ORDINARY COUNCIL

Wednesday 17 February 2021





Ordinary Council Meeting Wednesday, 17 February 2021

Items of Business

ltem	Subject		Page		
10.06	DRAFT CODE OF CONDUCT AND DRAFT PROCEDURES FOR THE ADMINISTRATION OF THE MODEL CODE OF CONDUCT				
	Attachment 1:	Draft Code of Conduct	6		
	Attachment 2:	Draft Procedures for the Administration of the Model Code of Conduct	53		
10.07	DELEGATION	OF AUTHORITY TO THE GENERAL MANAGER			
	Attachment :	Proposed Instrument of Delegation to General Manager	88		
10.10		BUDGET REVIEW STATEMENT - DECEMBER 2020			
	Attachment :	December 2020 Quarterly Review Statement	91		
10.11	MONTHLY BUI	MONTHLY BUDGET REVIEW - JANUARY 2021			
	Attachment :	January 2021 Budget Review	97		
10.12	INVESTMENTS	S - DECEMBER 2020			
	Attachment 1:	Port Macquarie-Hastings Council Monthly Report - December 2020.	104		
	Attachment 2:	Port Macquarie-Hastings Council Portfolio as at 31 December 2020	125		
10.13	INVESTMENTS	S - JANUARY 2021			
	Attachment 1:	Port Macquarie-Hastings Council Monthly Report - January 2021	131		
	Attachment 2:	Port Macquarie-Hastings Council Portfolio - January 2021	152		
10.15		IVERY PROGRAM AND 2020-2021 OPERATIONAL PLAN - EPORT AS AT 31 DECEMBER 2020			
	Attachment 1:	Attachment A: 2020-2021 Operational Plan actions reported as behind as at 31 December 2020	158		
	Attachment 2:	Attachment B: 2017-2022 Delivery Program and 2020-2021 Operational Plan progress report as at 31 December 2020	160		
10.16	GLASSHOUSE PLAN 2020 - 20	BIANNUAL REPORT AND UPDATE ON GLASSHOUSE			
	Attachment 1:	Glasshouse Financial Statement December 2020	287		
	Attachment 2:	Update on Glasshouse Plan 2020 - 2022 Actions - December 2020	288		
10.17	BUSHFIRE DIS	SASTER RECOVERY FUNDING			
	Attachment 1:	\$250,000 NSW State Government Bushfire Community Resilience and Economic Recovery Fund Progress Report	290		
	Attachment 2:	\$1.4M Commonwealth Bushfire Disaster Recovery Funding Progress Report	291		
10.19	WATER SUPPI	LY POLICY 2021	<u> </u>		
	Attachment 1:	DRAFT Water Supply Policy 2021			

	Attachment 2:	DRAFT Water Conservation and Drought Management Procedure 2021	297	
	Attachment 3:	DRAFT Water Supply Tariff and Billing Procedures 2021	311	
	Attachment 4:	DRAFT Water Supply Procedure 2021	321	
	Attachment 5:	DRAFT Recycled Water Procedure 2021	342	
11.01	PORT MACQU	ARIE FORESHORE BICENTENNIAL WALKWAY		
	Attachment :	Port Macquarie Foreshore Bicentennial Walkway - Priority Sections	354	
12.01	GRANT APPLI	CATIONS BIANNUAL REPORT		
	Attachment :	PMHC Grants Register 2020-21	356	
12.02	COVID-19 REC	OVERY AND STIMULUS PROJECTS		
	Attachment 1:	\$1.4M COVID-19 Relief Reserve Funding Update	359	
	Attachment 2:	\$1.8M Local Roads and Community Infrastructure Program Update	361	
12.03	POLICY REVIE REPORT	W - MARKETS POLICY - POST PUBLIC EXHIBITION		
	Attachment :	Draft Markets Policy - February 2021	362	
13.03	PORT MACQUARIE TRANSPORT NETWORK COMMUNITY CONSULTATIVE COMMITTEE MEMBERSHIP			
	Attachment :	Port Macquarie Transport Network Community Consultative Committee Charter Adopted April 2020	369	
13.06	LAND ACQUIS	ITION - HASTINGS RIVER DRIVE, PORT MACQUARIE		
	Attachment :	Plan of Acquisition DP1263240	373	
13.07	ACQUISITION WAUCHOPE	OF EASEMENT FOR WATER SUPPLY - KING STREET,		
	Attachment 1:	Attachment 1 - Location of Easement for Water Supply	374	
	Attachment 2:	Attachment 2 - Plan of Easement on Lot 4 DP 1184035	375	
13.08	ACQUISITION BONNY HILLS	OF EASEMENT FOR WATER SUPPLY - OCEAN DRIVE,		
	Attachment :	Plan of acquisition, Deposited Plan 1264664	376	
13.09	LAND ACQUIS ROLLANDS PL	SITION - UPPER ROLLANDS PLAINS ROAD, UPPER _AINS		
	Attachment :	Attachment 1 - Plan of Acquisition DP1270413	377	
13.10		IT ASSESSMENT PANEL - APPOINTMENT OF MEMBERS TED AUTHORITY		
	Attachment :	Development Assessment Panel Charter	378	
13.11	KOOLOONBUI UPDATE	NG CREEK FLYING-FOX CAMP MANAGEMENT PLAN		
	Attachment :	Final Kooloonbung Creek Camp Management Plan	382	
13.12	COASTAL MANAGEMENT PROGRAM SCOPING STUDY - POST EXHIBITION SUBMISSIONS REPORT			
	Attachment 1:	Coastal Management Program CMP Scoping Study Submissions List for Council Report, July 2020		
	Attachment 2:	Saving Lake Cathie survey results	565 M	



13.13 PLANNING PROPOSAL PP2014 - 14.1: LAND AT THE INTERSECTION OF HOUSTON MITCHELL DRIVE AND OCEAN DRIVE BONNY HILLS -CONSIDERATION OF SUBMISSIONS

APPLICANT: KING AND CAMPBELL PTY LTD OWNER: S J MIFSUD

13.14

Attachment 1:	Proponents Revised Concept Plan Houston Mitchell Drive	641
Attachment 2:	Planning Proposal - PP2014-14.1 Houston Mitchell Drive V2.1 February 2021	642
Attachment 3:	Draft amendment to PMHC Development Control Plan 2013 Part B3 Objective 18 Bushfire Hazard management	805
Attachment 4:	Draft Site Specific Development Control Plan - Houston Mitchell Drive Employment Lands	806
Attachment 5:	Houston Mitchell Drive Planning Proposal - Summary of Submissions Public Exhibition 2019	811
Attachment 6:	Planning Agreement Offer - Houston Mitchell Drive 28 09 2020	833
BRIERLEY HILL ENVIRONMENTAL LAND EAST PLANNING AGREEMENT		
Attachment :	Draft Brierley Hill Environmental Land East Planning Agreement	838



Leadership and Governance

What we are trying to achieve

A community that works together in decision making that is defined as ethically, socially and environmentally responsible.

What the result will be

We will have:

- A community that has the opportunity to be involved in decision making
- Open, easy, meaningful, regular and diverse communication between the community and decision makers
- Partnerships and collaborative projects, that meet the community's expectations, needs and challenges
- Knowledgeable, skilled and connected community leaders
- Strong corporate management that is transparent

How we will get there

- 1.1 Inform and engage with the community about what Council does using varied communication channels
- 1.2 Maintain strong partnerships between all stakeholders local, state and federal so that they are affective advocates for the community
- 1.3 Demonstrate leadership
- 1.4 Use innovative, efficient and sustainable practices
- 1.5 Ensure strong corporate and financial management that is transparent and accountable



The Model Code of Conduct for Local Councils in NSW

2020

TABLE OF CONTENTS

PART 1		3	
PART 2	DEFINITIONS	4	
PART 3	GENERAL CONDUCT OBLIGATIONS	6	
PART 4	PECUNIARY INTERESTS	. 10	
PART 5	NON-PECUNIARY CONFLICTS OF INTEREST	. 17	
PART 6	PERSONAL BENEFIT	. 22	
PART 7	RELATIONSHIPS BETWEEN COUNCIL OFFICIALS	. 25	
PART 8	ACCESS TO INFORMATION AND COUNCIL RESOURCES	. 27	
PART 9	MAINTAINING THE INTEGRITY OF THIS CODE	. 31	
SCHEDU	LE 1: DISCLOSURES OF INTERESTS AND OTHER MATTERS IN		
WRITTEN	RETURNS SUBMITTED UNDER CLAUSE 4.21	. 33	
SCHEDU	LE 2: FORM OF WRITTEN RETURN OF INTERESTS SUBMITTED		
UNDER C	CLAUSE 4.21	.41	
SCHEDU	LE 3: FORM OF SPECIAL DISCLOSURE OF PECUNIARY INTEREST		
SUBMITTED UNDER CLAUSE 4.37			

PART 1 INTRODUCTION

Port Macquarie-Hastings Council prides itself on the application of high standards of behaviour in regard to integrity, responsibility and fair dealing. Our ratepayers need to have confidence that as Council officials, we will continue to strive to maintain the highest standards in our dealings with the community we serve.

This Code of Conduct is made for the purposes of section 440 of the Local Government Act 1993 ("the Act"). Section 440 of the Act requires every Council to adopt a code of conduct that incorporates the provisions of the Model Code of Conduct for local councils in NSW. This Code applies to all Council officials.

Based on this Code, a "Statement of Business Ethics" has been developed for Council contractors and consultants. Reference should be made to Council Policy "Statement of Business Ethics".

Port Macquarie-Hastings Council's *Code of Conduct* outlines our standards and provides you with guidelines to ensure your decisions reflect our Council's vision, mission and values, which are:

C O M M U N I T Y V I S I O N A sustainable high quality of life for all

C O M M U N I T Y M I S S I O N Building the future together – People, Place, Health, Education, Technology

> V A L U E S Communication – we keep each other informed Accountability – we hold ourselves and others accountable Professionalism – we deliver the best value Integrity – we are open, honest and fair Teamwork – we achieve together

The *Code of Conduct* sets the minimum standards of conduct for Council officials. It is prescribed by regulation to assist Council officials to: > understand and comply with the standards of conduct that are expected of them > enable them to fulfil their statutory duty to act honestly and exercise a reasonable degree of care and diligence (section 439)

> act in a way that enhances public confidence in local government.

As a Council official, it is your responsibility to comply with the standards in our Code.

Councillors, administrators, members of staff of councils, delegates of councils, (including members of Council committees that are delegates of a Council) and any other person a Council's adopted code of conduct applies to, must comply with the applicable provisions of their Council's code of conduct. It is the personal responsibility of Council officials to comply with the standards in the code and to regularly review their personal circumstances and conduct with this in mind.

Council contractors and volunteers will also be required to observe the relevant provisions of Council's *Code of Conduct*.

Failure by a Councillor to comply with the standards of conduct prescribed under this code constitutes misconduct for the purposes of the LGA. The LGA provides for a range of

penalties that may be imposed on Councillors for misconduct, including suspension or disqualification from civic office. A Councillor who has been suspended on three or more occasions for misconduct is automatically disqualified from holding civic office for five years. Failure by a member of staff to comply with a council's code of conduct may give rise to disciplinary action.

PART 2 DEFINITIONS

In this code the following terms have the following meanings:

administrator	an administrator of a Council appointed under the LGA other than an administrator appointed under section 66
committee	see the definition of "Council committee"
complaint	a code of conduct complaint made for the purposes of clauses 4.1 and 4.2 of the Procedures.
conduct	includes acts and omissions
Council	includes county Councils and joint organisations
Council committee	a committee established by a Council comprising of Councillors, staff or other persons that the Council has delegated functions to and the Council's audit, risk and improvement committee
Council committee member	a person other than a Councillor or member of staff of a Council who is a member of a Council committee other than a wholly advisory committee, and a person other than a Councillor who is a member of the Council's audit, risk and improvement committee
Council official	includes Councillors, members of staff of a Council, administrators, Council committee members, delegates of Council and, for the purposes of clause 4.16, Council advisers
Councillor	any person elected or appointed to civic office, including the Mayor and includes members and chairpersons of county Councils and voting representatives of the boards of joint organisations and chairpersons of joint organisations
delegate of Council	a person (other than a Councillor or member of staff of a Council) or body, and the individual members of that body, to whom a function of the Council is delegated
designated person	a person referred to in clause 4.8

election campaign	includes Council, state and federal election campaigns
environmental planning instrument	has the same meaning as it has in the <i>Environmental</i> <i>Planning and Assessment Act 1</i> 979
General Manager	includes the executive officer of a joint organisation
joint organisation	a joint organisation established under section 400O of the LGA
LGA	Local Government Act 1993
local planning panel	a local planning panel constituted under the <i>Environmental</i> <i>Planning and Assessment Act 1</i> 979
Mayor	includes the chairperson of a county Council or a joint organisation
members of staff of a Council	includes members of staff of county Councils and joint organisations
the Office	Office of Local Government
personal information	information or an opinion (including information or an opinion forming part of a database and whether or not recorded in a material form) about an individual whose identity is apparent or can reasonably be ascertained from the information or opinion
the Procedures	the <i>Procedures for the Administration of the Model Code</i> of <i>Conduct for Local Councils in NSW</i> prescribed under the Regulation
the Regulation	the Local Government (General) Regulation 2005
voting representative	a voting representative of the board of a joint organisation
wholly advisory committee	a Council committee that the Council has not delegated any functions to

PART 3 GENERAL CONDUCT OBLIGATIONS

General conduct

- 3.1 You must not conduct yourself in a manner that:
 - a) is likely to bring the Council or other Council officials into disrepute
 - b) is contrary to statutory requirements or the Council's administrative requirements or policies
 - c) is improper or unethical
 - d) is an abuse of power
 - e) causes, comprises or involves intimidation or verbal abuse
 - f) involves the misuse of your position to obtain a private benefit
 - g) constitutes harassment or bullying behaviour under this code, or is unlawfully discriminatory.
- 3.2 You must act lawfully and honestly, and exercise a reasonable degree of care and diligence in carrying out your functions under the LGA or any other Act. *(section 439).*

Fairness and equity

- 3.3 You must consider issues consistently, promptly and fairly. You must deal with matters in accordance with established procedures, in a non-discriminatory manner.
- 3.4 You must take all relevant facts known to you, or that you should be reasonably aware of, into consideration and have regard to the particular merits of each case. You must not take irrelevant matters or circumstances into consideration when making decisions.
- 3.5 An act or omission in good faith, whether or not it involves error, will not constitute a breach of clauses 3.3 or 3.4.

Harassment and discrimination

- 3.6 You must not harass or unlawfully discriminate against others, or support others who harass or unlawfully discriminate against others, on the grounds of age, disability, race (including colour, national or ethnic origin or immigrant status), sex, pregnancy, marital or relationship status, family responsibilities or breastfeeding, sexual orientation, gender identity or intersex status or political, religious or other affiliation.
- 3.7 For the purposes of this code, "harassment" is any form of behaviour towards a person that:
 - a) is not wanted by the person
 - b) offends, humiliates or intimidates the person, and
 - c) creates a hostile environment.

Bullying

3.8 You must not engage in bullying behaviour towards others.

- 3.9 For the purposes of this code, "bullying behaviour" is any behaviour in which:
 - a) a person or a group of people repeatedly behaves unreasonably towards another person or a group of persons, and
 - b) the behaviour creates a risk to health and safety.
- 3.10 Bullying behaviour may involve, but is not limited to, any of the following types of behaviour:
 - a) aggressive, threatening or intimidating conduct
 - b) belittling or humiliating comments
 - c) spreading malicious rumours
 - d) teasing, practical jokes or 'initiation ceremonies'
 - e) exclusion from work-related events
 - f) unreasonable work expectations, including too much or too little work, or work below or beyond a worker's skill level
 - g) displaying offensive material
 - h) pressure to behave in an inappropriate manner.
- 3.11 Reasonable management action carried out in a reasonable manner does not constitute bullying behaviour for the purposes of this code. Examples of reasonable management action may include, but are not limited to:
 - a) performance management processes
 - b) disciplinary action for misconduct
 - c) informing a worker about unsatisfactory work performance or inappropriate work behaviour
 - d) directing a worker to perform duties in keeping with their job
 - e) maintaining reasonable workplace goals and standards
 - f) legitimately exercising a regulatory function
 - g) legitimately implementing a Council policy or administrative processes.

Work health and safety

- 3.12 All Council officials, including Councillors, owe statutory duties under the *Work Health and Safety Act 2011* (WHS Act). You must comply with your duties under the WHS Act and your responsibilities under any policies or procedures adopted by the Council to ensure workplace health and safety. Specifically, you must:
 - a) take reasonable care for your own health and safety
 - b) take reasonable care that your acts or omissions do not adversely affect the health and safety of other persons
 - c) comply, so far as you are reasonably able, with any reasonable instruction that is given to ensure compliance with the WHS Act and any policies or procedures adopted by the Council to ensure workplace health and safety
 - d) cooperate with any reasonable policy or procedure of the Council relating to workplace health or safety that has been notified to Council staff
 - e) report accidents, incidents, near misses, to the General Manager or such other staff member nominated by the General Manager, and take part in any incident investigations

f) so far as is reasonably practicable, consult, co-operate and coordinate with all others who have a duty under the WHS Act in relation to the same matter.

Land use planning, development assessment and other regulatory functions

- 3.13 You must ensure that land use planning, development assessment and other regulatory decisions are properly made, and that all parties are dealt with fairly. You must avoid any occasion for suspicion of improper conduct in the exercise of land use planning, development assessment and other regulatory functions.
- 3.14 In exercising land use planning, development assessment and other regulatory functions, you must ensure that no action, statement or communication between yourself and others conveys any suggestion of willingness to improperly provide concessions or preferential or unduly unfavourable treatment.

Binding caucus votes

- 3.15 You must not participate in binding caucus votes in relation to matters to be considered at a Council or committee meeting.
- 3.16 For the purposes of clause 3.15, a binding caucus vote is a process whereby a group of Councillors are compelled by a threat of disciplinary or other adverse action to comply with a predetermined position on a matter before the Council or committee, irrespective of the personal views of individual members of the group on the merits of the matter before the Council or committee.
- 3.17 Clause 3.15 does not prohibit Councillors from discussing a matter before the Council or committee prior to considering the matter in question at a Council or committee meeting, or from voluntarily holding a shared view with other Councillors on the merits of a matter.
- 3.18 Clause 3.15 does not apply to a decision to elect the Mayor or deputy Mayor, or to nominate a person to be a member of a Council committee or a representative of the Council on an external body.

Obligations in relation to meetings

- 3.19 You must comply with rulings by the chair at Council and committee meetings or other proceedings of the Council unless a motion dissenting from the ruling is passed.
- 3.20 You must not engage in bullying behaviour (as defined under this Part) towards the chair, other Council officials or any members of the public present during Council or committee meetings or other proceedings of the Council (such as, but not limited to, workshops and briefing sessions).
- 3.21 You must not engage in conduct that disrupts Council or committee meetings or other proceedings of the Council (such as, but not limited to, workshops and briefing sessions), or that would otherwise be inconsistent with the orderly conduct of meetings.

- 3.22 If you are a Councillor, you must not engage in any acts of disorder or other conduct that is intended to prevent the proper or effective functioning of the Council, or of a committee of the Council. Without limiting this clause, you must not:
 - a) leave a meeting of the Council or a committee for the purposes of depriving the meeting of a quorum, or
 - b) submit a rescission motion with respect to a decision for the purposes of voting against it to prevent another Councillor from submitting a rescission motion with respect to the same decision, or
 - c) deliberately seek to impede the consideration of business at a meeting.

PART 4 PECUNIARY INTERESTS

What is a pecuniary interest?

- 4.1 A pecuniary interest is an interest that you have in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to you or a person referred to in clause 4.3.
- 4.2 You will not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision you might make in relation to the matter, or if the interest is of a kind specified in clause 4.6.
- 4.3 For the purposes of this Part, you will have a pecuniary interest in a matter if the pecuniary interest is:
 - (a) your interest, or
 - (b) the interest of your spouse or de facto partner, your relative, or your partner or employer, or
 - (c) a company or other body of which you, or your nominee, partner or employer, is a shareholder or member.
- 4.4 For the purposes of clause 4.3:
 - (a) Your "relative" is any of the following:
 - i) your parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child
 - ii) your spouse's or de facto partner's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child
 - iii) the spouse or de facto partner of a person referred to in paragraphs (i) and (ii).
 - (b) "de facto partner" has the same meaning as defined in section 21C of the *Interpretation Act* 1987.
- 4.5 You will not have a pecuniary interest in relation to a person referred to in subclauses 4.3(b) or (c):
 - (a) if you are unaware of the relevant pecuniary interest of your spouse, de facto partner, relative, partner, employer or company or other body, or
 - (b) just because the person is a member of, or is employed by, a Council or a statutory body, or is employed by the Crown, or
 - (c) just because the person is a member of, or a delegate of a Council to, a company or other body that has a pecuniary interest in the matter, so long as the person has no beneficial interest in any shares of the company or body.

What interests do not have to be disclosed?

- 4.6 You do not have to disclose the following interests for the purposes of this Part: (a) your interest as an elector
 - (b) your interest as a ratepayer or person liable to pay a charge
 - (c) an interest you have in any matter relating to the terms on which the provision of a service or the supply of goods or commodities is

offered to the public generally, or to a section of the public that includes persons who are not subject to this code

- (d) an interest you have in any matter relating to the terms on which the provision of a service or the supply of goods or commodities is offered to your relative by the Council in the same manner and subject to the same conditions as apply to persons who are not subject to this code
- (e) an interest you have as a member of a club or other organisation or association, unless the interest is as the holder of an office in the club or organisation (whether remunerated or not)
- (f) if you are a Council committee member, an interest you have as a person chosen to represent the community, or as a member of a nonprofit organisation or other community or special interest group, if you have been appointed to represent the organisation or group on the Council committee
- (g) an interest you have relating to a contract, proposed contract or other matter, if the interest arises only because of a beneficial interest in shares in a company that does not exceed 10 per cent of the voting rights in the company
- (h) an interest you have arising from the proposed making by the Council of an agreement between the Council and a corporation, association or partnership, being a corporation, association or partnership that has more than 25 members, if the interest arises because your relative is a shareholder (but not a director) of the corporation, or is a member (but not a member of the committee) of the association, or is a partner of the partnership
- (i) an interest you have arising from the making by the Council of a contract or agreement with your relative for, or in relation to, any of the following, but only if the proposed contract or agreement is similar in terms and conditions to such contracts and agreements as have been made, or as are proposed to be made, by the Council in respect of similar matters with other residents of the area:
 - i) the performance by the Council at the expense of your relative of any work or service in connection with roads or sanitation
 - ii) security for damage to footpaths or roads
 - iii) any other service to be rendered, or act to be done, by the Council by or under any Act conferring functions on the Council, or by or under any contract
- (j) an interest relating to the payment of fees to Councillors (including the Mayor and deputy Mayor)
- (k) an interest relating to the payment of expenses and the provision of facilities to Councillors (including the Mayor and deputy Mayor) in accordance with a policy under section 252 of the LGA,
- an interest relating to an election to the office of Mayor arising from the fact that a fee for the following 12 months has been determined for the office of Mayor
- (m)an interest of a person arising from the passing for payment of a regular account for the wages or salary of an employee who is a relative of the person

- (n) an interest arising from being covered by, or a proposal to be covered by, indemnity insurance as a Councillor or a Council committee member
- (o) an interest arising from the appointment of a Councillor to a body as a representative or delegate of the Council, whether or not a fee or other recompense is payable to the representative or delegate.
- 4.7 For the purposes of clause 4.6, "relative" has the same meaning as in clause 4.4, but includes your spouse or de facto partner.

What disclosures must be made by a designated person?

- 4.8 Designated persons include:
 - (a) the General Manager
 - (b) other senior staff of the Council for the purposes of section 332 of the LGA
 - (c) a person (other than a member of the senior staff of the Council) who is a member of staff of the Council or a delegate of the Council and who holds a position identified by the Council as the position of a designated person because it involves the exercise of functions (such as regulatory functions or contractual functions) that, in their exercise, could give rise to a conflict between the person's duty as a member of staff or delegate and the person's private interest
 - (d) a person (other than a member of the senior staff of the Council) who is a member of a committee of the Council identified by the Council as a committee whose members are designated persons because the functions of the committee involve the exercise of the Council's functions (such as regulatory functions or contractual functions) that, in their exercise, could give rise to a conflict between the member's duty as a member of the committee and the member's private interest.

4.9 A designated person:

- (a) must prepare and submit written returns of interests in accordance with clauses 4.21, and
- (b) must disclose pecuniary interests in accordance with clause 4.10.
- 4.10 A designated person must disclose in writing to the General Manager (or if the person is the General Manager, to the Council) the nature of any pecuniary interest the person has in any Council matter with which the person is dealing as soon as practicable after becoming aware of the interest.
- 4.11 Clause 4.10 does not require a designated person who is a member of staff of the Council to disclose a pecuniary interest if the interest relates only to the person's salary as a member of staff, or to their other conditions of employment.
- 4.12 The General Manager must, on receiving a disclosure from a designated person, deal with the matter to which the disclosure relates or refer it to another person to deal with.

4.13 A disclosure by the General Manager must, as soon as practicable after the disclosure is made, be laid on the table at a meeting of the Council and the Council must deal with the matter to which the disclosure relates or refer it to another person to deal with.

What disclosures must be made by Council staff other than designated persons?

- 4.14 A member of staff of Council, other than a designated person, must disclose in writing to their manager or the General Manager the nature of any pecuniary interest they have in a matter they are dealing with as soon as practicable after becoming aware of the interest.
- 4.15 The staff member's manager or the General Manager must, on receiving a disclosure under clause 4.14, deal with the matter to which the disclosure relates or refer it to another person to deal with.

What disclosures must be made by Council advisers?

- 4.16 A person who, at the request or with the consent of the Council or a Council committee, gives advice on any matter at any meeting of the Council or committee, must disclose the nature of any pecuniary interest the person has in the matter to the meeting at the time the advice is given. The person is not required to disclose the person's interest as an adviser.
- 4.17 A person does not breach clause 4.16 if the person did not know, and could not reasonably be expected to have known, that the matter under consideration at the meeting was a matter in which they had a pecuniary interest.

What disclosures must be made by a Council committee member?

- 4.18 A Council committee member must disclose pecuniary interests in accordance with clause 4.28 and comply with clause 4.29.
- 4.19 For the purposes of clause 4.18, a "Council committee member" includes a member of staff of Council who is a member of the committee.

What disclosures must be made by a Councillor?

4.20 A Councillor:

- (a) must prepare and submit written returns of interests in accordance with clause 4.21, and
- (b) must disclose pecuniary interests in accordance with clause 4.28 and comply with clause 4.29 where it is applicable.

Disclosure of interests in written returns

- 4.21 A Councillor or designated person must make and lodge with the General Manager a return in the form set out in schedule 2 to this code, disclosing the Councillor's or designated person's interests as specified in schedule 1 to this code within 3 months after:
 - (a) becoming a Councillor or designated person, and
 - (b) 30 June of each year, and
 - (c) the Councillor or designated person becoming aware of an interest they are required to disclose under schedule 1 that has not been previously disclosed in a return lodged under paragraphs (a) or (b).

- 4.22 A person need not make and lodge a return under clause 4.21, paragraphs (a) and (b) if:
 - (a) they made and lodged a return under that clause in the preceding 3 months, or
 - (b) they have ceased to be a Councillor or designated person in the preceding 3 months.
- 4.23 A person must not make and lodge a return that the person knows or ought reasonably to know is false or misleading in a material particular.
- 4.24 The General Manager must keep a register of returns required to be made and lodged with the General Manager.
- 4.25 Returns required to be lodged with the General Manager under clause 4.21(a) and (b) must be tabled at the first meeting of the Council after the last day the return is required to be lodged.
- 4.26 Returns required to be lodged with the General Manager under clause 4.21(c) must be tabled at the next Council meeting after the return is lodged.
- 4.27 Information contained in returns made and lodged under clause 4.21 is to be made publicly available in accordance with the requirements of the *Government Information (Public Access) Act 2009*, the *Government Information (Public Access) Regulation 2009* and any guidelines issued by the Information Commissioner.

Disclosure of pecuniary interests at meetings

- 4.28 A Councillor or a Council committee member who has a pecuniary interest in any matter with which the Council is concerned, and who is present at a meeting of the Council or committee at which the matter is being considered, must disclose the nature of the interest to the meeting as soon as practicable.
- 4.29 The Councillor or Council committee member must not be present at, or in sight of, the meeting of the Council or committee:
 - (a) at any time during which the matter is being considered or discussed by the Council or committee, or
 - (b) at any time during which the Council or committee is voting on any question in relation to the matter.
- 4.30 In the case of a meeting of a board of a joint organisation, a voting representative is taken to be present at the meeting for the purposes of clauses 4.28 and 4.29 where they participate in the meeting by telephone or other electronic means.
- 4.31 A disclosure made at a meeting of a Council or Council committee must be recorded in the minutes of the meeting.
- 4.32 A general notice may be given to the General Manager in writing by a Councillor or a Council committee member to the effect that the Councillor or Council

committee member, or the Councillor's or Council committee member's spouse, de facto partner or relative, is:

- (a) a member of, or in the employment of, a specified company or other body, or
- (b) a partner of, or in the employment of, a specified person.

Such a notice is, unless and until the notice is withdrawn or until the end of the term of the Council in which it is given (whichever is the sooner), sufficient disclosure of the Councillor's or Council committee member's interest in a matter relating to the specified company, body or person that may be the subject of consideration by the Council or Council committee after the date of the notice.

- 4.33 A Councillor or a Council committee member is not prevented from being present at and taking part in a meeting at which a matter is being considered, or from voting on the matter, merely because the Councillor or Council committee member has an interest in the matter of a kind referred to in clause 4.6.
- 4.34 A person does not breach clauses 4.28 or 4.29 if the person did not know, and could not reasonably be expected to have known, that the matter under consideration at the meeting was a matter in which they had a pecuniary interest.
- 4.35 Despite clause 4.29, a Councillor who has a pecuniary interest in a matter may participate in a decision to delegate consideration of the matter in question to another body or person.
- 4.36 Clause 4.29 does not apply to a Councillor who has a pecuniary interest in a matter that is being considered at a meeting if:
 - (a) the matter is a proposal relating to:
 - the making of a principal environmental planning instrument applying to the whole or a significant portion of the Council's area, or
 - the amendment, alteration or repeal of an environmental planning instrument where the amendment, alteration or repeal applies to the whole or a significant portion of the Council's area, and
 - (b) the pecuniary interest arises only because of an interest of the Councillor in the Councillor's principal place of residence or an interest of another person (whose interests are relevant under clause 4.3) in that person's principal place of residence, and
 - (c) the Councillor made a special disclosure under clause 4.37 in relation to the interest before the commencement of the meeting.
- 4.37 A special disclosure of a pecuniary interest made for the purposes of clause 4.36(c) must:
 - (a) be in the form set out in schedule 3 of this code and contain the information required by that form, and
 - (b) be laid on the table at a meeting of the Council as soon as practicable after the disclosure is made, and the information contained in the special disclosure is to be recorded in the minutes of the meeting.

- 4.38 The Minister for Local Government may, conditionally or unconditionally, allow a Councillor or a Council committee member who has a pecuniary interest in a matter with which the Council is concerned to be present at a meeting of the Council or committee, to take part in the consideration or discussion of the matter and to vote on the matter if the Minister is of the opinion:
 - (a) that the number of Councillors prevented from voting would be so great a proportion of the whole as to impede the transaction of business, or
 - (b) that it is in the interests of the electors for the area to do so.
- 4.39 A Councillor or a Council committee member with a pecuniary interest in a matter who is permitted to be present at a meeting of the Council or committee, to take part in the consideration or discussion of the matter and to vote on the matter under clause 4.38, must still disclose the interest they have in the matter in accordance with clause 4.28.

PART 5 NON-PECUNIARY CONFLICTS OF INTEREST

What is a non-pecuniary conflict of interest?

- 5.1 Non-pecuniary interests are private or personal interests a Council official has that do not amount to a pecuniary interest as defined in clause 4.1 of this code. These commonly arise out of family or personal relationships, or out of involvement in sporting, social, religious or other cultural groups and associations, and may include an interest of a financial nature.
- 5.2 A non-pecuniary conflict of interest exists where a reasonable and informed person would perceive that you could be influenced by a private interest when carrying out your official functions in relation to a matter.
- 5.3 The personal or political views of a Council official do not constitute a private interest for the purposes of clause 5.2.
- 5.4 Non-pecuniary conflicts of interest must be identified and appropriately managed to uphold community confidence in the probity of Council decision-making. The onus is on you to identify any non-pecuniary conflict of interest you may have in matters that you deal with, to disclose the interest fully and in writing, and to take appropriate action to manage the conflict in accordance with this code.
- 5.5 When considering whether or not you have a non-pecuniary conflict of interest in a matter you are dealing with, it is always important to think about how others would view your situation.

Managing non-pecuniary conflicts of interest

- 5.6 Where you have a non-pecuniary conflict of interest in a matter for the purposes of clause 5.2, you must disclose the relevant private interest you have in relation to the matter fully and in writing as soon as practicable after becoming aware of the non-pecuniary conflict of interest and on each occasion on which the non-pecuniary conflict of interest arises in relation to the matter. In the case of members of Council staff other than the General Manager, such a disclosure is to be made to the staff member's manager. In the case of the General Manager, such a disclosure is to be made to the Mayor.
- 5.7 If a disclosure is made at a Council or committee meeting, both the disclosure and the nature of the interest must be recorded in the minutes on each occasion on which the non-pecuniary conflict of interest arises. This disclosure constitutes disclosure in writing for the purposes of clause 5.6.
- 5.8 How you manage a non-pecuniary conflict of interest will depend on whether or not it is significant.
- 5.9 As a general rule, a non-pecuniary conflict of interest will be significant where it does not involve a pecuniary interest for the purposes of clause 4.1, but it involves:
 - a) a relationship between a Council official and another person who is affected by a decision or a matter under consideration that is particularly

close, such as a current or former spouse or de facto partner, a relative for the purposes of clause 4.4 or another person from the Council official's extended family that the Council official has a close personal relationship with, or another person living in the same household

- b) other relationships with persons who are affected by a decision or a matter under consideration that are particularly close, such as friendships and business relationships. Closeness is defined by the nature of the friendship or business relationship, the frequency of contact and the duration of the friendship or relationship.
- c) an affiliation between the Council official and an organisation (such as a sporting body, club, religious, cultural or charitable organisation, corporation or association) that is affected by a decision or a matter under consideration that is particularly strong. The strength of a Council official's affiliation with an organisation is to be determined by the extent to which they actively participate in the management, administration or other activities of the organisation.
- d) membership, as the Council's representative, of the board or management committee of an organisation that is affected by a decision or a matter under consideration, in circumstances where the interests of the Council and the organisation are potentially in conflict in relation to the particular matter
- e) a financial interest (other than an interest of a type referred to in clause 4.6) that is not a pecuniary interest for the purposes of clause 4.1
- f) the conferral or loss of a personal benefit other than one conferred or lost as a member of the community or a broader class of people affected by a decision.
- 5.10 Significant non-pecuniary conflicts of interest must be managed in one of two ways:
 - a) by not participating in consideration of, or decision making in relation to, the matter in which you have the significant non-pecuniary conflict of interest and the matter being allocated to another person for consideration or determination, or
 - b) if the significant non-pecuniary conflict of interest arises in relation to a matter under consideration at a Council or committee meeting, by managing the conflict of interest as if you had a pecuniary interest in the matter by complying with clauses 4.28 and 4.29.
- 5.11 If you determine that you have a non-pecuniary conflict of interest in a matter that is not significant and does not require further action, when disclosing the interest you must also explain in writing why you consider that the non-pecuniary conflict of interest is not significant and does not require further action in the circumstances.
- 5.12 If you are a member of staff of Council other than the General Manager, the decision on which option should be taken to manage a non-pecuniary conflict of interest must be made in consultation with and at the direction of your manager. In the case of the General Manager, the decision on which option should be

taken to manage a non-pecuniary conflict of interest must be made in consultation with and at the direction of the Mayor.

- 5.13 Despite clause 5.10(b), a Councillor who has a significant non-pecuniary conflict of interest in a matter, may participate in a decision to delegate consideration of the matter in question to another body or person.
- 5.14 Council committee members are not required to declare and manage a nonpecuniary conflict of interest in accordance with the requirements of this Part where it arises from an interest they have as a person chosen to represent the community, or as a member of a non-profit organisation or other community or special interest group, if they have been appointed to represent the organisation or group on the Council committee.

Political donations

- 5.15 Councillors should be aware that matters before Council or committee meetings involving their political donors may also give rise to a non-pecuniary conflict of interest.
- 5.16 Where you are a Councillor and have received or knowingly benefitted from a reportable political donation:
 - a) made by a major political donor in the previous four years, and
 - b) the major political donor has a matter before Council,

you must declare a non-pecuniary conflict of interest in the matter, disclose the nature of the interest, and manage the conflict of interest as if you had a pecuniary interest in the matter by complying with clauses 4.28 and 4.29. A disclosure made under this clause must be recorded in the minutes of the meeting.

- 5.17 For the purposes of this Part:
 - a) a "reportable political donation" has the same meaning as it has in section 6 of the *Electoral Funding Act 2018*
 - b) "major political donor" has the same meaning as it has in the *Electoral Funding Act 2018.*
- 5.18 Councillors should note that political donations that are not a "reportable political donation", or political donations to a registered political party or group by which a Councillor is endorsed, may still give rise to a non-pecuniary conflict of interest. Councillors should determine whether or not such conflicts are significant for the purposes of clause 5.9 and take the appropriate action to manage them.
- 5.19 Despite clause 5.16, a Councillor who has received or knowingly benefitted from a reportable political donation of the kind referred to in that clause, may participate in a decision to delegate consideration of the matter in question to another body or person.

Loss of quorum as a result of compliance with this Part

5.20 A Councillor who would otherwise be precluded from participating in the consideration of a matter under this Part because they have a non-pecuniary

conflict of interest in the matter is permitted to participate in consideration of the matter if:

a) the matter is a proposal relating to:

- the making of a principal environmental planning instrument applying to the whole or a significant portion of the Council's area, or
- ii) the amendment, alteration or repeal of an environmental planning instrument where the amendment, alteration or repeal applies to the whole or a significant portion of the Council's area, and
- b) the non-pecuniary conflict of interest arises only because of an interest that a person has in that person's principal place of residence, and
- c) the Councillor discloses the interest they have in the matter that would otherwise have precluded their participation in consideration of the matter under this Part in accordance with clause 5.6.
- 5.21 The Minister for Local Government may, conditionally or unconditionally, allow a Councillor or a Council committee member who is precluded under this Part from participating in the consideration of a matter to be present at a meeting of the Council or committee, to take part in the consideration or discussion of the matter and to vote on the matter if the Minister is of the opinion:
 - a) that the number of Councillors prevented from voting would be so great a proportion of the whole as to impede the transaction of business, or
 - b) that it is in the interests of the electors for the area to do so.
- 5.22 Where the Minister exempts a Councillor or committee member from complying with a requirement under this Part under clause 5.21, the Councillor or committee member must still disclose any interests they have in the matter the exemption applies to, in accordance with clause 5.6.

Other business or employment

- 5.23 The General Manager must not engage, for remuneration, in private employment, contract work or other business outside the service of the Council without the approval of the Council.
- 5.24 A member of staff must not engage, for remuneration, in private employment, contract work or other business outside the service of the Council that relates to the business of the Council or that might conflict with the staff member's Council duties unless they have notified the General Manager in writing of the employment, work or business and the General Manager has given their written approval for the staff member to engage in the employment, work or business.
- 5.25 The General Manager may at any time prohibit a member of staff from engaging, for remuneration, in private employment, contract work or other business outside the service of the Council that relates to the business of the Council, or that might conflict with the staff member's Council duties.
- 5.26 A member of staff must not engage, for remuneration, in private employment, contract work or other business outside the service of the Council if prohibited from doing so.

- 5.27 Members of staff must ensure that any outside employment, work or business they engage in will not:
 - a) conflict with their official duties
 - b) involve using confidential information or Council resources obtained through their work with the Council including where private use is permitted
 - c) require them to work while on Council duty
 - d) discredit or disadvantage the Council
 - e) pose, due to fatigue, a risk to their health or safety, or to the health and safety of their co-workers.

Personal dealings with Council

- 5.28 You may have reason to deal with your Council in your personal capacity (for example, as a ratepayer, recipient of a Council service or applicant for a development consent granted by Council). You must not expect or request preferential treatment in relation to any matter in which you have a private interest because of your position. You must avoid any action that could lead members of the public to believe that you are seeking preferential treatment.
- 5.29 You must undertake any personal dealings you have with the Council in a manner that is consistent with the way other members of the community deal with the Council. You must also ensure that you disclose and appropriately manage any conflict of interest you may have in any matter in accordance with the requirements of this code.

PART 6 PERSONAL BENEFIT

- 6.1 For the purposes of this Part, a gift or a benefit is something offered to or received by a Council official or someone personally associated with them for their personal use and enjoyment.
- 6.2 A reference to a gift or benefit in this Part does not include:
 - a) items with a value of \$10 or less
 - b) a political donation for the purposes of the Electoral Funding Act 2018
 - c) a gift provided to the Council as part of a cultural exchange or sister-city relationship that is not converted for the personal use or enjoyment of any individual Council official or someone personally associated with them
 - d) a benefit or facility provided by the Council to an employee or Councillor
 - e) attendance by a Council official at a work-related event or function for the purposes of performing their official duties, or
 - free or subsidised meals, beverages or refreshments provided to Council officials in conjunction with the performance of their official duties such as, but not limited to:
 - i) the discussion of official business
 - ii) work-related events such as Council-sponsored or community events, training, education sessions or workshops
 - iii) conferences
 - iv) Council functions or events
 - v) social functions organised by groups, such as Council committees and community organisations.

Gifts and benefits

- 6.3 You must avoid situations that would give rise to the appearance that a person or body is attempting to secure favourable treatment from you or from the Council, through the provision of gifts, benefits or hospitality of any kind to you or someone personally associated with you.
- 6.4 A gift or benefit is deemed to have been accepted by you for the purposes of this Part, where it is received by you or someone personally associated with you.

How are offers of gifts and benefits to be dealt with?

- 6.5 You must not:
 - a) seek or accept a bribe or other improper inducement
 - b) seek gifts or benefits of any kind
 - c) accept any gift or benefit that may create a sense of obligation on your part, or may be perceived to be intended or likely to influence you in carrying out your public duty
 - d) subject to clause 6.7, accept any gift or benefit of more than token value as defined by clause 6.9

- 23
- e) accept an offer of cash or a cash-like gift as defined by clause 6.13, regardless of the amount
- f) participate in competitions for prizes where eligibility is based on the Council being in or entering into a customer-supplier relationship with the competition organiser
- g) personally benefit from reward points programs when purchasing on behalf of the Council.
- 6.6 Where you receive a gift or benefit of any value other than one referred to in clause 6.2, you must disclose this promptly to your manager or the General Manager in writing. The recipient, manager, or General Manager must ensure that, at a minimum, the following details are recorded in the Council's gift register:
 - a) the nature of the gift or benefit
 - b) the estimated monetary value of the gift or benefit
 - c) the name of the person who provided the gift or benefit, and
 - d) the date on which the gift or benefit was received.
- 6.7 Where you receive a gift or benefit of more than token value that cannot reasonably be refused or returned, the gift or benefit must be surrendered to the Council, unless the nature of the gift or benefit makes this impractical.

Gifts and benefits of token value

- 6.8 You may accept gifts and benefits of token value. Gifts and benefits of token value are one or more gifts or benefits received from a person or organisation over a 12-month period that, when aggregated, do not exceed a value of \$100. They include, but are not limited to:
 - a) invitations to and attendance at local social, cultural or sporting events with a ticket value that does not exceed \$100
 - b) gifts of alcohol that do not exceed a value of \$100
 - c) ties, scarves, coasters, tie pins, diaries, chocolates or flowers or the like
 - d) prizes or awards that do not exceed \$100 in value.

Gifts and benefits of more than token value

- 6.9 Gifts or benefits that exceed \$100 in value are gifts or benefits of more than token value for the purposes of clause 6.5(d) and, subject to clause 6.7, must not be accepted.
- 6.10 Gifts and benefits of more than token value include, but are not limited to, tickets to major sporting events (such as international matches or matches in national sporting codes) with a ticket value that exceeds \$100, corporate hospitality at a corporate facility at major sporting events, free or discounted products or services for personal use provided on terms that are not available to the general public or a broad class of persons, the use of holiday homes, artworks, free or discounted travel.
- 6.11 Where you have accepted a gift or benefit of token value from a person or organisation, you must not accept a further gift or benefit from the same person or organisation or another person associated with that person or organisation within a single 12-month period where the value of the gift, added to the value of earlier gifts received from the same person or organisation, or a person

associated with that person or organisation, during the same 12-month period would exceed \$100 in value.

6.12 For the purposes of this Part, the value of a gift or benefit is the monetary value of the gift or benefit inclusive of GST.

"Cash-like gifts"

6.13 For the purposes of clause 6.5(e), "cash-like gifts" include, but are not limited to, gift vouchers, credit cards, debit cards with credit on them, prepayments such as phone or internet credit, lottery tickets, memberships or entitlements to discounts that are not available to the general public or a broad class of persons.

Improper and undue influence

- 6.14 You must not use your position to influence other Council officials in the performance of their official functions to obtain a private benefit for yourself or for somebody else. A Councillor will not be in breach of this clause where they seek to influence other Council officials through the proper exercise of their role as prescribed under the LGA.
- 6.15 You must not take advantage (or seek to take advantage) of your status or position with Council, or of functions you perform for Council, in order to obtain a private benefit for yourself or for any other person or body.

PART 7 RELATIONSHIPS BETWEEN COUNCIL OFFICIALS

Obligations of Councillors and administrators

- 7.1 Each Council is a body politic. The Councillors or administrator/s are the governing body of the Council. Under section 223 of the LGA, the role of the governing body of the Council includes the development and endorsement of the strategic plans, programs, strategies and policies of the Council, including those relating to workforce policy, and to keep the performance of the Council under review.
- 7.2 Councillors or administrators must not:
 - a) direct Council staff other than by giving appropriate direction to the General Manager by way of Council or committee resolution, or by the Mayor or administrator exercising their functions under section 226 of the LGA
 - b) in any public or private forum, direct or influence, or attempt to direct or influence, any other member of the staff of the Council or a delegate of the Council in the exercise of the functions of the staff member or delegate
 - c) contact a member of the staff of the Council on Council-related business unless in accordance with the policy and procedures governing the interaction of Councillors and Council staff that have been authorised by the Council and the General Manager
 - d) contact or issue instructions to any of the Council's contractors, including the Council's legal advisers, unless by the Mayor or administrator exercising their functions under section 226 of the LGA.
- 7.3 Despite clause 7.2, Councillors may contact the Council's external auditor or the chair of the Council's Audit Risk and Improvement Committee to provide information reasonably necessary for the external auditor or the audit, risk and improvement committee to effectively perform their functions.

Obligations of staff

- 7.4 Under section 335 of the LGA, the role of the General Manager includes conducting the day-to-day management of the Council in accordance with the strategic plans, programs, strategies and policies of the Council, implementing without undue delay, lawful decisions of the Council and ensuring that the Mayor and other Councillors are given timely information and advice and the administrative and professional support necessary to effectively discharge their official functions.
- 7.5 Members of staff of Council must:
 - a) give their attention to the business of the Council while on duty
 - b) ensure that their work is carried out ethically, efficiently, economically and effectively
 - c) carry out reasonable and lawful directions given by any person having authority to give such directions
 - d) give effect to the lawful decisions, policies and procedures of the Council, whether or not the staff member agrees with or approves of them

Item 10.06 Attachment 1 Page 30 e) ensure that any participation in political activities outside the service of the Council does not interfere with the performance of their official duties.

Inappropriate interactions

- 7.6 You must not engage in any of the following inappropriate interactions:
 - a) Councillors and administrators approaching staff and staff organisations to discuss individual or operational staff matters (other than matters relating to broader workforce policy), grievances, workplace investigations and disciplinary matters
 - b) Council staff approaching Councillors and administrators to discuss individual or operational staff matters (other than matters relating to broader workforce policy), grievances, workplace investigations and disciplinary matters
 - c) subject to clause 8.6, Council staff refusing to give information that is available to other Councillors to a particular Councillor
 - d) Councillors and administrators who have lodged an application with the Council, discussing the matter with Council staff in staff-only areas of the Council
 - e) Councillors and administrators approaching members of local planning panels or discussing any application that is either before the panel or that will come before the panel at some future time, except during a panel meeting where the application forms part of the agenda and the Councillor or administrator has a right to be heard by the panel at the meeting
 - f) Councillors and administrators being overbearing or threatening to Council staff
 - g) Council staff being overbearing or threatening to Councillors or administrators
 - h) Councillors and administrators making personal attacks on Council staff or engaging in conduct towards staff that would be contrary to the general conduct provisions in Part 3 of this code in public forums including social media
 - i) Councillors and administrators directing or pressuring Council staff in the performance of their work, or recommendations they should make
 - j) Council staff providing ad hoc advice to Councillors and administrators without recording or documenting the interaction as they would if the advice was provided to a member of the community
 - k) Council staff meeting with applicants or objectors alone AND outside office hours to discuss planning applications or proposals
 - Councillors attending on-site inspection meetings with lawyers and/or consultants engaged by the Council associated with current or proposed legal proceedings unless permitted to do so by the Council's General Manager or, in the case of the Mayor or administrator, unless they are exercising their functions under section 226 of the LGA.

Item 10.06 Attachment 1

Page 31

26

PART 8 ACCESS TO INFORMATION AND COUNCIL RESOURCES

Councillor and administrator access to information

- 8.1 The General Manager is responsible for ensuring that Councillors and administrators can access information necessary for the performance of their official functions. The General Manager and public officer are also responsible for ensuring that members of the public can access publicly available Council information under the *Government Information (Public Access) Act 2009* (the GIPA Act).
- 8.2 The General Manager must provide Councillors and administrators with the information necessary to effectively discharge their official functions.
- 8.3 Members of staff of Council must provide full and timely information to Councillors and administrators sufficient to enable them to exercise their official functions and in accordance with Council procedures.
- 8.4 Members of staff of Council who provide any information to a particular Councillor in the performance of their official functions must also make it available to any other Councillor who requests it and in accordance with Council procedures.
- 8.5 Councillors and administrators who have a private interest only in Council information have the same rights of access as any member of the public.
- 8.6 Despite clause 8.4, Councillors and administrators who are precluded from participating in the consideration of a matter under this code because they have a conflict of interest in the matter, are not entitled to request access to Council information in relation to the matter unless the information is otherwise available to members of the public, or the Council has determined to make the information available under the GIPA Act.

Councillors and administrators to properly examine and consider information

8.7 Councillors and administrators must ensure that they comply with their duty under section 439 of the LGA to act honestly and exercise a reasonable degree of care and diligence by properly examining and considering all the information provided to them relating to matters that they are required to make a decision on.

Refusal of access to information

8.8 Where the General Manager or public officer determine to refuse access to information requested by a Councillor or administrator, they must act reasonably. In reaching this decision they must take into account whether or not the information requested is necessary for the Councillor or administrator to perform their official functions (see clause 8.2) and whether they have disclosed a conflict of interest in the matter the information relates to that would preclude their participation in consideration of the matter (see clause 8.6). The General Manager or public officer must state the reasons for the decision if access is refused.

Use of certain Council information

- 8.9 In regard to information obtained in your capacity as a Council official, you must:
 a) subject to clause 8.14, only access Council information needed for Council business
 - b) not use that Council information for private purposes
 - c) not seek or obtain, either directly or indirectly, any financial benefit or other improper advantage for yourself, or any other person or body, from any information to which you have access by virtue of your office or position with Council
 - d) only release Council information in accordance with established Council policies and procedures and in compliance with relevant legislation.

Use and security of confidential information

- 8.10 You must maintain the integrity and security of confidential information in your possession, or for which you are responsible.
- 8.11 In addition to your general obligations relating to the use of Council information, you must:
 - a) only access confidential information that you have been authorised to access and only do so for the purposes of exercising your official functions
 - b) protect confidential information
 - c) only release confidential information if you have authority to do so
 - d) only use confidential information for the purpose for which it is intended to be used
 - e) not use confidential information gained through your official position for the purpose of securing a private benefit for yourself or for any other person
 - f) not use confidential information with the intention to cause harm or detriment to the Council or any other person or body
 - g) not disclose any confidential information discussed during a confidential session of a Council or committee meeting or any other confidential forum (such as, but not limited to, workshops or briefing sessions).

Personal information

- 8.12 When dealing with personal information you must comply with:
 - a) the Privacy and Personal Information Protection Act 1998
 - b) the Health Records and Information Privacy Act 2002
 - c) the Information Protection Principles and Health Privacy Principles
 - d) the Council's privacy management plan
 - e) the Privacy Code of Practice for Local Government

Use of Council resources

8.13 You must use Council resources ethically, effectively, efficiently and carefully in exercising your official functions, and must not use them for private purposes, except when supplied as part of a contract of employment (but not for private business purposes), unless this use is lawfully authorised and proper payment is made where appropriate.

- 8.14 Union delegates and consultative committee members may have reasonable access to Council resources and information for the purposes of carrying out their industrial responsibilities, including but not limited to:
 - a) the representation of members with respect to disciplinary matters
 - b) the representation of employees with respect to grievances and disputes
 - c) functions associated with the role of the local consultative committee.
- 8.15 You must be scrupulous in your use of Council property, including intellectual property, official services, facilities, technology and electronic devices and must not permit their misuse by any other person or body.
- 8.16 You must avoid any action or situation that could create the appearance that Council property, official services or public facilities are being improperly used for your benefit or the benefit of any other person or body.
- 8.17 You must not use Council resources (including Council staff), property or facilities for the purpose of assisting your election campaign or the election campaigns of others unless the resources, property or facilities are otherwise available for use or hire by the public and any publicly advertised fee is paid for use of the resources, property or facility.
- 8.18 You must not use the Council letterhead, Council crests, Council email or social media or other information that could give the appearance it is official Council material:
 - a) for the purpose of assisting your election campaign or the election campaign of others, or
 - b) for other non-official purposes.
- 8.19 You must not convert any property of the Council to your own use unless properly authorised.

Internet access

8.20 You must not use Council's computer resources or mobile or other devices to search for, access, download or communicate any material of an offensive, obscene, pornographic, threatening, abusive or defamatory nature, or that could otherwise lead to criminal penalty or civil liability and/or damage the Council's reputation.

Council record keeping

- 8.21 You must comply with the requirements of the *State Records Act 1998* and the Council's records management policy.
- 8.22 All information created, sent and received in your official capacity is a Council record and must be managed in accordance with the requirements of the *State Records Act 1998* and the Council's approved records management policies and practices.
- 8.23 All information stored in either soft or hard copy on Council supplied resources (including technology devices and email accounts) is deemed to be related to the business of the Council and will be treated as Council records, regardless of

whether the original intention was to create the information for personal purposes.

8.24 You must not destroy, alter, or dispose of Council information or records, unless authorised to do so. If you need to alter or dispose of Council information or records, you must do so in consultation with the Council's records manager and comply with the requirements of the *State Records Act 1998*.

Councillor access to Council buildings

- 8.25 Councillors and administrators are entitled to have access to the Council chamber, committee room, Mayor's office (subject to availability), Councillors' rooms, and public areas of Council's buildings during normal business hours and for meetings. Councillors and administrators needing access to these facilities at other times must obtain authority from the General Manager.
- 8.26 Councillors and administrators must not enter staff-only areas of Council buildings without the approval of the General Manager (or their delegate) or as provided for in the procedures governing the interaction of Councillors and Council staff.
- 8.27 Councillors and administrators must ensure that when they are within a staff only area they refrain from conduct that could be perceived to improperly influence Council staff decisions.

PART 9 MAINTAINING THE INTEGRITY OF THIS CODE

Complaints made for an improper purpose

- 9.1 You must not make or threaten to make a complaint or cause a complaint to be made alleging a breach of this code for an improper purpose.
- 9.2 For the purposes of clause 9.1, a complaint is made for an improper purpose where it is trivial, frivolous, vexatious or not made in good faith, or where it otherwise lacks merit and has been made substantially for one or more of the following purposes:
 - a) to bully, intimidate or harass another Council official
 - b) to damage another Council official's reputation
 - c) to obtain a political advantage
 - d) to influence a Council official in the exercise of their official functions or to prevent or disrupt the exercise of those functions
 - e) to influence the Council in the exercise of its functions or to prevent or disrupt the exercise of those functions
 - f) to avoid disciplinary action under the Procedures
 - g) to take reprisal action against a person for making a complaint alleging a breach of this code
 - h) to take reprisal action against a person for exercising a function prescribed under the Procedures
 - i) to prevent or disrupt the effective administration of this code under the Procedures.

Detrimental action

- 9.3 You must not take detrimental action or cause detrimental action to be taken against a person substantially in reprisal for a complaint they have made alleging a breach of this code.
- 9.4 You must not take detrimental action or cause detrimental action to be taken against a person substantially in reprisal for any function they have exercised under the Procedures.
- 9.5 For the purposes of clauses 9.3 and 9.4, a detrimental action is an action causing, comprising or involving any of the following:
 - a) injury, damage or loss
 - b) intimidation or harassment
 - c) discrimination, disadvantage or adverse treatment in relation to employment
 - d) dismissal from, or prejudice in, employment
 - e) disciplinary proceedings.

Compliance with requirements under the Procedures

- 9.6 You must not engage in conduct that is calculated to impede or disrupt the consideration of a matter under the Procedures.
- 9.7 You must comply with a reasonable and lawful request made by a person exercising a function under the Procedures. A failure to make a written or oral

submission invited under the Procedures will not constitute a breach of this clause.

- 9.8 You must comply with a practice ruling made by the Office under the Procedures.
- 9.9 Where you are a Councillor or the General Manager, you must comply with any Council resolution requiring you to take action as a result of a breach of this code.

Disclosure of information about the consideration of a matter under the Procedures

- 9.10 All allegations of breaches of this code must be dealt with under and in accordance with the Procedures.
- 9.11 You must not allege breaches of this code other than by way of a complaint made or initiated under the Procedures.
- 9.12 You must not make allegations about, or disclose information about, suspected breaches of this code at Council, committee or other meetings, whether open to the public or not, or in any other forum, whether public or not.
- 9.13 You must not disclose information about a complaint you have made alleging a breach of this code or any other matter being considered under the Procedures except for the purposes of seeking legal advice, unless the disclosure is otherwise permitted under the Procedures.
- 9.14 Nothing under this Part prevents a person from making a public interest disclosure to an appropriate public authority or investigative authority under the *Public Interest Disclosures Act 1994*.

Complaints alleging a breach of this Part

- 9.15 Complaints alleging a breach of this Part by a Councillor, the General Manager or an administrator are to be managed by the Office. This clause does not prevent the Office from referring an alleged breach of this Part back to the Council for consideration in accordance with the Procedures.
- 9.16 Complaints alleging a breach of this Part by other Council officials are to be managed by the General Manager in accordance with the Procedures.

SCHEDULE 1: DISCLOSURES OF INTERESTS AND OTHER MATTERS IN WRITTEN RETURNS SUBMITTED UNDER CLAUSE 4.21

Part 1: Preliminary

Definitions

1. For the purposes of the schedules to this code, the following definitions apply:

address means:

- a) in relation to a person other than a corporation, the last residential or business address of the person known to the Councillor or designated person disclosing the address, or
- b) in relation to a corporation, the address of the registered office of the corporation in New South Wales or, if there is no such office, the address of the principal office of the corporation in the place where it is registered, or
- c) in relation to any real property, the street address of the property.

de facto partner has the same meaning as defined in section 21C of the *Interpretation Act 1987*.

disposition of property means a conveyance, transfer, assignment, settlement, delivery, payment or other alienation of property, including the following:

- a) the allotment of shares in a company
- b) the creation of a trust in respect of property
- c) the grant or creation of a lease, mortgage, charge, easement, licence, power, partnership or interest in respect of property
- d) the release, discharge, surrender, forfeiture or abandonment, at law or in equity, of a debt, contract or chose in action, or of an interest in respect of property
- e) the exercise by a person of a general power of appointment over property in favour of another person
- f) a transaction entered into by a person who intends by the transaction to diminish, directly or indirectly, the value of the person's own property and to increase the value of the property of another person.

gift means a disposition of property made otherwise than by will (whether or not by instrument in writing) without consideration, or with inadequate consideration, in money or money's worth passing from the person to whom the disposition was made to the person who made the disposition, but does not include a financial or other contribution to travel.

interest means:

a) in relation to property, an estate, interest, right or power, at law or in equity, in or over the property, or

b) in relation to a corporation, a relevant interest (within the meaning of section 9 of the *Corporations Act 2001* of the Commonwealth) in securities issued or made available by the corporation.

listed company means a company that is listed within the meaning of section 9 of the *Corporations Act 2001* of the Commonwealth.

occupation includes trade, profession and vocation.

professional or business association means an incorporated or unincorporated body or organisation having as one of its objects or activities the promotion of the economic interests of its members in any occupation.

property includes money.

return date means:

- a) in the case of a return made under clause 4.21(a), the date on which a person became a Councillor or designated person
- b) in the case of a return made under clause 4.21(b), 30 June of the year in which the return is made
- c) in the case of a return made under clause 4.21(c), the date on which the Councillor or designated person became aware of the interest to be disclosed.

relative includes any of the following:

- a) a person's spouse or de facto partner
- b) a person's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child
- c) a person's spouse's or de facto partner's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child
- d) the spouse or de factor partner of a person referred to in paragraphs (b) and (c).

travel includes accommodation incidental to a journey.

Matters relating to the interests that must be included in returns

- 2. Interests etc. outside New South Wales: A reference in this schedule or in schedule 2 to a disclosure concerning a corporation or other thing includes any reference to a disclosure concerning a corporation registered, or other thing arising or received, outside New South Wales.
- 3. *References to interests in real property:* A reference in this schedule or in schedule 2 to real property in which a Councillor or designated person has an interest includes a reference to any real property situated in Australia in which the Councillor or designated person has an interest.
- 4. *Gifts, loans etc. from related corporations:* For the purposes of this schedule and schedule 2, gifts or contributions to travel given, loans made, or goods

or services supplied, to a Councillor or designated person by two or more corporations that are related to each other for the purposes of section 50 of the *Corporations Act 2001* of the Commonwealth are all given, made or supplied by a single corporation.

Part 2: Pecuniary interests to be disclosed in returns

Real property

- 5. A person making a return under clause 4.21 of this code must disclose:
 - a) the street address of each parcel of real property in which they had an interest on the return date, and
 - b) the street address of each parcel of real property in which they had an interest in the period since 30 June of the previous financial year, and
 - c) the nature of the interest.
- 6. An interest in a parcel of real property need not be disclosed in a return if the person making the return had the interest only:
 - a) as executor of the will, or administrator of the estate, of a deceased person and not as a beneficiary under the will or intestacy, or
 - b) as a trustee, if the interest was acquired in the ordinary course of an occupation not related to their duties as the holder of a position required to make a return.
- An interest in a parcel of real property need not be disclosed in a return if the person ceased to hold the interest prior to becoming a Councillor or designated person.
- 8. For the purposes of clause 5 of this schedule, "interest" includes an option to purchase.

<u>Gifts</u>

- 9. A person making a return under clause 4.21 of this code must disclose:
 - a) a description of each gift received in the period since 30 June of the previous financial year, and
 - b) the name and address of the donor of each of the gifts.
- 10. A gift need not be included in a return if:
 - a) it did not exceed \$500, unless it was among gifts totalling more than \$500 made by the same person during a period of 12 months or less, or
 - b) it was a political donation disclosed, or required to be disclosed, under Part 3 of the *Electoral Funding Act 2018*, or
 - c) the donor was a relative of the donee, or
 - d) subject to paragraph (a), it was received prior to the person becoming a Councillor or designated person.
- 11. For the purposes of clause 10 of this schedule, the amount of a gift other than money is an amount equal to the value of the property given.

Contributions to travel

12. A person making a return under clause 4.21 of this code must disclose:

- a) the name and address of each person who made any financial or other contribution to the expenses of any travel undertaken by the person in the period since 30 June of the previous financial year, and
- b) the dates on which the travel was undertaken, and

- c) the names of the states and territories, and of the overseas countries, in which the travel was undertaken.
- 13. A financial or other contribution to any travel need not be disclosed under this clause if it:
 - a) was made from public funds (including a contribution arising from travel on free passes issued under an Act or from travel in government or Council vehicles), or
 - b) was made by a relative of the traveller, or
 - c) was made in the ordinary course of an occupation of the traveller that is not related to their functions as the holder of a position requiring the making of a return, or
 - d) did not exceed \$250, unless it was among gifts totalling more than \$250 made by the same person during a 12-month period or less, or
 - e) was a political donation disclosed, or required to be disclosed, under Part 3 of the *Electoral Funding Act 2018*, or
 - f) was made by a political party of which the traveller was a member and the travel was undertaken for the purpose of political activity of the party in New South Wales, or to enable the traveller to represent the party within Australia, or
 - g) subject to paragraph (d) it was received prior to the person becoming a Councillor or designated person.
- 14. For the purposes of clause 13 of this schedule, the amount of a contribution (other than a financial contribution) is an amount equal to the value of the contribution.

Interests and positions in corporations

15. A person making a return under clause 4.21 of this code must disclose:

- a) the name and address of each corporation in which they had an interest or held a position (whether remunerated or not) on the return date, and
- b) the name and address of each corporation in which they had an interest or held a position in the period since 30 June of the previous financial year, and
- c) the nature of the interest, or the position held, in each of the corporations, and
- d) a description of the principal objects (if any) of each of the corporations, except in the case of a listed company.
- 16. An interest in, or a position held in, a corporation need not be disclosed if the corporation is:
 - a) formed for the purpose of providing recreation or amusement, or for promoting commerce, industry, art, science, religion or charity, or for any other community purpose, and
 - b) required to apply its profits or other income in promoting its objects, and
 - c) prohibited from paying any dividend to its members.
- 17. An interest in a corporation need not be disclosed if the interest is a beneficial interest in shares in a company that does not exceed 10 per cent of the voting rights in the company.

18. An interest or a position in a corporation need not be disclosed if the person ceased to hold the interest or position prior to becoming a Councillor or designated person.

Interests as a property developer or a close associate of a property developer

- 19. A person making a return under clause 4.21 of this code must disclose whether they were a property developer, or a close associate of a corporation that, or an individual who, is a property developer, on the return date.
- 20. For the purposes of clause 19 of this schedule:

close associate, in relation to a corporation or an individual, has the same meaning as it has in section 53 of the *Electoral Funding Act 2018.*

property developer has the same meaning as it has in Division 7 of Part 3 of the *Electoral Funding Act 2018*.

Positions in trade unions and professional or business associations

- 21. A person making a return under clause 4.21 of the code must disclose:
 - a) the name of each trade union, and of each professional or business association, in which they held any position (whether remunerated or not) on the return date, and
 - b) the name of each trade union, and of each professional or business association, in which they have held any position (whether remunerated or not) in the period since 30 June of the previous financial year, and
 - c) a description of the position held in each of the unions and associations.
- 22. A position held in a trade union or a professional or business association need not be disclosed if the person ceased to hold the position prior to becoming a Councillor or designated person.

Dispositions of real property

- 23. A person making a return under clause 4.21 of this code must disclose particulars of each disposition of real property by the person (including the street address of the affected property) in the period since 30 June of the previous financial year, under which they wholly or partly retained the use and benefit of the property or the right to re-acquire the property.
- 24. A person making a return under clause 4.21 of this code must disclose particulars of each disposition of real property to another person (including the street address of the affected property) in the period since 30 June of the previous financial year, that is made under arrangements with, but is not made by, the person making the return, being a disposition under which the person making the return obtained wholly or partly the use of the property.
- 25. A disposition of real property need not be disclosed if it was made prior to a person becoming a Councillor or designated person.

Page 43

Sources of income

26. A person making a return under clause 4.21 of this code must disclose:

- a) each source of income that the person reasonably expects to receive in the period commencing on the first day after the return date and ending on the following 30 June, and
- b) each source of income received by the person in the period since 30 June of the previous financial year.
- 27. A reference in clause 26 of this schedule to each source of income received, or reasonably expected to be received, by a person is a reference to:
 - a) in relation to income from an occupation of the person:
 - (i) a description of the occupation, and
 - (ii) if the person is employed or the holder of an office, the name and address of their employer, or a description of the office, and
 - (iii) if the person has entered into a partnership with other persons, the name (if any) under which the partnership is conducted, or
 - b) in relation to income from a trust, the name and address of the settlor and the trustee, or
 - c) in relation to any other income, a description sufficient to identify the person from whom, or the circumstances in which, the income was, or is reasonably expected to be, received.
- 28. The source of any income need not be disclosed by a person in a return if the amount of the income received, or reasonably expected to be received, by the person from that source did not exceed \$500, or is not reasonably expected to exceed \$500, as the case may be.
- 29. The source of any income received by the person that they ceased to receive prior to becoming a Councillor or designated person need not be disclosed.
- 30. A fee paid to a Councillor or to the Mayor or deputy Mayor under sections 248 or 249 of the LGA need not be disclosed.

<u>Debts</u>

- 31. A person making a return under clause 4.21 of this code must disclose the name and address of each person to whom the person was liable to pay any debt:
 - a) on the return date, and
 - b) at any time in the period since 30 June of the previous financial year.
- 32. A liability to pay a debt must be disclosed by a person in a return made under clause 4.21 whether or not the amount, or any part of the amount, to be paid was due and payable on the return date or at any time in the period since 30 June of the previous financial year, as the case may be.
- 33. A liability to pay a debt need not be disclosed by a person in a return if:
 - a) the amount to be paid did not exceed \$500 on the return date or in the period since 30 June of the previous financial year, as the case may be, unless:

- the debt was one of two or more debts that the person was liable to pay to one person on the return date, or at any time in the period since 30 June of the previous financial year, as the case may be, and
- (ii) the amounts to be paid exceeded, in the aggregate, \$500, or
- b) the person was liable to pay the debt to a relative, or
- c) in the case of a debt arising from a loan of money the person was liable to pay the debt to an authorised deposit-taking institution or other person whose ordinary business includes the lending of money, and the loan was made in the ordinary course of business of the lender, or
- d) in the case of a debt arising from the supply of goods or services:
 - the goods or services were supplied in the period of 12 months immediately preceding the return date, or were supplied in the period since 30 June of the previous financial year, as the case may be, or
 - the goods or services were supplied in the ordinary course of any occupation of the person that is not related to their duties as the holder of a position required to make a return, or
- e) subject to paragraph (a), the debt was discharged prior to the person becoming a Councillor or designated person.

Discretionary disclosures

34. A person may voluntarily disclose in a return any interest, benefit, advantage or liability, whether pecuniary or not, that is not required to be disclosed under another provision of this Schedule.

Item 10.06 Attachment 1

40

SCHEDULE 2: FORM OF WRITTEN RETURN OF INTERESTS SUBMITTED UNDER CLAUSE 4.21

'Disclosures by Councillors and designated persons' return

- 1. The pecuniary interests and other matters to be disclosed in this return are prescribed by Schedule 1 of the *Model Code of Conduct for Local Councils in NSW* (the Model Code of Conduct).
- 2. If this is the first return you have been required to lodge with the General Manager after becoming a Councillor or designated person, do not complete Parts C, D and I of the return. All other parts of the return should be completed with appropriate information based on your circumstances at the return date, that is, the date on which you became a Councillor or designated person.
- 3. If you have previously lodged a return with the General Manager and you are completing this return for the purposes of disclosing a new interest that was not disclosed in the last return you lodged with the General Manager, you must complete all parts of the return with appropriate information for the period from 30 June of the previous financial year or the date on which you became a Councillor or designated person, (whichever is the later date), to the return date which is the date you became aware of the new interest to be disclosed in your updated return.
- 4. If you have previously lodged a return with the General Manager and are submitting a new return for the new financial year, you must complete all parts of the return with appropriate information for the 12-month period commencing on 30 June of the previous year to 30 June this year.
- 5. This form must be completed using block letters or typed.
- 6. If there is insufficient space for all the information you are required to disclose, you must attach an appendix which is to be properly identified and signed by you.
- 7. If there are no pecuniary interests or other matters of the kind required to be disclosed under a heading in this form, the word "NIL" is to be placed in an appropriate space under that heading.

Important information

This information is being collected for the purpose of complying with clause 4.21 of the Model Code of Conduct.

You must not lodge a return that you know or ought reasonably to know is false or misleading in a material particular (see clause 4.23 of the Model Code of Conduct). Complaints about breaches of these requirements are to be referred to the Office of Local Government and may result in disciplinary action by the Council, the Chief Executive of the Office of Local Government or the NSW Civil and Administrative Tribunal.

The information collected on this form will be kept by the General Manager in a register of returns. The General Manager is required to table all returns at a Council meeting.

Information contained in returns made and lodged under clause 4.21 is to be made publicly available in accordance with the requirements of the *Government Information (Public Access) Act 2009*, the *Government Information (Public Access) Regulation 2009* and any guidelines issued by the Information Commissioner.

You have an obligation to keep the information contained in this return up to date. If you become aware of a new interest that must be disclosed in this return, or an interest that you have previously failed to disclose, you must submit an updated return within three months of becoming aware of the previously undisclosed interest.

<u>Disclosure of pecuniary interests and other matters</u> by [full name of Councillor or designated person]

as at [return date]

in respect of the period from [date] to [date]

[Councillor's or designated person's signature] [date]

A. Real Property

Street address of each parcel of real property in which I Nature of had an interest at the return date/at any time since 30 interest June

B. Sources of income

1 Sources of income I reasonably expect to receive from an occupation in the period commencing on the first day after the return date and ending on the following 30 June

Sources of income I received from an occupation at any time since 30 June

Description of occupation	Name and address of employer or description of	Name under which
	office held (if applicable)	partnership
		conducted (if applicable)

2 Sources of income I reasonably expect to receive from a trust in the period commencing on the first day after the return date and ending on the following 30 June

Sources of income I received from a trust since 30 June

Name and address of settlor Name and address of trustee

(except in case

of listed company)

3 Sources of other income I reasonably expect to receive in the period commencing on the first day after the return date and ending on the following 30 June

Sources of other income I received at any time since 30 June [Include description sufficient to identify the person from whom, or the circumstances in which, that income was received]

C. Gifts

Description of each gift I received at any Name and address of donor time since 30 June

D. Contributions to travel			
Name and address of each person who made any financial or other contribution to any travel undertaken by me at any time since 30 June	Dates on whic undertaken	h travel was	Name of States, Territories of the Commonwealth and overseas countries in which travel was undertaken
E. Interests and positions in a	corporations		
Name and address of each corporation in which I had an interest or held a position at the return date/at any time	interest (if	Description of position (if any)	Description of principal objects (if any) of corporation

F. Were you a property developer or a close associate of a property developer on the return date? (Y/N)

G. Positions in trade unions and professional or business associations
Name of each trade union and each
professional or business association in
which I held any position (whether
remunerated or not) at the return date/at
any time since 30 June

H. Debts

since 30 June

Name and address of each person to whom I was liable to pay any debt at the return date/at any time since 30 June

I. Dispositions of property

1 Particulars of each disposition of real property by me (including the street address of the affected property) at any time since 30 June as a result of which I retained, either wholly or in part, the use and benefit of the property or the right to re-acquire the property at a later time

2 Particulars of each disposition of property to a person by any other person under arrangements made by me (including the street address of the affected property), being dispositions made at any time since 30 June, as a result of which I obtained, either wholly or in part, the use and benefit of the property

J. Discretionary disclosures

SCHEDULE 3: FORM OF SPECIAL DISCLOSURE OF PECUNIARY INTEREST SUBMITTED UNDER CLAUSE 4.37

- 1. This form must be completed using block letters or typed.
- 2. If there is insufficient space for all the information you are required to disclose, you must attach an appendix which is to be properly identified and signed by you.

Important information

This information is being collected for the purpose of making a special disclosure of pecuniary interests under clause 4.36(c) of the *Model Code of Conduct for Local Councils in NSW* (the Model Code of Conduct).

The special disclosure must relate only to a pecuniary interest that a Councillor has in the Councillor's principal place of residence, or an interest another person (whose interests are relevant under clause 4.3 of the Model Code of Conduct) has in that person's principal place of residence.

Clause 4.3 of the Model Code of Conduct states that you will have a pecuniary interest in a matter because of the pecuniary interest of your spouse or your de facto partner or your relative or because your business partner or employer has a pecuniary interest. You will also have a pecuniary interest in a matter because you, your nominee, your business partner or your employer is a member of a company or other body that has a pecuniary interest in the matter.

"Relative" is defined by clause 4.4 of the Model Code of Conduct as meaning your, your spouse's or your de facto partner's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child and the spouse or de facto partner of any of those persons.

You must not make a special disclosure that you know or ought reasonably to know is false or misleading in a material particular. Complaints about breaches of these requirements are to be referred to the Office of Local Government and may result in disciplinary action by the Chief Executive of the Office of Local Government or the NSW Civil and Administrative Tribunal.

This form must be completed by you before the commencement of the Council or Council committee meeting at which the special disclosure is being made. The completed form must be tabled at the meeting. Everyone is entitled to inspect it. The special disclosure must be recorded in the minutes of the meeting.

> Item 10.06 Attachment 1 Page 50

Special disclosure of pecuniary interests by [full name of Councillor]

in the matter of [insert name of environmental planning instrument]

which is to be considered at a meeting of the [name of Council or Council committee (as the case requires)]

to be held on the day of 20.

Pecuniary interest	
Address of the affected principal place of residence of the Councillor or an associated person, company or body (the identified land)	
Relationship of identified land to the Councillor [<i>Tick or cross one box</i> .]	 The Councillor has an interest in the land (e.g. is the owner or has another interest arising out of a mortgage, lease, trust, option or contract, or otherwise). An associated person of the Councillor has an interest in the land. An associated company or body of the Councillor has an interest in the land.
Matter giving rise to pecuniary inter	est ¹
Nature of the land that is subject to a change in zone/planning control by the proposed LEP (the subject land) ² [Tick or cross one box]	 The identified land. Land that adjoins or is adjacent to or is in proximity to the identified land.
Current zone/planning control [Insert name of current planning instrument and identify relevant zone/planning control applying to the subject land]	

¹ Clause 4.1 of the Model Code of Conduct provides that a pecuniary interest is an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person. A person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to the matter, or if the interest is of a kind specified in clause 4.6 of the Model Code of Conduct.

² A pecuniary interest may arise by way of a change of permissible use of land adjoining, adjacent to or in proximity to land in which a Councillor or a person, company or body referred to in clause 4.3 of the Model Code of Conduct has a proprietary interest.

Proposed change of zone/planning	
control [Insert name of proposed LEP and]	
identify proposed change of	
zone/planning control applying to	
the subject land]	
Effect of proposed change of	
zone/planning control on Councillor	
or associated person	
[Insert one of the following:	
"Appreciable financial gain" or	
"Appreciable financial loss"]	

[If more than one pecuniary interest is to be declared, reprint the above box and fill in for each additional interest.]

Councillor's signature

Date

[This form is to be retained by the Council's General Manager and included in full in the minutes of the meeting]

Procedures for the Administration of the Model Code of Conduct for Local Councils in NSW

2020

Item 10.06 Attachment 2

Page 53

TABLE OF CONTENTS

PART 1	INTRODUCTION
PART 2	DEFINITIONS
PART 3	ADMINISTRATIVE FRAMEWORK5
PART 4	HOW MAY CODE OF CONDUCT COMPLAINTS BE MADE?8
PART 5	HOW ARE CODE OF CONDUCT COMPLAINTS TO BE
MANAGE	D?10
PART 6	PRELIMINARY ASSESSMENT OF CODE OF CONDUCT
COMPLAI	NTS ABOUT COUNCILLORS OR THE GENERAL MANAGER BY
CONDUC.	T REVIEWERS 18
PART 7	INVESTIGATIONS OF CODE OF CONDUCT COMPLAINTS
ABOUT C	OUNCILLORS OR THE GENERAL MANAGER
PART 8	OVERSIGHT AND RIGHTS OF REVIEW
PART 9	PROCEDURAL IRREGULARITIES
PART 10	PRACTICE DIRECTIONS
PART 11	REPORTING STATISTICS ON CODE OF CONDUCT
COMPLAI	NTS ABOUT COUNCILLORS AND THE GENERAL MANAGER 34
PART 12	CONFIDENTIALITY

PART 1 INTRODUCTION

These procedures ("the Model Code Procedures") are prescribed for the administration of the *Model Code of Conduct for Local Councils in NSW* ("the Model Code of Conduct").

The Model Code of Conduct is made under section 440 of the *Local Government Act* 1993 ("the LGA") and the *Local Government (General) Regulation* 2005 ("the Regulation"). Section 440 of the LGA requires every council (including county councils) and joint organisation to adopt a code of conduct that incorporates the provisions of the Model Code of Conduct.

The Model Code Procedures are made under section 440AA of the LGA and the Regulation. Section 440AA of the LGA requires every council (including county councils) and joint organisation to adopt procedures for the administration of their code of conduct that incorporate the provisions of the Model Code Procedures.

In adopting procedures for the administration of their adopted codes of conduct, councils and joint organisations may supplement the Model Code Procedures. However, provisions that are not consistent with those prescribed under the Model Code Procedures will have no effect.

Note: References in these procedures to councils are also to be taken as references to county councils and joint organisations.

Note: In adopting the Model Code Procedures, joint organisations should adapt them to substitute the terms "board" for "council", "chairperson" for "mayor", "voting representative" for "councillor" and "executive officer" for "general manager".

Note: In adopting the Model Code Procedures, county councils should adapt them to substitute the term "chairperson" for "mayor" and "member" for "councillor".

Note: Parts 6, 7, 8 and 11 of these procedures apply only to the management of code of conduct complaints about councillors (including the mayor) or the general manager.

PART 2 DEFINITIONS

In these procedures the following terms have the following meanings:

administrator	an administrator of a council appointed under the LGA other than an administrator appointed under section 66
code of conduct	a code of conduct adopted under section 440 of the LGA

code of conduct complaint	a complaint that is a code of conduct complaint for the purposes of clauses 4.1 and 4.2 of these procedures
complainant	a person who makes a code of conduct complaint
complainant councillor	a councillor who makes a code of conduct complaint
complaints coordinator	a person appointed by the general manager under these procedures as a complaints coordinator
conduct reviewer	a person appointed under these procedures to review allegations of breaches of the code of conduct by councillors or the general manager
council	includes county councils and joint organisations
council committee	a committee established by a council comprising of councillors, staff or other persons that the council has delegated functions to and the council's audit, risk and improvement committee
council committee member	a person other than a councillor or member of staff of a council who is a member of a council committee other than a wholly advisory committee, and a person other than a councillor who is a member of the council's audit, risk and improvement committee
councillor	any person elected or appointed to civic office, including the mayor, and includes members and chairpersons of county councils and voting representatives of the boards of joint organisations and chairpersons of joint organisations
council official	any councillor, member of staff of council, administrator, council committee member, delegate of council and, for the purposes of clause 4.16 of the Model Code of Conduct, council adviser

Item 10.06 Attachment 2 Page 56

delegate of council	a person (other than a councillor or member of staff of a council) or body, and the individual members of that body, to whom a function of the council is delegated
external agency	a state government agency such as, but not limited to, the Office, the ICAC, the NSW Ombudsman or the police
general manager	includes the executive officer of a joint organisation
ICAC	the Independent Commission Against Corruption
joint organisation	a joint organisation established under section 400O of the LGA
LGA	the Local Government Act 1993
mayor	includes the chairperson of a county council or a joint organisation
members of staff of a council	includes members of staff of county councils and joint organisations
the Office	the Office of Local Government
investigator	a conduct reviewer
the Regulation	the Local Government (General) Regulation 2005
respondent	a person whose conduct is the subject of investigation by a conduct reviewer under these procedures
wholly advisory committee	a council committee that the council has not delegated any functions to

PART 3 ADMINISTRATIVE FRAMEWORK

The establishment of a panel of conduct reviewers

3.1 The council must establish a panel of conduct reviewers.

- 3.2 The council may enter into an arrangement with one or more other councils to share a panel of conduct reviewers including through a joint organisation or another regional body associated with the councils.
- 3.3 The panel of conduct reviewers is to be established following a public expression of interest process.
- 3.4 An expression of interest for members of the council's panel of conduct reviewers must, at a minimum, be advertised locally and in the Sydney metropolitan area.
- 3.5 To be eligible to be a conduct reviewer, a person must, at a minimum, meet the following requirements:
 - a) an understanding of local government, and
 - b) knowledge of investigative processes including but not limited to procedural fairness requirements and the requirements of the *Public Interest Disclosures Act 1994*, and
 - c) knowledge and experience of one or more of the following:
 - i) investigations
 - ii) law
 - iii) public administration
 - iv) public sector ethics
 - v) alternative dispute resolution, and
 - d) meet the eligibility requirements for membership of a panel of conduct reviewers under clause 3.6.
- 3.6 A person is not eligible to be a conduct reviewer if they are:
 - a) a councillor, or
 - b) a nominee for election as a councillor, or
 - c) an administrator, or
 - d) an employee of a council, or
 - e) a member of the Commonwealth Parliament or any State Parliament or Territory Assembly, or
 - f) a nominee for election as a member of the Commonwealth Parliament or any State Parliament or Territory Assembly, or
 - g) a person who has a conviction for an indictable offence that is not an expired conviction.
- 3.7 A person is not precluded from being a member of the council's panel of conduct reviewers if they are a member of another council's panel of conduct reviewers.
- 3.8 An incorporated or other entity may be appointed to a council's panel of conduct reviewers where the council is satisfied that all the persons who will be undertaking the functions of a conduct reviewer on behalf of the entity meet the selection and eligibility criteria prescribed under this Part.
- 3.9 A panel of conduct reviewers established under this Part is to have a term of up to four years.

- 3.10 The council may terminate the panel of conduct reviewers at any time. Where a panel of conduct reviewers has been terminated, conduct reviewers who were members of the panel may continue to deal with any matter referred to them under these procedures prior to the termination of the panel until they have finalised their consideration of the matter.
- 3.11 When the term of the panel of conduct reviewers concludes or is terminated, the council must establish a new panel of conduct reviewers in accordance with the requirements of this Part.
- 3.12 A person who was a member of a previous panel of conduct reviewers established by the council may be a member of subsequent panels of conduct reviewers established by the council if they continue to meet the selection and eligibility criteria for membership of the panel.

The appointment of an internal ombudsman to a panel of conduct reviewers

- 3.13 Despite clause 3.6(d), an employee of a council who is the nominated internal ombudsman of one or more councils may be appointed to a council's panel of conduct reviewers with the Office's consent.
- 3.14 To be appointed to a council's panel of conduct reviewers, an internal ombudsman must meet the qualification requirements for conduct reviewers prescribed under clause 3.5 as modified by the operation of clause 3.13.
- 3.15 An internal ombudsman appointed to a council's panel of conduct reviewers may also exercise the functions of the council's complaints coordinator. For the purposes of clause 6.1, an internal ombudsman who is a council's complaints coordinator and has been appointed to the council's panel of conduct reviewers, may either undertake a preliminary assessment and investigation of a matter referred to them under clauses 5.26 or 5.33 or refer the matter to another conduct reviewer in accordance with clause 6.2.
- 3.16 Clause 6.4(c) does not apply to an internal ombudsman appointed to a council's panel of conduct reviewers.

The appointment of complaints coordinators

- 3.17 The general manager must appoint a member of staff of the council or another person (such as, but not limited to, a member of staff of another council or a member of staff of a joint organisation or other regional body associated with the council), to act as a complaints coordinator. Where the complaints coordinator is a member of staff of the council, the complaints coordinator should be a senior and suitably qualified member of staff.
- 3.18 The general manager may appoint other members of staff of the council or other persons (such as, but not limited to, members of staff of another

council or members of staff of a joint organisation or other regional body associated with the council), to act as alternates to the complaints coordinator.

- 3.19 The general manager must not undertake the role of complaints coordinator.
- 3.20 The person appointed as complaints coordinator or alternate complaints coordinator must also be a nominated disclosures coordinator appointed for the purpose of receiving and managing reports of wrongdoing under the *Public Interest Disclosures Act 1994*.
- 3.21 The role of the complaints coordinator is to:
 - a) coordinate the management of complaints made under the council's code of conduct
 - b) liaise with and provide administrative support to a conduct reviewer
 - c) liaise with the Office, and
 - d) arrange the annual reporting of code of conduct complaints statistics.

PART 4 HOW MAY CODE OF CONDUCT COMPLAINTS BE MADE?

What is a code of conduct complaint?

- 4.1 For the purpose of these procedures, a code of conduct complaint is a complaint that shows or tends to show conduct on the part of a council official in connection with their role as a council official or the exercise of their functions as a council official that would constitute a breach of the standards of conduct prescribed under the council's code of conduct if proven.
- 4.2 The following are not "code of conduct complaints" for the purposes of these procedures:
 - a) complaints about the standard or level of service provided by the council or a council official
 - b) complaints that relate solely to the merits of a decision made by the council or a council official or the exercise of a discretion by the council or a council official
 - c) complaints about the policies or procedures of the council
 - d) complaints about the conduct of a council official arising from the exercise of their functions in good faith, whether or not involving error, that would not otherwise constitute a breach of the standards of conduct prescribed under the council's code of conduct.
- 4.3 Only code of conduct complaints are to be dealt with under these procedures. Complaints that do not satisfy the definition of a code of

conduct complaint are to be dealt with under the council's routine complaints management processes.

When must a code of conduct complaint be made?

- 4.4 A code of conduct complaint must be made within 3 months of the alleged conduct occurring or within three months of the complainant becoming aware of the alleged conduct.
- 4.5 A complaint made after 3 months may only be accepted if the general manager or their delegate, or, in the case of a complaint about the general manager, the mayor or their delegate, is satisfied that the allegations are serious and compelling grounds exist for the matter to be dealt with under the code of conduct.

How may a code of conduct complaint about a council official other than the general manager be made?

- 4.6 All code of conduct complaints other than those relating to the general manager are to be made to the general manager in writing. This clause does not operate to prevent a person from making a complaint to an external agency.
- 4.7 Where a code of conduct complaint about a council official other than the general manager cannot be made in writing, the complaint must be confirmed with the complainant in writing as soon as possible after the receipt of the complaint.
- 4.8 In making a code of conduct complaint about a council official other than the general manager, the complainant may nominate whether they want the complaint to be resolved by mediation or by other alternative means.
- 4.9 The general manager or their delegate, or, where the complaint is referred to a conduct reviewer, the conduct reviewer, must consider the complainant's preferences in deciding how to deal with the complaint.
- 4.10 Notwithstanding clauses 4.6 and 4.7, where the general manager becomes aware of a possible breach of the council's code of conduct, they may initiate the process for the consideration of the matter under these procedures without a written complaint.

How may a code of conduct complaint about the general manager be made?

4.11 Code of conduct complaints about the general manager are to be made to the mayor in writing. This clause does not operate to prevent a person from making a complaint about the general manager to an external agency.

Item 10.06 Attachment 2 Page 61

- 4.12 Where a code of conduct complaint about the general manager cannot be made in writing, the complaint must be confirmed with the complainant in writing as soon as possible after the receipt of the complaint.
- 4.13 In making a code of conduct complaint about the general manager, the complainant may nominate whether they want the complaint to be resolved by mediation or by other alternative means.
- 4.14 The mayor or their delegate, or, where the complaint is referred to a conduct reviewer, the conduct reviewer, must consider the complainant's preferences in deciding how to deal with the complaint.
- 4.15 Notwithstanding clauses 4.11 and 4.12, where the mayor becomes aware of a possible breach of the council's code of conduct by the general manager, they may initiate the process for the consideration of the matter under these procedures without a written complaint.

PART 5 HOW ARE CODE OF CONDUCT COMPLAINTS TO BE MANAGED?

Delegation by general managers and mayors of their functions under this Part

5.1 A general manager or mayor may delegate their functions under this Part to a member of staff of the council or to a person or persons external to the council other than an external agency. References in this Part to the general manager or mayor are also to be taken to be references to their delegates.

Consideration of complaints by general managers and mayors

5.2 In exercising their functions under this Part, general managers and mayors may consider the complaint assessment criteria prescribed under clause 6.31.

What complaints may be declined at the outset?

- 5.3 Without limiting any other provision in these procedures, the general manager or, in the case of a complaint about the general manager, the mayor, may decline to deal with a complaint under these procedures where they are satisfied that the complaint:
 - a) is not a code of conduct complaint, or
 - b) subject to clause 4.5, is not made within 3 months of the alleged conduct occurring or the complainant becoming aware of the alleged conduct, or
 - c) is trivial, frivolous, vexatious or not made in good faith, or
 - d) relates to a matter the substance of which has previously been considered and addressed by the council and does not warrant further action, or

e) is not made in a way that would allow the alleged conduct and any alleged breaches of the council's code of conduct to be readily identified.

How are code of conduct complaints about staff (other than the general manager) to be dealt with?

- 5.4 The general manager is responsible for the management of code of conduct complaints about members of staff of council (other than complaints alleging a breach of the pecuniary interest provisions contained in Part 4 of the code of conduct) and for determining the outcome of such complaints.
- 5.5 The general manager must refer code of conduct complaints about members of staff of council alleging a breach of the pecuniary interest provisions contained in Part 4 of the code of conduct to the Office.
- 5.6 The general manager may decide to take no action in relation to a code of conduct complaint about a member of staff of council other than one requiring referral to the Office under clause 5.5 where they consider that no action is warranted in relation to the complaint.
- 5.7 Where the general manager decides to take no action in relation to a code of conduct complaint about a member of staff of council, the general manager must give the complainant reasons in writing for their decision and this shall finalise the consideration of the matter under these procedures.
- 5.8 Code of conduct complaints about members of staff of council must be managed in accordance with the relevant industrial instrument or employment contract and make provision for procedural fairness including the right of an employee to be represented by their union.
- 5.9 Sanctions for breaches of the code of conduct by staff depend on the severity, scale and importance of the breach and must be determined in accordance with any relevant industrial instruments or contracts.

How are code of conduct complaints about delegates of council, council advisers and council committee members to be dealt with?

- 5.10 The general manager is responsible for the management of code of conduct complaints about delegates of council and council committee members (other than complaints alleging a breach of the pecuniary interest provisions contained in Part 4 of the code of conduct) and for determining the outcome of such complaints.
- 5.11 The general manager must refer code of conduct complaints about council advisers, delegates of council and council committee members alleging a breach of the pecuniary interest provisions contained in Part 4 of the code of conduct to the Office.

- 5.12 The general manager may decide to take no action in relation to a code of conduct complaint about a delegate of council or a council committee member other than one requiring referral to the Office under clause 5.11 where they consider that no action is warranted in relation to the complaint.
- 5.13 Where the general manager decides to take no action in relation to a code of conduct complaint about a delegate of council or a council committee member, the general manager must give the complainant reasons in writing for their decision and this shall finalise the consideration of the matter under these procedures.
- 5.14 Where the general manager considers it to be practicable and appropriate to do so, the general manager may seek to resolve code of conduct complaints about delegates of council or council committee members, by alternative means such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour. The resolution of a code of conduct complaint under this clause is not to be taken as a determination that there has been a breach of the council's code of conduct.
- 5.15 Where the general manager resolves a code of conduct complaint under clause 5.14 to the general manager's satisfaction, the general manager must notify the complainant in writing of the steps taken to resolve the complaint and this shall finalise the consideration of the matter under these procedures.
- 5.16 Sanctions for breaches of the code of conduct by delegates of council and/or council committee members depend on the severity, scale and importance of the breach and may include one or more of the following:
 - a) censure
 - b) requiring the person to apologise to any person or organisation adversely affected by the breach in such a time and form specified by the general manager
 - c) prosecution for any breach of the law
 - d) removing or restricting the person's delegation
 - e) removing the person from membership of the relevant council committee.
- 5.17 Prior to imposing a sanction against a delegate of council or a council committee member under clause 5.16, the general manager or any person making enquiries on behalf of the general manager must comply with the requirements of procedural fairness. In particular:
 - a) the substance of the allegation (including the relevant provision/s of the council's code of conduct that the alleged conduct is in breach of) must be put to the person who is the subject of the allegation, and

- b) the person must be given an opportunity to respond to the allegation, and
- c) the general manager must consider the person's response in deciding whether to impose a sanction under clause 5.16.

How are code of conduct complaints about administrators to be dealt with?

- 5.18 The general manager must refer all code of conduct complaints about administrators to the Office for its consideration.
- 5.19 The general manager must notify the complainant of the referral of their complaint in writing.

How are code of conduct complaints about councillors to be dealt with?

- 5.20 The general manager must refer the following code of conduct complaints about councillors to the Office:
 - a) complaints alleging a breach of the pecuniary interest provisions contained in Part 4 of the code of conduct
 - b) complaints alleging a failure to comply with a requirement under the code of conduct to disclose and appropriately manage conflicts of interest arising from political donations (see section 328B of the LGA)
 - c) complaints alleging a breach of the provisions relating to the maintenance of the integrity of the code of conduct contained in Part 9 of the code of conduct
 - d) complaints that are the subject of a special complaints management arrangement with the Office under clause 5.49.
- 5.21 Where the general manager refers a complaint to the Office under clause 5.20, the general manager must notify the complainant of the referral in writing.
- 5.22 The general manager may decide to take no action in relation to a code of conduct complaint about a councillor, other than one requiring referral to the Office under clause 5.20, where they consider that no action is warranted in relation to the complaint.
- 5.23 Where the general manager decides to take no action in relation to a code of conduct complaint about a councillor, the general manager must give the complainant reasons in writing for their decision within 21 days of receipt of the complaint and this shall finalise the consideration of the matter under these procedures.
- 5.24 Where the general manager considers it to be practicable and appropriate to do so, the general manager may seek to resolve code of conduct complaints about councillors, other than those requiring referral to the Office under clause 5.20, by alternative means such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the

Item 10.06 Attachment 2 Page 65 offending behaviour. The resolution of a code of conduct complaint under this clause is not to be taken as a determination that there has been a breach of the council's code of conduct.

- 5.25 Where the general manager resolves a code of conduct complaint under clause 5.24 to the general manager's satisfaction, the general manager must notify the complainant in writing of the steps taken to resolve the complaint within 21 days of receipt of the complaint and this shall finalise the consideration of the matter under these procedures.
- 5.26 The general manager must refer all code of conduct complaints about councillors, other than those referred to the Office under clause 5.20 or finalised under clause 5.23 or resolved under clause 5.24, to the complaints coordinator.

How are code of conduct complaints about the general manager to be dealt with?

- 5.27 The mayor must refer the following code of conduct complaints about the general manager to the Office:
 - a) complaints alleging a breach of the pecuniary interest provisions contained in Part 4 of the code of conduct
 - b) complaints alleging a breach of the provisions relating to the maintenance of the integrity of the code of conduct contained in Part 9 of the code of conduct
 - c) complaints that are the subject of a special complaints management arrangement with the Office under clause 5.49.
- 5.28 Where the mayor refers a complaint to the Office under clause 5.27, the mayor must notify the complainant of the referral in writing.
- 5.29 The mayor may decide to take no action in relation to a code of conduct complaint about the general manager, other than one requiring referral to the Office under clause 5.27, where they consider that no action is warranted in relation to the complaint.
- 5.30 Where the mayor decides to take no action in relation to a code of conduct complaint about the general manager, the mayor must give the complainant reasons in writing for their decision within 21 days of receipt of the complaint and this shall finalise the consideration of the matter under these procedures.
- 5.31 Where the mayor considers it to be practicable and appropriate to do so, the mayor may seek to resolve code of conduct complaints about the general manager, other than those requiring referral to the Office under clause 5.27, by alternative means such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour. The resolution of a code of conduct complaint under this clause is not to

Item 10.06 Attachment 2 Page 66 be taken as a determination that there has been a breach of the council's code of conduct.

- 5.32 Where the mayor resolves a code of conduct complaint under clause 5.31 to the mayor's satisfaction, the mayor must notify the complainant in writing of the steps taken to resolve the complaint within 21 days of receipt of the complaint and this shall finalise the consideration of the matter under these procedures.
- 5.33 The mayor must refer all code of conduct complaints about the general manager, other than those referred to the Office under clause 5.27 or finalised under clause 5.30 or resolved under clause 5.31, to the complaints coordinator.

How are complaints about both the general manager and the mayor to be dealt with?

- 5.34 Where the general manager or mayor receives a code of conduct complaint that alleges a breach of the code of conduct by both the general manager and the mayor, the general manager or mayor must either:
 - a) delegate their functions under this part with respect to the complaint to a member of staff of the council other than the general manager where the allegation is not serious, or to a person external to the council, or
 - b) refer the matter to the complaints coordinator under clause 5.26 and clause 5.33.

Referral of code of conduct complaints to external agencies

- 5.35 The general manager, mayor or a conduct reviewer may, at any time, refer a code of conduct complaint to an external agency for its consideration, where they consider such a referral is warranted.
- 5.36 The general manager, mayor or a conduct reviewer must report to the ICAC any matter that they suspect on reasonable grounds concerns or may concern corrupt conduct.
- 5.37 Where the general manager, mayor or conduct reviewer refers a complaint to an external agency under clause 5.35, they must notify the complainant of the referral in writing unless they form the view, on the advice of the relevant agency, that it would not be appropriate for them to do so.
- 5.38 Referral of a matter to an external agency shall finalise consideration of the matter under these procedures unless the council is subsequently advised otherwise by the referral agency.

Disclosure of the identity of complainants

- 5.39 In dealing with matters under these procedures, information that identifies or tends to identify complainants is not to be disclosed unless:
 - a) the complainant consents in writing to the disclosure, or
 - b) it is generally known that the complainant has made the complaint as a result of the complainant having voluntarily identified themselves as the person who made the complaint, or
 - c) it is essential, having regard to procedural fairness requirements, that the identifying information be disclosed, or
 - d) a conduct reviewer is of the opinion that disclosure of the information is necessary to investigate the matter effectively, or
 - e) it is otherwise in the public interest to do so.
- 5.40 Clause 5.39 does not apply to code of conduct complaints made by councillors about other councillors or the general manager.
- 5.41 Where a councillor makes a code of conduct complaint about another councillor or the general manager, and the complainant councillor considers that compelling grounds exist that would warrant information that identifies or tends to identify them as the complainant not to be disclosed, they may request in writing that such information not be disclosed.
- 5.42 A request made by a complainant councillor under clause 5.41 must be made at the time they make a code of conduct complaint and must state the grounds upon which the request is made.
- 5.43 The general manager or mayor, and where the matter is referred to a conduct reviewer, the conduct reviewer, must consider a request made under clause 5.41 before disclosing information that identifies or tends to identify the complainant councillor, but they are not obliged to comply with the request.
- 5.44 Where a complainant councillor makes a request under clause 5.41, the general manager or mayor or, where the matter is referred to a conduct reviewer, the conduct reviewer, shall notify the councillor in writing of their intention to disclose information that identifies or tends to identify them prior to disclosing the information.

Code of conduct complaints made as public interest disclosures

5.45 These procedures do not override the provisions of the *Public Interest Disclosures Act 1994.* Code of conduct complaints that are made as public interest disclosures under that Act are to be managed in accordance with the requirements of that Act, the council's internal reporting policy, and any guidelines issued by the NSW Ombudsman that relate to the management of public interest disclosures.

- 5.46 Where a councillor makes a code of conduct complaint about another councillor or the general manager as a public interest disclosure, before the matter may be dealt with under these procedures, the complainant councillor must consent in writing to the disclosure of their identity as the complainant.
- 5.47 Where a complainant councillor declines to consent to the disclosure of their identity as the complainant under clause 5.46, the general manager or the mayor must refer the complaint to the Office for consideration. Such a referral must be made under section 26 of the *Public Interest Disclosures Act 1994*.

Special complaints management arrangements

- 5.48 The general manager may request in writing that the Office enter into a special complaints management arrangement with the council in relation to code of conduct complaints made by or about a person or persons.
- 5.49 Where the Office receives a request under clause 5.48, it may agree to enter into a special complaints management arrangement if it is satisfied that the number or nature of code of conduct complaints made by or about a person or persons has:
 - a) imposed an undue and disproportionate cost burden on the council's administration of its code of conduct, or
 - b) impeded or disrupted the effective administration by the council of its code of conduct, or
 - c) impeded or disrupted the effective functioning of the council.
- 5.50 A special complaints management arrangement must be in writing and must specify the following:
 - a) the code of conduct complaints the arrangement relates to, and
 - b) the period that the arrangement will be in force.
- 5.51 The Office may, by notice in writing, amend or terminate a special complaints management arrangement at any time.
- 5.52 While a special complaints management arrangement is in force, an officer of the Office (the assessing OLG officer) must undertake the preliminary assessment of the code of conduct complaints specified in the arrangement in accordance with the requirements of Part 6 of these procedures.
- 5.53 Where, following a preliminary assessment, the assessing OLG officer determines that a code of conduct complaint warrants investigation by a conduct reviewer, the assessing OLG officer shall notify the complaints coordinator in writing of their determination and the reasons for their determination. The complaints coordinator must comply with the recommendation of the assessing OLG officer.

- 5.54 Prior to the expiry of a special complaints management arrangement, the Office may, at the request of the general manager, review the arrangement to determine whether it should be renewed or amended.
- 5.55 A special complaints management arrangement shall expire on the date specified in the arrangement unless renewed under clause 5.54.

PART 6 PRELIMINARY ASSESSMENT OF CODE OF CONDUCT COMPLAINTS ABOUT COUNCILLORS OR THE GENERAL MANAGER BY CONDUCT REVIEWERS

Referral of code of conduct complaints about councillors or the general manager to conduct reviewers

- 6.1 The complaints coordinator must refer all code of conduct complaints about councillors or the general manager that have not been referred to an external agency or declined or resolved by the general manager, mayor or their delegate and that have been referred to them under clauses 5.26 or 5.33, to a conduct reviewer within 21 days of receipt of the complaint by the general manager or the mayor.
- 6.2 For the purposes of clause 6.1, the complaints coordinator will refer a complaint to a conduct reviewer selected from:
 - a) a panel of conduct reviewers established by the council, or
 - b) a panel of conduct reviewers established by an organisation approved by the Office.
- 6.3 In selecting a suitable conduct reviewer, the complaints coordinator may have regard to the qualifications and experience of members of the panel of conduct reviewers. Where the conduct reviewer is an incorporated or other entity, the complaints coordinator must also ensure that the person assigned to receive the referral on behalf of the entity meets the selection and eligibility criteria for conduct reviewers prescribed under Part 3 of these procedures.
- 6.4 A conduct reviewer must not accept the referral of a code of conduct complaint where:
 - a) they have a conflict of interest in relation to the matter referred to them, or
 - b) a reasonable apprehension of bias arises in relation to their consideration of the matter, or
 - c) they or their employer has entered into one or more contracts with the council (other than contracts relating to the exercise of their functions as a conduct reviewer) in the 2 years preceding the referral, and they or their employer have received or expect to receive payments under the contract or contracts of a value that, when aggregated, exceeds \$100,000, or

Item 10.06 Attachment 2 Page 70

- d) at the time of the referral, they or their employer are the council's legal service provider or are a member of a panel of legal service providers appointed by the council.
- 6.5 For the purposes of clause 6.4(a), a conduct reviewer will have a conflict of interest in a matter where a reasonable and informed person would perceive that they could be influenced by a private interest when carrying out their public duty (see clause 5.2 of the Model Code of Conduct).
- 6.6 For the purposes of clause 6.4(b), a reasonable apprehension of bias arises where a fair-minded observer might reasonably apprehend that the conduct reviewer might not bring an impartial and unprejudiced mind to the matter referred to the conduct reviewer.
- 6.7 Where the complaints coordinator refers a matter to a conduct reviewer, they will provide the conduct reviewer with a copy of the code of conduct complaint and any other information relevant to the matter held by the council, including any information about previous proven breaches and any information that would indicate that the alleged conduct forms part of an ongoing pattern of behaviour.
- 6.8 The complaints coordinator must notify the complainant in writing that the matter has been referred to a conduct reviewer, and advise which conduct reviewer the matter has been referred to.
- 6.9 Conduct reviewers must comply with these procedures in their consideration of matters that have been referred to them and exercise their functions in a diligent and timely manner.
- 6.10 The complaints coordinator may at any time terminate the referral of a matter to a conduct reviewer and refer the matter to another conduct reviewer where the complaints coordinator is satisfied that the conduct reviewer has failed to:
 - a) comply with these procedures in their consideration of the matter, or
 - b) comply with a lawful and reasonable request by the complaints coordinator, or
 - c) exercise their functions in a timely or satisfactory manner.
- 6.11 Where the complaints coordinator terminates a referral to a conduct reviewer under clause 6.10, they must notify the complainant and any other affected person in writing of their decision and the reasons for it and advise them which conduct reviewer the matter has been referred to instead.

Preliminary assessment of code of conduct complaints about councillors or the general manager by a conduct reviewer

- 6.12 The conduct reviewer is to undertake a preliminary assessment of a complaint referred to them by the complaints coordinator for the purposes of determining how the complaint is to be managed.
- 6.13 The conduct reviewer may determine to do one or more of the following in relation to a complaint referred to them by the complaints coordinator:
 - a) to take no action
 - b) to resolve the complaint by alternative and appropriate strategies such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour
 - c) to refer the matter back to the general manager or, in the case of a complaint about the general manager, the mayor, for resolution by alternative and appropriate strategies such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour
 - d) to refer the matter to an external agency
 - e) to investigate the matter.
- 6.14 In determining how to deal with a matter under clause 6.13, the conduct reviewer must have regard to the complaint assessment criteria prescribed under clause 6.31.
- 6.15 The conduct reviewer may make such enquiries the conduct reviewer considers to be reasonably necessary to determine what options to exercise under clause 6.13.
- 6.16 The conduct reviewer may request the complaints coordinator to provide such additional information the conduct reviewer considers to be reasonably necessary to determine what options to exercise in relation to the matter under clause 6.13. The complaints coordinator will, as far as is reasonably practicable, supply any information requested by the conduct reviewer.
- 6.17 The conduct reviewer must refer to the Office any complaints referred to them that should have been referred to the Office under clauses 5.20 and 5.27.
- 6.18 The conduct reviewer must determine to take no action on a complaint that is not a code of conduct complaint for the purposes of these procedures.
- 6.19 The resolution of a code of conduct complaint under clause 6.13, paragraphs (b) or (c) is not to be taken as a determination that there has been a breach of the council's code of conduct.

- 6.20 Where the conduct reviewer completes their preliminary assessment of a complaint by determining to exercise an option under clause 6.13, paragraphs (a), (b) or (c), they must provide the complainant with written notice of their determination and provide reasons for it, and this will finalise consideration of the matter under these procedures.
- 6.21 Where the conduct reviewer refers a complaint to an external agency, they must notify the complainant of the referral in writing unless they form the view, on the advice of the relevant agency, that it would not be appropriate for them to do so.
- 6.22 The conduct reviewer may only determine to investigate a matter where they are satisfied as to the following:
 - a) that the complaint is a code of conduct complaint for the purposes of these procedures, and
 - b) that the alleged conduct is sufficiently serious to warrant the formal censure of a councillor under section 440G of the LGA or disciplinary action against the general manager under their contract of employment if it were to be proven, and
 - c) that the matter is one that could not or should not be resolved by alternative means.
- 6.23 In determining whether a matter is sufficiently serious to warrant formal censure of a councillor under section 440G of the LGA or disciplinary action against the general manager under their contract of employment, the conduct reviewer is to consider the following:
 - a) the harm or cost that the alleged conduct has caused to any affected individuals and/or the council
 - b) the likely impact of the alleged conduct on the reputation of the council and public confidence in it
 - c) whether the alleged conduct was deliberate or undertaken with reckless intent or negligence
 - d) any previous proven breaches by the person whose alleged conduct is the subject of the complaint and/or whether the alleged conduct forms part of an ongoing pattern of behaviour.
- 6.24 The conduct reviewer must complete their preliminary assessment of the complaint within 28 days of referral of the matter to them by the complaints coordinator and notify the complaints coordinator in writing of the outcome of their assessment.
- 6.25 The conduct reviewer is not obliged to give prior notice to or to consult with any person before making a determination in relation to their preliminary assessment of a complaint, except as may be specifically required under these procedures.

Referral back to the general manager or mayor for resolution

6.26 Where the conduct reviewer determines to refer a matter back to the general manager or to the mayor to be resolved by alternative and

appropriate means, they must write to the general manager or, in the case of a complaint about the general manager, to the mayor, recommending the means by which the complaint may be resolved.

- 6.27 The conduct reviewer must consult with the general manager or mayor prior to referring a matter back to them under clause 6.13(c).
- 6.28 The general manager or mayor may decline to accept the conduct reviewer's recommendation. In such cases, the conduct reviewer may determine to deal with the complaint by other means under clause 6.13.
- 6.29 Where the conduct reviewer refers a matter back to the general manager or mayor under clause 6.13(c), the general manager or, in the case of a complaint about the general manager, the mayor, is responsible for implementing or overseeing the implementation of the conduct reviewer's recommendation.
- 6.30 Where the conduct reviewer refers a matter back to the general manager or mayor under clause 6.13(c), the general manager, or, in the case of a complaint about the general manager, the mayor, must advise the complainant in writing of the steps taken to implement the conduct reviewer's recommendation once these steps have been completed.

Complaints assessment criteria

- 6.31 In undertaking the preliminary assessment of a complaint, the conduct reviewer must have regard to the following considerations:
 - a) whether the complaint is a code of conduct complaint for the purpose of these procedures
 - b) whether the complaint has been made in a timely manner in accordance with clause 4.4, and if not, whether the allegations are sufficiently serious for compelling grounds to exist for the matter to be dealt with under the council's code of conduct
 - c) whether the complaint is trivial, frivolous, vexatious or not made in good faith
 - d) whether the complaint discloses prima facie evidence of conduct that, if proven, would constitute a breach of the code of conduct
 - e) whether the complaint raises issues that would be more appropriately dealt with by an external agency
 - f) whether there is or was an alternative and satisfactory means of redress available in relation to the conduct complained of
 - g) whether the complaint is one that can be resolved by alternative and appropriate strategies such as, but not limited to, explanation, counselling, training, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour
 - h) whether the issue/s giving rise to the complaint have previously been addressed or resolved
 - i) any previous proven breaches of the council's code of conduct
 - j) whether the conduct complained of forms part of an ongoing pattern of behaviour

Item 10.06 Attachment 2

- k) whether there were mitigating circumstances giving rise to the conduct complained of
- I) the seriousness of the alleged conduct (having regard to the criteria specified in clause 6.23)
- m) the significance of the conduct or the impact of the conduct for the council
- n) how much time has passed since the alleged conduct occurred
- o) such other considerations that the conduct reviewer considers may be relevant to the assessment of the complaint.

PART 7 INVESTIGATIONS OF CODE OF CONDUCT COMPLAINTS ABOUT COUNCILLORS OR THE GENERAL MANAGER

What matters may a conduct reviewer investigate?

- 7.1 A conduct reviewer (hereafter referred to as an "investigator") may investigate a code of conduct complaint that has been referred to them by the complaints coordinator and any matters related to or arising from that complaint.
- 7.2 Where an investigator identifies further separate possible breaches of the code of conduct that are not related to or do not arise from the code of conduct complaint that has been referred to them, they are to report the matters separately in writing to the general manager, or, in the case of alleged conduct on the part of the general manager, to the mayor.
- 7.3 The general manager or the mayor or their delegate is to deal with a matter reported to them by an investigator under clause 7.2 as if it were a new code of conduct complaint in accordance with these procedures.

How are investigations to be commenced?

- 7.4 The investigator must at the outset of their investigation provide a written notice of investigation to the respondent. The notice of investigation must:
 - a) disclose the substance of the allegations against the respondent, and
 - b) advise of the relevant provisions of the code of conduct that apply to the alleged conduct, and
 - c) advise of the process to be followed in investigating the matter, and
 - d) advise the respondent of the requirement to maintain confidentiality, and
 - e) invite the respondent to make a written submission in relation to the matter within a period of not less than 14 days specified by the investigator in the notice, and
 - f) provide the respondent the opportunity to address the investigator on the matter within such reasonable time specified in the notice.

Item 10.06 Attachment 2

- 7.5 The respondent may, within 7 days of receipt of the notice of investigation, request in writing that the investigator provide them with such further information they consider necessary to assist them to identify the substance of the allegation against them. An investigator will only be obliged to provide such information that the investigator considers reasonably necessary for the respondent to identify the substance of the allegation against them.
- 7.6 An investigator may at any time prior to issuing a draft report, issue an amended notice of investigation to the respondent in relation to the matter referred to them.
- 7.7 Where an investigator issues an amended notice of investigation, they must provide the respondent with a further opportunity to make a written submission in response to the amended notice of investigation within a period of not less than 14 days specified by the investigator in the amended notice.
- 7.8 The investigator must also, at the outset of their investigation, provide written notice of the investigation to the complainant, the complaints coordinator and the general manager, or in the case of a complaint about the general manager, to the complainant, the complaints coordinator and the mayor. The notice must:
 - a) advise them of the matter the investigator is investigating, and
 - b) in the case of the notice to the complainant, advise them of the requirement to maintain confidentiality, and
 - c) invite the complainant to make a written submission in relation to the matter within a period of not less than 14 days specified by the investigator in the notice.

Written and oral submissions

- 7.9 Where the respondent or the complainant fails to make a written submission in relation to the matter within the period specified by the investigator in their notice of investigation or amended notice of investigation, the investigator may proceed to prepare their draft report without receiving such submissions.
- 7.10 The investigator may accept written submissions received outside the period specified in the notice of investigation or amended notice of investigation.
- 7.11 Prior to preparing a draft report, the investigator must give the respondent an opportunity to address the investigator on the matter being investigated. The respondent may do so in person or by telephone or other electronic means.
- 7.12 Where the respondent fails to accept the opportunity to address the investigator within the period specified by the investigator in the notice of

investigation, the investigator may proceed to prepare a draft report without hearing from the respondent.

- 7.13 Where the respondent accepts the opportunity to address the investigator in person, they may have a support person or legal adviser in attendance. The support person or legal adviser will act in an advisory or support role to the respondent only. They must not speak on behalf of the respondent or otherwise interfere with or disrupt proceedings.
- 7.14 The investigator must consider all written and oral submissions made to them in relation to the matter.

How are investigations to be conducted?

- 7.15 Investigations are to be undertaken without undue delay.
- 7.16 Investigations are to be undertaken in the absence of the public and in confidence.
- 7.17 Investigators must make any such enquiries that may be reasonably necessary to establish the facts of the matter.
- 7.18 Investigators may seek such advice or expert guidance that may be reasonably necessary to assist them with their investigation or the conduct of their investigation.
- 7.19 An investigator may request that the complaints coordinator provide such further information that the investigator considers may be reasonably necessary for them to establish the facts of the matter. The complaints coordinator will, as far as is reasonably practicable, provide the information requested by the investigator.

Referral or resolution of a matter after the commencement of an investigation

- 7.20 At any time after an investigator has issued a notice of investigation and before they have issued their final report, an investigator may determine to:
 - a) resolve the matter by alternative and appropriate strategies such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour, or
 - b) refer the matter to the general manager, or, in the case of a complaint about the general manager, to the mayor, for resolution by alternative and appropriate strategies such as, but not limited to, explanation, counselling, training, mediation, informal discussion, negotiation, a voluntary apology or an undertaking not to repeat the offending behaviour, or
 - c) refer the matter to an external agency.

Item 10.06 Attachment 2

- 7.21 Where an investigator determines to exercise any of the options under clause 7.20 after the commencement of an investigation, they must do so in accordance with the requirements of Part 6 of these procedures relating to the exercise of these options at the preliminary assessment stage.
- 7.22 The resolution of a code of conduct complaint under clause 7.20, paragraphs (a) or (b) is not to be taken as a determination that there has been a breach of the council's code of conduct.
- 7.23 Where an investigator determines to exercise any of the options under clause 7.20 after the commencement of an investigation, they may by written notice to the respondent, the complainant, the complaints coordinator and the general manager, or in the case of a complaint about the general manager, to the respondent, the complainant, the complaints coordinator and the mayor, discontinue their investigation of the matter.
- 7.24 Where the investigator discontinues their investigation of a matter under clause 7.23, this shall finalise the consideration of the matter under these procedures.
- 7.25 An investigator is not obliged to give prior notice to or to consult with any person before making a determination to exercise any of the options under clause 7.20 or to discontinue their investigation except as may be specifically required under these procedures.

Draft investigation reports

- 7.26 When an investigator has completed their enquiries and considered any written or oral submissions made to them in relation to a matter, they must prepare a draft of their proposed report.
- 7.27 The investigator must provide their draft report to the respondent and invite them to make a written submission in relation to it within a period of not less than 14 days specified by the investigator.
- 7.28 Where the investigator proposes to make adverse comment about any other person (an affected person) in their report, they must also provide the affected person with relevant extracts of their draft report containing such comment and invite the affected person to make a written submission in relation to it within a period of not less than 14 days specified by the investigator.
- 7.29 The investigator must consider written submissions received in relation to the draft report prior to finalising their report in relation to the matter.
- 7.30 The investigator may, after consideration of all written submissions received in relation to their draft report, make further enquiries into the matter. If, as a result of making further enquiries, the investigator makes any material change to their proposed report that makes new adverse comment about the respondent or an affected person, they must provide

the respondent or affected person as the case may be with a further opportunity to make a written submission in relation to the new adverse comment.

- 7.31 Where the respondent or an affected person fails to make a written submission in relation to the draft report within the period specified by the investigator, the investigator may proceed to prepare and issue their final report without receiving such submissions.
- 7.32 The investigator may accept written submissions in relation to the draft report received outside the period specified by the investigator at any time prior to issuing their final report.

Final investigation reports

- 7.33 Where an investigator issues a notice of investigation, they must prepare a final report in relation to the matter unless the investigation is discontinued under clause 7.23.
- 7.34 An investigator must not prepare a final report in relation to the matter at any time before they have finalised their consideration of the matter in accordance with the requirements of these procedures.
- 7.35 The investigator's final report must:
 - a) make findings of fact in relation to the matter investigated, and,
 - b) make a determination that the conduct investigated either,
 - i. constitutes a breach of the code of conduct, or
 - ii. does not constitute a breach of the code of conduct, and
 - c) provide reasons for the determination.
- 7.36 At a minimum, the investigator's final report must contain the following information:
 - a) a description of the allegations against the respondent
 - b) the relevant provisions of the code of conduct that apply to the alleged conduct investigated
 - c) a statement of reasons as to why the matter warranted investigation (having regard to the criteria specified in clause 6.23)
 - d) a statement of reasons as to why the matter was one that could not or should not be resolved by alternative means
 - e) a description of any attempts made to resolve the matter by use of alternative means
 - f) the steps taken to investigate the matter
 - g) the facts of the matter
 - h) the investigator's findings in relation to the facts of the matter and the reasons for those findings
 - i) the investigator's determination and the reasons for that determination
 - j) any recommendations.

Item 10.06 Attachment 2

- 7.37 Where the investigator determines that the conduct investigated constitutes a breach of the code of conduct, the investigator may recommend:
 - a) in the case of a breach by the general manager, that disciplinary action be taken under the general manager's contract of employment for the breach, or
 - b) in the case of a breach by a councillor, that the councillor be formally censured for the breach under section 440G of the LGA, or
 - c) in the case of a breach by a councillor, that the council resolves as follows:
 - i. that the councillor be formally censured for the breach under section 440G of the LGA, and
 - ii. that the matter be referred to the Office for further action under the misconduct provisions of the LGA.
- 7.38 Where the investigator proposes to make a recommendation under clause 7.37(c), the investigator must first consult with the Office on their proposed findings, determination and recommendation prior to finalising their report, and must take any comments by the Office into consideration when finalising their report.
- 7.39 Where the investigator has determined that there has been a breach of the code of conduct, the investigator may, in addition to making a recommendation under clause 7.37, recommend that the council revise any of its policies, practices or procedures.
- 7.40 Where the investigator determines that the conduct investigated does not constitute a breach of the code of conduct, the investigator may recommend:
 - a) that the council revise any of its policies, practices or procedures
 - b) that a person or persons undertake any training or other education.
- 7.41 The investigator must provide a copy of their report to the complaints coordinator and the respondent.
- 7.42 At the time the investigator provides a copy of their report to the complaints coordinator and the respondent, the investigator must provide the complainant with a written statement containing the following information:
 - a) the investigator's findings in relation to the facts of the matter and the reasons for those findings
 - b) the investigator's determination and the reasons for that determination
 - c) any recommendations, and
 - d) such other additional information that the investigator considers may be relevant.

Item 10.06 Attachment 2 Page 80

- 7.43 Where the investigator has determined that there has not been a breach of the code of conduct, the complaints coordinator must provide a copy of the investigator's report to the general manager or, where the report relates to the general manager's conduct, to the mayor, and this will finalise consideration of the matter under these procedures.
- 7.44 Where the investigator has determined that there has been a breach of the code of conduct and makes a recommendation under clause 7.37, the complaints coordinator must, where practicable, arrange for the investigator's report to be reported to the next ordinary council meeting for the council's consideration, unless the meeting is to be held within the 4 weeks prior to an ordinary local government election, in which case the report must be reported to the first ordinary council meeting following the election.
- 7.45 Where it is apparent to the complaints coordinator that the council will not be able to form a quorum to consider the investigator's report, the complaints coordinator must refer the investigator's report to the Office for its consideration instead of reporting it to the council under clause 7.44.

Consideration of the final investigation report by council

- 7.46 The role of the council in relation to a final investigation report is to impose a sanction if the investigator has determined that there has been a breach of the code of conduct and has made a recommendation in their final report under clause 7.37.
- 7.47 The council is to close its meeting to the public to consider the final investigation report in cases where it is permitted to do so under section 10A of the LGA.
- 7.48 Where the complainant is a councillor, they must absent themselves from the meeting and take no part in any discussion or voting on the matter. The complainant councillor may absent themselves without making any disclosure of interest in relation to the matter unless otherwise required to do so under the code of conduct.
- 7.49 Prior to imposing a sanction, the council must provide the respondent with an opportunity to make a submission to the council. A submission may be made orally or in writing. The respondent is to confine their submission to addressing the investigator's recommendation.
- 7.50 Once the respondent has made their submission they must absent themselves from the meeting and, where they are a councillor, take no part in any discussion or voting on the matter.
- 7.51 The council must not invite submissions from other persons for the purpose of seeking to rehear evidence previously considered by the investigator.

- 7.52 Prior to imposing a sanction, the council may by resolution:
 - a) request that the investigator make additional enquiries and/or provide additional information to it in a supplementary report, or
 - b) seek an opinion from the Office in relation to the report.
- 7.53 The council may, by resolution, defer further consideration of the matter pending the receipt of a supplementary report from the investigator or an opinion from the Office.
- 7.54 The investigator may make additional enquiries for the purpose of preparing a supplementary report.
- 7.55 Where the investigator prepares a supplementary report, they must provide copies to the complaints coordinator who shall provide a copy each to the council and the respondent.
- 7.56 The investigator is not obliged to notify or consult with any person prior to submitting the supplementary report to the complaints coordinator.
- 7.57 The council is only required to provide the respondent a further opportunity to make an oral or written submission on a supplementary report if the supplementary report contains new information that is adverse to them.
- 7.58 A council may by resolution impose one of the following sanctions on a respondent:
 - a) in the case of a breach by the general manager, that disciplinary action be taken under the general manager's contract of employment for the breach, or
 - b) in the case of a breach by a councillor, that the councillor be formally censured for the breach under section 440G of the LGA, or
 - c) in the case of a breach by a councillor:
 - i. that the councillor be formally censured for the breach under section 440G of the LGA, and
 - ii. that the matter be referred to the Office for further action under the misconduct provisions of the LGA.
- 7.59 Where the council censures a councillor under section 440G of the LGA, the council must specify in the censure resolution the grounds on which it is satisfied that the councillor should be censured by disclosing in the resolution, the investigator's findings and determination and/or such other grounds that the council considers may be relevant or appropriate.
- 7.60 The council is not obliged to adopt the investigator's recommendation. Where the council proposes not to adopt the investigator's recommendation, the council must resolve not to adopt the recommendation and state in its resolution the reasons for its decision.

7.61 Where the council resolves not to adopt the investigator's recommendation, the complaints coordinator must notify the Office of the council's decision and the reasons for it.

PART 8 OVERSIGHT AND RIGHTS OF REVIEW

The Office's powers of review

- 8.1 The Office may, at any time, whether or not in response to a request, review the consideration of a matter under a council's code of conduct where it is concerned that a person has failed to comply with a requirement prescribed under these procedures or has misinterpreted or misapplied the standards of conduct prescribed under the code of conduct in their consideration of a matter.
- 8.2 The Office may direct any person, including the council, to defer taking further action in relation to a matter under consideration under the council's code of conduct pending the completion of its review. Any person the subject of a direction must comply with the direction.
- 8.3 Where the Office undertakes a review of a matter under clause 8.1, it will notify the complaints coordinator and any other affected persons, of the outcome of the review.

Complaints about conduct reviewers

- 8.4 The general manager or their delegate must refer code of conduct complaints about conduct reviewers to the Office for its consideration.
- 8.5 The general manager must notify the complainant of the referral of their complaint about the conduct reviewer in writing.
- 8.6 The general manager must implement any recommendation made by the Office as a result of its consideration of a complaint about a conduct reviewer.

Practice rulings

- 8.7 Where a respondent and an investigator are in dispute over a requirement under these procedures, either person may make a request in writing to the Office to make a ruling on a question of procedure (a practice ruling).
- 8.8 Where the Office receives a request in writing for a practice ruling, the Office may provide notice in writing of its ruling and the reasons for it to the person who requested it and to the investigator, where that person is different.
- 8.9 Where the Office makes a practice ruling, all parties must comply with it.

8.10 The Office may decline to make a practice ruling. Where the Office declines to make a practice ruling, it will provide notice in writing of its decision and the reasons for it to the person who requested it and to the investigator, where that person is different.

Review of decisions to impose sanctions

- 8.11 A person who is the subject of a sanction imposed under Part 7 of these procedures other than one imposed under clause 7.58, paragraph (c), may, within 28 days of the sanction being imposed, seek a review of the investigator's determination and recommendation by the Office.
- 8.12 A review under clause 8.11 may be sought on the following grounds:
 - a) that the investigator has failed to comply with a requirement under these procedures, or
 - b) that the investigator has misinterpreted or misapplied the standards of conduct prescribed under the code of conduct, or
 - c) that in imposing its sanction, the council has failed to comply with a requirement under these procedures.
- 8.13 A request for a review made under clause 8.11 must be made in writing and must specify the grounds upon which the person believes the investigator or the council has erred.
- 8.14 The Office may decline to conduct a review, in cases where the grounds upon which the review is sought are not sufficiently specified.
- 8.15 The Office may undertake a review of a matter without receiving a request under clause 8.11.
- 8.16 The Office will undertake a review of the matter on the papers. However, the Office may request that the complaints coordinator provide such further information that the Office considers reasonably necessary for it to review the matter. The complaints coordinator must, as far as is reasonably practicable, provide the information requested by the Office.
- 8.17 Where a person requests a review under clause 8.11, the Office may direct the council to defer any action to implement a sanction. The council must comply with a direction to defer action by the Office.
- 8.18 The Office must notify the person who requested the review and the complaints coordinator of the outcome of the Office's review in writing and the reasons for its decision. In doing so, the Office may comment on any other matters the Office considers to be relevant.
- 8.19 Where the Office considers that the investigator or the council has erred, the Office may recommend that a decision to impose a sanction under these procedures be reviewed. Where the Office recommends that the decision to impose a sanction be reviewed:

- a) the complaints coordinator must, where practicable, arrange for the Office's determination to be tabled at the next ordinary council meeting unless the meeting is to be held within the 4 weeks prior to an ordinary local government election, in which case it must be tabled at the first ordinary council meeting following the election, and
- b) the council must:
 - i. review its decision to impose the sanction, and
 - ii. consider the Office's recommendation in doing so, and
 - iii. resolve to either rescind or reaffirm its previous resolution in relation to the matter.
- 8.20 Where, having reviewed its previous decision in relation to a matter under clause 8.19(b), the council resolves to reaffirm its previous decision, the council must state in its resolution its reasons for doing so.

PART 9 PROCEDURAL IRREGULARITIES

- 9.1 A failure to comply with these procedures does not, on its own, constitute a breach of the code of conduct, except as may be otherwise specifically provided under the code of conduct.
- 9.2 A failure to comply with these procedures will not render a decision made in relation to a matter invalid where:
 - a) the non-compliance is isolated and/or minor in nature, or
 - b) reasonable steps are taken to correct the non-compliance, or
 - c) reasonable steps are taken to address the consequences of the non-compliance.

PART 10 PRACTICE DIRECTIONS

- 10.1 The Office may at any time issue a practice direction in relation to the application of these procedures.
- 10.2 The Office will issue practice directions in writing, by circular to all councils.
- 10.3 All persons performing a function prescribed under these procedures must consider the Office's practice directions when performing the function.

PART 11 REPORTING STATISTICS ON CODE OF CONDUCT COMPLAINTS ABOUT COUNCILLORS AND THE GENERAL MANAGER

- 11.1 The complaints coordinator must arrange for the following statistics to be reported to the council within 3 months of the end of September of each year:
 - a) the total number of code of conduct complaints made about councillors and the general manager under the code of conduct in the year to September (the reporting period)
 - b) the number of code of conduct complaints referred to a conduct reviewer during the reporting period
 - c) the number of code of conduct complaints finalised by a conduct reviewer at the preliminary assessment stage during the reporting period and the outcome of those complaints
 - d) the number of code of conduct complaints investigated by a conduct reviewer during the reporting period
 - e) without identifying particular matters, the outcome of investigations completed under these procedures during the reporting period
 - f) the number of matters reviewed by the Office during the reporting period and, without identifying particular matters, the outcome of the reviews, and
 - g) the total cost of dealing with code of conduct complaints made about councillors and the general manager during the reporting period, including staff costs.
- 11.2 The council is to provide the Office with a report containing the statistics referred to in clause 11.1 within 3 months of the end of September of each year.

PART 12 CONFIDENTIALITY

- 12.1 Information about code of conduct complaints and the management and investigation of code of conduct complaints is to be treated as confidential and is not to be publicly disclosed except as may be otherwise specifically required or permitted under these procedures.
- 12.2 Where a complainant publicly discloses information on one or more occasions about a code of conduct complaint they have made or purported to make, the general manager or their delegate may, with the consent of the Office, determine that the complainant is to receive no further information about their complaint and any future code of conduct complaint they make or purport to make.
- 12.3 Prior to seeking the Office's consent under clause 12.2, the general manager or their delegate must give the complainant written notice of their intention to seek the Office's consent, invite them to make a written submission within a period of not less than 14 days specified by the

general manager or their delegate, and consider any submission made by them.

- 12.4 In giving its consent under clause 12.2, the Office must consider any submission made by the complainant to the general manager or their delegate.
- 12.5 The general manager or their delegate must give written notice of a determination made under clause 12.2 to:
 - a) the complainant
 - b) the complaints coordinator
 - c) the Office, and
 - d) any other person the general manager or their delegate considers should be notified of the determination.
- 12.6 Any requirement under these procedures that a complainant is to be provided with information about a code of conduct complaint that they have made or purported to make, will not apply to a complainant the subject of a determination made by the general manager or their delegate under clause 12.2.
- 12.7 Clause 12.6 does not override any entitlement a person may have to access to council information under the *Government Information (Public Access) Act 2009* or to receive information under the *Public Interest Disclosures Act 1994* in relation to a complaint they have made.

INSTRUMENT OF DELEGATION TO GENERAL MANAGER

PORT MACQUARIE-HASTINGS COUNCIL

On 17 February 2021 Port Macquarie-Hastings Council ("Council") resolved that:

- 1. All previous delegations of Functions the subject of this Instrument be revoked.
- 2. The person who holds the role of General Manager of Council in the position of Chief Executive Officer ("General Manager" or "Chief Executive Officer"), being at the date of this instrument, Dr Clare Molly Allen, be delegated authority under section 377 of the LG Act to exercise and/or perform on behalf of Council the Council's Functions under all Legislation in force and as amended from time to time:

(a) **Subject to** any condition or limitation on a Function specified in **Schedule 1**; and

- (b) **Excluding** those Functions:
 - that are expressly prohibited from delegation as listed under Section 377 of the LG Act;
 - (ii) which are expressly required by legislation to be exercised by a resolution of Council.
- 3. The General Manager be sub-delegated authority to exercise and/ or perform on behalf of Council the Functions delegated to Council under, and in accordance with, any instrument of delegation to the Council set out in **Schedule 2**, **excluding** those functions which pursuant to the terms of delegation to the Council may not be sub-delegated.
- 4. The General Manager be delegated any Function which is taken to be conferred or imposed on the Council pursuant to section 381(1) of the LG Act.
- 5. In the absence of the Chief Executive Officer that a person appointed by resolution to act as Chief Executive Officer assume all functions, delegations and sub-delegations of the Chief Executive Officer for the period only of the absence of the Chief Executive Officer unless otherwise resolved by Council.
- 6. The delegations in this Instrument are subject to, and are to be exercised in accordance with, the requirements of the relevant legislation, and any resolution or policy or procedure or budget adopted from time to time by the Council.
- 7. The delegations in this Instrument are effective from the date of the resolution of the Council referred to below and remain in force until amended or revoked by a resolution of the Council.
- 8. In this delegation:

"Functions" means powers, authorities, duties and functions and anything ancillary or related to the exercise or performance thereof.

"General Manager" means "Chief Executive Officer" and vice versa

"Legislation" includes legislation enacted by the parliaments of New South Wales and of the Commonwealth of Australia;

"LG Act" means the Local Government Act 1993 as amended.

INSTRUMENT OF DELEGATION TO GENERAL MANAGER

Schedule 1: Limitations

1	i,	1	٨	
N	I	1	H	۱

Schedule 2: Instruments of Delegation to Council

Delegator	Regarding	Date of Instrument
NSW Food Authority	NSW Food Authority- Those functions as specified in the <i>Food Act 2003</i> .	Tuesday, 1 July 2008
Roads and Maritime Services (RMS)	Roads and Maritime Services delegations- Section 50- The RMS delegates to councils constituted under the <i>Local Government Act 1993</i> listed in schedule 1 and 2 respectively ("delegates") the functions of RMS set out in Schedule 3 ("the functions") subject to the limitations set out in Schedule 4 and authorises delegates to sub- delegate the functions to the persons in Schedule 5 ("sub-delegates") subject to the limitations in Schedule 4.	Monday, 31 October 2011
NSW Government- Planning & Infrastructure	Making of Local Environmental Plans- Authority to exercise the functions of the Minister for Planning & Infrastructure under Section 59 of the <i>Environmental Planning and Assessment Act 1979</i> that are delegated to Port Macquarie-Hastings Council by instrument of delegation dated 14 October 2012, following receipt of the Written Authorisation to Exercise Delegation in exercising the Minister's function under section 59, Council officers must comply the Department's "A guideline for the preparation of local environmental plans" and "A guide to preparing planning proposals".	Sunday, 14 October 2012
NSW- Fair Trading	Fair Trading- Those functions as specified in the "Instrument of delegation" under section 21 of the <i>Plumbing and Drainage Act 2011</i> .	Tuesday, 1 January 2013
National Heavy Vehicle Regulator Board	National Heavy Vehicle Regulator Board- Those functions specified in Column 1 and Column 2 of Schedule 1, subject to the limitations (if any) specified in Column 3 of Schedule 1.	Thursday, 22 January 2015

Pursuant to a Resolution of the Council at its meeting of 17 February 2021

Peta Pinson Mayor Date: 18 February 2021

Port Macquarie-Hastings Council

Page 2 of 3

INSTRUMENT OF DELEGATION TO GENERAL MANAGER

General Manager's acknowledgement of Delegations of Authority

I, Dr Clare Molly Allen, currently employed by the Council in the role of General Manager and position of Chief Executive Officer do hereby acknowledge that I have read and understood the Instrument of Delegation, delegated to me by Council pursuant to a Resolution of the Council at its meeting of 17 February 2021 and that I will perform my duties within the boundaries of these delegations and in accordance with my position description. I acknowledge these delegations are effective unless revoked only while I remain in this position.

.....

Dr Clare Molly Allen Chief Executive Officer Date: 18 February 2021

Port Macquarie-Hastings Council

Page 3 of 3

Item 10.07 Attachment 1 Page 90

ATTACHMENT

Port Macquarie-Hastings Council Budget Review for the quarter ended 31 December 2020 Income & Expenses

			AN	NUAL			YEA	R TO DATE		CURR		TER
	Original Budget 2020/21	Original Budget including Carry-over 2020/21 (000's)	Approved Changes (Jul-Aug 20 Reviews (000's)	Approved Changes Sep Nov 20 Reviews (000's)	Revised Budget	Projected year end result 2020/21 (000's)	YTD Actuals (000's)	YTD Budget (000's)	Actuals as a % of Budget	Oct 20 - Dec 20 Actuals	Oct 20 - Dec 20 Budget	Oct 20 - Dec 20 Actuals as a % of Budget
Income												
Rates and annual charges	105,087	105,087			105,087	105,087	100,004	99,950	100.1%	1,706	2,225	76.7%
User charges and fees	36,935	36,935		(879)	36,056	36,056	14,583	18,150	80.3%	9,112	8,880	102.6%
Interest and investment revenue	6,490	6,490			6,490	6,490	3,391	3,441	98.5%	1,644	1,818	90.4%
Other revenues	4,109	4,109	(10)	85	4,184	4,184	2,364	2,022	116.9%	1,049	915	114.7%
Grants and contributions - operating	16,243	17,238	419	210	17,867	17,867	6,973	7,139	97.7%	4,549	3,705	122.8%
Grants and contributions - capital	28,274	30,176	1,659	4,512	36,347	36,347	15,534	11,697	132.8%	8,516	6,842	124.5%
Total income from continuing operations	197,138	200,035	2,068	3,928	206,031	206,031	142,848	142,399	100.3%	26,577	24,385	109.0%
Expenses												
Employee costs	54,590	54,590	(102)	160	54,648	54,648	24,700	28,077	88.0%	13,226	14,773	89.5%
Borrowing costs	2,512	2,512	. ,		2,512	2,512	1,065	992	107.3%	701	758	92.4%
Materials and contracts	42,329	45,573	1,736	(632)	46,677	46,677	18,327	21,768	84.2%	11,301	11,881	95.1%
Depreciation	49,177	49,177			49,177	49,177	24,268	24,589	98.7%	11,586	12,294	94.2%
Other expenses	15,075	15,075	63		15,138	15,138	6,783	7,344	92.4%	3,366	4,136	81.4%
Net Loss/(Profit) from disposal of assets	3,000	3,000	(1,500)		1,500	1,500	0	0	0.0%	0	0	0.0%
Total expenses from continuing operations	166,683	169,927	197	(472)	169,652	169,652	75,143	82,769	90.8%	40,180	43,842	91.6%
Net operating result from continuing operations - Surplus/(Deficit)	30,455	30,108	1,871	4,400	36,379	36,379	67,706	59,630	113.5%	(13,603)	(19,457)	69.9%
Net operating result before capital items - Surplus/(Deficit)	2,181	(68)	212	(112)	32	32	52,172	47,933	108.8%	(22,119)	(26,299)	84.1%

ATTACHMENT

Port Macquarie-Hastings Council Budget Review for the quarter ended 31 December 2020 Capital Budget (excluding Commitments)

	Original Budget 2020/21	Carry- over (000's)	Approved Changes Jul-Aug 20 Reviews (000's)	Approved Changes Sep-Nov 20 Reviews (000's)	Revised Budget	Projected year end result 2020/21 (000's)	YTD Actuals (000's)		Actuals as a % of Budget	Oct 20 - Dec 20 Actuals	Oct 20 - Dec 20 Budget	Oct 20 - Dec 20 Actuals as a % of Budget
Capital Funding												
General fund rates and environmental levy	5,606		28	(28)	5,606	5,606	2,323	1,739	133.6%	1,930	266	725.6%
Capital grants and contributions	11,732	1,327	1,607	4,557	19,223	19,223	3,275	3,631	90.2%	2,075	(160)	-1296.9%
Internal Restrictions	28,607	4,509	(11)	(400)	32,705	32,705	3,420	5,133	66.6%	1,576	531	296.8%
External Restrictions	25,290	746	(1,106)	1,213	26,143	26,143	9,884	11,711	84.4%	3,749	2,859	131.1%
S94/64 funds	10,958	1,462	(539)	(485)	11,396	11,396	2,993	3,149	95.0%	1,594	796	200.3%
Loans	2,700				2,700	2,700	810	850	95.3%	58	(370)	-15.7%
Total Capital Funding	84,892	8,044	(21)	4,857	97,772	97,772	22,705	26,213	86.6%	10,982	3,922	280.0%
Capital Expenditure												
General fund asset purchases/construction	46,785	6,988	1,196	4,115	59,084	59,084	7,966	10,390	76.7%	4,018	(763)	-526.6%
Waste management asset purchases/construction	6,173	297	(111)	(109)	6,250	6,250	709	402	176.4%	112	(310)	-36.1%
Water supply asset purchases/construction	22,475	178	(2,098)	(471)	20,084	20,084	6,327	6,726	94.1%	2,914	1,586	183.7%
Sewerage services asset purchases/construction	9,459	581	992	1,322	12,354	12,354	2,517	3,588	70.2%	425	(118)	-360.2%
Capital Expenditure excluding Loans	84,892	8,044	(21)	4,857	97,772	97,772	17,519	21,106	83.0%	7,469	395	1890.9%
Loan Repayments (principal)	10,470				10,470	10,470	5,186	5,107	101.5%	3,513	3,527	99.6%
Total Capital Expenditure	95,362	8,044	(21)	4,857	108,242	108,242	22,705	26,213	86.6%	10,982	3,922	280.0%

Port Macquarie-Hastings Council Budget Review for the quarter ended 31 December 2020 Cash & Investments

	Original Budget 2020/21 (000's)	Carry- over (000's)	Approved Changes Jul- Aug 20 Reviews (000's)	Approved Changes Sep-Nov 20 Reviews (000's)	Revised Budget	Projected year end result 2020/21 (000's)	YTD Actuals (000's)
Unrestricted	(677)		151	64	(462)	(462)	
Externally restricted							
Developer Contributions (Incl Water & Sewer)	115,680	(1,475)	1,101		115,307	115,307	
Unexpended contributions	72				72	72	
Unexpended grants Unexpended loans	6,959 (3,355)	(272)	10		6,959 (3,617)	6,959 (3,617)	
Water Supply	65,922	(78)	2,098	(1,000)	66,942	66,942	
Sewerage Services	27,202	(497)	(984)	(1,330)	24,391	24,391	
Employee Leave Entitlements (Restricted)	0	(4.4.0)			0 1.475	0 1.475	
Special Rates Domestic Waste Management	1,593	(118) (378)	20	185	1,475	1,475	
Stormwater Management	(382)	(196)	57	100	(521)	(521)	
Deposits & Bonds	7,862				7,862	7,862	
Total externally restricted	233,340	(3,014)	2,302	(2,145)	230,484	230,484	
Internally restricted							
Operational Reserves Committed Works	4,542	(1.000)	200	90	2 0 00	3.029	
Committed Works Employee Leave Entitlements	4,542 5,812	(1,902)	299	90	3,029 5,812	3,029 5,812	
Office Building & Equipment	435	(32)			403	403	
Plant Replacement	4,187		(215)		3,972	3,972	
Working Capital	5,435	(947)	84		4,488	4,488	0
Quarantined Funds	20,411	(2,881)	84	90	17,704	17,704	C
Crown Reserves	507	(395)			112	112	
Environment Levy	1,415	(609)	30		836	836	
Onsite Effluent	903				903	903	
Surf Clubs Tourism & Industry Promotion	714 611				714 611	714 611	
Wauchope Heated Indoor Pool	0				0	0	
	4,150	(1,004)	30	0	3,176	3,176	C
Roads & Infrastructure Asset Revaluation							
Asset Revaluation The Glasshouse	104 457				104 457	104 457	
Ferries Maintenance	1,350				1,350	1,350	
Infrastructure Priorities	222	(109)			113	113	
Lake Road Upgrade	0				0	0	
Major Buildings Renewals Playing Fields	243 300	(195)			48 300	48 300	
PM Town Centre Masterplan	1,401	(294)	38		1,145	1,145	
Road Environmental Works	(9)	(11)			(20)	(20)	
Regional Road Infrastructure	6,114	(9)			6,105	6,105	
Strategic Priorities Reserve Transport Infrastructure Renewal	7,604 2,439	(180)	45 121		7,649 2,392	7,649 2,392	
William Street Carparking	3,391	(168)	121		2,382	2,382	
Works Associated with Developments	200				200	200	
	23,816	(786)	204	0	19,843	19,843	C
Council Business Units Airport	(49)	(53)			(102)	(102)	
Crematorium & Lawn Cemetery	730	(55)	1,500		2.230	2.230	
Property Investment	2,252	(293)	.,		1,959	1,959	
	2,933	(346)	1,500	0	4,087	4,087	C
Coastal & Estuary Management Canal Maintenance	(53)	(175)			(228)	(228)	
Lake Cathie Dredging	41	(175)			(220)	(220)	
Lake Cathie Remediation - Enforceable Undertaking	60						
Town Beach Sand Nourishment/4WD Access Points	634				634	634	
Other	682	(175)	0	0	447	447	C
Council Election	50			650	700	700	
Covid Relief Measures			(1,493)	200			
Cultural Activities	200		. ,		200	200	
HACC Greenmeadows	0	(105)			0	0	
Planning Studies Street Lighting	(206) 886	(185)			(391) 886	(391) 886	
Town Bands	0				82	82	
Work Health & Safety Initiatives	130						
	1,060	(185)	(1,493)	650	1,477	1,477	C
Total internally restricted	53,052	(5,377)	325	740	46,734	46,734	
Total restricted	286,392	(8,391)	2,627	(1,405)	277,218	277,218	
Total cash and investments	285,715	(8,391)	2,778	(1,341)	276,756	276,756	
Available cash	(677)	0	151	64	(462)	(462)	
Available CaSII	(611)	U	101	64	(462)	(462)	
			Total Cash	& Investments less Cas		al Balance & on Hand	338,268 (179)
			Total funds	s invested per t	he Investm	ent Report	338,089

Responsible Accounting Officer Statement All restricted funds are invested in accordance with Council's Investment Policy. Council's cash has been reconciled to the bank statement to the 31 December 2020 The YTD Total Cash and Investments have been reconciled with funds invested and Cash at Bank.

Item 10.10 Attachment 1

Port Macquarie-Hastings Council Budget Review for the quarter ended 31 December 2020 TCORP Ratios

T-Corp Ratios					Projected Jur	e 2021 Position		
Ratio	Purpose	Definition	Benchmark	June 2020 Actual Result	Original 2020/21 Budget	Revised 2020/21 Budget	Internal Target - Short Term (1-2 yrs)	CALCULATION METHOD
Operating Performance	This ratio measures Council's achievement of containing operating expenditure within operating revenue.	(Operating Revenue excluding capital grants and contributions - operating expenses) / (Operating Revenue excluding capital grants and contributions)	Greater than 0	✓ 3.38%	Ø 0.69%	Ø 0.02%	>0%	Budget
Own Source Revenue	This ratio measures fiscal flexibility. It is the degree of reliance on external funding sources such as operating grants and contributions. A Council's financial flexibility improves the higher the level of its own source revenue.	Operating Revenue excluding all grants and contributions/ Total Revenue including all grants and contributions	Greater than 60%	71.82%	76.95%	Ø 70.74%	60.00%	Budget
Unrestricted Current Ratio	This ratio is designed to represent Council's ability to meet short term obligations as they fall due.	Current assets less all external restrictions/ current liabilities less specific purpose liabilities	Greater than 1.5	1.43	1.54	⊘ 1.54	>1.5	Estimate
Debt Service Cover	This ratio measures the availability of operating cash to service debt including interest, principal and lease payments.	(Op results before capital excluding interest & depn, impairment, amortisation) / (Principal repayments + borrowing costs)	Greater than 2	4.83	4.60	4.50	>2	Estimate
Rates and Annual Charges Outstanding Percentage	To assess the impact of uncollected rates and annual charges on liquidity and the adequacy of recovery efforts.	Rates and annual charges outstanding/ Rates and annual charges collectible	<5% metro and <10% rural	S.71	5.88	5.88	< 5.5%	Estimate
Cash Expenses Cover	This liquidity ratio indicates the number of months a Council can continue paying for its immediate expenses without additional cash flow.	(Current year's cash equivalents + term deposits) (Payments from cash flow of operating and financing activities) x 12	Greater than 3 months	28.31	32.46	3 4.14	> 3 months	Estimate
Building and Infrastructure Renewals Ratio	This ratio compares the proportion spent on infrastructure asset renewals and the asset's deterioration measured by its accounting depreciation.	Asset renewals (building, infrastructure and other structures/Depreciation, amortisation and impairment (building, infrastructure and other structures)	100%	⊗ 49.35%	8 72.67%	80.12%	>45%	Estimate
Infrastructure Backlog Ratio	This ratio shows what proportion the backlog is against the total value of Council's infrastructure.	Estimated cost to bring assets to a satisfactory condition/ Total value of infrastructure, building, other structures and depreciable land improvement assets.	Less than 2%	3.51%	4.24%	() 4.19%	<6%	Estimate
Asset Maintenance	This ratio compares actual versus required annual maintenance, as detailed in Special Schedule 7 (of the annual financial statements).	Actual asset maintenance/Required asset maintenance	Greater than 1	0.93	0.92	0.91	>.9	Estimate

0	
0	
8	

Meets ratio benchmark Close to meeting ratio benchmark Does not meet benchmark

Item 10.10 Attachment 1

Port Macquarie-Hastings Council Budget Review for the quarter ended 31 December 2020 Consultancy and Legal Expenses

	Expenditure YTD excluding GST	Budgeted Y/N
Expense		
Legal Fees	206,409	Yes
IT Consulting	182,687	Yes
Business Consultant	150,116	Yes
Engineering Consulting	1,003,929	Yes
Environmental Consulting	378,765	Yes
Property Development	140,381	Yes
Total Expense	2,062,287	

Port Macquarie-Hastings Council Budget Review for the quarter ended 31 December 2020 Contracts entered into during the December quarter.

Division	Contractor	Contract detail & purpose	Contract value	Commencement Date	Duration of Contract	Budgeted Y/N	Explanation as to why not budgeted.
Corporate Performance	OpenCities Pty Ltd	Content Management System for Council's Website	\$342,000	20-Feb-21	Three (3) years	Yes	Not Applicable
Corporate Performance	Rapiscan Systems Pty Ltd	T-20-14 Port Macquarie Airport Security Screening Equipment	\$385,757	21-Oct-20	Three (3) years	Yes	Not Applicable
Development & Environment	Hopkins Consultants Pty Ltd	T-20-17 Design & Environmental Approvals - Thrumster Sporting Fields	\$346,945	21-Oct-20	Complete on finalisation of project	Yes	Not Applicable
Infrastructure	Pensar Water Pty Ltd	T-20-26 Bonny Hills Recycled Water System Upgrade	\$1,722,309	21-Oct-20	Complete on finalisation of project	Yes	Not Applicable
Development & Environment	CO-OP Studios Pty Ltd	T-20-22 Concept Design and Approvals for the Port Macquarie Aquatic Centre	\$780,825	18-Nov-20	Complete on finalisation of project	Yes	Not Applicable
Infrastructure	Metal Manufacturers Ltd t/as TLE Electrical Data Suppliers	T-20-38 Supply and Delivery of Electrical Goods	\$1,200,000	18-Nov-20	Four (4) years	Yes	Not Applicable

BUDGET VARIATIONS - January 202	1		-	-							
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to January 2021	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING POSITION
Adjustments which impact Council's	Budget Posi	tion									
Rental Income from Council Facilitie	es above budg	get due to Covid-19 impacts being less t	han forecast.								
Facilities	10255	Community Hall s355 Management Committees Income	Operating		0	0	-19,988	-19,988	-19,988	Revenue	- 19,988
Facilities	11440	Buildings Income	Operating	Development &	0	0	-36,663	-36,663	-36,663	Revenue	- 36,663
Parks & Recreation	11590	Rental of Reserves	Operating	Environment	0	0	-102,099	-102,099	-102,099	Revenue	- 102,099
Parks & Recreation	409	Covid-19 Expenses	Operating		0	0	41,420	41,420	41,420	Revenue	41,420
Total adjustments which impact Cou	ıncil's Budget	t Position							-117,330		-117,330
Grant Funding											
Council has received funding from t	he Library Co	uncil NSW for the Library Local Priority	Grant.								
Library	40935	Library Local Priority Grant	Capital	Strategy &	0	32,673	23,997	92,141	-59,468	Grant	0
Library	19172	Capital Grants	Capital	Growth	0	0	-59,468	-59,468	59,468	Grant	0
Grant Funding received from Depart	ment Industry	y, Science, Energy & Resources for the	Port Macquari	e Parallel Taxiwa	ay.						
Airport	42078	PM Airport Parallel Taxiway Stage 1	Capital	Corporate	0	0	78,525	120,000	-120,000	Grant	0
Airport	19012	Capital Grants	Capital	Performance	-405,000	-545,000	-777,652	-665,000	120,000	Grant	0
Funding received from Resilience N	SW for Round	I 2 of the Bushfire Community Recovery	Grant.								
Bushfire Control	42149	Bushfire Community Recovery Fund Stream 2	Operating	Infrastructure	0	0	0	120,000	-120,000	Grant	0
Bushfire Control	19251	Operating Grants	Operating	masuucidie	0	-226,970	-250,000	-346,970	120,000	Grant	0
Council has received grant funding	from the Natio	onal Australia Day Council under the Au	stralia Day 20	21 COVID Safe G	Frant Program.						
Events	278	Australia Day Expenses	Operating	Strategy &	20,400	20,400	911	41,400	-21,000	Grant	0
Events	19201	Operating Grants	Operating	Growth	0	0	-21,000	-21,000	21,000	Grant	0

Item 10.11 Attachment 1

BUDGET VARIATIONS - January 202	1										
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to January 2021	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING POSITION
Additional Grant Funding received fo	or the Weeds	Action Plan 20-21 above the amount in t	he Budget.	·							
Noxious Plants	480	Noxious Weeds	Operating	Development &	281,655	279,967	168,829	280,611	-644	Grant	0
Noxious Plants	11560	Operating Grants	Operating	Environment	-117,996	-117,996	-118,640	-118,640	644	Grant	0
Grant Funding has been received fro	m the Austra	lian Trade & Investment Commission for	the Port Ma	cquarie Lumiere p	project.						
Destination & Cultural Development	42106	Port Macquarie Lumiere Night Time Installation	Operating	Strategy &	0	120,000	32,144	265,000	-145,000	Grant	0
Destination & Cultural Development	19051	Operating Grants	Operating	Growth	-7,350	-288,388	-169,593	-433,388	145,000	Grant	0
Contribution from Council's insurer f	for damage to	o Council property at Woodlands Reserv	e.	·							
Facilities	42150	Woodlands Reserve - Tennis Club Repairs	Operating	Development &	0	0	0	106,466	-106,466	Contribution	0
Facilities	11442	Insurance Recoveries for Buildings	Operating	Environment	0	0	-106,466	-106,466	106,466	Contribution	0
Grant Funding has been received fro	m the Depart	ment of Regional NSW for Youth Events	•		· · ·						
Community Engagement	42151	Splashfest Twilight Youth Event	Operating	Strategy &	0	0	0	10,000	-10,000	Grant	0
Community Engagement	19151	Operating Grants	Operating	Growth	0	-2,346	-1,500	-12,346	10,000	Grant	0
Notification received from the Rural	Fire Service	NSW for the amount of grant funded allo	cated to the 2	20/21 Bushfire Ha	zard Reduction	n Program.					
Bushfire Control	41303	Rural Fire Service - Hazard Reduction	Operating	- Infrastructure	0	77,080	11,624	191,022	-113,942	Grant	0
Bushfire Control	19251	Operating Grants	Operating	- mnastructure -	0	-346,970	-250,000	-460,912	113,942	Grant	0

BUDGET VARIATIONS - January 202	1										
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to January 2021	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING POSITION
To recognise grant funding received	from Transp	ort for NSW for Lord & Herschell Street F	Roundabout,	Owen & Home S	treet Roundabo	out, King Creek	Road and Th	e Hatch Road p	rojects.		
Transport & Traffic	42066	Lord & Herschell Street - Roundabout	Capital		250,000	250,000	13,716	200,000	50,000	Grant	0
Transport & Traffic	42070	Owen & Home Street - Roundabout	Capital		200,000	200,000	30,381	440,000	-240,000	Grant	0
Transport & Traffic	42071	King Creek Road Shoulder Sealing & Barrier Install	Capital	Infrastructure	250,000	250,000	32,925	306,000	-56,000	Grant	0
Transport & Traffic	41990	The Hatch Road - Reseal Sections	Capital		0	15,086	0	215,086	-200,000	Grant	0
Transport & Traffic	19342	Capital Grants	Capital		-6,119,089	-11,757,863	-16,592,675	-12,203,863	446,000	Grant	0
Total Grant Funding									1,142,520		0
Reserve Movements											
Income from Beach Permits above b	udget,dueto	estimated Covid-19 impacts not being re	ealised.								
Lifeguard & Beach Services	11550	Beaches Income	Operating	Development &	0	0	-121,791	-97,932	97,932	Reserve	0
Lifeguard & Beach Services	9019	Transfer To Reserve	Operating	Environment	110,000	110,000	0	207,932	-97,932	Reserve	0
Budget adjustment to cover costs as	sociated with	n the maintenance of Shelly Beach Corric	dor, Red Och	re project & Glen	iview Park. Co	uncil collected	these funds ເ	under a VPA Ag	reement.		
Natural Resources	41830	Shelly Beach Corridor Env Mgmt	Operating		0	0	0	8,850	-8,850	Reserve	0
Natural Resources	41843	Red Ochre Env Mgmt Lands	Operating	Development &	0	3,500	0	7,830	-4,330	Reserve	0
Natural Resources	41720	Glenview Estate Wauchope	Operating	Environment	0	6,567	8,025	21,270	-14,703	Reserve	0
Natural Resources	19236	S 7.11 Funding	Operating		0	-11,179	0	-39,062	27,883	Reserve	0
Budget Variance Request for Wauch	ope Depot to	carry out the works on the Bitumen Emu	Ision Tank.								
Fleet Management	40208	Plant Purchases	Capital	- Infrastructure	2,500,000	2,500,000	542,707	2,620,000	-120,000	Reserve	0
Fleet Management	19139	Transfer From Reserve	Capital	anastructure	-4,060,000	-4,275,000	0	-4,395,000	120,000	Reserve	0
Transfer income received from Diese	el Fuel Rebat	es to Plant Reserve.									
Fleet Management	11300	Plant Operating Income - Diesel Fuel	Operating	Infra atru atu	-6,996	-6,996	-117,898	-124,894	117,898	Reserve	0

Item 10.11 Attachment 1

SUDGET VARIATIONS - January 2021											
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	,	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING POSITION
Fleet Management	9007	Transfer To Reserve	Operating	milastructure	2,468,626	2,468,626	0	2,586,524	-117,898	Reserve	0
Total Reserve Movements	otal Reserve Movements							-67,947		0	

Item 10.11 Attachment 1

BUDGET VARIATIONS - January 202	1										
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to January 2021	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING POSITION
Movement between Projects											
Adjustment to recognise savings in	Library & Gla	sshouse salaries due to reduced activity	under Covid	-19 restrictions.							
Library	218	Port Macquarie Library - Salaries Operating Corporate 1,745,892 1,755					903,333	1,657,589	100,000	Revenue	100,000
Glasshouse	917	Glasshouse - Salaries	Operating	Performance/ Strategy &	1,548,342	1,548,342	613,837	1,398,342	150,000	Revenue	150,000
Governance	398	Allowance for Vacancies	Operating	Growth	-300,000	-300,000	0	-50,000	-250,000	Revenue	-250,000
Transfer between Economic Develop	oment Budget	Lines (accounting entry only)									
Economic & Cultural Development	42093	Artwalk Delivery	Operating	Strategy & Growth	0	40,000	0	0	40,000	Reserve	0
Economic & Cultural Development	42077	Artwalk 2020	Operating		0	79,763	93,644	99,763	-20,000	Reserve	0
Economic & Cultural Development	42111	Artwalk 2021	Operating		0	11,763	0	31,763	-20,000	Reserve	0
Transfer Salaries Budget from Crem	atorium to Ce	meteries (accounting entry only).									
Crematorium & Cemeteries	114	Crematorium	Operating	Corporate Performance/	37,464	37,464	4,374	0	37,464	Revenue	37,464
Cemeteries	112	Cemetery Improvement Works	Operating	Strategy & Growth	0	0	0	37,464	-37,464	Revenue	-37,464
Transfer event traffic control budget	between sec	tions (accounting entry only)									
Transport & Traffic	660	Sealed Road Maintenance	Operating	Infrastructure/	2,155,956	2,155,956	977,088	2,137,740	18,216	Revenue	18,216
Events	185	Events	Operating	Strategy & Growth	318,979	318,979	117,093	337,195	-18,216	Revenue	-18,216
Deed of Variation received from Reg	ional NSW to	vary grant funded projects requiring inte	ernal transfer	•							
Transport & Traffic	41904	Telegraph Point Pedestrian Safety Upgrades	Capital	Infrastructure/ Development &	0	115,823	95,377	95,377	20,446	Grant	0
Parks & Recreation	41900	Camden Haven Sports Field Lighting and Infrastructure	Capital	Environment	0	67,265	67,482	87,711	-20,446	Grant	0

BUDGET VARIATIONS - January 2021											
Section	Project				Full Year Current Budget	January	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING POSITION	
Transfer between Community Engagement Budget Lines (accounting entry only)											
Community Engagement	41643	Town and Village Signage	Capital	Strategy &	0	50,000		0	50,000	Reserve	0
Community Engagement 41939 Port Macquarie Town Signage Capital Growth				0	29,982		79,982	-50,000	Reserve	0	
Total Movements between Projects 416,126 0											0
ORGANISATIO	ONAL TOTAL	- THIS REVIEW							1,490,699	-	-117,330
FORECAST FOR FINA	NCIAL YEAR	ENDED 30 JUNE 2021									
Original Budget as at 1 July 2020 <u>Plus: Adjustments</u>				Shortfall	-676,730						
	July Review0August ReviewSurplus151,102September ReviewSurplus63,165October ReviewBalanced0										
FOREC	November Review Balanced 0 January Review Surplus 117,330 FORECAST FOR 30 JUNE 2021 Shortfall -345,133										

on Capital/ Operating	Division O	Original Curren Budget Budge	,	New Yearly Proposed Budget - January 2021	Movement	Funding Source	EFFECT ON FUNDING
	surpluses/deficits in the wa						POSITION
		water, sewerage and was	te funds are tr	ansferred to/fron	n reserves.		
Reserve are internal restrictions that hold funds for a specific purpose, e.g. The airport has its own reserve and all income and expenditure relating to the airport is redited/debited to that reserve.							
Council projects are funded from a variety of funding sources. Below is a definition of the various types of funding that are used to fund projects.							
Revenue - All funds that are generated through rates, annual charges, fees and charges, interest etc. These funds are untied and can be expended on any project that Council considers appropriate.							
Grants - Government grants can either be monetary or otherwise and may be tied or untied. Tied grants are required to be used for a specific purpose such as the construction of a road. Untied grants may be applied for any purpose council considers appropriate.							
			iired to give va	alue in exchange	for the contril	outions directly i	o the
	a specific purpose, e.g. Th	The airport has its own re	serve and all ir	ncome and expe	nditure relatin	g to the airport i	s
S7.11 and S64 Contributions - Section 7.11 of the NSW Environmental and Planning Act (1979) and section 64 of the Local Government Act (1993) provides NSW local government with a formal legal framework for levying developers for the provision of infrastructure, services and amenities - known as developer contributions.							ocal
	Some projects are funded by multiple funding sources, e.g. a capital project may be funded by s7.11 funds, grants and revenue. The effect on capital column will only show the revenue funding adjustment as the other types of funding will have an income line budget adjustment shown in the report.						
e	ples are contributions given by rate res are internal restrictions held for that reserve. ntributions - Section 7.11 of the NS formal legal framework for levying of	ples are contributions given by ratepayers towards capital w res are internal restrictions held for a specific purpose, e.g. that reserve. ntributions - Section 7.11 of the NSW Environmental and Pla formal legal framework for levying developers for the provis	ples are contributions given by ratepayers towards capital works in their vicinity. es are internal restrictions held for a specific purpose, e.g. The airport has its own re that reserve. ntributions - Section 7.11 of the NSW Environmental and Planning Act (1979) and sec formal legal framework for levying developers for the provision of infrastructure, servi funded by multiple funding sources, e.g. a capital project may be funded by s7.11 fur	ples are contributions given by ratepayers towards capital works in their vicinity. The sare internal restrictions held for a specific purpose, e.g. The airport has its own reserve and all in that reserve. Intributions - Section 7.11 of the NSW Environmental and Planning Act (1979) and section 64 of the formal legal framework for levying developers for the provision of infrastructure, services and amen funded by multiple funding sources, e.g. a capital project may be funded by s7.11 funds, grants and	ples are contributions given by ratepayers towards capital works in their vicinity. The sare internal restrictions held for a specific purpose, e.g. The airport has its own reserve and all income and experi- that reserve. Intributions - Section 7.11 of the NSW Environmental and Planning Act (1979) and section 64 of the Local Governme formal legal framework for levying developers for the provision of infrastructure, services and amenities - known as funded by multiple funding sources, e.g. a capital project may be funded by s7.11 funds, grants and revenue. The	ples are contributions given by ratepayers towards capital works in their vicinity. The sare internal restrictions held for a specific purpose, e.g. The airport has its own reserve and all income and expenditure relating that reserve. Intributions - Section 7.11 of the NSW Environmental and Planning Act (1979) and section 64 of the Local Government Act (1993) formal legal framework for levying developers for the provision of infrastructure, services and amenities - known as developer con funded by multiple funding sources, e.g. a capital project may be funded by s7.11 funds, grants and revenue. The effect on capit	es are internal restrictions held for a specific purpose, e.g. The airport has its own reserve and all income and expenditure relating to the airport is that reserve. ntributions - Section 7.11 of the NSW Environmental and Planning Act (1979) and section 64 of the Local Government Act (1993) provides NSW la formal legal framework for levying developers for the provision of infrastructure, services and amenities - known as developer contributions. funded by multiple funding sources, e.g. a capital project may be funded by s7.11 funds, grants and revenue. The effect on capital column will or



Monthly Investment Report

December 2020



Imperium Markets Pty Ltd ABN: 87 616 579 527 Authorised Representative of Libertas Financial Planning Pty Ltd AFSL 429 718 Phone: +61 2 9053 2987 Email: <u>michael.chandra@imperium.markets</u> Level 13, 333 George Street, Sydney NSW 2000

> Item 10.12 Attachment 1 Page 104



Executive Summary

Compliance

Compliance Measure	Within Policy Limits (Y/N)	Reason if Not Compliant
Term to Maturity	Yes – Compliant	n/a
Counterparty	Yes – Compliant	n/a
Credit Quality	Yes – Compliant	n/a

Performance

As at 31/11/2020	1m (actual)	1m (% p.a.)	FYTD (actual)	FYTD (% p.a.)
AusBond Bank Bill Index	0.00%	0.03%	0.05%	0.09%
Council's Portfolio^	0.17%	2.01%	1.10%	2.19%
Outperformance	0.17%	1.98%	1.05%	2.10%

^Total portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

Impact of COVID-19 to Council's Portfolio

COVID-19 has adversely impacted financial markets, which in turn, has also affected Council's investment portfolio. We provide a quick summary in this section.

With regards to financial markets, of importance was the RBA cutting interest rates twice in March 2020, taking the official cash rate down to 0.25%. Shares (equities) experienced a significant correction in March but recovered substantially due to the unprecedented fiscal and monetary policy support from global central banks and governments, as well as pricing in an early distribution of a vaccine. **The RBA cut rates to record lows on 3rd November 2020 to 0.10%.** December saw the ongoing rally in equities on the back of the multiple vaccines that were rolled out globally.

With regards to the medium-longer term outlook for financial markets, of importance is the RBA's outlook and stance on the current situation:

- The RBA's official cash rate will remain unchanged at its emergency level of 0.10% until its objectives of full employment and inflation are reached. They stressed that unemployment was a "national priority" and the development in the labour market as key to the policy outlook;
- The extension of the Term Funding Facility (TFF) until 30 June 2021, allowing all ADIs to access cheap funding directly from the RBA at a cost of 0.10% for 3 years for new drawings (the facility was previously available at a cost of 0.25% and was increased from an original \$90bn to \$200bn);
- 3. RBA Governor Lowe has commented that he has not seen any signs of stress in the financial system from this crisis because unlike the GFC, the banks have cash and are well capitalised;
- 4. The RBA Board is "not expecting to increase the cash rate for at least three years".

Monthly Investment Report: December 2020



The biggest impact to Council's investment portfolio is with regards to its largest exposure being assets held in bank term deposits, which accounts for around ~92% of Council's total investment, and cash (~7% of the total investment portfolio). The biggest risk that PMHC faces over the medium-longer term in this environment is not the potential loss of capital (given all the banks are well capitalised and regulated by APRA), but the rapid loss of interest income as interest rates have plummeted.

Council's term deposit portfolio was yielding 2.01% p.a. at month-end, with a weighted average duration of around 633 days or 1.73 years. This average duration will provide some income protection against the low interest rate environment over the next 18 months. As existing deposits mature however, they will inevitably be reinvested at much lower prevailing rates.

We note the current interest rates in the term deposit market:

- The highest deposit rate from any rated ADI in the market is now 1.20% p.a. for 5 years;
- The highest deposit rates amongst the "AA-" rated ADIs (major banks) is now yielding between 0.45%-0.90% p.a. (depending on term);
- The highest deposit rates amongst the "A" rated ADIs was yielding between 0.68%-1.20% p.a. (depending on term);
- The highest deposit rates amongst the "BBB" and unrated ADIs was yielding between 0.45%-0.70% p.a. (depending on term).

Given official rates have fallen to record lows, Council is likely to see a rapid decline in interest income over future financial years. Its budgeted income over the <u>medium-longer term</u> needs to be revised to reflect the low interest rate environment. Returns between 0.50%-0.80% p.a. may potentially be the "norm" over the next few financial years.

ORDINARY COUNCIL 17/02/2021



Council's Portfolio

Asset Allocation

The portfolio is predominately directed to fixed term deposits (92%). The remainder of the portfolio is directed to the overnight cash account with Westpac (7%) and the single FRN with Bendigo-Adelaide (1%).

With the RBA cutting interest rates in November to 0.10%, the priority should be to lock in any remaining attractive medium-longer dated fixed deposits that may still be available to address reinvestment risk as margins continue to compress.

Breakdown by asset type	
CASH - 7.41%	
FRN - 0.90%	
	TD - 91.69%

Term to Maturity

All maturity limits (minimum and maximum) comply with the Investment Policy. Medium-Term (3-5½ years) assets account for around 13% of the total investment portfolio, with capacity of around \$90m at month-end.

Maturi	ty compliance			
Limits	Compliant Non	-compliant		
100%				
75%				
50%				
25%				
0%	0 - 365 days		1 - 3 years	3 - 5.5 years

Where there is (counterparty) capacity to invest in attractive 3-5½ year investments, we recommend this be allocated to new any remaining attractive fixed term deposits and fixed bonds (refer to respective sections below).

Monthly Investment Report: December 2020



Compliant	Horizon	Invested (\$)	Invested (%)	Min. Limit (%)	Max. Limit (%)	Available (\$)
~	0 - 365 days	\$145,589,104	43.05%	0%	100%	\$192,559,802
\checkmark	1 - 3 years	\$136,500,000	40.37%	0%	70%	\$100,204,234
~	3 - 5.5 years	\$56,059,802	16.58%	0%	40%	\$79,199,760
~	5.5 - 10 years	\$0	0.00%	0%	10%	\$33,814,891
		\$338,148,906	100.00%			

Counterparty

As at the end of December, Council did not have an overweight position to any single ADI. Overall, the portfolio is diversified across the investment grade credit spectrum (rated BBB- or higher), with no exposure to unrated ADIs.

Compliant	lssuer	Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
√	NAB	AA-	\$66,500,000	19.67%	30.00%	\$34,944,672
~	WBC (St George)	AA-	\$75,589,104	22.35%	30.00%	\$25,855,568
\checkmark	Rabobank	A+	\$13,000,000	3.84%	20.00%	\$54,629,781
\checkmark	ICBC Sydney	А	\$62,000,000	18.34%	20.00%	\$5,629,781
\checkmark	ING Bank Aus.	А	\$17,500,000	5.18%	20.00%	\$50,129,781
\checkmark	Aus Military Bank	BBB+	\$7,500,000	2.22%	10.00%	\$26,314,891
\checkmark	BOQ	BBB+	\$30,000,000	8.87%	10.00%	\$3,814,891
\checkmark	Bendigo	BBB+	\$3,059,802	0.90%	10.00%	\$30,755,089
\checkmark	AMP Bank	BBB	\$9,000,000	2.66%	10.00%	\$24,814,891
\checkmark	Auswide	BBB	\$24,000,000	7.10%	10.00%	\$9,814,891
\checkmark	MyState	BBB	\$13,000,000	3.84%	10.00%	\$20,814,891
\checkmark	Newcastle PBS	BBB	\$17,000,000	5.03%	10.00%	\$16,814,891
			\$338,148,906	100.00%		

In September 2020, ratings agency **S&P downgraded AMP Bank by one notch to "BBB"** stating its view that "the overall creditworthiness of the AMP group is weaker" and that "the group is exposed to challenges that may disrupt its overall strategic direction and its ability to effectively execute its strategy."

Separately, Moody's downgraded MyState Bank's long-term credit rating from Baa1 (BBB+ equivalent from S&P) to Baa2 (BBB equivalent from S&P). The downgrade reflects the bank's lower financial buffers in a more challenging operating environment when compared to its peers. Moody's acknowledged though that the bank's capital ratio remained steady during the 2020 financial year.

We have no issues with Council's investments with both AMP Bank and MyState, given they are super-senior ranked assets, extremely low risk and high up the bank capital structure.

We remain supportive of the regional and unrated ADI sector (and have been even throughout the GFC period). They continue to remain solid, incorporate strong balance sheets, while exhibiting high

Monthly Investment Report: December 2020



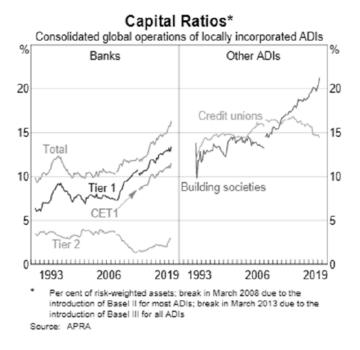
levels of capital – typically, much higher compared to the higher rated ADIs. Some unrated ADIs have up to 25-40% more capital than the domestic major banks, and well above the Basel III requirements.

RBA Governor Lowe has commented that they have not seen any signs of stress in the financial system and that unlike during the GFC, the banks (all ADIs) now have cash, are well capitalised and are acting as "shock absorbers" in the current crisis.

Overall, the lower rated ADIs (BBB and unrated) are generally now in a better financial position then they have been historically (see the Capital Ratio figure below). We believe that deposit investments with the lower rated ADIs should be continued going forward, particularly when they offer 'above market' specials. Not only would it diversify the investment portfolio and reduce credit risk, it would also improve the portfolio's overall returns.

In the current environment of high regulation and scrutiny, all domestic (and international) ADIs continue to carry high levels of capital. There is minimal (if any) probability of any ADI defaulting on their deposits going forward – this was stress tested during the GFC. **APRA's mandate is to** "*protect depositors*" and provide "*financial stability*".

The biggest single risk that depositors face in the current low interest rate environment is not capital or credit risk, but reinvestment risk. Interest rates are now at their effective lower bound of 0.10%.



Monthly Investment Report: December 2020

Page 6



Fossil Fuel Investments

What is Council's current exposure to institutions that fund fossil fuels?

Using the following link <u>http://www.marketforces.org.au/banks/compare</u>, based on the Council's investment portfolio balance as at 31/12/2020 (\$338.15m), we can roughly estimate that ~59% of the investments have some form of exposure.

How would Council modify its Investment Policy to cater for divestment of fossil fuels?

If the major banks were withdrawn from investments, some members of the community may look at that remaining list of ADIs (banks) and say "Why the do we have all our money with those no-name institutions? I've never even heard of them. We don't want to take risks with our money after councils lost \$100's of millions speculating in the GFC". It will be difficult to please everyone. We suggest starting the discussion with all Councillors asking "are you comfortable investing all the money with the lower rated regionals and credit unions?" If not, then a full divestment campaign will be complicated.

Some ways to potentially 'make changes' to the policy, or at least have a discussion, includes:

- "Where possible within policy and without compromising the risk and return profile, we favour..."
- "We have not yet made a decision to divest because it will have implications on credit quality, ratings and income, but we are actively discussing..."

What would be implications on our portfolio credit rating?

By adopting a free fossil fuel policy or an active divestment strategy, this would eliminate the major banks rated "AA-" as well as some other "A" rated banks (AMP, BoQ and ING). Council would be left with a smaller sub-sector of banks to choose to invest with.

What would be risks and implications on Council's portfolio performance?

Some implications include:

- High concentration risk limiting Council to a selected number of banks;
- Increased credit/counterparty risk;
- May lead to a reduction in performance (most of the senior FRN issues are with the higher rated ADIs) which could result in a significant loss of income generated – could be in excess of hundreds of thousands of dollars per annum;
- Underperformance compared to other Councils.

It may actually be contrary to Council's primary objective to preserve capital as the investment portfolio's risk would increase (all things being equal). Council may not be maximising its returns – this is one of the primary objectives written in the Investment Policy.



Council's exposure is summarised as follows:

Counterparty	Credit Rating	Funding Fossil Fuel
NAB	AA-	Yes
WBC (St George)	AA-	Yes
Rabobank	A+	No
ICBC, Sydney	А	No
ING Bank Australia	А	Yes
Australian Military	BBB+	No
BoQ	BBB+	Yes
Bendigo-Adelaide	BBB+	No
AMP Bank	BBB	Yes
Auswide	BBB	No
MyState Bank	BBB	No
Newcastle Permanent	BBB	No

^^The underlying exposure in these managed funds includes the domestic major banks. Source: https://www.marketforces.org.au/info/compare-bank-table/

Summary	Amount	Invested %
Yes	\$198,589,205	59%
No	\$139,559,802	41%
	\$338,148,906	100%

Monthly Investment Report: December 2020

Page 8



Credit Quality

The portfolio remains lightly diversified from a credit ratings perspective. The portfolio is entirely directed to the investment grade ADIs (BBB- or higher), with zero allocation to unrated ADIs. There is high capacity to invest in the higher rated ADIs (A or higher), particularly after the downgrades of BoQ and Bendigo-Adelaide Bank in May 2017, as well as AMP Bank over the past 12 months, which now all fall into the "BBB" rated category.

Following the adoption of a new policy, there is now more capacity to invest with the "BBB" rated ADIs (~\$15m remaining at month-end), although most ADIs in this sector are currently full on liquidity due to the combination of minimal credit growth (loans being written) and the term funding facility (TFF) provided by the RBA (access to cheap funding).

If there are any attractive deposits being offered in the "BBB" rated sector (outside of BoQ, which Council is close to maximum limits), we will inform Council to take advantage and invest accordingly.

Compliant	Credit Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
~	AA Category	\$142,089,104	42.02%	100%	\$196,059,802
~	A Category	\$92,500,000	27.35%	60%	\$110,389,344
\checkmark	BBB Category	\$103,559,802	30.63%	35%	\$14,792,315
\checkmark	Unrated ADIs	\$0	0.00%	5%	\$16,907,445
		\$338,148,906	100.00%		

All ratings categories are within the current Policy limits:

Monthly Investment Report: December 2020



Performance

Council's performance for the month ending 31 December 2020 is summarised as follows:

Performance (Actual)	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.01%	0.04%	0.10%	0.10%	0.31%
AusBond Bank Bill Index	0.00%	0.02%	0.05%	0.05%	0.37%
Council's T/D Portfolio	0.17%	0.52%	1.10%	1.10%	2.39%
Council's FRN Portfolio	0.08%	0.26%	0.53%	0.53%	1.32%
Council's Portfolio^	0.17%	0.52%	1.10%	1.10%	2.38%
Outperformance	0.17%	0.49%	1.05%	1.05%	2.02%

^Total portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

Performance (Annualised)	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.10%	0.15%	0.20%	0.20%	0.31%
AusBond Bank Bill Index	0.03%	0.08%	0.09%	0.09%	0.37%
Council's T/D Portfolio	2.02%	2.07%	2.20%	2.20%	2.39%
Council's FRN Portfolio	1.00%	1.03%	1.05%	1.05%	1.32%
Council's Portfolio^	2.01%	2.06%	2.19%	2.19%	2.38%
Outperformance	1.98%	1.98%	2.10%	2.10%	2.02%

ATotal portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

For the month of December, the portfolio (excluding cash) provided a solid return of +0.17% (actual), outperforming the benchmark AusBond Bank Bill Index return by +0.17% (actual). The strong performance continues to be driven by the handful of deposits still yielding above 3% p.a. However, some of these individual deposits are approaching maturity and will be reinvested at much lower prevailing rates.

Over the past 12 months, the portfolio returned +2.38% p.a., outperforming bank bills by 2.02% p.a. and around six times the official cash rate. This has been very strong given deposit rates reached their all-time lows and margins have generally contracted over the past 3 years.

We are pleased that PMHC remains amongst the best performing Councils in the state of NSW where deposits are concerned, earning on average, more than \$2,000,000 in additional interest income compared to its peers (refer to our September 2020 rankings). We have been pro-active in our advice about protecting interest income and addressing reinvestment risk for many years and encouraged to maintain a long duration position. This is now reflected by the high performance of the investment portfolio. Of the 81 individual deposits PMHC held, 23 are still yielding higher than 3.00% p.a. That is, around 28% of outstanding deposits held is earning an interest rate that is thirty times the prevailing cash rate of 0.10%.



Council's Term Deposit Portfolio & Recommendation

As at the end of December 2020, Council's deposit portfolio was yielding 2.01% p.a. (down 6bp from the previous month), with an average duration of ~1% years. Where possible, we recommend Council extends or at least maintains this average duration. In the low interest rate environment, the biggest collective risk that the local government sector has faced over the post-GFC era has been the dramatic fall in interest rates - from 7% to the historical low levels of 0.10%.

As the past decade has highlighted (post-GFC era), we have seen too many portfolios' roll a high proportion of their deposits between 3-6 months, resulting in their deposits being reinvested at lower prevailing rates. That is, depositors have overpaid for liquidity and generally not insured themselves against the low interest rate environment by diversify their funding across various tenors (out to 5 years) but rather placed all their 'eggs in one basket' and kept all their deposits short. **Reinvestment risk has collectively been and continues to be the biggest detriment to depositors' interest income over the post-GFC period**.

ADI	LT Credit Rating	Term	T/D Rate
ICBC, Sydney	А	5 years	1.20% p.a.
ICBC, Sydney	А	4 years	1.00% p.a.
АМР	BBB	18 months	^0.95% p.a.
NAB	AA-	5 years	0.90% p.a.
ICBC, Sydney	А	3 years	0.88% p.a.
NAB	AA-	4 years	0.75% p.a.
ICBC, Sydney	А	2 years	0.68% p.a.
NAB	AA-	3 years	0.65% p.a.

At the time of writing, we see value in:

^ AMP T/Ds – these are grossed up rates which includes a 0.20% p.a. rebated commission from Imperium Markets

The above deposits are suitable for investors looking to provide some income protection and mitigate reinvestment/rollover risk in the low interest rate environment.

For terms under 12 months, we believe the strongest value is currently being offered by the regional ADIs (dependent on daily funding requirements):





ADI	LT Credit Rating	Term	T/D Rate
AMP	BBB	11-12 months	^0.95% p.a.
АМР	BBB	6-10 months	^0.90% p.a.
АМР	BBB	3-5 months	^0.80% p.a.
Judo Bank	Unrated ADI	12 months	~0.84% p.a.
Judo Bank	Unrated ADI	9 months	~0.78% p.a.
Judo Bank	Unrated ADI	6 months	~0.75% p.a.
BoQ	BBB+	7-9 months	0.50% p.a.
BoQ	BBB+	4-6 months	0.45% p.a.

^ AMP T/Ds - these are grossed up rates which includes a 0.20% p.a. rebated commission from Imperium Markets

Amongst the higher rated ADIs ("A" rated or higher), the following deposits remain attractive for terms under 12 months:

ADI	LT Credit Rating	Term	T/D Rate
NAB	AA-	12 months	0.45% p.a.
Westpac	AA-	12 months	0.45% p.a.
ICBC, Sydney	А	12 months	~0.45% p.a.
СВА	AA-	12 months	0.45% p.a.
NAB	AA-	3-9 months	0.40% p.a.

Page 12



Senior FRNs & Recommendations

Over December, amongst the senior major bank FRNs, physical credit securities widened (valuations fell) by around 4-5bp at the longer-end of the curve. Secondary market securities remain expensive on the back of the RBA announcing its \$100bn quantitative easing (QE) package in its November meeting. Bid-ask spreads have tightened sharply on the back of excess liquidity and short supply of new issuances.

A new 5 year senior major bank FRN would now be issued around the +37-40bp level, appearing expensive on a historical basis. We expect minimal primary issuance from the domestic banks in the immediate future given the RBA's term funding facility (TFF) available to the ADIs, offering a rate of 0.10% (on new drawings) for 3 years, which has been extended to June 2021. The lack of supply from new (primary) issuances has also played a major role with the rally in credit markets over recent months.

During the month, Macquarie Bank (A+) issued a new 5 year deal at +48bp, tightening from initial guidance of +[52]bp, printing \$1.45bn. Notably, they issued a 5 year senior deal earlier in February 2020 at +84bp, reflecting the significant rally in credit securities over the past ~9 months.

Amongst the "A" and "BBB" rated sector, the senior securities were marked between 2-5bp wider over the month. While turnover in the secondary market is still predominately dominated by commonwealth, semi-government and major bank senior paper, given the lack of supply, we have started to observe that even a handful of regional bank senior paper has sometimes been trading inside "mid" levels over recent months.

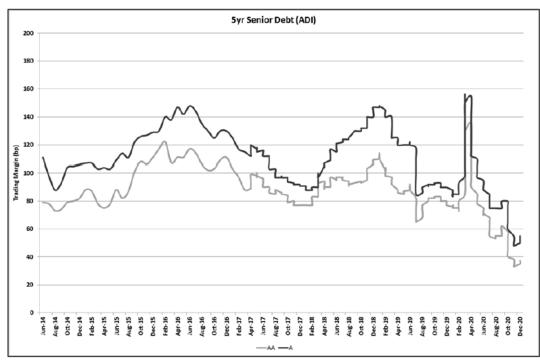
Credit margins are now trading very tight on a historical level and look fairly expensive. FRNs will continue to play a role in investor's portfolios mainly on the basis of their liquidity and the ability to roll down the curve and gross up returns over ensuing years (in a relatively stable credit environment).

Senior FRNs (ADIs)	31/12/2020	30/11/2020
"AA" rated – 5yrs	+37bp	+33bp
"AA" rated – 3yrs	+21bp	+15bp
"A" rated – 5yrs	+55bp	+48bp
"A" rated – 3yrs	+35bp	+33bp
"BBB" rated – 3yrs	+55bp	+55bp

Source: IBS Capital







Source: IBS Capital

We now generally **recommend switches** ('benchmark' issues only) into new attractive primary issues (or longer-dated alternatives), out of the following senior FRNs that are maturing:

- On or before 2023 for the "AA" rated ADIs (domestic major banks);
- On or before 2021 for the "A" rated ADIs; and
- Within 12 months for the "BBB" rated ADIs (consider case by case).

Investors holding onto the above senior FRNs ('benchmark' issues only) in their last 1-2 years are now generally holding sub-optimal investments and are not maximising returns by foregoing realised capital gains. In the current low interest rate environment, any boost in overall returns should be locked in when it is advantageous to do so.

In late August 2019, Council placed a bid of \$3m into the new Bendigo (BBB+) 5 year FRN at +97bp maturing 06/09/2024 (ISIN: AU3FN0050019). This FRN should be viewed as a 4 year holding period, with the ability to 'roll down the curve', realise capital gains which would boost the overall return of the investment portfolio. The security was marked around +42bp (from +41bp the previous month) or a capital price ~\$101.99 at month-end. We recommend Council holds this FRN.



Economic Commentary

International Market

Financial markets continued to look through the short-term negative news (rising infections and renewed lockdowns) in the knowledge that a strong economic recovery is looking much more assured following the recent vaccine news and additional stimulus measures.

The Pfizer/BioNTech vaccine commenced in the UK and the US during the month, with hopes of herd immunity being achieved within 6-12 months.

The US FDA also found Moderna's COVID-19 vaccine to be "highly effective", paving the way for immediate distribution across the country.

Equity markets continued their rally, with the S&P 500 Index gaining +3.71%, while the NASDAQ surged another +5.65%. Across Europe, Germany's DAX added +3.22%, UK's FTSE +3.10% and France's CAC +0.60%.

US Congress approved and President Trump finally signed the US\$900bn stimulus package, which included direct payments of US\$600 to those who earn less than US\$75,000 and extends supplemental unemployment benefits to US\$300 for 11 weeks, averting a government shutdown that was set to begin in late December.

The US Fed delivered its final policy statement of 2020 and kept the policy target rate unchanged at 0.00%-0.25%. The US Fed said it "will continue to increase its holdings of Treasury securities by at least \$80bn p/m and of agency mortgage-backed securities by at least \$40bn p/m until substantial further progress has been made toward the Committee's maximum employment and price stability goals".

The ECB kept its key refinancing and deposit rates unchanged at 0.0% and -0.5% respectively and expanded its main crisis asset purchase vehicle - the PEPP - by €500bn to €1.85tn.

Boris Johnson's Brexit deal passed the House of Commons with an overwhelming majority, ending four years of political deadlock.

China's monthly activity data for November met market expectations, showing further evidence of economic recovery, with both industrial production and retail sales increasing to their highest annual growth rates for the year.

Index	1m	3m	1yr	3yr	5yr	10yr
S&P 500 Index	+3.71%	+11.69%	+16.26%	+12.00%	+12.94%	+11.56%
MSCI World ex-AUS	+4.10%	+13.45%	+14.25%	+8.72%	+10.22%	+7.95%
S&P ASX 200 Accum. Index	+1.21%	+13.70%	+1.40%	+6.73%	+8.73%	+7.84%

The MSCI World ex-Aus Index surged +4.10% for the month of December:

Source: S&P, MSCI

Monthly Investment Report: December 2020



Domestic Market

The RBA's December Board Meeting was largely a 'non-event' given the RBA had made a substantial number of policy announcements in November. While the Bank acknowledged the positive associated with recent vaccine news, the Board continues to state it "*is not expecting to increase the cash rate for at least 3 years*".

GDP rose by a large +3.3% in Q3, following the sharp -7% fall in Q2. Consumer spending drove the rebound amid the reopening across most of the economy as the virus was contained (pre-emergence of the NSW / Northern Beaches cluster in mid-late December).

The trade balance rebounded in October to +\$7.5bn, driven by exports which rose +5% (or \$1.8bn) to \$35.7bn, while imports rose +1% (or \$0.2bn) to \$38.3bn.

S&P delivered a two-notch downgrade for Victoria from AAA to AA, while cutting New South Wales credit rating from AAA to AA+.

PM Morrison announced in the MYEFO to pledge for an additional \$1bn towards aged care, which will include \$850m to fund 10,000 new places.

The underlying cash balance is now expected to be a deficit of \$197.7bn in 2020-21, a \$15.9bn improvement since the October Budget forecast just two months ago of a deficit of \$213.7bn.

NZ prime minster Jacinda Ardern announced plans for a trans-Tasman travel bubble in early 2021, subject to interim infection news and assuming acceptable contingency plans being first put in place.

Sydney's northern beaches saw a COVID-19 virus cluster emerge a week prior to Christmas, with various lockdown measure imposed.

Preliminary retail sales rose +7.0% m/m in November and is now sitting +13.9% higher than pre-COVID levels.

The Australian dollar surged +4.18% over the month, finishing at US77.02 cents (from US73.93 cents the previous month).

Credit Market

The main credit indices tightened over December on the back of the global vaccine rollouts. The indices now trade back to their levels experienced in late 2019:

Index	December 2020	November 2020
CDX North American 5yr CDS	50b p	50bp
iTraxx Europe 5yr CDS	48b p	49bp
iTraxx Australia 5yr CDS	57bp	59bp

Source: Markit

Monthly Investment Report: December 2020



Fixed Interest Review

Benchmark Index Returns

Index	December 2020	November 2020
Bloomberg AusBond Bank Bill Index (0+YR)	+0.00%	+0.01%
Bloomberg AusBond Composite Bond Index (0+YR)	-0.27%	-0.11%
Bloomberg AusBond Credit FRN Index (0+YR)	+0.00%	+0.21%
Bloomberg AusBond Credit Index (0+YR)	+0.01%	+0.79%
Bloomberg AusBond Treasury Index (0+YR)	-0.36%	-0.33%
Bloomberg AusBond Inflation Gov't Index (0+YR)	+1.20%	+0.55%

Source: Bloomberg

Other Key Rates

Index	December 2020	November 2020
RBA Official Cash Rate	0.10%	0.10%
90 Day (3 month) BBSW Rate	0.01%	0.02%
3yr Australian Government Bonds	0.10%	0.11%
10yr Australian Government Bonds	0.97%	0.90%
US Fed Funds Rate	0.00%-0.25%	0.00%-0.25%
10yr US Treasury Bonds	0.93%	0.84%

Source: RBA, AFMA, US Department of Treasury

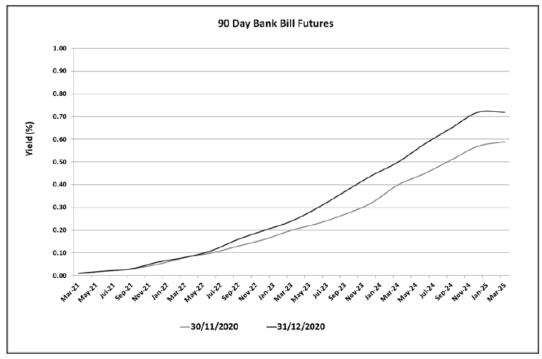
Monthly Investment Report: December 2020

Page 17



90 Day Bill Futures

Over December, bill futures rose across the board following the rollout of the multiple vaccines globally. Overall, bill futures continue to depict a low rate environment over the long-run:



Source: ASX

Monthly Investment Report: December 2020

Page 18



Fixed Interest Outlook

Investors continue to focus on the positive medium-term news from multiple vaccine roll-outs and fiscal stimulus, overlooking the signs of a slowing economy and overwhelmed healthcare service.

The US Fed has reiterated it is committed to "using its full range of tools to support the US economy". It has signalled it is not considering raising interest rates at least until the end of 2023. The futures market pushed back expectations of the next Fed rate hike (by around 3 years) after it announced it aims to achieve a "moderately above 2% inflation for some time". The median Fed 'dot' for the anticipated Fed Funds rate target remains unchanged at 0.125% through 2023.

Domestically, the RBA's latest Minutes reiterated that "the Board does not expect to increase the cash rate for at least 3 years" given that "significant gains in employment and a return to a tight labour market" would be needed to have wages growth "materially higher than current levels" to see actual inflation sustainably back in the RBA's 2-3% target range.

RBA Governor Lowe said if the world's major central banks adopted negative rates at significant levels (e.g. the US Fed going to -50bp to -100bp), only then would the RBA "consider" going negative.

The RBA's focus is now to reduce the unemployment rate, commenting that it was a "national priority" to achieve their inflation target range. The RBA is not going to be increasing the cash rate until "actual inflation is sustainably within the 2-3% target range". For inflation to lift sustainably, it will require wages growth to lift substantially and Governor Lowe suggested the unemployment rate may need to fall to 4-point something percent to achieve this objective.

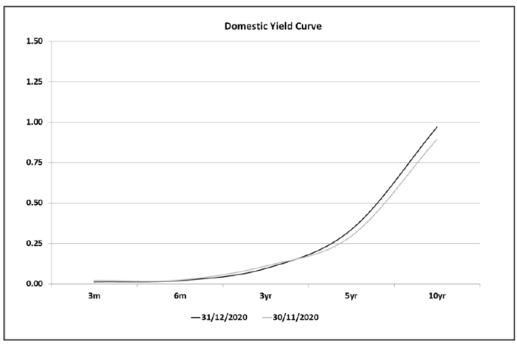
Worryingly on the inflation outlook, the RBA notes that around 25% of recently surveyed firms intend to implement wage freezes in 2021, while 30% already have wage freezes in place.

The RBA's preferred core trimmed mean measure is forecast to be 1½% at the end of 2022, well below their 2-3% target band. The 'low for longer' depleted state of interest rates has resulted in the RBA to repeatedly declare its forward guidance of "*not expecting to increase the cash rate for at least three years*". The Board has continued to emphasise the recovery as being "*uneven and drawn out*", with the unemployment only expected to decline "*slowly*".

The domestic bond market continues to suggest a prolonged low period of interest rates. Over the month, yields rose up to 7bp at the long-end of the curve:

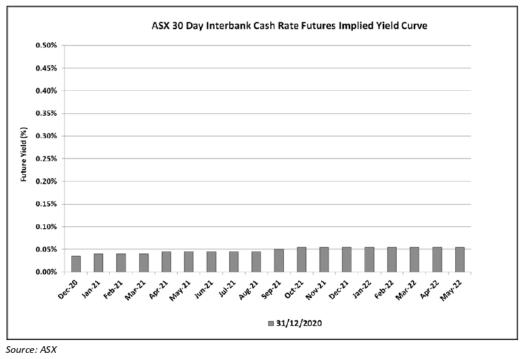
Monthly Investment Report: December 2020





Source: AFMA, ASX, RBA

Despite the RBA's forward guidance (keep rates unchanged for 3 years), the futures market is still pricing in the possibility of further rate cuts closer to 0% over the next 18 months:



Monthly Investment Report: December 2020



Disclaimer

Imperium Markets provides fixed income investment advisory services and a financial market platform through which clients and fixed income product providers may transact with each other.

The information in this document is intended solely for your use. The information and recommendations constitute judgements as of the date of this report and do not consider your individual investment objectives and adopted policy mandate.

Imperium Markets monitors the entire fixed income investible universe and recommends the best rate available to us, regardless of whether a product provider uses our market platform. You are responsible for deciding whether our recommendations are appropriate for your particular investment needs, objectives and financial situation and for implementing your decisions. You may use our platform to transact with your chosen product providers.

Imperium Markets charges a flat fee for our investment advice. Any commissions received are rebated to clients in full. If you choose a product provider who uses our market platform, the product provider pays us 1bp p.a. funding fee (pro-rated for the term of investment) of the value of the investments transacted.

Monthly Investment Report: December 2020





Investment Report

01/12/2020 to 31/12/2020

Item 10.12 Attachment 2

PORT MACQUARIE-HASTINGS

Portfolio Valuation as at 31/12/2020

Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
BOQ	BBB+	TD	GENERAL	Annual	24/01/2017	25/01/2021	3.6500	2,000,000.00	68,600.00	6,200.00
Westpac	AA-	TD	LOCAL BRANCH	At Maturity	30/01/2020	29/01/2021	1.2000	10,000.00	110.79	10.19
Westpac	AA-	TD	LOCAL BRANCH	At Maturity	21/08/2020	22/02/2021	0.6500	20,000.00	47.37	11.04
Westpac	AA-	TD	LOCAL BRANCH	Annual	21/02/2017	22/02/2021	3.3900	2,000,000.00	58,512.33	5,758.36
ICBC Sydney Branch	А	TD	GENERAL	Annual	27/02/2020	26/02/2021	1.3900	2,500,000.00	29,418.49	2,951.37
BOQ	BBB+	TD	GENERAL	Annual	10/03/2016	10/03/2021	3.8000	3,000,000.00	92,761.64	9,682.19
ING Direct	А	TD	GENERAL	Annual	20/02/2019	16/03/2021	2.8200	2,000,000.00	48,828.49	4,790.14
Westpac	AA-	TD	GENERAL	Quarterly	22/03/2018	23/03/2021	3.0200	4,000,000.00	3,309.59	3,309.59
Westpac	AA-	TD	LOCAL BRANCH	At Maturity	21/05/2020	21/05/2021	1.0000	10,000.00	61.64	8.49
Westpac	AA-	TD	GENERAL	Quarterly	22/05/2018	25/05/2021	3.1000	4,000,000.00	13,249.32	10,531.51
AMP Bank	BBB	TD	GENERAL	Annual	25/11/2019	25/05/2021	1.6000	5,000,000.00	8,109.59	6,794.52
AMP Bank	BBB	TD	GENERAL	Annual	29/11/2019	27/05/2021	1.6000	4,000,000.00	5,610.96	5,435.62
BOQ	BBB+	TD	GENERAL	Annual	29/05/2019	31/05/2021	2.3000	3,000,000.00	41,021.92	5,860.27
Rabobank Australia Branch	A+	TD	GENERAL	Annual	08/06/2017	07/06/2021	3.0200	5,000,000.00	85,221.92	12,824.66
Westpac	AA-	TD	GENERAL	Quarterly	06/06/2018	15/06/2021	3.1000	3,000,000.00	6,369.86	6,369.86
NAB	AA-	TD	GENERAL	At Maturity	19/06/2020	21/06/2021	1.0000	4,000,000.00	21,479.45	3,397.26
NAB	AA-	TD	GENERAL	Annual	03/07/2018	22/06/2021	3.0000	4,000,000.00	59,835.62	10,191.78
NAB	AA-	TD	GENERAL	Annual	03/07/2018	06/07/2021	3.0000	3,000,000.00	44,876.71	7,643.84

Page 2 / 6

ORDINARY COUNCIL 17/02/2021

										QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
Westpac	AA-	TD	GENERAL	Quarterly	17/07/2018	13/07/2021	3.0400	5,000,000.00	30,816.44	12,909.59
NAB	AA-	TD	GENERAL	Annual	26/07/2018	20/07/2021	3.0400	4,000,000.00	52,637.81	10,327.67
Westpac	AA-	TD	LOCAL BRANCH	Annual	24/07/2019	23/07/2021	1.7500	4,000,000.00	30,876.71	5,945.21
NAB	AA-	TD	GENERAL	Annual	02/08/2018	03/08/2021	3.0700	5,000,000.00	63,082.19	13,036.99
ICBC Sydney Branch	А	TD	GENERAL	Annual	30/08/2019	30/08/2021	1.6200	5,000,000.00	27,295.89	6,879.45
NAB	AA-	TD	GENERAL	At Maturity	31/08/2020	31/08/2021	0.8000	5,000,000.00	13,479.45	3,397.26
NAB	AA-	TD	GENERAL	Annual	31/08/2020	31/08/2021	0.8000	5,000,000.00	13,479.45	3,397.26
Westpac	AA-	TD	GENERAL	Quarterly	13/09/2018	14/09/2021	2.8800	5,000,000.00	7,101.37	7,101.37
NAB	AA-	TD	GENERAL	Annual	27/09/2018	28/09/2021	3.0500	5,000,000.00	39,691.78	12,952.05
Auswide Bank	BBB	TD	GENERAL	Annual	30/09/2019	30/09/2021	1.7500	4,000,000.00	17,835.62	5,945.21
Westpac	AA-	TD	GENERAL	Quarterly	13/09/2018	12/10/2021	2.8900	5,000,000.00	7,126.03	7,126.03
Auswide Bank	BBB	TD	GENERAL	Annual	23/10/2019	25/10/2021	1.6500	5,000,000.00	15,821.92	7,006.85
Auswide Bank	BBB	TD	GENERAL	At Maturity	25/11/2019	25/11/2021	1.7000	5,000,000.00	93,849.32	7,219.18
ICBC Sydney Branch	А	TD	GENERAL	Annual	05/12/2018	07/12/2021	3.0100	4,000,000.00	8,246.58	8,246.58
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/12/2019	16/12/2021	1.5700	4,000,000.00	2,752.88	2,752.88
ING Direct	А	TD	GENERAL	Annual	30/01/2020	31/01/2022	1.6500	5,000,000.00	76,171.23	7,006.85
Newcastle Permanent	BBB	TD	GENERAL	Quarterly	07/02/2019	08/02/2022	3.0500	4,000,000.00	17,715.07	10,361.64
Westpac	AA-	TD	GENERAL	Annual	21/02/2017	21/02/2022	3.6100	2,000,000.00	62,309.59	6,132.05
NAB	AA-	TD	GENERAL	Annual	21/02/2017	21/02/2022	3.4600	5,000,000.00	149,301.37	14,693.15
ING Direct	А	TD	GENERAL	Annual	02/03/2020	02/03/2022	1.5000	5,000,000.00	62,671.23	6,369.86

Page 3 / 6

Item 10.12 Attachment 2

ORDINARY COUNCIL 17/02/2021

.....

										QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
BOQ	BBB+	TD	GENERAL	Annual	15/03/2017	15/03/2022	3.8000	2,000,000.00	60,591.78	6,454.79
Newcastle Permanent	BBB	TD	GENERAL	Quarterly	12/03/2019	22/03/2022	2.9000	4,000,000.00	5,720.55	5,720.55
Newcastle Permanent	BBB	TD	GENERAL	Annual	27/03/2019	29/03/2022	2.8000	5,000,000.00	107,397.26	11,890.41
Newcastle Permanent	BBB	TD	GENERAL	Quarterly	18/04/2019	19/04/2022	2.7000	4,000,000.00	21,895.89	9,172.60
BOQ	BBB+	TD	GENERAL	Annual	28/05/2019	30/05/2022	2.4000	4,000,000.00	57,336.99	8,153.42
Rabobank Australia Branch	A+	TD	GENERAL	Annual	08/06/2017	07/06/2022	3.2200	5,000,000.00	90,865.75	13,673.97
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/06/2020	20/06/2022	1.1500	2,000,000.00	12,350.68	1,953.42
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/06/2020	20/06/2022	1.1500	2,000,000.00	12,350.68	1,953.42
Westpac	AA-	TD	GENERAL	Quarterly	23/06/2020	23/06/2022	1.0100	3,500,000.00	871.64	871.64
Australian Military Bank	BBB+	TD	GENERAL	Annual	23/06/2020	23/06/2022	1.0500	3,500,000.00	19,331.51	3,121.23
Westpac	AA-	TD	GENERAL	Quarterly	24/06/2020	24/06/2022	1.0200	5,000,000.00	1,117.81	1,117.81
NAB	AA-	TD	GENERAL	Annual	02/08/2018	02/08/2022	3.2200	4,000,000.00	52,931.51	10,939.18
NAB	AA-	TD	GENERAL	Annual	16/08/2018	16/08/2022	3.0500	4,000,000.00	45,791.78	10,361.64
ICBC Sydney Branch	А	TD	GENERAL	Annual	28/08/2019	29/08/2022	1.6400	5,000,000.00	28,306.85	6,964.38
Auswide Bank	BBB	TD	GENERAL	At Maturity	06/09/2019	06/09/2022	1.8000	3,000,000.00	71,457.53	4,586.30
Rabobank Australia Branch	A+	TD	GENERAL	Annual	13/09/2017	13/09/2022	3.3800	3,000,000.00	30,281.10	8,612.05
Westpac	AA-	TD	LOCAL BRANCH	Annual	13/09/2017	13/09/2022	3.4100	3,000,000.00	30,549.86	8,688.49
Westpac	AA-	TD	GENERAL	Quarterly	29/09/2020	29/09/2022	0.7200	5,000,000.00	295.89	295.89
MyState Bank	BBB	TD	GENERAL	Annual	29/09/2020	29/09/2022	0.8500	5,000,000.00	10,945.21	3,609.59
Auswide Bank	BBB	TD	GENERAL	Annual	30/09/2019	30/09/2022	1.7500	4,000,000.00	17,835.62	5,945.21

Page 4 / 6

Item 10.12 Attachment 2

ORDINARY COUNCIL 17/02/2021

1

										QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
ICBC Sydney Branch	A	TD	GENERAL	Annual	23/10/2019	24/10/2022	1.7000	3,000,000.00	9,780.82	4,331.51
ICBC Sydney Branch	А	TD	GENERAL	Annual	31/10/2019	31/10/2022	1.7300	5,000,000.00	14,930.14	7,346.58
ING Direct	А	TD	GENERAL	Annual	27/02/2020	27/02/2023	1.6000	2,500,000.00	33,863.01	3,397.26
BOQ	BBB+	TD	GENERAL	Annual	28/05/2019	29/05/2023	2.5500	4,000,000.00	60,920.55	8,663.01
BOQ	BBB+	TD	GENERAL	Annual	19/06/2020	19/06/2023	1.3500	2,000,000.00	14,498.63	2,293.15
BOQ	BBB+	TD	GENERAL	Annual	27/06/2019	27/06/2023	2.2000	5,000,000.00	56,054.79	9,342.47
MyState Bank	BBB	TD	GENERAL	Annual	14/09/2020	14/09/2023	0.9000	4,000,000.00	10,750.68	3,057.53
MyState Bank	BBB	TD	GENERAL	Annual	14/09/2020	14/09/2023	0.9000	4,000,000.00	10,750.68	3,057.53
ICBC Sydney Branch	А	TD	GENERAL	Annual	27/11/2019	27/11/2023	1.7600	6,000,000.00	10,126.03	8,968.77
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/12/2019	18/12/2023	1.8100	4,000,000.00	3,173.70	3,173.70
Auswide Bank	BBB	TD	GENERAL	Annual	02/03/2020	04/03/2024	1.7500	3,000,000.00	43,869.86	4,458.90
BOQ	BBB+	TD	GENERAL	Annual	18/06/2020	18/06/2024	1.4500	3,000,000.00	23,478.08	3,694.52
ING Direct	А	TD	GENERAL	Annual	23/06/2020	24/06/2024	1.2500	3,000,000.00	19,726.03	3,184.93
Bendigo and Adelaide	BBB+	FRN	GENERAL	Quarterly	06/09/2019	06/09/2024	0.9891	3,059,802.00	2,032.40	2,032.40
BOQ	BBB+	TD	GENERAL	Annual	27/09/2019	27/09/2024	2.0000	2,000,000.00	10,410.96	3,397.26
NAB	AA-	TD	GENERAL	Annual	16/10/2020	16/10/2024	0.8000	5,000,000.00	8,438.36	3,397.26
NAB	AA-	TD	GENERAL	Annual	18/11/2020	18/11/2024	0.7000	5,000,000.00	4,219.18	2,972.60
ICBC Sydney Branch	А	TD	GENERAL	Annual	18/06/2020	18/06/2025	1.7500	2,000,000.00	18,890.41	2,972.60
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/10/2020	16/10/2025	1.2000	5,000,000.00	12,657.53	5,095.89
ICBC Sydney Branch	А	TD	GENERAL	Annual	17/11/2020	17/11/2025	1.3000	6,500,000.00	10,417.81	7,176.71

Page 5 / 6

Item 10.12 Attachment 2

ORDINARY COUNCIL 17/02/2021

										QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
NAB	AA-	TD	GENERAL	Annual	17/11/2020	17/11/2025	0.8500	3,500,000.00	3,667.81	2,526.71
ICBC Sydney Branch	А	TD	GENERAL	Annual	03/12/2020	03/12/2025	1.2000	5,000,000.00	4,767.12	4,767.12
ICBC Sydney Branch	А	TD	GENERAL	Annual	07/12/2020	08/12/2025	1.2000	5,000,000.00	4,109.59	4,109.59
NAB	AA-	TD	GENERAL	Annual	07/12/2020	08/12/2025	0.9000	5,000,000.00	3,082.19	3,082.19
Westpac	AA-	CASH	GENERAL	Monthly	31/12/2020	31/12/2020	0.5000	25,049,104.18	9,127.42	9,127.42
TOTALS								338,148,906.18	2,461,657.29	500,291.46

Page 6 / 6

Item 10.12 Attachment 2



Monthly Investment Report

January 2021



Imperium Markets Pty Ltd ABN: 87 616 579 527 Authorised Representative of Libertas Financial Planning Pty Ltd AFSL 429 718 Phone: +61 2 9053 2987 Email: <u>michael.chandra@imperium.markets</u> Level 13, 333 George Street, Sydney NSW 2000



Executive Summary

Compliance

Compliance Measure	Within Policy Limits (Y/N)	Reason if Not Compliant
Term to Maturity	Yes – Compliant	n/a
Counterparty	Yes – Compliant	n/a
Credit Quality	Yes – Compliant	n/a

Performance

As at 31/01/2021	1m (actual)	1m (% p.a.)	FYTD (actual)	FYTD (% p.a.)
AusBond Bank Bill Index	0.00%	0.01%	0.05%	0.08%
Council's Portfolio [^]	0.17%	1.99%	1.27%	2.16%
Outperformance	0.17%	1.98%	1.22%	2.08%

^Total portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

Impact of COVID-19 to Council's Portfolio

COVID-19 has adversely impacted financial markets, which in turn, has also affected Council's investment portfolio. We provide a quick summary in this section.

With regards to financial markets, of importance was the RBA cutting interest rates twice in March 2020, taking the official cash rate down to 0.25%. Shares (equities) experienced a significant correction in March 2020 but recovered substantially due to the unprecedented fiscal and monetary policy support from global central banks and governments, as well as pricing in an early distribution of a vaccine. **The RBA cut rates to record lows on 3rd November 2020 to 0.10%.** December 2020 saw the ongoing rally in equities on the back of the multiple vaccines that were rolled out globally, although there was some retracement in global equities in January 2021.

With regards to the medium-longer term outlook for financial markets, of importance is the RBA's outlook and stance on the current situation:

- The RBA's official cash rate will remain unchanged at its emergency level of 0.10% until its objectives of full employment and inflation are reached. They stressed that reducing unemployment was a "national priority" and the development in the labour market as key to the policy outlook;
- The extension of the Term Funding Facility (TFF) until 30 June 2021, allowing all ADIs to access cheap funding directly from the RBA at a cost of 0.10% for 3 years for new drawings (the facility was previously available at a cost of 0.25% and was increased from an original \$90bn to \$200bn);
- 3. RBA Governor Lowe has commented that he has not seen any signs of stress in the financial system from this crisis because unlike the GFC, the banks have cash and are well capitalised;
- 4. The RBA Board is "not expecting to increase the cash rate for at least three years".

Monthly Investment Report: January 2021



The biggest impact to Council's investment portfolio is with regards to its largest exposure being assets held in bank term deposits, which accounts for around ~94½% of Council's total investment, and cash (~4½% of the total investment portfolio). The biggest risk that PMHC faces over the medium-longer term in this environment is not the potential loss of capital (given all the banks are well capitalised and regulated by APRA), but the rapid loss of interest income as interest rates have plummeted.

Council's term deposit portfolio was yielding 1.97% p.a. at month-end, with a weighted average duration of around 632 days or 1.73 years. This average duration will provide some income protection against the low interest rate environment over the next 18 months. As existing deposits mature however, they will inevitably be reinvested at much lower prevailing rates.

We note the current interest rates in the term deposit market:

- The highest deposit rate from any rated ADI in the market is now 1.10% p.a. for 5 years;
- The highest deposit rates amongst the "AA-" rated ADIs (major banks) is now yielding between 0.40%-0.90% p.a. (depending on term);
- The highest deposit rates amongst the "A" rated ADIs was yielding between 0.60%-1.10% p.a. (depending on term);
- The highest deposit rates amongst the "BBB" and unrated ADIs was yielding between 0.40%-0.65% p.a. (depending on term).

Given official rates have fallen to record lows, Council is likely to see a rapid decline in interest income over future financial years. Its budgeted income over the <u>medium-longer term</u> needs to be revised to reflect the low interest rate environment. Returns between 0.50%-0.80% p.a. may potentially be the "norm" over the next few financial years.

Monthly Investment Report: January 2021

Page 3



Council's Portfolio

Asset Allocation

The portfolio is predominately directed to fixed term deposits (94½%). The remainder of the portfolio is directed to the overnight cash account with Westpac (4½%) and the single FRN with Bendigo-Adelaide (1%).

With the RBA cutting interest rates in November 2020 to 0.10%, the priority should be to lock in any remaining attractive medium-longer dated fixed deposits that may still be available to address reinvestment risk as margins continue to compress.

Breakdown by asset type	
CASH - 4.51%	
FRN - 0.92%	
	TD - 94.58%

Term to Maturity

All maturity limits (minimum and maximum) comply with the Investment Policy. Medium-Term (3-5½ years) assets account for around 19% of the total investment portfolio, with capacity of around \$70m at month-end.

Maturi	ty compliance			
Limits	Compliant Nor	n-compliant		
100%				
75%				
50%				
25%				_
0%	0 - 365 days		1 - 3 years	3 - 5.5 years

Where there is (counterparty) capacity to invest in attractive 3-5½ year investments, we recommend this be allocated to new any remaining attractive fixed term deposits or fixed bonds (refer to respective sections below).





Compliant	Horizon	Invested (\$)	Invested (%)	Min. Limit (%)	Max. Limit (%)	Available (\$)
~	0 - 365 days	\$138,596,070	41.48%	0%	100%	\$195,559,922
~	1 - 3 years	\$131,500,000	39.35%	0%	70%	\$102,409,194
~	3 - 5.5 years	\$64,059,922	19.17%	0%	40%	\$69,602,475
~	5.5 - 10 years	\$0	0.00%	0%	10%	\$33,415,599
		\$334,155,992	100.00%			

Counterparty

As at the end of January, Council did not have an overweight position to any single ADI. Overall, the portfolio is diversified across the investment grade credit spectrum (rated BBB- or higher), with no exposure to unrated ADIs.

Compliant	lssuer	Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
\checkmark	NAB	AA-	\$74,500,000	22.29%	30.00%	\$25,746,798
\checkmark	WBC (St George)	AA-	\$65,596,070	19.63%	30.00%	\$34,650,728
\checkmark	Rabobank	A+	\$13,000,000	3.89%	20.00%	\$53,831,198
\checkmark	ICBC Sydney	А	\$62,000,000	18.55%	20.00%	\$4,831,198
\checkmark	ING Bank Aus.	А	\$17,500,000	5.24%	20.00%	\$49,331,198
\checkmark	Aus Military Bank	BBB+	\$7,500,000	2.24%	10.00%	\$25,915,599
\checkmark	BOQ	BBB+	\$28,000,000	8.38%	10.00%	\$5,415,599
\checkmark	Bendigo	BBB+	\$3,059,922	0.92%	10.00%	\$30,355,677
\checkmark	AMP Bank	BBB	\$9,000,000	2.69%	10.00%	\$24,415,599
\checkmark	Auswide	BBB	\$24,000,000	7.18%	10.00%	\$9,415,599
\checkmark	MyState	BBB	\$13,000,000	3.89%	10.00%	\$20,415,599
\checkmark	Newcastle PBS	BBB	\$17,000,000	5.09%	10.00%	\$16,415,599
			\$334,155,992	100.00%		

In September 2020, ratings agency **S&P downgraded AMP Bank by one notch to "BBB"** stating its view that "the overall creditworthiness of the AMP group is weaker" and that "the group is exposed to challenges that may disrupt its overall strategic direction and its ability to effectively execute its strategy."

Separately, Moody's downgraded MyState Bank's long-term credit rating from Baa1 (BBB+ equivalent from S&P) to Baa2 (BBB equivalent from S&P). The downgrade reflects the bank's lower financial buffers in a more challenging operating environment when compared to its peers. Moody's acknowledged though that the bank's capital ratio remained steady during the 2020 financial year.

We have no issues with Council's investments with both AMP Bank and MyState, given they are super-senior ranked assets, extremely low risk and high up the bank capital structure.

We remain supportive of the regional and unrated ADI sector (and have been even throughout the GFC period). They continue to remain solid, incorporate strong balance sheets, while exhibiting high

Monthly Investment Report: January 2021



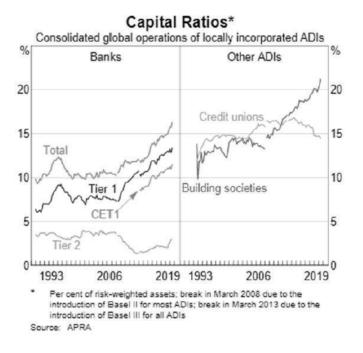
levels of capital – typically, much higher compared to the higher rated ADIs. Some unrated ADIs have up to 25-40% more capital than the domestic major banks, and well above the Basel III requirements.

RBA Governor Lowe has commented that they have not seen any signs of stress in the financial system and that unlike during the GFC, the banks (all ADIs) now have cash, are well capitalised and are acting as "shock absorbers" in the current crisis.

Overall, the lower rated ADIs (BBB and unrated) are generally now in a better financial position then they have been historically (see the Capital Ratio figure below). We believe that deposit investments with the lower rated ADIs should be continued going forward, particularly when they offer 'above market' specials. Not only would it diversify the investment portfolio and reduce credit risk, it would also improve the portfolio's overall returns.

In the current environment of high regulation and scrutiny, all domestic (and international) ADIs continue to carry high levels of capital. There is minimal (if any) probability of any ADI defaulting on their deposits going forward – this was stress tested during the GFC. **APRA's mandate is to** "*protect depositors*" and provide "*financial stability*".

The biggest single risk that depositors face in the current low interest rate environment is not capital or credit risk, but reinvestment risk. Interest rates are now at their effective lower bound of 0.10%.



Monthly Investment Report: January 2021

Page 6



Fossil Fuel Investments

What is Council's current exposure to institutions that fund fossil fuels?

Using the following link <u>http://www.marketforces.org.au/banks/compare</u>, based on the Council's investment portfolio balance as at 31/01/2021 (\$334.16m), we can roughly estimate that ~58% of the investments have some form of exposure.

How would Council modify its Investment Policy to cater for divestment of fossil fuels?

If the major banks were withdrawn from investments, some members of the community may look at that remaining list of ADIs (banks) and say "Why the do we have all our money with those no-name institutions? I've never even heard of them. We don't want to take risks with our money after councils lost \$100's of millions speculating in the GFC". It will be difficult to please everyone. We suggest starting the discussion with all Councillors asking "are you comfortable investing all the money with the lower rated regionals and credit unions?" If not, then a full divestment campaign will be complicated.

Some ways to potentially 'make changes' to the policy, or at least have a discussion, includes:

- "Where possible within policy and without compromising the risk and return profile, we favour..."
- "We have not yet made a decision to divest because it will have implications on credit quality, ratings and income, but we are actively discussing..."

What would be implications on our portfolio credit rating?

By adopting a free fossil fuel policy or an active divestment strategy, this would eliminate the major banks rated "AA-" as well as some other "A" rated banks (AMP, BoQ and ING). Council would be left with a smaller sub-sector of banks to choose to invest with.

What would be risks and implications on Council's portfolio performance?

Some implications include:

- High concentration risk limiting Council to a selected number of banks;
- Increased credit/counterparty risk;
- May lead to a reduction in performance (most of the senior FRN issues are with the higher rated ADIs) which could result in a significant loss of income generated – could be in excess of hundreds of thousands of dollars per annum;
- Underperformance compared to other Councils.

It may be contrary to Council's primary objective to preserve capital as the investment portfolio's risk would increase (all things being equal). Council may not be maximising its returns – this is one of the primary objectives written in the Investment Policy.



Council's exposure is summarised as follows:

Counterparty	Credit Rating	Funding Fossil Fuel
NAB	AA-	Yes
WBC (St George)	AA-	Yes
Rabobank	A+	No
ICBC, Sydney	A	No
ING Bank Australia	А	Yes
Australian Military	BBB+	No
BoQ	BBB+	Yes
Bendigo-Adelaide	BBB+	No
AMP Bank	BBB	Yes
Auswide	BBB	No
MyState Bank	BBB	No
Newcastle Permanent	BBB	No

^^The underlying exposure in these managed funds includes the domestic major banks. Source: https://www.marketforces.org.au/info/compare-bank-table/

Summary	Amount	Invested %
Yes	\$194,596,070	58%
No	\$139,559,922	42%
	\$334,155,992	100%

Monthly Investment Report: January 2021

Page 8



Credit Quality

The portfolio remains lightly diversified from a credit ratings perspective. The portfolio is entirely directed to the investment grade ADIs (BBB- or higher), with zero allocation to unrated ADIs. There is high capacity to invest in the higher rated ADIs (A or higher), particularly after the downgrades of BoQ and Bendigo-Adelaide Bank in May 2017, as well as AMP Bank over the past 12 months, which now all fall into the "BBB" rated category.

Following the adoption of a new policy, there is now more capacity to invest with the "BBB" rated ADIs (~\$15m remaining at month-end), although most ADIs in this sector are currently full on liquidity due to the combination of minimal credit growth (loans being written) and the term funding facility (TFF) provided by the RBA (access to cheap funding).

If there are any attractive deposits being offered in the "BBB" rated sector (outside of BoQ, which Council is close to maximum limits), we will inform Council to take advantage and invest accordingly.

Compliant	Credit Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
√	AA Category	\$140,096,070	41.93%	100%	\$194,059,922
1	A Category	\$92,500,000	27.68%	60%	\$107,993,595
1	BBB Category	\$101,559,922	30.39%	35%	\$15,394,675
1	Unrated ADIs	\$0	0.00%	5%	\$16,707,800
		\$334,155,992	100.00%		

All ratings categories are within the current Policy limits:

Monthly Investment Report: January 2021

Page 9



Performance

Council's performance for the month ending 31 January 2021 is summarised as follows:

Performance (Actual)	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.01%	0.03%	0.09%	0.11%	0.25%
AusBond Bank Bill Index	0.00%	0.01%	0.04%	0.05%	0.29%
Council's T/D Portfolio	0.17%	0.51%	1.07%	1.28%	2.34%
Council's FRN Portfolio	0.08%	0.26%	0.52%	0.61%	1.25%
Council's Portfolio^	0.17%	0.51%	1.07%	1.27%	2.33%
Outperformance	0.17%	0.50%	1.03%	1.22%	2.04%

ATotal portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

Performance (Annualised)	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.10%	0.10%	0.17%	0.19%	0.25%
AusBond Bank Bill Index	0.01%	0.04%	0.08%	0.08%	0.29%
Council's T/D Portfolio	2.00%	2.04%	2.14%	2.17%	2.34%
Council's FRN Portfolio	0.99%	1.02%	1.03%	1.04%	1.25%
Council's Portfolio^	1.99%	2.03%	2.13%	2.16%	2.33%
Outperformance	1.98%	1.99%	2.05%	2.08%	2.04%

ATotal portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

For the month of January, the total portfolio (excluding cash) provided a solid return of +0.17% (actual) or +1.99% p.a. (annualised), outperforming the benchmark AusBond Bank Bill Index return of +0.00% (actual) or +0.01% p.a. (annualised). The strong performance continues to be driven by the handful of deposits still yielding above 3% p.a. However, some of these individual deposits are approaching maturity and will be reinvested at much lower prevailing rates.

Over the past 12 months, the portfolio returned +2.33% p.a., outperforming bank bills by 2.04% p.a. and over seven times the official cash rate. This has been very strong given deposit rates reached their all-time lows and margins have generally contracted over the past 3 years.

We are pleased that PMHC remains amongst the best performing Councils in the state of NSW where deposits are concerned, earning on average, more than \$2,000,000 in additional interest income compared to its peers (refer to our October 2020 rankings). We have been pro-active in our advice about protecting interest income and addressing reinvestment risk for many years and encouraged to maintain a long duration position. This is now reflected by the high performance of the investment portfolio. Of the 82 individual deposits PMHC held, 22 are still yielding higher than 3.00% p.a. That is, around 27% of outstanding deposits held is earning an interest rate that is thirty times the prevailing cash rate of 0.10%.

Page 10



Council's Term Deposit Portfolio & Recommendation

As at the end of January 2021, Council's deposit portfolio was yielding 1.97% p.a. (down 4bp from the previous month), with an average duration of ~1% years. Where possible, we recommend Council extends or at least maintains this average duration. In the low interest rate environment, the biggest collective risk that the local government sector has faced over the post-GFC era has been the dramatic fall in interest rates - from 7% to the historical low levels of 0.10%.

As the past decade has highlighted (post-GFC era), we have seen too many portfolios' roll a high proportion of their deposits between 3-6 months, resulting in their deposits being reinvested at lower prevailing rates. That is, depositors have overpaid for liquidity and generally not insured themselves against the low interest rate environment by diversify their funding across various tenors (out to 5 years) but rather placed all their 'eggs in one basket' and kept all their deposits short. **Reinvestment risk has collectively been and continues to be the biggest detriment to depositors' interest income over the post-GFC period**.

ADI	LT Credit Rating	Term	T/D Rate
ICBC, Sydney	А	5 years	1.10% p.a.
ICBC, Sydney	А	4 years	1.00% p.a.
AMP	BBB	18 months	^0.95% p.a.
NAB	AA-	5 years	0.85% p.a.
ICBC, Sydney	А	3 years	0.80% p.a.
Warwick CU	Unrated ADI	2 years	0.75% p.a.
NAB	AA-	4 years	0.70% p.a.
ICBC, Sydney	А	2 years	0.64% p.a.

At the time of writing, we see value in:

^ AMP T/Ds - these are grossed up rates which includes a 0.20% p.a. rebated commission from Imperium Markets

The above deposits are suitable for investors looking to provide some income protection and mitigate reinvestment/rollover risk in the low interest rate environment.

For terms under 12 months, we believe the strongest value is currently being offered by the following ADIs (dependent on daily funding requirements):





ADI	LT Credit Rating	Term	T/D Rate
AMP	BBB	11-12 months	^0.95% p.a.
AMP	BBB	6-10 months	^0.90% p.a.
AMP	BBB	3-5 months	^0.80% p.a.
Judo Bank	Unrated ADI	9-12 months	~0.60% p.a.
Bank of Sydney	Unrated ADI	9-12 months	0.60% p.a.
Warwick CU	Unrated ADI	12 months	0.60% p.a.
ICBC, Sydney	А	12 months	~0.45% p.a.
СВА	AA-	12 months	0.43% p.a.
NAB	AA-	12 months	0.40% p.a.
BoQ	BBB+	9-12 months	0.40% p.a.
NAB	AA-	9-10 months	0.37% p.a.

^ AMP T/Ds - these are grossed up rates which includes a 0.20% p.a. rebated commission from Imperium Markets

Monthly Investment Report: January 2021

Page 12



Senior FRNs & Recommendations

Over January, amongst the senior major bank FRNs, physical credit securities marginally tightened (valuations rose) by around 1-2bp at the longer-end of the curve. Secondary market securities remain expensive on the back of the RBA announcing its \$100bn quantitative easing (QE) package in its November meeting. Bid-ask spreads have tightened sharply on the back of excess liquidity and short supply of new issuances.

A new 5 year senior major bank FRN would now be issued around the +35-40bp level, appearing expensive on a historical basis. We expect minimal primary issuance from the domestic banks in the immediate future given the RBA's term funding facility (TFF) available to the ADIs, offering a rate of 0.10% (on new drawings) for 3 years, which has been extended to June 2021. The lack of supply from new (primary) issuances has also played a major role with the rally in credit markets over recent months.

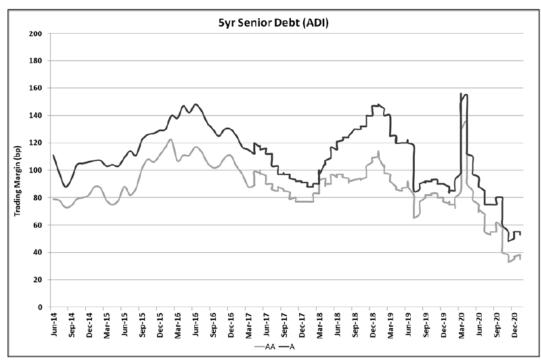
Amongst the "A" and "BBB" rated sector, the senior securities were marked between 2-3bp tighter over the month. While turnover in the secondary market is still predominately dominated by commonwealth, semi-government and major bank senior paper, given the lack of supply, we have started to observe that even a handful of regional bank senior paper has sometimes been trading inside "mid" levels over recent months.

Credit margins are now trading very tight on a historical level and look fairly expensive. FRNs will continue to play a role in investor's portfolios mainly on the basis of their liquidity and the ability to roll down the curve and gross up returns over ensuing years (in a relatively stable credit environment).

Senior FRNs (ADIs)	29/01/2021	31/12/2020
"AA" rated – 5yrs	+35bp	+37bp
"AA" rated – 3yrs	+20bp	+21bp
"A" rated – 5yrs	+53bp	+55bp
"A" rated – 3yrs	+35bp	+35bp
"BBB" rated – 3yrs	+52bp	+55bp

Source: IBS Capital





Source: IBS Capital

We now generally **recommend switches** ('benchmark' issues only) into new attractive primary issues (or longer-dated alternatives), out of the following senior FRNs that are maturing:

- On or before early 2024 for the "AA" rated ADIs (domestic major banks);
- > On or before mid-2022 for the "A" rated ADIs; and
- Within 12 months for the "BBB" rated ADIs (consider case by case).

Investors holding onto the above senior FRNs ('benchmark' issues only) in their last 1-2 years are now generally holding sub-optimal investments and are not maximising returns by foregoing realised capital gains. In the current low interest rate environment, any boost in overall returns should be locked in when it is advantageous to do so.

In late August 2019, Council placed a bid of \$3m into the new Bendigo (BBB+) 5 year FRN at +97bp maturing 06/09/2024 (ISIN: AU3FN0050019). This FRN should be viewed as a 4 year holding period, with the ability to 'roll down the curve', realise capital gains which would boost the overall return of the investment portfolio. The security was marked around +41bp (from +42bp the previous month) or a capital price ~\$102.00 at month-end. We recommend Council holds this FRN.



Economic Commentary

International Market

US equity markets reached all-time highs in early January after Joe Biden was officially inaugurated as the 46th President of the United States and signed 15 Executive Actions, mostly unwinding Trump's policies. The Democratic Party also took control of Congress for the first time in a decade.

Global equity markets fell late in the month on renewed lockdowns and a slower than anticipated distribution of the vaccines. The S&P 500 Index fell -1.11%, while the NASDAQ gained +1.42%. Across Europe, Germany's DAX fell -2.08%, UK's FTSE -0.82% and France's CAC -2.74%.

Biden unveiled a \$US1.9 trillion coronavirus plan to turn the tide on the pandemic, speeding up the vaccine rollout and providing financial help to individuals, states and local governments and businesses.

The US unemployment rate held at 6.7% in December (expected rise to 6.8%), amid an unchanged 61.8% participation rate. US non-farm payrolls fell by -140k, well below the +50k rise expected.

US headline CPI for December rose +0.4% m/m with almost 60% of the rise driven by higher gasoline prices, which rose +8.4% m/m. The more important core measure was more muted at +0.1% m/m and +1.6% y/y.

US December retail sales fell -0.7%, below the consensus of 0.0%, somewhat a reality check, highlighting the impact from the third COVID-19 wave.

US GDP came at an annualised +4.0% in Q4, following the +33.4% surge in Q3. On an annual basis, growth was down -2.5% in 2020.

The ECB left their main policy settings completely unchanged as expected (Deposit Facility Rate at -0.5%, the pandemic emergency purchase programme (PEPP) at €1.85tn, to run at least until March 2022, and the asset purchase programme (APP) to remain open-ended at €20bn per month).

China's Q4 GDP grew by a faster-than-expected pace of +6.5% q/q following a rise of +4.9% in Q3. GDP grew at +2.3% in 2020, making China the only major economy to avoid a contraction last year.

The IMF now estimates the global economy to fall by -3.5% in 2020, 0.9% higher than projected in October. It now sees growth rebounding +5.5% in 2021, a +0.3% upgrade from October's forecasts.

Index	1m	3m	1yr	3yr	5yr	10yr
S&P 500 Index	-1.11%	+13.59%	+15.15%	+9.57%	+13.87%	+11.19%
MSCI World ex-AUS	-1.08%	+15.95%	+12.31%	+6.15%	+11.35%	+7.63%
S&P ASX 200 Accum. Index	+0.31%	+11.89%	-3.11%	+7.00%	+10.03%	+7.81%

The MSCI World ex-Aus Index fell -1.08% for the month of January:

Source: S&P, MSCI

Monthly Investment Report: January 2021

Page 15



Domestic Market

The RBA's 6-month \$100bn quantitative easing (QE) program will currently cease at the end of April 2021. As such, the RBA will need to provide guidance early this year for its plans for QE, with an announcement likely in March (potentially earlier).

Employment was strong again in December, lifting 50k, with the level of employment now just 0.7% or 93K jobs below pre-pandemic (February) levels. **The unemployment rate fell by 0.2% to 6.6%**, while the participation rate rose 0.1% to 66.2%, to be the highest in the history of the series.

Headline Q4 CPI rose +0.9% q/q against the +0.7% consensus. The RBA's preferred core measure grew as expected at +0.4% q/q, which came in at +1.2% on an annualised basis.

Final retail sales rose +7.1% m/m in November to be +14% higher than pre-COVID levels. Victoria's reopening drove the increase, increasing +22.4% m/m with the sharp rise now seeing the level of Victorian retail sales broadly on par with the rest of Australia.

Preliminary retail sales fell -4.2% m/m in December, though importantly sales are still +9.2% higher than pre-pandemic February levels.

Treasurer Frydenberg said that the country's accelerated vaccine rollout hopes to have around four million doses distributed by the end of March.

The residential market continues to rebound. ABS data for new housing loan approvals in November showed a +5.6% m/m increase to be +24.4% above pre-pandemic levels, which is the highest level on record and was mostly driven by owner-occupier loans.

The Australian dollar reached a 2 year high, surpassing US78 cents earlier in the month (on the back of stronger commodity prices), before tapering off. It finished the month down -0.74% at US76.45 cents (from US77.02 cents the previous month).

Credit Market

The main credit indices widened over January on rising global infections and the moderation in the pace of the global economic recovery. The indices now trade back to their levels experienced in late 2019:

Index	January 2021	December 2020
CDX North American 5yr CDS	56bp	50bp
iTraxx Europe 5yr CDS	52bp	48bp
iTraxx Australia 5yr CDS	63bp	57bp

Source: Markit



ORDINARY COUNCIL 17/02/2021



Fixed Interest Review

Benchmark Index Returns

Index	January 2021	December 2020
Bloomberg AusBond Bank Bill Index (0+YR)	+0.00%	+0.00%
Bloomberg AusBond Composite Bond Index (0+YR)	-0.42%	-0.27%
Bloomberg AusBond Credit FRN Index (0+YR)	+0.09%	+0.00%
Bloomberg AusBond Credit Index (0+YR)	+0.04%	+0.01%
Bloomberg AusBond Treasury Index (0+YR)	-0.64%	-0.36%
Bloomberg AusBond Inflation Gov't Index (0+YR)	-0.98%	+1.20%

Source: Bloomberg

Other Key Rates

Index	January 2021	December 2020
RBA Official Cash Rate	0.10%	0.10%
90 Day (3 month) BBSW Rate	0.01%	0.01%
3yr Australian Government Bonds	0.11%	0.10%
10yr Australian Government Bonds	1.09%	0.97%
US Fed Funds Rate	0.00%-0.25%	0.00%-0.25%
10yr US Treasury Bonds	1.11%	0.93%

Source: RBA, AFMA, US Department of Treasury

Monthly Investment Report: January 2021

Page 17

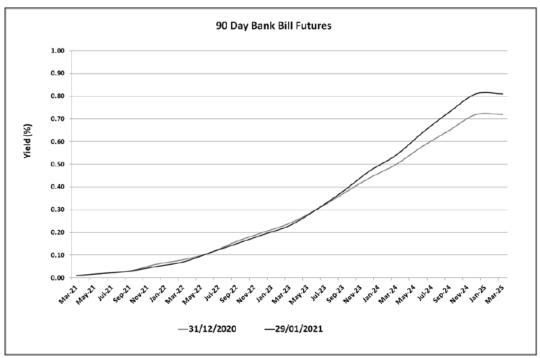
Item 10.13 Attachment 1 Page 147

ORDINARY COUNCIL 17/02/2021



90 Day Bill Futures

Over January, bill futures rose at the long-end of the curve as investors remained positive with the rollout of the multiple vaccines globally. Overall, bill futures continue to depict a low rate environment over the long-run:



Source: ASX

Monthly Investment Report: January 2021

Page 18

Item 10.13 Attachment 1 Page 148



Fixed Interest Outlook

Investors continue to focus on the positive medium-term news from multiple vaccine roll-outs and fiscal stimulus, overlooking the signs of a slowing economy and overwhelmed healthcare service.

The prospect of stronger fiscal support for the economy and the evident determination of the new US Biden administration to get pandemic under control and stabilise the economy has aided financial markets.

US Fed Chair Powell stressed the point that the US economy is a long way from a full recovery. He has emphasised the that it is likely to take "some time" before substantial progress is made, adding that the real unemployment rate is closer to 10%. Meanwhile, inflation is not a concern, commenting that the Fed "will be patient and not react if we see small, transient inflation increases".

The Fed's new framework for interest rate policy, launched last year, indicates **the central bank would not raise interest rates to prevent unemployment from falling unless it sees a serious risk of excessive inflation**.

Domestically, the RBA's latest Minutes reiterated that "the Board does not expect to increase the cash rate for at least 3 years" given that "significant gains in employment and a return to a tight labour market" would be needed to have wages growth "materially higher than current levels" to see actual inflation sustainably back in the RBA's 2-3% target range.

The RBA's focus is now to reduce the unemployment rate, commenting that it was a "national priority" to achieve their inflation target range. The RBA is not going to be increasing the cash rate until "actual inflation is sustainably within the 2-3% target range". For inflation to lift sustainably, it will require wages growth to lift substantially and Governor Lowe suggested the unemployment rate may need to fall to 4-point something percent to achieve this objective.

Worryingly on the inflation outlook, the RBA notes that around 25% of recently surveyed firms intend to implement wage freezes in 2021, while 30% already have wage freezes in place.

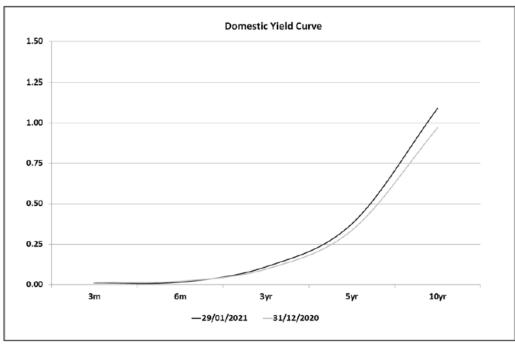
The RBA's preferred core trimmed mean measure is forecast to be 1½% at the end of 2022, well below their 2-3% target band. The 'low for longer' depleted state of interest rates has resulted in the RBA to repeatedly declare its forward guidance of "*not expecting to increase the cash rate for at least three* <u>years</u>". The Board has continued to emphasise the recovery as being "*uneven and drawn out*", with the unemployment only expected to decline "*slowly*".

The domestic bond market continues to suggest a prolonged low period of interest rates. Over the month, yields rose up to 12bp at the long-end of the curve:

Monthly Investment Report: January 2021

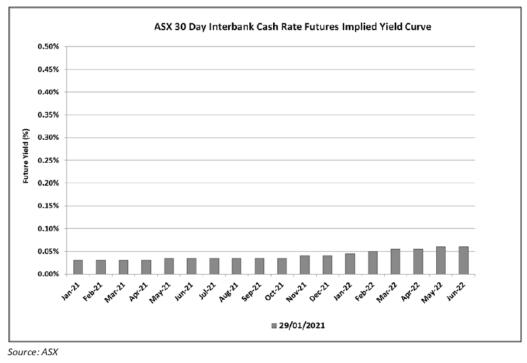
Page 19





Source: AFMA, ASX, RBA

Despite the RBA's forward guidance (keep rates unchanged for 3 years), the futures market is still pricing in the possibility of further rate cuts closer to 0% over the next 18 months:



Monthly Investment Report: January 2021

Page 20

Item 10.13 Attachment 1 Page 150

ORDINARY COUNCIL 17/02/2021



Disclaimer

Imperium Markets provides fixed income investment advisory services and a financial market platform through which clients and fixed income product providers may transact with each other.

The information in this document is intended solely for your use. The information and recommendations constitute judgements as of the date of this report and do not consider your individual investment objectives and adopted policy mandate.

Imperium Markets monitors the entire fixed income investible universe and recommends the best rate available to us, regardless of whether a product provider uses our market platform. You are responsible for deciding whether our recommendations are appropriate for your particular investment needs, objectives and financial situation and for implementing your decisions. You may use our platform to transact with your chosen product providers.

Imperium Markets charges a flat fee for our investment advice. Any commissions received are rebated to clients in full. If you choose a product provider who uses our market platform, the product provider pays us 1bp p.a. funding fee (pro-rated for the term of investment) of the value of the investments transacted.

Monthly Investment Report: January 2021

Page 21

Item 10.13 Attachment 1 Page 151



Investment Report

01/01/2021 to 31/01/2021

Item 10.13 Attachment 2

Page 152

ORDINARY COUNCIL 17/02/2021

PORT MACQUARIE-HASTINGS

Portfolio Valuation as at 31/01/2021

Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
Westpac	AA-	TD	LOCAL BRANCH	At Maturity	21/08/2020	22/02/2021	0.6500	20,000.00	58.41	11.04
Westpac	AA-	TD	LOCAL BRANCH	Annual	21/02/2017	22/02/2021	3.3900	2,000,000.00	64,270.68	5,758.36
ICBC Sydney Branch	A	TD	GENERAL	Annual	27/02/2020	26/02/2021	1.3900	2,500,000.00	32,369.86	2,951.37
BOQ	BBB+	TD	GENERAL	Annual	10/03/2016	10/03/2021	3.8000	3,000,000.00	102,443.84	9,682.19
ING Direct	А	TD	GENERAL	Annual	20/02/2019	16/03/2021	2.8200	2,000,000.00	53,618.63	4,790.14
Westpac	AA-	TD	GENERAL	Quarterly	22/03/2018	23/03/2021	3.0200	4,000,000.00	13,569.32	10,259.73
Westpac	AA-	TD	LOCAL BRANCH	At Maturity	21/05/2020	21/05/2021	1.0000	10,000.00	70.14	8.49
Westpac	AA-	TD	GENERAL	Quarterly	22/05/2018	25/05/2021	3.1000	4,000,000.00	23,780.82	10,531.51
AMP Bank	BBB	TD	GENERAL	Annual	25/11/2019	25/05/2021	1.6000	5,000,000.00	14,904.11	6,794.52
AMP Bank	BBB	TD	GENERAL	Annual	29/11/2019	27/05/2021	1.6000	4,000,000.00	11,046.58	5,435.62
BOQ	BBB+	TD	GENERAL	Annual	29/05/2019	31/05/2021	2.3000	3,000,000.00	46,882.19	5,860.27
Rabobank Australia Branch	A+	TD	GENERAL	Annual	08/06/2017	07/06/2021	3.0200	5,000,000.00	98,046.58	12,824.66
Westpac	AA-	TD	GENERAL	Quarterly	06/06/2018	15/06/2021	3.1000	3,000,000.00	14,268.49	7,898.63
NAB	AA-	TD	GENERAL	At Maturity	19/06/2020	21/06/2021	1.0000	4,000,000.00	24,876.71	3,397.26
NAB	AA-	TD	GENERAL	Annual	03/07/2018	22/06/2021	3.0000	4,000,000.00	70,027.40	10,191.78
NAB	AA-	TD	GENERAL	Annual	03/07/2018	06/07/2021	3.0000	3,000,000.00	52,520.55	7,643.84
Westpac	AA-	TD	GENERAL	Quarterly	17/07/2018	13/07/2021	3.0400	5,000,000.00	5,830.14	5,830.14
NAB	AA-	TD	GENERAL	Annual	26/07/2018	20/07/2021	3.0400	4,000,000.00	62,965.48	10,327.67

Page 2 / 6

ORDINARY COUNCIL 17/02/2021

)	COUNCIL	QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
Westpac	AA-	TD	LOCAL BRANCH	Annual	24/07/2019	23/07/2021	1.7500	4,000,000.00	36,821.92	5,945.21
NAB	AA-	TD	GENERAL	Annual	02/08/2018	03/08/2021	3.0700	5,000,000.00	76,119.18	13,036.99
ICBC Sydney Branch	А	TD	GENERAL	Annual	30/08/2019	30/08/2021	1.6200	5,000,000.00	34,175.34	6,879.45
NAB	AA-	TD	GENERAL	Annual	31/08/2020	31/08/2021	0.8000	5,000,000.00	16,876.71	3,397.26
NAB	AA-	TD	GENERAL	At Maturity	31/08/2020	31/08/2021	0.8000	5,000,000.00	16,876.71	3,397.26
Westpac	AA-	TD	GENERAL	Quarterly	13/09/2018	14/09/2021	2.8800	5,000,000.00	19,331.51	12,230.14
NAB	AA-	TD	GENERAL	Annual	27/09/2018	28/09/2021	3.0500	5,000,000.00	52,643.84	12,952.05
Auswide Bank	BBB	TD	GENERAL	Annual	30/09/2019	30/09/2021	1.7500	4,000,000.00	23,780.82	5,945.21
Westpac	AA-	TD	GENERAL	Quarterly	13/09/2018	12/10/2021	2.8900	5,000,000.00	19,398.63	12,272.60
Auswide Bank	BBB	TD	GENERAL	Annual	23/10/2019	25/10/2021	1.6500	5,000,000.00	22,828.77	7,006.85
Auswide Bank	BBB	TD	GENERAL	At Maturity	25/11/2019	25/11/2021	1.7000	5,000,000.00	101,068.49	7,219.18
ICBC Sydney Branch	A	TD	GENERAL	Annual	05/12/2018	07/12/2021	3.0100	4,000,000.00	18,472.33	10,225.75
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/12/2019	16/12/2021	1.5700	4,000,000.00	8,086.58	5,333.70
ING Direct	А	TD	GENERAL	Annual	30/01/2020	31/01/2022	1.6500	5,000,000.00	678.08	678.08
Westpac	AA-	TD	GENERAL	At Maturity	30/01/2021	31/01/2022	0.9500	10,000.00	0.52	0.52
Newcastle Permanent	BBB	TD	GENERAL	Quarterly	07/02/2019	08/02/2022	3.0500	4,000,000.00	28,076.71	10,361.64
NAB	AA-	TD	GENERAL	Annual	21/02/2017	21/02/2022	3.4600	5,000,000.00	163,994.52	14,693.15
Westpac	AA-	TD	GENERAL	Annual	21/02/2017	21/02/2022	3.6100	2,000,000.00	68,441.64	6,132.05
ING Direct	А	TD	GENERAL	Annual	02/03/2020	02/03/2022	1.5000	5,000,000.00	69,041.10	6,369.86
BOQ	BBB+	TD	GENERAL	Annual	15/03/2017	15/03/2022	3.8000	2,000,000.00	67,046.58	6,454.79

Page 3 / 6

Item 10.13 Attachment 2

ORDINARY COUNCIL 17/02/2021

									COUNCIL	QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
Newcastle Permanent	BBB	TD	GENERAL	Quarterly	12/03/2019	22/03/2022	2.9000	4,000,000.00	15,572.60	9,852.05
Newcastle Permanent	BBB	TD	GENERAL	Annual	27/03/2019	29/03/2022	2.8000	5,000,000.00	119,287.67	11,890.41
Newcastle Permanent	BBB	TD	GENERAL	Quarterly	18/04/2019	19/04/2022	2.7000	4,000,000.00	4,142.47	4,142.47
BOQ	BBB+	TD	GENERAL	Annual	28/05/2019	30/05/2022	2.4000	4,000,000.00	65,490.41	8,153.42
Rabobank Australia Branch	A+	TD	GENERAL	Annual	08/06/2017	07/06/2022	3.2200	5,000,000.00	104,539.73	13,673.97
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/06/2020	20/06/2022	1.1500	2,000,000.00	14,304.11	1,953.42
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/06/2020	20/06/2022	1.1500	2,000,000.00	14,304.11	1,953.42
Australian Military Bank	BBB+	TD	GENERAL	Annual	23/06/2020	23/06/2022	1.0500	3,500,000.00	22,452.74	3,121.23
Westpac	AA-	TD	GENERAL	Quarterly	23/06/2020	23/06/2022	1.0100	3,500,000.00	3,873.97	3,002.33
Westpac	AA-	TD	GENERAL	Quarterly	24/06/2020	24/06/2022	1.0200	5,000,000.00	5,449.32	4,331.51
NAB	AA-	TD	GENERAL	Annual	02/08/2018	02/08/2022	3.2200	4,000,000.00	63,870.68	10,939.18
NAB	AA-	TD	GENERAL	Annual	16/08/2018	16/08/2022	3.0500	4,000,000.00	56,153.42	10,361.64
ICBC Sydney Branch	А	TD	GENERAL	Annual	28/08/2019	29/08/2022	1.6400	5,000,000.00	35,271.23	6,964.38
Auswide Bank	BBB	TD	GENERAL	At Maturity	06/09/2019	06/09/2022	1.8000	3,000,000.00	76,043.84	4,586.30
Westpac	AA-	TD	LOCAL BRANCH	Annual	13/09/2017	13/09/2022	3.4100	3,000,000.00	39,238.36	8,688.49
Rabobank Australia Branch	A+	TD	GENERAL	Annual	13/09/2017	13/09/2022	3.3800	3,000,000.00	38,893.15	8,612.05
Westpac	AA-	TD	GENERAL	Quarterly	29/09/2020	29/09/2022	0.7200	5,000,000.00	3,353.42	3,057.53
MyState Bank	BBB	TD	GENERAL	Annual	29/09/2020	29/09/2022	0.8500	5,000,000.00	14,554.79	3,609.59
Auswide Bank	BBB	TD	GENERAL	Annual	30/09/2019	30/09/2022	1.7500	4,000,000.00	23,780.82	5,945.21
ICBC Sydney Branch	А	TD	GENERAL	Annual	23/10/2019	24/10/2022	1.7000	3,000,000.00	14,112.33	4,331.51

Page 4 / 6

Item 10.13 Attachment 2

ORDINARY COUNCIL 17/02/2021

										QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
ICBC Sydney Branch	А	TD	GENERAL	Annual	31/10/2019	31/10/2022	1.7300	5,000,000.00	22,276.71	7,346.58
ING Direct	А	TD	GENERAL	Annual	27/02/2020	27/02/2023	1.6000	2,500,000.00	37,260.27	3,397.26
BOQ	BBB+	TD	GENERAL	Annual	28/05/2019	29/05/2023	2.5500	4,000,000.00	69,583.56	8,663.01
BOQ	BBB+	TD	GENERAL	Annual	19/06/2020	19/06/2023	1.3500	2,000,000.00	16,791.78	2,293.15
BOQ	BBB+	TD	GENERAL	Annual	27/06/2019	27/06/2023	2.2000	5,000,000.00	65,397.26	9,342.47
MyState Bank	BBB	TD	GENERAL	Annual	14/09/2020	14/09/2023	0.9000	4,000,000.00	13,808.22	3,057.53
MyState Bank	BBB	TD	GENERAL	Annual	14/09/2020	14/09/2023	0.9000	4,000,000.00	13,808.22	3,057.53
ICBC Sydney Branch	А	TD	GENERAL	Annual	27/11/2019	27/11/2023	1.7600	6,000,000.00	19,094.79	8,968.77
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/12/2019	18/12/2023	1.8100	4,000,000.00	9,322.74	6,149.04
Auswide Bank	BBB	TD	GENERAL	Annual	02/03/2020	04/03/2024	1.7500	3,000,000.00	48,328.77	4,458.90
BOQ	BBB+	TD	GENERAL	Annual	18/06/2020	18/06/2024	1.4500	3,000,000.00	27,172.60	3,694.52
ING Direct	А	TD	GENERAL	Annual	23/06/2020	24/06/2024	1.2500	3,000,000.00	22,910.96	3,184.93
Bendigo and Adelaide	BBB+	FRN	GENERAL	Quarterly	06/09/2019	06/09/2024	0.9891	3,059,922.00	4,552.57	2,520.17
BOQ	BBB+	TD	GENERAL	Annual	27/09/2019	27/09/2024	2.0000	2,000,000.00	13,808.22	3,397.26
NAB	AA-	TD	GENERAL	Annual	16/10/2020	16/10/2024	0.8000	5,000,000.00	11,835.62	3,397.26
NAB	AA-	TD	GENERAL	Annual	18/11/2020	18/11/2024	0.7000	5,000,000.00	7,191.78	2,972.60
NAB	AA-	TD	GENERAL	Annual	29/01/2021	29/01/2025	0.7200	4,000,000.00	236.71	236.71
ICBC Sydney Branch	А	TD	GENERAL	Annual	18/06/2020	18/06/2025	1.7500	2,000,000.00	21,863.01	2,972.60
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/10/2020	16/10/2025	1.2000	5,000,000.00	17,753.42	5,095.89
ICBC Sydney Branch	А	TD	GENERAL	Annual	17/11/2020	17/11/2025	1.3000	6,500,000.00	17,594.52	7,176.71

Page 5 / 6

Item 10.13 Attachment 2

ORDINARY COUNCIL 17/02/2021

										QUARIE-HASTINGS
Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Value	Accrued	Accrued MTD
NAB	AA-	TD	GENERAL	Annual	17/11/2020	17/11/2025	0.8500	3,500,000.00	6,194.52	2,526.71
ICBC Sydney Branch	А	TD	GENERAL	Annual	03/12/2020	03/12/2025	1.2000	5,000,000.00	9,863.01	5,095.89
ICBC Sydney Branch	А	TD	GENERAL	Annual	07/12/2020	08/12/2025	1.2000	5,000,000.00	9,205.48	5,095.89
NAB	AA-	TD	GENERAL	Annual	07/12/2020	08/12/2025	0.9000	5,000,000.00	6,904.11	3,821.92
NAB	AA-	TD	GENERAL	Annual	29/01/2021	29/01/2026	0.9100	4,000,000.00	299.18	299.18
Westpac	AA-	CASH	GENERAL	Monthly	31/01/2021	31/01/2021	0.5000	15,056,069.88	10,226.62	10,226.62
TOTALS								334,155,991.88	2,773,283.74	518,348.22

Page 6 / 6

Item 10.13 Attachment 2

Page 157

					Attachment A - Exception Report
	22 Delivery F	Program and 2020-2021 Open Success Measures			Exception Report as at 31 December 2020
Operational Plan Activity 2020-2021	Responsibility	Success measures	Target	Actual	Comment on Progress 31 December 2020
heme: Leadership and Governance					
I.5.3.1 Increase operating revenue at the Airport, the Glasshouse, and the Environmental Laboratory	Commercial Business Units	Increase operating revenue by 3% per annum per business unit (Airport)	3%		Behind schedule. Operating revenue down 67.2% on the corresponding period in 2019-20 due to the impact of COVID.
1.5.3.1 Increase operating revenue at the Airport, the Glasshouse, and the Environmental Laboratory	Commercial Business Units	Increase operating revenue by 3% per annum per business unit (Environmental Laboratory)	3%	-5%	Behind schedule. Sampling and analysis has been reduced slightly as a result of initial response to the COVID pandemic.
I.5.3.1 Increase operating revenue at the Airport, the Glasshouse, and the Environmental Laboratory	Commercial Business Units	Increase operating revenue by 3% per annum per business unit (Glasshouse)	3%		Behind schedule. Operating revenue down 83% on the corresponding period in 2019-20 due to the impact of COV public health order restrictions.
Theme: Your Community Life					
2.3.2.3 Manage the Mayor's Sporting Fund	Economic and Cultural Development	Distribute funds as required and coordinate fundraising events	100%		Behind schedule. Due to the impacts of COVID on local, State, National and International sporting competition's ability to be held, funds have not been distributed to local athletes since March 2020. The exception to this is the 2019 Wayne Richards Sporting Scholarship recipient who continued to train and then travel to compete in Europe. All fund raising events proposed for the remainder of 2020 were cancelled until there is a lift in current NSW Public Health Order restrictions. It is proposed that the Mayor's Sporting fund Sub-Committee not reconvene until Februar 2021.
2.3.3.18 Administration of public roads, public spaces, events and customer engagement: Section 138 Road Applications, Road Encroachments, Customer Enquiries, Statutory Road Functions, Road Policies	Infrastructure Planning	Deliver works in accordance with Council's Policies and Procedures	100%		Behind schedule. Level of service for responding to applications and enquiries has slightly decreased due to staff being on extended unplanned leave. One temporary staff and one permanent staff positions recruited to back fill roles to ensure the level of service can be increased to required levels. A slight increase has been realised with temporary staff working. Approval has been given to recruit further temporary staff to reinstate the required level of service.
2.5.1.3 Manage the delivery of a range of high quality performing and visual arts events at the Glasshouse in consideration of Council's Cultural Plan	Commercial Business Units	Deliver the performing arts program as per the annual season launch (15 events)	100%		Behind schedule. The Glasshouse performance spaces were closed from Monday 23 March until Monday 31 Augu 2020 due to the Public Health Order (Restrictions on Gathering and Movement) Order 2020. This resulted in the cancellation of performances planned as part of the Glasshouse Theater Program 2020. The latest INSW Public Health Order has increased the capacity of all venue spaces to 75% (e.g. theatre with 440 patrons). This has enabled the resumption of performances and the following events have been delivered: Manhattan Short Film Festival, Viva Italia, It's a Iot like Christmas and The Wharf Revue.
Theme: Your Business and Industry					
3.3.1.2 Support, facilitate and advocate for regular public transport (RPT) airline services at Port Macquarie Airport	Commercial Business Units	Increase in passenger numbers compared to previous year	100%		Behind schedule. Passenger numbers for July to December 2020 are down 86% when compared to July to December 2019 due to the impact of COVID.
Theme: Your Natural and Built Environment					
4.1.1.26 CW Continue construction of the Southern Arm Trunk Main (DN750) - Pacific Hwy to Bonny Hills	Infrastructure Planning, (Project Delivery)	Deliver programs according to approved schedule (Construction of the Southern Arm Trunk Main)	100%		Behind schedule. Project preconstruction phase was previously on hold awaiting the completion of road corridor property acquisitions along Houston Mitchell Drive. An approved pathway to dedication of road corridor has howev now been finalised during this reporting period. Project delivery planning has therefore commenced during this reporting period with construction expected to span over future financial years subject to future funding allocation(s
4.1.1.46 CW Bonny Hills Recycled Water System Upgrade	Infrastructure Planning, (Project Delivery)	Deliver programs according to approved schedule (Bonny Hills Recycled Water System Upgrade)	100%		Behind schedule. Construction tender awarded during this reporting period for upgrade to recycled water treatment process at Borny Hills Sewerage Treatment Plant. Program for completion extends into 2021.
I.1.3.18 CW Continuation of preconstruction of Fhrumster Sewerage treatment Plant (Area 13) - Phase	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Preconstruction of Thrumster Sewerage Treatment Plant (Area 13)	100%	75%	Behind schedule. Project has been delayed awaiting the completion of the Integrated Water Cycle Management Strategy. Project is forecast to commence in the last quarter of the 2020-2021 financial year.
.1.5.09 CW Investigation of Stormwater Remediation Options - Bellbowrie/Bay Street Catchment	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Investigation of Stormwater Remediation Options - Bellbowrie/Bay Street Catchment)	100%		Behind schedule. Design is behind milestone dates mainly associated with variations introduced to the original scope. Consultant has been on hold awaiting approval to commence variation works prior to finalising original scop items. Approval has been given to commerce variation works and an updated program is to be provided to include variation and complete all remaining deliverables (design report, design drawings, cost estimates).
I.1.6.22 CW North Haven Flood Mitigation Works - nvestigation and concept design of remedial works	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (North Haven Flood mitigation Works - investigation and concept design of remedial works)	100%		Behind schedule. Project planning commenced in Dec 2020 due to COVID and other grant funded project priorities It is aimed to complete the works within the 2020-2021 financial year however, works may progress into the 2021- 2022 financial year if found to be more complex than initially expected.
4.2.1.17 Develop the annual bushfire risk mitigation program for Council lands prepared in accordance with he Bush Fire Risk Management Plan	Environment and Regulatory Services	The annual bushfire risk mitigation program is adopted by Council by 30 September 2020	100%		Behind schedule. Project has been delayed due to additional on-ground requirements and associated environment approvals required. Work will recommence on this project in quarter three.

Page 1

2017-20	22 Delivery	Program and 2020-2021 Ope	rationa	l Plan	Exception Report as at 31 December 2020
Operational Plan Activity 2020-2021	Lead Responsibility	Success Measures	Target	Actual	Comment on Progress 31 December 2020
4.4.1.13 CW Hastings River Drive - Hughes Place to Boundary Street upgrade (Multi-year project)	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Hastings River Drive - Hughes Place to Boundary Street upgrade)	100%		Behind schedule This project continues from 2017-2018 financial year. Design consultant engaged to undertake detailed design and environmental approvals. Detailed designs are nearing completion. The contractor has experienced some delays in meeting scheduled progress with the project only recently progressing to the final stag of Development Approval submission. The construction of this segment of Hastings River Dr is subject to additiona funding being allocated/secured.
4.4.1.34 CW Kew Main Street Upgrade	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Kew Main Street Upgrade)	100%		Behind schedule. This project continued from the 2017-2018 financial year following the announcement of funding from the Federal Government. The detailed design phase of the project is currently nearing completion with multiple rounds of community consultation now complete. The project has been delayed due to the efforts required to ensur the community is accepting of what is proposed in the design. Construction works are expected to commence in April 2021 and completed in Q1 2021-2022.
4.4.1.52 AUS-SPEC Review - Undertake a comprehensive review of Councils full suite of design and construction specifications - multi-year project	Infrastructure Planning	Deliver project according to approved project plan (AUS-SPEC Review)	100%		Behind schedule. Implementation of revised specifications have been delayed by other higher priority projects. This project is continuing and ongoing.
·····, -···, -···, -···, -···, -···, -····, -··, -·, -	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Pembrooke Road - Stoney Creek Bridge Upgrade - Detailed Design)	100%		Behind schedule. Project scope of works has been finalised and design phase project planning has commenced. Project is expected to carry over into the 2021-2022 financial year due to the complexity of the design and delay in design commencement.
······	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Kindee Bridge Upgrade - Detailed Design)	100%		Behind schedule. Kindee bridge maintenance and repair works have been prioritised ahead of the initiation of this broader bridge replacement project. Project initiation now expected in the last quarter of 2020-2121 financial year.
Clarence Street and William Street - Detailed Design	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Pedestrian Refuge - Horton Street - Clarence Street and William Street - Detailed Design and Construction)	100%		Behind schedule. This project requires a level of community and Town Centre Master Plan Committee engagemen prior to completion of the design. This is expected to push the completion of the works into the 2021-2022 financial year.
4.4.1.71 Work with National Parks and Wildlife Services to adjust road boundaries	Infrastructure Planning	Boundary adjustments commenced	100%		Behind schedule. Discussion have been initiated with NPWS for the adjustment of road boundaries, however still no response. The adjustment of Houston Mitchell Drive is progressing with formal revocation of the National Park complete, now land acquisition and dedication to public road can occur.
Streets	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan (Roundabout Installation Owen and Home Streets)	100%		Behind schedule. This is NSW Government Grant funded project. This project has been consolidated with the Lord St roundabout project. The combined funding of these projects will allow this roundabout to be delivered. Detailed designs are near completion with construction expected to commence in early 2021.
	Recreation, Property and Buildings	Provide advice in accordance with service standards and industry best practice	100%		Behind schedule. Total number of active CRM's is 471.246 (Public), 99 (storm), 77 (Private), 26 (Illegal tree removal/pruning) and 23 (Other). 35 CRM's currently exceed service standard. Additional information: 131 enquirei (74 public and 57 private phone and email enquires). This does not include calls transferred from call centre to mobile or landline. In addition, there were 42 internal enquireis and 10 hours for rural road/fire related inspections.

Item 10.15 Attachment 1



Item 10.15 Attachment 2



Delivery Program Objective: 1.1.1 Use a variety of tools to engage with the community in a manner that is transparent, effective, relevant and inclusive

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.1.1 Engage with the community using a range of methods to facilitate community involvement in decision making	Community	1. Capture the number of engagement activities undertaken and number of participant including online	1. 100%	1. 100%	On target. Engagement summary as follows: Pop-ups: 85 participants. Town Green Playground Pop-ups: 27 Nov, 28 Nov, 2 Dec 2020. Bain Park Master Plan: 4 and 12 Dec 2020. Zoom Meeting attendees: 213. Bonny Hills Reserves Master Plan: 13 Oct 2020. Beach to Beach 19 Oct, 1 Dec, 3 Dec and 15 Dec. Community Strategic Plan: 29 Oct and 28 Nov. Lake Cathie Mural meeting: 24 Nov. Fernbank and Sancrox: 30 Nov. Kooloonbung Creek Fly Fox: 4 Dec. Community Council Action Team meetings (CCAT): 14 participants. Beechwood and Camden Haven. Face-to-face meetings: 94. Gordon Street: 9. Laurieton Town Centre Master Plan: 85 online participants and 17 at the enquiry by design. Facebook Live: Reach 9,600, Engagement: 145. EngagePMH (Facebook group): 581 members. ConnectPMH (Instagram): 1,052. Letters; 1,697.

Delivery Program Objective: 1.1.1 Use a variety of tools to engage with the community in a manner that is transparent, effective, relevant and inclusive

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Improve overall engagement approach and levels of engagement	2. 100%	2. 100%	On target. Tested online workshop REMO (online meeting and collaboration platform), for the Bonny Hills Master Plan. Integrated Have Your Say (HYS) database with Campaign Monitor to create more engaging e-newsletter content. Registered HYS users for feedback purposes to grow database.
		3. Increased community participation on Council's Have your Say (HYS) online portal		3. 100%	On target. New HYS registrations since July/Aug/Sept 2020: 181
1.1.1.4 Implement strategic communications priorities in accordance with Council's Working Together Framework and established Council priorities (amend for 2020-2021)	Customer Experience and Communications	1. Deliver regular, positive and engaging media messaging	1. 100%	1. 100%	On target. A combined total 340 media release, statements, events, alerts, announcements and responses were actioned from July-Dec 2020. These appeared through a mix of different channels - newspapers, TV, radio, digital media and included a combination of driving positive messaging on Council services and projects, Mayoral messages and managing media inquiries.
		2. Increase community engagement with Council's digital channels	2. 100%	2. 100%	On target. Planning and delivery around these priorities is ongoing, and the results are shown through the digital engagement data demonstrated as per commentary for 1.1.5.3. Additionally, most engagement was undertaken digitally in this quarter due to public health restrictions as a result of COVID-19.

Delivery Program Objective: 1.1.1 Use a variety of tools to engage with the community in a manner that is transparent, effective, relevant and inclusive

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.1.5 Implement strategic education priorities in accordance with Council's Working Together Framework	Community	1. Education Framework for Council developed	1. 100%	1. 100%	On target. The draft framework has been formed and continues to guide our work. The document was shared with Communications Team to ensure a shared understanding for how we can work cohesively. This document still needs to be circulated across the business in order for internal stakeholders to understand our purpose and how they can effectively work with us.
		2. Education messaging program implemented in accordance with identified priorities	2. 100%	2. 100%	On target. Annual plans for natural resources, roads, waste and water developed which include key messaging. The messages have been determined in collaboration with the areas across Council and in some cases, with external stakeholders, e.g. Transport for NSW. Compliance would be a next area to target as some needs have been determined in the Operational Plan.

Delivery Program Objective: 1.1.2 Support community involvement in decision making through education around Council matters and services

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.2.1 Engage the community on developing the 2021 Community Strategic plan to drive council projects and programs into the future	Community	1. Community Strategic plan developed and adopted by June 2021	1. 100%	1. 100%	On target. Engagement Round Table sessions held in October and November 2020. Engagement recommencing in late January 2021.
		2. Engagement continues for the Community Strategic Plan until June 2021	2. 100%	2. 100%	On target. Community Strategic Plan engagement ongoing. With key engagement held in October and November 2020 with Community Round table. Additional surveys opening over November and December. Additional Focus groups planned for February 2021.

Delivery Program Objective: 1.1.2 Support community involvement in decision making through education around Council matters and services

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.2.3 Undertake the Community Planning Program	Community	1. Community plans developed by 1 September 2020	1. 100%	1. 100%	On target. Community Plans endorsed December 2020 Council Meeting: Camden Haven, Hastings Hinterland & Kew/ Kendall/Herons Creek/Lorne. In draft: Wauchope & North Shore.
		2. Facilitate Community Council Action teams (CCAT's)	2. 100%	2. 100%	On target. Engagement Officers allocated to CCATs and a number of meeting held during the quarter including Beechwood, Camden Haven and
		3. Implement Council actions identified in Community Plans and	3. 100%	3. 100%	On target .Spreadsheet of priority actions from the plans developed and allocated to Group Managers for consideration in the Operational Planning process.
1.1.2.4 Develop Local Strategic Planning Statement (LSPS)	Strategy	1. Complete Local Strategic Planning Statement (LSPS) for presentation to the NSW Department of Planning and Environment by 30 June 2021	1. 100%	1. 100%	Achieved. The Local Strategic Planning Statement was endorsed by Council at an Extraordinary Council meeting held on the 30 September 2020. The LSPS was uploaded to the NSW Government Planning Portal on the 30 September 2020 to meet the State's definition of completion of an LSPS.

Delivery Program Objective: 1.1.3 Engage with the community on impacts and changes to services.

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.3.2 Develop a Community Engagement program to enable community involvement in decision making in line with the Working Together Framework	Community	1. The Community Engagement program is developed and implementation of actions commenced by 30 June 2021	1. 100%	1. 100%	On target .Policy review scheduled for March 2020.

Delivery Program Objective: 1.1.4 Provide easy to understand and accessible community reporting.

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.4.1 Produce and submit the annual report in accordance with Local Government Act requirements	People, Safety and Performance	1. Annual report adopted by Council and submitted to the Office of Local Government (OLG) by 30 November	1. 100%	1. 100%	Achieved. The 2019-2020 Annual Report was presented to the 18 November 2020 Ordinary Council Meeting and submitted to the Office of Local Government in line with legislation.
		2. The Community Report Card (Part A); statutory report (Part B); and financial statements (Part C) is published for community viewing	2. 100%	2. 100%	Achieved. Hard copies of the 2019-2020 Annual Report have been placed in Customer Service Offices and Library Branches in Laurieton, Port Macquarie and Wauchope in line with legislation. The report is also available on Councils website.
1.1.4.2 Provide progress reports on implementation of the Delivery Program in accordance with Local Government Act requirements	People, Safety and Performance	1. Report Delivery Program progress to Council on a six monthly basis	1. 100%	1. 100%	On target. A six monthly Delivery Program and Operational Plan Progress Report was presented to the 23 September 2020 Ordinary Council Meeting. The next progress report is scheduled to be presented to Council in the third quarter of 2020-2021.
1.1.4.3 Develop the one year Operational Plan in accordance with Local Government Act requirements	People, Safety and Performance	1. Operational plan adopted by 30 June	1. 100%	1. 100%	On target. The Draft 2021-2022 Operational Plan is scheduled to be presented to Council in March 2021. The planning phase continued throughout the second quarter and is ongoing.
1.1.4.4 CW Implement new Corporate Reporting Tool	People, Safety and Performance	1. Improved planning and reporting capability with self-service access to real-time reporting achieved.	1. 100%	1. 100%	On target. A new corporate reporting tool is being scoped out and in progress.
1.1.4.5 Review the Resourcing Strategy in accordance with Local Government Act requirements	People, Safety and Performance	1. Resourcing strategy review completed by March 2021.	1. 100%	1. 100%	On target. The review of the existing Resourcing Strategy is in progress.

Delivery Program Objective: 1.1.5 Develop an effective and coordinated community focused Communications Strategy

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.5.3 Use targeted communication channels to ensure the community are well-informed, involved in Council decision making and understanding of Council priorities	Customer Experience and Communications	1. Deliver regular and engaging information and messaging utilising a range of communication channels	1. 100%	1. 100%	On target. Regular targeted and broader awareness communications have taken place using a range of communication methods and channels, including social media, emails, outdoor billboards, bus shelters, town flags and banners, radio, YouTube and project signage and rates newsletter, Of note has been an ongoing display of public health messaging at key locations in peak visitor periods.
		2. Increase community engagement with Council's digital channels	2. 100%	2. 100%	On target. We established a Facebook user group "EngagePMH" to focus conversation and engagement. EngagePMH currently has a total of 602 members. Engagement was undertaken with community via multiple digital channels including Zoom and TikTok. Q2 2020-21 web & social results: Council Website: The number of the pages accessed per session has increased by 17.58% from 1.84 to 2.16 pages. Top 10 most visited pages: 1. Job vacancies 2. Contact Us 3. Application Tracker 4. Make A Payment 5. Ferries 6. Vehicles on beaches 7. Waste 8. Dog Friendly Areas 9. Rates Payment Charges 10. Bin Collection Days Council Social: FB Followers: 13,858 (+11.9% compared to last quarter) FB Average Reach: 7.3K (-41% YoY) FB Average Engagement: 1.19% (+0.33% YoY) YouTube: Number of views: 51,8K, Average watch time: Four minutes.

Delivery Program Objective: 1.1.5 Develop an effective and coordinated community focused Communications Strategy

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.5.4 Ensure communication and strategies are informed by research and understanding of preferred community communication methods and other available insights	Customer Experience and Communications	1. Communications priorities and methods are informed by insights from the 2019 communications research and Customer Experience project	1. 100%	1. 100%	On target. Monthly analysis of community engagement via digital channels is ongoing, with these insights being used to inform for planning and prioritising future communication projects.

Delivery Program Objective: 1.1.6 Continue to promote access by the community to Councillors

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.6.1 Manage Councillor development program	Governance	1. Manage Councillor development	1. 100%	1. 100%	On target. The Councillor Professional Development Program has been managed as needs are identified and as per the adopted policy.
1.1.6.2 Deliver the Take the Council to the Community program	Governance	1. Hold two off-site Council meetings during the year (March Wauchope, October Laurieton)	1. 100%	1. 100%	On target. October 2020 Laurieton meeting could not be held in Laurieton due to COVID-19 restrictions. Wauchope meeting expected to be held in March 2021 at Wauchope however will be subject to COVID restrictions at the time.

Community Strategic Plan: 1.2 Maintain strong partnerships between all stakeholders — local, state and federal — so that they are affective advocates for the community

Delivery Program Objective: 1.2.1 Promote Council participation and build linkages in local, state and federal initiatives, forums and opportunities to support Council's continued planning for the growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.2.1.1 Convene meetings with local business chambers for the Mayor and Senior Staff	General Manager's Office	1. Schedule meetings throughout the year (with local business chambers for the Mayor and Senior Staff)	1. 100%	1. 100%	On target. 2021 meetings have been scheduled with the local Business Chambers, Mayor and Acting General Manager.

Community Strategic Plan:	1.2 Maintain strong partnerships between all stakeholders — local, state and federal — so that they are affective advocates for the
	community

Delivery Program Objective: 1.2.1 Promote Council participation and build linkages in local, state and federal initiatives, forums and opportunities to support Council's continued planning for the growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.2.1.2 Convene meetings with State and Federal Members for the Mayor and Senior Staff	General Manager's Office	1. Schedule meetings throughout the year (with State and Federal Members for the Mayor and Senior Staff)		1. 100%	On target. The Acting General Manager and Mayor meet with our State and Federal members on an as needs basis. The Acting General Manager and Director Development and Environment met with Leslie Williams and Minister Stokes on the 6th November and The Mayor and Acting General Manager met with Leslie Williams on 16 December.
1.2.1.3 Work proactively to secure grant funding from other levels of government to support Council project and service delivery priorities	Economic and Cultural Development	1. Identify and apply for grants in a timely and effective manner	1. 100%	1. 100%	On target. It has been a huge three months with 36 grant applications submitted, requesting approximately \$36million in grant funding. Applications range from Fixing Local Roads, Fixing Country Bridges, COVID-friendly Australia Day and Bushfire Resilience and Recovery Community Programs. Regular progress reporting continues for our approximate 120 grant funded projects.

Community Strategic Plan: 1.3 Demonstrate leadership

Delivery Program Objective: 1.3.1 Provide effective leadership and equity

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.1.1 Participate in the Mid North Coast Joint Organisation (MNCJO)	General Manager's Office	1. Attendance at the Regional Joint Organisation meetings by the Mayor and General Manager	1. 100%	1. 100%	On target. The Mayor and Acting General Manager attended the 4 December MNCJO Board meeting (Virtually) hosted by Bellingen Shire Council. GMAC was also attended by the Acting General Manager on 20 November 2020.

Delivery Program Objective: 1.3.1 Provide effective leadership and equity

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.1.2 Participate in the Regional Cities NSW quarterly meetings	General Manager's Office	1. Attendance at the meetings by the Mayor and General Manager	1. 100%	1. 100%	On target. The Acting General Manager and Mayor have attended the most recent Regional Cities Meeting (virtually) on 19 November 2020.
1.3.1.3 Ongoing community disaster preparedness and support	General Manager's Office	1. Ensure activities are undertaken	1. 100%	1. 100%	On target. Ongoing community support lead by the Strategy and Growth Division and Council's Bushfire Recovery Officer. Monthly updates are emailed to our LGA's local Members for their information.

Delivery Program Objective: 1.3.2 Build trust and improve Council's reputation through transparency, good decision making and living Council's Values

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.2.1 Manage the Legislative Compliance Register	Governance	1. Undertake annual review of the Legislative Compliance Register and report on it and consider improvements to the Legislative Compliance process	1. 100%	1. 100%	Achieved. The Legislative Compliance review for 2019-2020 was presented to the August 2020 Audit, Risk and Improvement Committee Meeting and then presented to the September 2020 Ordinary Council Meeting.
1.3.2.2 Produce and submit the annual Code of Conduct complaints report in accordance with Office of Local Government requirements	Governance	1. Report prepared annually and presented to Council no later than 31 December	1. 100%	1. 100%	Achieved. The annual report on Code of Conduct complaints was adopted by Council at the December 2020 Ordinary Council meeting and submitted to the Office of Local Government before the due date.
1.3.2.3 Produce and submit the annual Government Information Public Access (GIPA) Report in accordance with the GIPA Act requirements	Governance	1. Submit GIPA annual report to Information and Privacy Commission no later than 31 October	1. 100%	1. 100%	Achieved. The 2019-2020 GIPA Annual Report was submitted to the IPC in line with required timeframes.

Delivery Program Objective: 1.3.2 Build trust and improve Council's reputation through transparency, good decision making and living Council's Values

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.2.4 Coordinate lodgement of annual Disclosure of Interest Returns	Governance	1. Annually update Disclosure Register by 30 September	1. 100%	1. 100%	Achieved. Disclosure register updated and a report was adopted at the October 2020 Ordinary Council Meeting with subsequent reports at the November 2020 and December 2020 Ordinary meetings for returns submitted after the due date due to staff absences.
1.3.2.6 Report on Public Interest Disclosures (PID)	Governance	1. Report biannually in July and February on any Public Interest Disclosures (PIDs)	1. 100%	1. 100%	Achieved. The PID online reporting tool was used to submit the biannual statistical reports to the NSW Ombudsman on 24 July 2020.
		2. Submit PID annual report to NSW Ombudsman by 31 October	2. 100%	2. 100%	Achieved. The PID online reporting tool was used to submit the biannual statistical reports to the NSW Ombudsman on 24 July 2020.
1.3.2.7 Submit annual performance reporting for the water and sewer business to NSW Office of Water for benchmarking comparisons	Infrastructure Planning	1. Collate and forward performance reporting data to NSW Office of Water annually	1. 100%	1. 100%	Achieved. Benchmarking completed and submitted to the NSW Office of Water in the first quarter of 2020-2021.

Delivery Program Objective: 1.3.3 Ensure there is appropriate management of risk to mitigate impact for Council and the community

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.3.2 Manage the Risk Management Action Plan, as part of the state wide continuous improvement program	Governance	1. Review and implement the Risk Management Action Plan on a quarterly basis and report to Executive	1. 100%	1. 100%	On target. The Insurance Risk Management Action Plan (IRMAP) has been developed for 2020-2021 and is reported on a quarterly basis.
1.3.3.5 Improve the Risk Management Framework	Governance	1. Improve the Risk Management Framework in line with project milestones	1. 100%	1. 100%	On target. An exercise has been undertaken to review the Risk Culture for Councils' insurers, and a Safety Audit has been conducted with outcomes currently under review.

Delivery Program Objective: 1.3.3 Ensure there is appropriate management of risk to mitigate impact for Council and the community

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.3.6 Capture high risk electrical assets in Council's asset management system	Infrastructure Planning	1. Complete electrical asset data survey for Council owned assets by 30 June	1. 100%	1. 100%	Achieved. All high risk electrical assets have been captured with future assets being picked up as part of the project completion reporting process.
1.3.3.7 Manage the Delegation Framework	Governance	1. Manage and consider improvements to the Delegation framework	1. 100%	1. 100%	On target. A review of Director delegations has been undertaken. This Operational Plan action will be informed by the recruitment of the new Chief Executive Officer, who may wish to review and or amend the delegation framework.
1.3.3.8 Respond to formal information requests within required timeframes	Governance	1. Respond to formal GIPA requests within the required timeframes	1. 100%	1. 100%	On target. All requests managed within the legislative time frames for the September to December 2020 reporting period.
1.3.3.9 Coordinate requirements for the 2021 Local Government Election and Councillor Induction Program	Governance	1. Coordinate all requirements for the 2021 Local Government Election and Implement the Councillor Induction Program	1. 100%	1. 100%	On target. Elections to be held 4 September 2021. Pre-election planning to commence February 2021.

Delivery Program Objective: 1.3.4 Manage our workforce to deliver community outcomes

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.4.1 Implement workplace strategies and processes to continue to improve Human Resources	People, Safety and Performance	1. Actions implemented by 30 June 2021 as per the Workforce Management Strategy		1. 100%	On target. All engagement, attraction, retention and Equity & Diversity actions from the Workforce Management Strategy 2017-2021 are progressing. The Workforce Planning Pilot commenced in quarter two. A review of the pilot will be conducted in quarter three prior to confirming plans to roll out templates/processes across all Groups. A review of the organisational workforce reporting lines commenced in quarter two. An enhanced format Establishment structure will be set-up in quarter three, which will be the foundation piece for, Payroll, Recruitment, Timesheets and Human Resource Information System.
1.3.4.2 Implement workplace strategies and processes to continue to improve Work, Health and Safety.	People, Safety and Performance	1. Actions implemented by 30 June 2021 as per the Work, Health Safety Strategy.		1. 100%	On target. A Work Health & Safety Strategy Framework was developed and presented to the Senior Leadership Team to drive awareness, accountability and direction. Policies and procedures review and update is progressing in response to the 2019 Audit. Vault roll out will continue across all councils work groups and will be completed in quarter three.

Delivery Program Objective: 1.3.4 Manage our workforce to deliver community outcomes

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.4.3 Implement workplace strategies and processes to continue to improve Learning and Development	People, Safety and Performance	1. Actions implemented by 30 June 2021 as per the Learning and Development Strategy		1. 100%	On target. The annual training calendar is progressing and external face to face courses are now available to employees under a new COVID-19 Normal Plan, the provider must have COVID safety precautions in place. Reinstating face to face training ensures the Council can continue to meet requirements around licence renewals, compliance, skills and competency development. Council confirmed support of seven employees in quarter two for Education Assistance. Assisted financial support for six employees to a maximum of \$6,000 per year. One employee will be supported, which provides for Study Leave to meet the educational requirements. A review of the Learning & Development Strategy to meet the changing needs of the Council and its employees was conducted. The output of the review was captured in the People, Safety and Performance Business Plan.
1.3.4.4 CW Port Macquarie Depot - Rationalisation of Port Macquarie and Wauchope Council Depot operations	Strategy	1. Holistic review of depot holdings and plans by 30 June 2021	1. 100%	1. 100%	On target. The acquisition of 1 Commerce Street Wauchope was endorsed by Council at the Ordinary Council meeting held on the 23 September 2020. Following this strategic acquisition a working group was established on the 27 November 2020 for the holistic review of Council's depots.

Delivery Program Objective: 1.3.5 Build an engaged workforce

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.3.5.1 Implement Organisational Development nitiatives and strategies to develop a highly engaged workforce who are solutions focused	People, Safety and Performance	1. Actions implemented by 30 June 2021 as per the Organisational Development Strategy to grow Leadership capability across the organisation		1. 100%	On target. Work is continuing on combining the existing Organisational Development Strategy with the existing Learning and Development Strategy to create a central People and Culture Development document. The strategy for growing the Leadership capability across the organisation will be developed as part of this update.
		2. Employee Engagement Days (EED) delivered in May 2021	2. 100%	2.90%	Monitoring required. Discussions will commence with Executive early in the new year regarding the likelihood of EED's going ahead for May 2021 with considerations to the current COVID restrictions. Alternate options for how we can engage with staff will be considered.
		3. The Employee Engagement Process is implemented across the organisation with all staff having clear goals set, quarterly one on one conversations and a personal development plan in place	3. 100%	3. 100%	On target. Part I (Clarifying) and Part II (Setting Performance Targets and Development Goals) of the Employee Engagement Process Roadshow has been completed with people leaders. Part III of Roadshow (Managing Performance through the EEP) is in development and will be delivered by the People and Culture Business Partners and People and Culture Development Coordinator over the next 6- 8 months. Annual delivery of these education sessions will continue to capture any supervisors new to Council. Work on supporting people leaders on encouraging quarterly one on one conversations and clear goal setting will continue. There is currently work being undertaken in the Learning and Development space to clarify and simplify the process for Personal Development Plans.

Delivery Program Objective: 1.3.5 Build an engaged workforce

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		4. The Employee Engagement Survey results are circulated to all staff and action plans developed by 30 June 2021	4. 100%	4. 100%	On target. Employee Engagement Survey preparation has commenced December 2020 for approval for February 2021 survey.
1.3.5.3 Implement the Human Resource Information System (HRIS)	People, Safety and Performance	1. Staff have digital access to self-service human resource functionality	1. 100%	1. 100%	On target. Internal collaboration undertaken within Council to scope project deliverables. Quarter three will focus on detailed process sessions to build the business procedures and design the technology interface.

Community Strategic Plan: 1.4 Use innovative, efficient and sustainable practices

Delivery Program Objective: 1.4.1 Provide efficient technology and inclusive digital systems that are easy to use and easy to access

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.4.1.1 CW Undertake delivery of Digital Technology projects (DT - Roadmap Program - multi-year projects)	Digital Technology	1. Deliver project according to approved project plan (ICT - Projects)	1. 100%	1. 100%	On target. Projects are on track for delivery.
1.4.1.2 CW Undertake delivery of ICT projects (ICT - Renewals - multi-year project)	Digital Technology	1. Deliver project according to approved project plan (ICT - Renewals)	1. 100%	1. 100%	On target. Renewal program is on track for 2020-2021 financial year.

Community Strategic Plan: 1.4 Use innovative, efficient and sustainable practices

Delivery Program Objective: 1.4.1 Provide efficient technology and inclusive digital systems that are easy to use and easy to access

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.4.1.5 Develop asset design and as-constructed templates as part of the Asset Data Standards Review	Infrastructure Planning	1. Develop an Auto CAD file template for asset design and as- constructed plans that meets Asset Design As Constructed (ADAC) standards by 30 June	1. 100%	1. 0%	Deferred. Project being developed as part of Asset Designed As Constructed (ADAC) and Asset Data Standards review. The ADAC project has been deferred to the 2021/22 Operational Plan with funding allocated in the Draft budget to ensure implementation occurs. Work between the Assets Team, GIS and Asset Planning Engineers has commenced and will continue with completion is expected by 30 June 2022.
1.4.1.6 CW Property Management System for management of Council owned assets	Strategy	1. Property Management System options assessed for suitability	1. 100%	1. 90%	Monitoring required. This will be led by the Property Management Team and may be supported by Strategy where appropriate. The opportunities have been identified as largely transactional operational efficiency and effectiveness rather than strategic in nature.

Delivery Program Objective: 1.4.2 Deliver agreed services at the agreed service level at best value

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.4.2.1 Work across the organisation to facilitate the implementation of the Business Improvement Strategy	People, Safety and Performance	J	1. 100%	1. 100%	On target. The Business Improvement Office (BIO) has continued to raise the awareness of continuous improvement activities through improvement stories as well as developing an Improvement Playbook to provide a step by step guide to making improvements across the organisation using the PMHC Improvement Process.

Community Strategic Plan: 1.4 Use innovative, efficient and sustainable practices

Delivery Program Objective: 1.4.2 Deliver agreed services at the agreed service level at best value

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Undertake five improvement initiatives by 30 June 2021	2. 100%	2. 100%	On target. The Business Improvement Office (BIO) continues to finalise the identified service reviews. With recent upgrades to corporate systems, progress can continue on the recommendations from the Development Application Internal Referral Review. BIO are close to finalising the review into On Call Management, the Team are currently seeking high level feedback on the findings before presenting draft recommendations to the Executive Team.

Delivery Program Objective: 1.4.3 Deliver a customer focused service that provides the community a consistent experience of Council

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.4.3.1 Deliver high quality and valued customer experiences that place the customer at the Centre of what Council does	Customer Experience and Communications	1. Design and implement two cross organisational customer improvement programs identified in the Customer Experience project	1. 100%	1. 100%	On target. Cross divisional Customer Experience project team stood up with monthly reporting to Senior Leadership group. In Q2 we introduced online beach permits with rollout in early January 2021. From 1 January 2021, NSW planning portal lodgement requirements go live.
		2. Report quarterly to Council on Customer Experience improvement activity	2. 100%	2. 100%	On target. Next progress report due to Council March 2021.

Community Strategic Plan: 1.4 Use innovative, efficient and sustainable practices

Delivery Program Objective: 1.4.3 Deliver a customer focused service that provides the community a consistent experience of Council

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		3. Review and interrogate call centre data to demonstrate that customer experience is adequately captured, monitored and data informs improvement projects	3. 100%	3. 100%	On target. Data analysis scheduled to be completed Q3 in 2020/21 financial year.
1.4.3.2 Provide up to date information for our community through a single source of truth	Customer Experience and Communications	1. Develop digital communications strategy	1. 100%	1. 100%	On target. Digital communications plan and roadmap to be finalised in Q3.
		2. Ensure Council's website is current and represents single source of truth for internal and external customers	2. 100%	2. 100%	On target. Website re-platforming has commenced. Audit of current web pages and detailed data is informing new website build.

Community Strategic Plan: 1.5 Ensure strong corporate and financial management that is transparent and accountable

Delivery Program Objective: 1.5.1 Manage Council's financial assets and provide accurate, timely and reliable information

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.5.1.01 Monitor and accurately report on Council's financial position in accordance with Local Government Act requirements	Financial Services	1. Lodge audited financial statements with Office of Local Government by 31 October	1. 100%	1. 100%	Achieved. Council's audited annual financial statements for the year ended 30 June 2020 were lodged with the Office of Local Government by the required deadline.
		2. Submit three quarterly budget review statements and an annual report submitted to Council		2. 100%	On target. The Quarterly Budget Review Statement for the quarter ended 31 December 2020 will be presented to the February 2021 Council meeting.

Community Strategic Plan: 1.5 Ensure strong corporate and financial management that is transparent and accountable

Delivery Program Objective: 1.5.1 Manage Council's financial assets and provide accurate, timely and reliable information

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.5.1.02 Manage Council's investment portfolio to optimise investment returns within the constraints of the policy, the Local Government Act and Regulations	Financial Services	1. Exceed benchmark for investment return	1. 100%	1. 100%	On target. Investment return has exceeded the benchmark for each month in isolation and the financial year to date.
		2. Table report to Council monthly	2. 100%	2. 100%	On target. Reports have been presented to Council within the required timeframes.
1.5.1.03 Develop annual Operational Plan budget and review the Long Term Financial Plan	Financial Services	1. Develop the draft annual budget in line with Integrated Planning and Reporting time frames	1. 100%	1. 100%	On target. Preparation of the annual budget is underway and is on track to be finalised by the required timeframes.
		2. Have final budget adopted by Council by 30 June	2. 100%	2. 100%	On target. The 2021-2022 budget preparation is underway and on track for the budget to be adopted by June 2021.
		3. Review the Long Term Financial Plan in line with the budget cycle	3. 100%	3. 100%	On target. A review of the Long Term Financial Plan is currently underway in conjunction with the 2021-2022 Operational Plan development.
1.5.1.04 Prepare monthly financial reports for Council	Financial Services	1. Submit financial reports to Council monthly	1. 100%	1. 100%	On target. Monthly financial reports have been presented to Council as required.
1.5.1.06 Progress Partridge Creek residential development planning	Strategy	1. Provide a report to Council outlining Partridge Creek residential development options upon receipt of updated land valuation	1. 100%	1. 90%	Monitoring required This item is advanced through the project plan. Council development more broadly is subject to review and that review may influence the strategy to completion of this item.
1.5.1.08 Conduct Asset Revaluation for Transport assets (Roads, Bridges, Footpaths, Airport Runway)	Infrastructure Planning	1. Complete asset revaluation by 30 June	1. 100%	1. 100%	Achieved. The revaluation for Transport assets was accepted by Auditors with audit sign-off received with an unqualified audit opinion and Council was able to lodge the financial statements with the Office of Local Government in November.

Community Strategic Plan: 1.5 Ensure strong corporate and financial management that is transparent and accountable

Delivery Program Objective: 1.5.1 Manage Council's financial assets and provide accurate, timely and reliable information

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.5.1.09 Progress Emily Avenue residential development planning	Strategy	1. Receive Development Consent and Commence Design by 30 June	1. 100%	1. 100%	On target. DA for residential subdivision was approved at the ordinary Council Meeting on 20 May 2020, subject to planning and development conditions.
1.5.1.10 Implement Asset Designed As Constructed (ADAC) computerised automated process system	Infrastructure Planning	1. Complete implementation of ADAC within Council operations by 30 June	1. 100%	1.0%	Deferred. Undertaking the ADAC implementation has been deferred with funding being allocated in the draft 2021-2022 Operational Plan to allow the contracted implementation to be completed. Planning work to ensure timely engagement of the provider is ongoing.
1.5.1.11 Progress Kangaroo Park, North Shore residential development planning	Strategy	1. Lodge Development Approval application for Kangaroo Park development		1. 90%	Monitoring required. The constraints of the Kangaroo Park development are being reviewed. The review will determine the priority of development of Kangaroo Park to Council and the community.
1.5.1.12 Conduct Asset Revaluation for land improvements, other structures and other assets (parks, cemeteries, waste management, bus shelters, etc) assets	Infrastructure Planning	1. Undertake condition rating of Council's assets by 30 June	1. 100%	1. 100%	On target. A request for tender document to procure a suitable contractor to undertake a detailed condition assessment was undertaken and completed in this quarter. The contractor has completed inspections and a draft report was provided in December.
1.5.1.13 Undertake condition assessment and review of all unsealed roads in line with ARRB recommendations		1. Undertake assessment of unsealed roads by 30 June	1. 100%	1. 100%	On target. This project was expected to commence in early 2021, though due to unexpected absences of team key members will delay commencement and completion to later in 2020-2021.
1.5.1.14 Property Purchase Investigations	Strategy	1. Investigations into Property Purchases undertaken	1. 100%	1. 100%	On target. The strategic acquisition of 1 Commerce Street Wauchope was endorsed by Council at the Ordinary Council Meeting held on 23 September 2020.

Community Strategic Plan: 1.5 Ensure strong corporate and financial management that is transparent and accountable

Delivery Program Objective: 1.5.2 Use procurement, tendering, purchasing and contract management approaches that are transparent and equitable

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.5.2.1 Continue to implement and monitor the Procurement Strategy action items	Financial Services	1. Completion of Procurement Strategy implementation plan actions within agreed timeframes	1. 100%	1. 100%	On target. The procurement strategy action items have been completed within the required timeframes.
1.5.2.2 CW Ensure plant purchases are in line with the plant replacement program (Plant Purchases and Disposals - multi-year project)	Infrastructure Operations	1. Plant replacement program delivered according to approved schedule	1. 100%	1. 100%	On target. Plant replacement program is on track.
1.5.2.3 Manage and maintain Council's Plant and Fleet to support the operational activities of Council	Infrastructure Operations	1. Plant and Fleet managed and maintained in accordance with adopted program and budget	1. 100%	1. 100%	On target. Progressing as planned.
1.5.2.5 Undertake procurement activities in accordance with legislative requirements and that are transparent	Financial Services	1. Capture contracts awarded with a value of \$150,000 (excluding GST) or more	1. 100%	1. 100%	On target. All contracts above \$150,000 have been captured as required.

Delivery Program Objective: 1.5.3 Develop, manage and maintain Council Business Units through effective commercial management

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.5.3.1 Increase operating revenue at the Airport, the Glasshouse, and the Environmental Laboratory	Commercial Business Units	1. Increase operating revenue by 3% per annum per business unit (Airport)	1. 3%	167%	Behind schedule. Operating revenue down 67.2% on the corresponding period in 2019 -20 due to the impact of COVID-19.
		2. Increase operating revenue by 3% per annum per business unit (Environmental Laboratory)	2. 3%	25%	Behind schedule. Sampling and analysis has been reduced slightly as a result of initial response to the COVID-19 pandemic.

Leadership and Governance Page 21

Community Strategic Plan: 1.5 Ensure strong corporate and financial management that is transparent and accountable

Delivery Program Objective: 1.5.3 Develop, manage and maintain Council Business Units through effective commercial management

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		3. Increase operating revenue by 3% per annum per business unit (Glasshouse)	3. 3%	383%	Behind schedule. Operating revenue down 83% on the corresponding period in 2019-20 due to the impact of COVID-19 public health order restrictions.
1.5.3.2 Implement the Glasshouse Strategic Plan 2020- 2022 in consideration of Council's Cultural Plan	Commercial Business Units	1. Deliver actions according to adopted Glasshouse Strategic Plan	1. 100%	1. 100%	On target. (noting the impact of COVID-19). The Glasshouse Plan 2020-2022 was adopted by Council in July 2020.
		2. Present biannual reports to Council	2. 100%	2. 100%	On target. The Glasshouse presented its biannual report at the August 2020 Council meeting, the next report is due in February 2021.
1.5.3.6 Manage Council's property management, leasing and licencing, and statutory property functions for the most appropriate return to Council and the community	Recreation, Property and Buildings	1. Deliver statutory property projects according to approved project plan	1. 100%	1. 100%	On target. Land matters are progressed as required.
		2. Manage Council's lease and licence portfolio to ensure the most appropriate return to Council and the community	2. 100%	2. 100%	On target. 176 Commercial Leases 73 Community Leases 83 Leases PMHC as Lessee.
1.5.3.8 CW Land and Easement Acquisitions for Council Purposes - Survey, Valuation and Land Transactions	Recreation, Property and Buildings	1. Deliver projects according to approved project plan (Land Acquisitions for Council Roads - Survey, Valuation and Land Transactions)	1. 100%	1. 100%	On target. Land matters are progressed as required.

Leadership and Governance Page 22

Community Strategic Plan: 1.5 Ensure strong corporate and financial management that is transparent and accountable

Delivery Program Objective: 1.5.4 Identify new commercially viable revenue sources

	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.5.4.1 Review current revenue sources and investigate the commercial viability of identified new revenue sources	Commercial Business Units	1. Identify new revenue sources	1. 100%		On target. Review of revenue sources continuing in conjunction with the development of the 2021-2022 Schedule of Fees and Charges.

Leadership and Governance Page 23

COMMUNITY THEME 2 Your Community Life

What we are trying to achieve

A healthy, inclusive and vibrant community.

Community Strategic Plan: 2.1 Create a community that feels safe

Delivery Program Objective: 2.1.1 Support Community Safety initiatives

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.1.1.1 Manage the contract for approved lifeguard services	Recreation, Property and Buildings	1. Deliver approved lifeguard services	1. 100%	1. 100%	On target. Lifeguard patrols are continuing at Town and Flynn's Beach across the reporting period. Christmas Holiday patrols commenced at Lighthouse, Lake Cathie, Rainbow and North Haven beaches during December.
		2. Deliver lifeguard education programs to schools and community groups (target 2,500 students)	2. 100%	2. 100%	On target. The lifeguard education program commenced in term 4 in schools across our LGA. Due to COVID restrictions, the program was delivered via a mix of in classroom and online platforms with in excess of 2,500 students participating in the program.

Delivery Program Objective: 2.1.2 Advocate for, support and coordinate emergency services

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.1.2.1 CW Council supports Emergency Management Operations and Agencies	Infrastructure	1. Provide coordination and support to emergency service units as required	1. 100%	1. 100%	On target. Working with Emergency Service units is ongoing as required. LEMO chairing fortnightly Summer Safe Covid-19 LEMC updates. LEMC meeting and flood exercise held in Q2.

Community Strategic Plan: 2.1 Create a community that feels safe

Delivery Program Objective: 2.1.3 Conduct regulatory and educational activities which safeguard public and environmental health, and ensures compliance with planning and building standards

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.1.3.1 Monitor and take action as appropriate to ensure compliance with development approvals and building, environmental, public health and on-site sewage standards	Environment and Regulatory Services	1.80% of building certificate applications assessed within service standard	1. 80%	1. 100%	On target. Applications not assessed awaiting further information from customers.
		2.80% of food permit inspection program completed	2. 80%	2. 100%	On target. All programmed inspections completed as well as additional complaints and new applications.
		3. 80% of Notices of Completion applications for caravan park and manufactured homes assessed within service standard	3. 80%	3. 92%	On target. 13 applications received and 12 determined.
		4. 80% of notified buildings with fire safety requirement inspected (AFSS)	4. 80%	4. 98%	On target. 380 statements due, only 7 overdue.
		5. 80% of notified premises undertaking skin penetration procedures, barbers, hairdressers, beauty, tattoo inspected	5. 80%	5. 100%	On target. 5 programmed inspections completed.
		6. 80% of notified regulated cooling and heating systems inspected.	6. 80%	6. 100%	On target. 2 risk plans submitted, no inspections due.
		7. 80% of on-site sewage system inspection program completed	7. 80%	7. 100%	On target. 54 programmed inspections completed.

Community Strategic Plan: 2.1 Create a community that feels safe

Delivery Program Objective: 2.1.3 Conduct regulatory and educational activities which safeguard public and environmental health, and ensures compliance with planning and building standards

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		8. 80% of private swimming pool compliance certificate applications assessed within service standard	8. 80%	8. 100%	On target. 35 applications received, 11 awaiting assessment.
		9.80% of public pools and spas inspected	9. 80%	9. 100%	On target. 7 mandatory pool compliance inspections completed.
		10. Capture the number of public health customer requests (CRM's) received and investigate within the service standard	10. 100%	10. 89%	Monitoring required. 137 Customer requests received, 122 responded to within service standard.
		11. Develop an Education and Inspection program for Underground Petroleum Storage Systems (UPSS)	11. 100%	11. 100%	On target. All initial inspections completed with follow ups occurring as scheduled.
2.1.3.3 Provide ranger & law enforcement services to ensure compliance relating to parking, beach patrols, illegal signage, sale of goods on roads, building site sediment control & companion animals	Environment and Regulatory Services	1. Increase in the number of animal registrations annually	1. 100%	1. 80%	Monitoring required. Increase not achieved however drop in registrations expected due to COVID relief measures.
		2. Monitor the number of companion animal incidents	2. 100%	2. 100%	On target. 412 dog and cat customer requests received.
		3. Monitor the number of offences detected during proactive patrols	3. 100%	3. 100%	On target. Number of offences actively monitored and recorded.

Community Strategic Plan: 2.1 Create a community that feels safe

Delivery Program Objective: 2.1.3 Conduct regulatory and educational activities which safeguard public and environmental health, and ensures compliance with planning and building standards

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		4. Respond to 80% of Regulatory Services customer requests regarding compliance with parking, beach patrols, illegal signage, sale of goods on roads, building site sediment control and companion animals	4. 80%	4. 89%	On target. 314 CRMs received, 299 responded to.
2.1.3.4 Manage Council's Environmental Laboratory and provide sampling, analysis, reporting & advice of water quality analysis to internal & external customers on an approved fee for service basis	Commercial Business Units	1. Complete all sampling, analysis and reporting of operational and regulatory requests in accordance with the required service standards	1. 90%	1. 98%	On target. 97.6% of finalised reports met the required service standard. All reports for urgent request and non-compliant results were met within the agreed service standard.
		2. Maintain National Association of Testing Authorities (NATA) corporate accreditation	2. 100%	2. 100%	Achieved. NATA accreditation maintained.
		3. Undertake all sampling, analysis and reporting of operational and regulatory requests in accordance with approved budgets	3. 100%	3. 100%	On target. All sampling, analysis and reporting conducted within budget.
2.1.3.5 Provide a safe water supply in accordance with Australian Drinking Water Quality Guidelines	Infrastructure Planning	1. Have nil reportable incidents in accordance with NSW Health agreed protocols	1. 0#	1. 0#	On target. No reportable incidents.

Community Strategic Plan: 2.2 Advocate for social inclusion and fairness

Delivery Program Objective: 2.2.1 Support and advocate for all community sectors

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.2.1.1 Through the Community Inclusion Plan Involve youth for a better Council	Community	1. Implement a new refreshed and restructured Youth leadership model that will assist in providing a youth voice to Council decisions	1. 100%	1. 100%	On target. Refer to comments in 2.4.1.3.
		2. Support programs and youth activities including Youth Week	2. 100%	2. 100%	On target. Refer to comments under 2.4.1.3.
2.2.1.3 Through the Community Inclusion Plan coordinate the Community grants program to assist the community to deliver projects that contribute to a sense of place	Community	1. Deliver Community Grants Program through two rounds per year	1. 100%	1. 100%	On target. Round 1 of Community Grants were successful with Round 2 scheduled for March 2021.
		2. Review and implement the new Community Grants program to meet the needs of a changing community	2. 100%	2. 100%	On target. A review of the approach to Grants was developed and presented to Council in August 2020 and the new Community Grants Round reflects the review.

Community Strategic Plan: 2.3 Provide quality programs, community facilities and public spaces, e.g. for example, Community community halls, parks and vibrant town centres

Delivery Program Objective: 2.3.1 Ensure access to community facilities and activities: including access to natural environment

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.1.1 CW Deliver the Disability Inclusion Action Plan in accordance with State Legislation	Community	1. Implement the actions as per the Disability Inclusion Action Plan	1. 100%	1. 100%	On target. Team continues to deliver actions in Disability Inclusion Action Plan (DIAP). Planning for a new DIAP 2021 - 2024 is underway.

Delivery Program Objective: 2.3.1 Ensure access to community facilities and activities: including access to natural environment

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.1.2 Through the Community Inclusion plan continue to manage Community Halls	Community	 Audit and plan for community places and spaces 	1. 100%	1. 100%	On target. Commenced work on understanding hall users during COVID and the desire for management model into the future.
		2. Manage Community Halls to current service standards	2. 100%	2. 100%	On target. Although community halls have been impacted by COVID, they have continued to operate. At the September 2020 Council meeting all Community Halls fees were waived until February 2021 to allow greater community and business access. Discussions are being held with Property & Building Services to potentially lease out Council Owned halls that are currently managed by 355 committees.
		3. Support Council and non Council owned Hall network		3. 100%	On target. Through the Community Planning process and the Community Recovery projects, we are able to provide support for the halls.

Delivery Program Objective: 2.3.2 Provide a range of inclusive sporting and recreational opportunities and facilities to encourage a healthy and active lifestyle

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.2.2 CW Deliver sporting facility renewal and upgrades program across the LGA	Recreation, Property and Buildings	1. Deliver renewal and upgrades as per schedule and reported according to seasonal sports	1. 100%	1. 100%	On target. The overall Sporting Facility Renewals program is on target as follows: Vince Inmon Sporting Fields: Planning commenced, design to now commence in third quarter of 2021. Vince Inmon Sporting Fields Amenities: Construction of amenities ongoing, Works to be completed by end of February 2021. Construction ongoing with scope extended to include additional works awarded to the Contractor. Revised completion date extended to end of February 2021. Lank Bain Sports Ground: Planning commenced Port Macquarie Regional Sports Stadium: Planning commenced Sporting Infrastructure Renewals: Planning commenced Charlie Watt Lighting & Drainage: Construction complete with project to be closed out by early January 2021. Oxley Oval Lighting Project complete Blackbutt Park Project complete Kendall Sports Ground Project complete

Delivery Program Objective: 2.3.2 Provide a range of inclusive sporting and recreational opportunities and facilities to encourage a healthy and active lifestyle

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.2.3 Manage the Mayor's Sporting Fund	Economic and Cultural Development	1. Distribute funds as required and coordinate fundraising events	1. 100%	1. 0%	Behind schedule. Due to the impacts of COVID-19 on local, State, National and International sporting competition's ability to be held, funds have not been distributed to local athletes since March 2020. The exception to this is the 2019 Wayne Richards Sporting Scholarship recipient who continued to train and then travel to compete in Europe. All fund raising events proposed for the remainder of 2020 were cancelled until there is a lift in current NSW Public Health Order restrictions. It is proposed that the Mayor's Sporting fund Sub-Committee not reconvene until February 2021.
2.3.2.4 Undertake regional master planning for recreational facilities	Recreation, Property and Buildings	1. Commence review of Bonny Hills Reserves Master Plan	1. 100%	1. 100%	On target. Bonny Hills Reserves Master Planning is ongoing, second round of community engagement is underway. Target to complete third quarter.
		2. Complete Master Planning for Bain Park, Wauchope	2. 100%	2. 100%	On target. Bain Park Master Planning is ongoing, Community engagement is complete. Target to complete third quarter.
2.3.2.5 CW Camden Haven River Recreational Boating Improvements - Upgrade of facilities as pre Boating Needs Investigation	Recreation, Property and Buildings	1. Deliver to approved project plan (Camden Haven River Recreational Boating Improvements)	1. 100%	1. 100%	On target. Draft Review of Environmental Factors and required licences for dredging of North Haven Boat Ramp are being finalised so that funding for works can be sought.

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.3.01 CW Undertake the maintenance program for parks, reserves, sporting fields and beaches including parks signage	Recreation, Property and Buildings	1. Deliver program, including beach cleaning and playground inspections according to approved maintenance schedules	1. 100%	1. 100%	On target. During the reporting period, staff focus has been on: - mowing parks and reserves across the LGA - sports field preparation and maintenance for summer sporting season - mowing of all cemeteries, also for Christmas/ new year - garden maintenance in the Port Macquarie CBD area including pruning, watering, weed treatment and mulching - formal inspection of all playgrounds with required maintenance and repairs, - cleaning of bin hides and bubblers across the local government area, - outreach mowing in Port Urban areas storm damage and clean up following extensive rainfall and storms during December, including removal of significant flood debris at Town Beach pruning/vegetation removal at Oxley Highway/Lake Road roundabout
2.3.3.02 CW Undertake scheduled and reactive maintenance programs of all Council-owned buildings including office furniture replacement	Recreation, Property and Buildings	1. Deliver projects according to facilities works program	1. 100%	1. 100%	On target. Works are been carried out as per our current maintenance schedules and reporting mechanisms
2.3.3.03 CW Undertake building rectification works in line with Council Asset Management - multi-year project	Recreation, Property and Buildings	1. Deliver project according to approved project plan (building rectification works)	1. 100%	1. 100%	On target. All works are being carried out as per the Building Asset Management Plan's (BAMP) program.
2.3.3.04 CW Provide, maintain and manage public aquatic facilities	Recreation, Property and Buildings	1. Oversee the management of Council's public aquatic facilities in accordance with lease obligation checklist	1. 100%	1. 100%	On target. All four aquatic facilities are open to the public and are being monitored in accordance with the contractual requirements. All facilities are continuing to operate in accordance with NSW Government COVID-19 restrictions.

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Undertake annual off-season facility maintenance in accordance with approved program	2. 100%	2. 100%	On target. Project planning has commenced with works scheduled for delivery May/June 2021.
2.3.3.05 Deliver park furniture renewals across the local government area, including donated seats program	Recreation, Property and Buildings	1. Deliver Park furniture replacement program according to approved schedule	1. 100%	1. 100%	On target. Project planning has commenced. Target completion June 2021.
2.3.3.06 CW Carry out playground equipment replacement program	Recreation, Property and Buildings	1. Deliver the Playground Equipment Replacement program according to approved schedule	1. 100%	1. 100%	On target. The overall Playground Replacement program replacement is on target as follows: Bonny Hills Community Hall Reserve Planning, engagement and concept plan commenced. Construction scheduled for fourth quarter of 2020-2021 John Dick Reserve Planning commenced, engagement and concept plan scheduled for third quarter of 2020-2021 Narran Park King Creek Planning, engagement and concept plan commenced. Construction scheduled for commencement in third quarter of 2020-2021 Rocks Ferry Reserve construction scheduled to be completed by third quarter of 2020-2021 Blair Reserve Project complete. Town Beach Park Project delayed due to scope of work modification. Further design and possible engagement required. Expected completion date by 30 June 2021.

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.3.08 CW Deliver recreational walkway replacement program across the local government area	Recreation, Property and Buildings	1. Deliver Recreational walkway program according to approved project plan	1. 100%	1. 100%	On target. Town beach to Town Beach North Replacement Pathways - Project planning and environmental approvals commenced with works to be completed in fourth quarter Kooloonbung Creek Boardwalk Replacement - Project planning, environmental approvals and procurement complete with works to be completed in fourth quarter North Haven to Bonny Hills Walkway - Project planning and environmental approvals commenced with works to be completed in fourth quarter Sandhurst Reserve - Project planning, environmental approvals and procurement complete with works to be completed in third quarter (works delayed due to Contractor availability / prioritisation of other works) Blair Reserve - Complete Harry's Lookout - Complete
2.3.3.09 Implement maintenance programs for boat ramps, wharves and jetties	Recreation, Property and Buildings, (Infrastructure Operations)	1. Deliver programs according to approved maintenance and schedule (for boat ramps, wharves and jetties)	1. 100%	1. 100%	On target. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.
2.3.3.10 Undertake the maintenance program for beaches	Recreation, Property and Buildings	1. Undertake beach and beach access maintenance as per program	1. 100%	1. 100%	On target. Beach accesses maintained and cleaned as required. Detailed beach grooming undertaken at all high profile beaches ahead of the school holiday period. Repairs at Lighthouse, Lake Cathie and Middle Rock beach four-wheel drive access during December due to Storm Damage. Comprehensive removal of flood debris from Town Beach was also undertaken during December.

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Undertake inspections of beach access signs	2. 100%	2. 100%	On target. Signs inspected, repaired and replaced as required.
2.3.3.12 CW Thrumster Sports Fields - Detailed design and approvals - multi-year project	Recreation, Property and Buildings, (Project Delivery)	1. Deliver project according to approved project plan (Thrumster Sports Fields - design and approvals)	1. 100%	1. 100%	On target (revised). This is a multi-year project initiated in 2017-2018 financial year. Detailed design engagement has been awarded during this reporting period. Design engagement is expected to then continue into the 2020-2021 financial year.
2.3.3.14 CW Undertake the Public Amenities Renewals Program	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Public Amenities Renewals program)	1. 100%	1. 100%	On target. Pilot Beach Amenities - Completed and are operational as of 23/12/20. Blair Park Amenities - consultation is required prior to ordering these amenities, installation has been programmed for March 2021.
2.3.3.16 Manage burial, cremation and memorialisation services at Wauchope, Laurieton and other outlying cemeteries	Customer Experience and Communications	1. Carry out services in accordance with legislative and customer requirements	1. 100%	1. 100%	On target. All burial, ash placements and customers interactions carried out in accordance with legislative and customer requirements.
2.3.3.17 CW Carry out improvement and expansion works at Wauchope and Laurieton and other outlying cemeteries	Customer Experience and Communications	1. Deliver projects according to approved project plan (improvement and expansion works at cemeteries)	1. 100%	1. 100%	On target. Review of resourcing to be undertaken due to sale of crematorium.

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.3.18 Administration of public roads, public spaces, events and customer engagement:Section 138 Road Applications, Road Encroachments, Customer Enquiries, Statutory Road Functions, Road Policies	Infrastructure Planning	1. Deliver works in accordance with Council's Policies and Procedures	1. 100%	1. 80%	Behind schedule. Level of service for responding to applications and enquiries has slightly decreased due to staff being on extended unplanned leave. One temporary staff and one permanent staff positions recruited to back fill roles to ensure the level of service can be increased to required levels. A slight increase has been realised with temporary staff working. Approval has been given to recruit further temporary staff to reinstate the required level of service.
2.3.3.20 Develop Plans of Management for Council Crown Reserve Sites - Undertake plans of management as required under the Crown Lands Management Act	Recreation, Property and Buildings	1. Plans of Management for Council Crown Reserve Sites undertaken as required	1. 100%	1. 100%	On target. Land categorisations were finalised and endorsed at the December 19 meeting of Council and have been submitted to the Minister for Housing, Property and Water for approval. Request for quote sent to consultants for development of plans of management.

Delivery Program Objective: 2.3.4 Plan, investigate, design and construct open spaces, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.4.02 CW Port Macquarie Coastal Walk — upgrade as per adopted master plan	Recreation, Property and Buildings, (Project Delivery)	1. Deliver project according to approved project plan (Port Macquarie Coastal Walk)	1. 100%	1. 100%	Achieved. Project works included completion of Charlie Uptin Walk, Doctors Walk and Kenny Walk sections of the Coastal Walk.

Delivery Program Objective: 2.3.4 Plan, investigate, design and construct open spaces, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.4.07 CW Googik Track - construct shared walkway/cycleway, Stage 2 - multi-year project	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Googik Track - construct shared walkway/cycleway, Stage 2)	1. 100%	1. 100%	On target. Staff are working with National Parks staff to finalise planning for upgrading of sections of the Googik Track connection between Lake Cathie and Elkhorn Grove. Works are scheduled for delivery by end June 2021.
2.3.4.08 CW Hastings Regional Sporting Complex Construction (multi-year project)	Recreation, Property and Buildings, (Project Delivery)	1. Deliver project according to approved project plan (Hastings Regional Sporting Complex Construction)	1. 100%	1. 100%	On target. This is a multi-year project initiated in 2017-2018 financial year. An outsourced detailed design engagement is ongoing. Design phase has progressed during this reporting period with a 100% detailed design submitted to council in December 2020. currently under review. Construction works planning and associated phasing are currently being developed. This is a multi-year project and will continue into 2021-2022 reporting period for the construction phase (pending funding allocation).
2.3.4.12 CW Port Macquarie Town Centre Master Plan (TCMP) improvements	Recreation, Property and Buildings	1. Deliver project according to approved project plan (PMQ TCMP Improvements)	1. 100%	1. 100%	On target. Foreshore walkway priority projects. Detailed design complete. Consultant engaged to undertake Environmental and Crown Land Approvals with the view for completion in April 2021. Gordon Street underpass. Preparation of Environmental Impact Statement complete and Development Application lodged in the second quarter for assessment. Determination expected February 2021.

Delivery Program Objective: 2.3.4 Plan, investigate, design and construct open spaces, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.4.14 CW Port Macquarie Pool - Design Finalisation	Recreation, Property and Buildings, (Project Delivery)	1. Deliver project according to approved project plan (Port Macquarie Pool - Design Finalisation)	1. 100%	1. 100%	On target, against revised milestones. This project has been delayed due to extensive community consultation that was undertaken to determine the preferred location of the Pool. A contract for the first design stage of the project (strategic design and business case) has been awarded to expert architectural consultants Coop Studios in Dec 2020. This is a multi-year project.
2.3.4.16 CW Continue installation of Town Village Entry Signage	Community	1. Deliver project according to approved project plan (Continue installation of Town Village Entry Signage)	1. 100%	1. 100%	On target. Determining the locations for the next stage of signage. Investigating the addition of Birpai language on the newly installed large entrance signs as well as potential landscape enhancements to the large signs.
2.3.4.17 CW Lake Cathie Foreshore Reserve - Master plan implementation - Construction of Skate Facility	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Lake Cathie Foreshore Reserve - Construction of Skate Facility)	1. 100%	1. 100%	On target. Design and construct tender was awarded to Convic Pty Ltd. Design is complete with construction commenced in November 2020 with completion programmed in March 2021. All funds will be expended within the 2020-2021 FY
2.3.4.18 CW Rainbow Beach Sports Fields	Recreation, Property and Buildings, (Project Delivery)	1. Deliver project according to approved project plan (Rainbow Beach Sports Fields)	1. 100%	1. 100%	On target, against revised milestones. Design of the sports fields underway by outsourced consultancy. Design is expected to be completed early 2021 with construction commencing mid-2021.
2.3.4.19 CW Red Ochre Park - Develop new park facilities - Local Facilities	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Red Ochre Park - Develop new park facilities - Local Facilities)	1. 100%	1. 100%	Achieved. Project complete.

Delivery Program Objective: 2.3.4 Plan, investigate, design and construct open spaces, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.4.20 CW Ruins Way Park - Develop new park facilities - Local Facilities	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Ruins Way Park - Develop new park facilities - Local Facilities)	1. 100%	1. 100%	On target. Procurement complete with construction to commence January 2021.
2.3.4.22 CW Parks and Gardens Future Designs - Preparation of engineering designs in advance of construction programmes for Parks and Gardens	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Parks and Gardens Future Design)	1. 100%	1. 100%	On target.
2.3.4.23 CW Rainbow Beach Reserve - Reserve Upgrade	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Rainbow Beach Reserve - Reserve Upgrade)	1. 100%	1. 90%	Monitoring required. Project planning commenced with scope to be defined. Works to be completed in last quarter.
2.3.4.24 CW Camden Haven Surf Club Building - Contribution to design and approvals for new facility	Recreation, Property and Buildings	1. Preconstruction for replacement Camden Haven Surf Club Building - Contribution to design and approvals for new facility	1. 100%	1. 100%	On target. Building Services is in the process of engaging with the CHSLSC through Oct/Nov with the engagement of a suitable architect engaged third quarter of 2020-2021.
2.3.4.25 CW Port Macquarie Town Green West Reserve Upgrade - (Town Centre Master Plan supported project)	Recreation, Property and Buildings, (Project Delivery)	1. Deliver project according to approved project plan (Port Macquarie Town Green West Reserve Upgrade)	1. 100%	1. 100%	On target. Construction works have progressed well with the project on target for completion in Dec 2020 ahead of the summer holiday season.

Delivery Program Objective: 2.3.4 Plan, investigate, design and construct open spaces, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.4.26 CW Accessible Ramp and Viewing Platform - Tacking Point Lighthouse	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Accessible Ramp and Viewing Platform - Tacking Point Lighthouse	1. 100%	1. 100%	On target. Project planning has commenced. Target completion June 2021.
2.3.4.27 CW Jabiru Reserve Fish Cleaning Table	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Jabiru Reserve Fish Cleaning Table)	1. 100%	1. 90%	Monitoring required. Project is at risk of being delivered due to Environmental Constraints.
2.3.4.28 CW Port Macquarie Town Signage - Installation of Signage in the Port Macquarie area	Community	1. Deliver project according to approved project plan (Port Macquarie Town Signage)	1. 100%	1. 100%	On target. The entrance signs are now installed. A few modifications are being investigated including acknowledgement of Birpai and landscaping works. Budget expended.
2.3.4.30 CW Beechwood Tennis Courts - Upgrade Tennis Facility	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Beechwood Tennis Courts - Upgrade Tennis Facility)	1. 100%	1. 100%	Achieved. Works complete.
2.3.4.31 CW Lake Cathie Master Plan - Implementation	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Lake Cathie Master Plan - Implementation)	1. 100%	1. 100%	Achieved. Works complete.

Delivery Program Objective: 2.3.5 Plan and deliver innovative Library Services which cater for new technology and growing population

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.5.1 CW Provide a range of library programs and lending services across the local government area (including Library Furnishings, Fittings and Equip; Library Local Priority Grant)	Community	1. Annual library events program delivered	1. 100%	1. 100%	On target. Continued to provide a range of online program and services including children's story times, author talks, and instructional sessions. Have resumed some core services such as Imaginarium and Portal.
		2. Increase Library membership	2. 100%	2. 100%	On target. Increase in membership from 30,371 (Dec 2019) to 32,638 (Dec 2020).
2.3.5.2 CW Purchase of Library Books - multi-year project	Community	1. Complete book purchases	1. 100%	1. 100%	On target. Have expended 48% of annual book vote.
2.3.5.4 Adopt and implement the Library Strategic Plan	Community	1. Implement actions as per the Library Strategic Plan - Undertake precinct planning for future libraries - Review Library operating hours and resource levels	1. 100%	1. 100%	On target. Plan has been adopted by Council. We have applied for a library grant to introduce interim services to Sovereign Hills and Lake Cathie, until planning for future libraries can be determined. Library hours being reviewed after impacts of COVID-19.
2.3.5.6 CW Purchase and fit out new Community Van to provide services such as Library outreach, arts and cultural program and community engagement	Community	1. Service delivery program developed and implementation commenced by 30 June 2021	1. 100%	1. 100%	Achieved. New mobile services introduced at Sovereign Hills and Lake Cathie.
		2. Van purchased and fit out complete	2. 100%	2. 100%	On target. Van acquired, fit-out completed. Awaiting final milestone payment from Regional Cultural Fund.
2.3.5.7 CW Deliver Special Library Projects to enhance library delivery program	Community	1. Deliver Special Library Projects to enhance library delivery program	1. 100%	1. 100%	On target. Introduced new 'Book of the Month' program. Produced promotional videos to highlight library services during COVID restrictions.

Delivery Program Objective: 2.3.6 Support a range of inclusive community activities and programs

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.6.04 Implement the Community Inclusion Plan	Community	1. Implement the Community Inclusion Plan actions	1. 100%	1. 100%	On target. Team continuing to work through with actions in Community Inclusion Plan. Planning underway for community events in 2021, updated volunteering procedures, implementing Community Inclusion Committee and Aboriginal Advisory Committee.
		2. Review Inclusion plan annually to meet the needs of our growing community	2. 100%	2.0%	Yet to commence. With limited staff resources in the first quarter and volunteering impacted by COVID, this has not been a key focus. This will be a focus in quarter 3 and 4 of the 2020/21 FY.
2.3.6.05 Hamilton Green Maintenance and Hamilton Green Enhancement Project	Community	1. Hamilton Green Maintenance and Hamilton Green Enhancement Project undertaken	1. 100%	1. 100%	On target. Focus for 2020-2021 with limited funds will be on maintenance priorities, which are determined in consultation with the management group.
2.3.6.09 Community Drug Action Team (CDAT) Drug Action Week	Community	1. Community Drug Action Team (CDAT) Week deliveried sucessfully	1. 100%	1. 100%	On target. The Community Drug Action Team continue to meet regularly to determine how to support Drug Action Week in 2021.
2.3.6.10 Anzac Centenary Local Grants Programme	Community	1. Anzac Centenary Local Grants Programme delivered successfully	1. 100%	1. 100%	On target .Working with a few communities to finalise the inclusions for their Anzac memorials including Rollands Plains, Kendall and Telegraph Point.

Delivery Program Objective: 2.4.1 Work with the community to identify and address community needs, to inform Council processes, services and projects

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.4.1.1 Through the Community Inclusion Plan implement, support and promote the Graffiti Blaster Program	Community	1. Plan and coordinate the graffiti blasters program and capture impact of graffiti removal	1. 100%	1. 90%	Monitoring required. Due to COVID-19, the Graffiti Blaster ceased working out in the community. Minimal volunteers back out in the field but with reduced availability, however a contractor has also been engaged to assist with working through the outstanding graffiti removal requests. We are reviewing the Graffiti Policy and organisational approach to graffiti removal.
2.4.1.2 Prioritise and commence implementation of agreed actions from the Customer Experience project	Customer Experience and Communications	1. Implement the agreed Customer Experience priorities for 2020-2021	1. 100%	1. 100%	On target. Customer Experience Policy framework adopted by Council in Q2 2020/21. This will inform the Customer Experience Roadmap which is under development.
2.4.1.3 Through the Community Inclusion Plan Involve youth for a better Council	Community	1. Implement a new refreshed and restructured Youth leadership model that will assist in providing a youth voice to Council decisions	1. 100%	1. 100%	On target. Discussions are underway with established Youth Groups in the LGA on how we can utilise them to help with getting a youth voice within Council.
		2. Support programs and youth activities including Youth Week	2. 100%	2. 100%	On target. Planning is underway for Youth Week 2021 to hold a physical event at Town Beach.
2.4.1.4 Through the Community Inclusion Plan support developing a connected community	Community	1. Develop and deliver training for volunteers and volunteer managers to increase capacity for volunteering within Council projects	1. 100%	1. 90%	Monitoring required. Volunteering has been impacted during 2020 due to COVID, however planning is underway for a "new look" volunteering program for 2021.

Delivery Program Objective: 2.4.1 Work with the community to identify and address community needs, to inform Council processes, services and projects

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Implement a Community Directory	2. 100%	2. 100%	On target. Community Directory is up and running and is being utilised regularly for e-newsletters. Plans for Community Directory promotion once new website is implemented.
		3. Review and implement Council's volunteer policy, toolkit, guidelines, recruitment and recognition and management processes	3. 100%	3. 100%	On target. Planning is underway to revise the volunteering program for the future, and creating policies, procedures and toolkits to reflect the changes.
2.4.1.5 Through the Community Inclusion Plan support developing a diverse community	Community	1. Celebrate dates of significance for Aboriginal and Torres Strait Islander people	1. 100%	1. 100%	On target. Worked with the NAIDOC committee to promote the virtual events in November 2020. NAIDOC story time was held through the library.
		2. Celebrate Seniors Week	2. 100%	2. 100%	On target. Planning is underway for a Virtual Seniors Expo in 2021. Also partnering up with the Cultural team to offer senior tours etc. as part of Bicentenary celebrations.
		3. Develop a Council community Inclusion Committee	3. 100%	3. 100%	On target. Eight members of the Community Inclusion Committee have been appointed with the first meeting to be held in March 2021. The remaining positions are to be advertised in early 2021.

Delivery Program Objective: 2.4.1 Work with the community to identify and address community needs, to inform Council processes, services and projects

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		4. Review and re-affirm Councils statement of Reconciliation and Commitment to the Birpai Community	4. 100%	4. 100%	On target. Regular meetings have been held with the Birpai and Bunyah Local Aboriginal Land Councils in the development of the Aboriginal Advisory Council and associated Charter. A report is expected to go to the February 2020 Ordinary Council Meeting. The review and re-affirm Council's statement of Reconciliation and Commitment to the Birpai Community is yet to commence. With limited staff resources in the first quarter and volunteering impacted by COVID, this was not key focus, however will be a focus in Quarters 3 & 4 of the 2020-2021 financial year.
		5. Support Seniors Programs	5. 100%	5. 100%	On target. Planning is underway for a Virtual Seniors Expo in 2021. Also partnering up with the Cultural team to offer senior tours etc. as part of Bicentenary celebrations.
2.4.1.6 Through the Community Inclusion Plan support developing a resilient community	Community	1. Support others through participating in community events and significant dates	1. 100%	1. 90%	Monitoring required. Due to COVID-19, physical events could not proceed, however supported the Aboriginal community with NAIDOC week by promoting their virtual events and also holding a special NAIDOC story time through the library.
		2. Work collaboratively with relevant organisation to develop improved service for marginalised communities		2. 100%	On target, We continue to work with key groups and our COVID Wellbeing Group to support our community including the PMH Cares initiative. This will also be supported by the new Community Inclusion Committee.

Delivery Program Objective: 2.4.1 Work with the community to identify and address community needs, to inform Council processes, services and projects

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		3. Work with community and industry service providers to advocate for affordable houses and space spaces, improved services and facilities for our homeless	3. 100%	3. 100%	On target. key engagement has been undertaken this quarter to inform our new Housing Strategy this included key stakeholders from service groups and providers of safe spaces and services.
2.4.1.7 Through the Community Inclusion Plan support developing a liveable community	Community	1. Audit built environment to improve recreation and connecting opportunities	1. 100%	1. 100%	On target. Working with all areas across the organisation. Using information gained through engagement and community plans, looking to provide connection and improved outcomes for the community.
		2. Design and deliver intergenerational and inclusive play spaces	2. 100%	2. 100%	On target. We continue to support the organisation with engagement on the development of inclusive spaces such as Blair Reserve, Town Beach development and Town Green.
		3. Support community led actions to create more liveable communities as identified in the Community Plans	3. 100%	3. 100%	On target. The team is working with our community on both the Community Plans and actions within the plans to create a more liveable place.

Delivery Program Objective: 2.4.1 Work with the community to identify and address community needs, to inform Council processes, services and projects

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.4.1.8 Implement strategic education priorities in accordance with Council's Working Together Framework	Community	1. Design an Annual Education program that influences community behaviours	1. 100%	1. 100%	On target. The Education Team have designed annual plans in the areas of Natural Resources, Roads, Water and Waste. Each annual plan outlines all known campaigns and projects for that area and each of these campaigns and projects have/will have sub-plans developed which identifies the desired behavioural change to be targeted. The biggest challenge for the team is measuring the behavioural change and this continues to be something we're working towards.
		2. Develop an Holistic approach for Education for priority Council services - Education Plan	2. 100%	2. 100%	On target. The Education Team has developed plans and are now working to ensure an equitable spread of education for areas across Council. Part of this process has been collaboratively going through the Operational Plan to pinpoint actions that directly or indirectly may apply to our team. A spreadsheet documenting these references was created. One goal we have is to ensure the community can develop an understanding of the 40+ services we offer.

Delivery Program Objective: 2.4.1 Work with the community to identify and address community needs, to inform Council processes, services and projects

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		3. Implement Education programs including Water, Waste and Road Safety	3. 100%	3. 100%	On target. Projects and campaigns that have commenced or are in the planning phases include: Roads - Little Blue Dinosaur, Speed on Country Roads, Plan B Competition (in collaboration with Liquor Accord), Double Demerits, Road Safety Week and Driver Reviver Water - Water Week Campaign, Summer promotions, Interactive map for IWCM, Recycled water Scheme Waste- Which Bin, Battery Recycling, Junior Master Chef Food waste campaign, Christmas waste Natural Resources- Koala signage competition, Coastal Management Program, Christmas koalas/Our Koala Story (to reduce road strike and increase community support of koala conservation).

Community Strategic Plan: 2.5 Promote a creative and culturally rich community

Delivery Program Objective: 2.5.1 Support cultural activities within the community

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.5.1.1 Implement the Cultural Plan	Economic and Cultural Development	1. Implement agreed Cultural Plan actions	1. 100%	1. 100%	On target. Actions under the Cultural Plan continue to be implemented with the bi- annual progress report presented to the October 2020 meetings of Council and the Cultural Steering Group.

Community Strategic Plan: 2.5 Promote a creative and culturally rich community

Delivery Program Objective: 2.5.1 Support cultural activities within the community

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.5.1.2 CW Undertake Glasshouse back of house maintenance	Commercial Business Units	1. Undertake Glasshouse back of house maintenance as required	1. 100%	1. 100%	On target. Planned, preventative maintenance on the building and equipment included; glass window replaced, fly system inspected and certified, orchestra pit lift inspected and certified, theatre and studio dimmer racks serviced and repaired, annual fire safety statement completed, air conditioning building management system upgraded.
2.5.1.3 Manage the delivery of a range of high quality performing and visual arts events at the Glasshouse in consideration of Council's Cultural Plan	Commercial Business Units	1. Deliver the exhibition program as per the annual gallery program (20 exhibitions)	1. 100%	1. 100%	On target. The Glasshouse Regional Gallery has presented the following exhibitions as per the annual visual arts program: Food For Thought - Hastings Valley Fine Arts Association Weapons for the Soldier Encounters Snowline to Sandune.
		2. Deliver the performing arts program as per the annual season launch (15 events)	2. 100%	2. 40%	Behind schedule. The Glasshouse performance spaces were closed from Monday 23 March until Monday 31 August 2020 due to the Public Health Order (Restrictions on Gathering and Movement) Order 2020. This resulted in the cancellation of performances planned as part of the Glasshouse Theatre Program 2020. The latest NSW Public Health Order has increased the capacity of all venue spaces to 75% (e.g. theatre with 440 patrons). This has enabled the resumption of performances and the following events have been delivered: Manhattan Short Film Festival, Viva Italia, It's a lot like Christmas and The Wharf Revue.

Community Strategic Plan: 2.5 Promote a creative and culturally rich community

Delivery Program Objective: 2.5.1 Support cultural activities within the community

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.5.1.4 Commence development of new Cultural Plan	Economic and Cultural Development	1. Commence review and development of new Cultural Development Plan working with the Cultural Steering Group and key stakeholders	1. 100%	1. 100%	On target. Project planning has commenced with an initial engagement session scheduled with the Cultural Steering Group in January 2021 to inform the direction of the new Strategy along with insights from the Cultural Economy Project.
2.5.1.5 Heritage Local Assistance Fund	Economic and Cultural Development	1. Distribute Heritage Assistance Fund Grants in accordance with established criteria	1. 100%	1. 100%	On target. No applications were received during Round One of the funding program. Direct promotion of Heritage grants to owners and custodians of heritage listed properties is recommended for the next round.
2.5.1.6 Bicentenary Activities	Economic and Cultural Development	1. Bicentenary activities delivered according to the adopted events plan	1. 100%	1. 100%	On target. Council endorsed a revised COVID Safe event program at their October 2020 meeting. The revised program incorporates the launch of Port Macquarie Lumiere and other identified PMHC COVID Recovery Projects that support the event vision: "To walk our place and discover the stories that weave together to make Port Macquarie-Hastings the region it was, it is, and will be."
2.5.1.7 Wauchope Bicentenary Riverside Sculptural Trail	Economic and Cultural Development	1. Wauchope Bicentenary Riverside Sculptural Trail delivered according to the adopted project plan	1. 100%	1. 100%	On target. Artist contracts issued and construction and installation works have commenced.
2.5.1.8 Art Walk	Economic and Cultural Development	1. Art Walk delivered successfully	1. 100%	1. 100%	Achieved. ArtWalk was successfully delivered as a COVID-safe event from 1 - 8 October 2020.

COMMUNITY THEME 3 Your Business and Industry

What we are trying to achieve

The Port Macquarie-Hastings region is a successful place that has a vibrant, diversified and resilient regional economy for people to live, learn, work, play and invest.

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.1 Assist the growth of local business and industry, ensuring this is a central consideration of Council activities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.1.1.01 Implement actions from the 2017-2021 Economic Development Strategy to lead, create and proactively support an environment that stimulates sustainable industry, business and investment growth	Economic and Cultural Development	1. Implement actions from the Economic Development Strategy and report to Council on implementation twice per year	1. 100%	1. 100%	On target. Actions from the Economic Development Strategy implemented, with twice-yearly report to Council adopted in November 2020.
3.1.1.02 Commence development of new Economic Development Strategy	Economic and Cultural Development	1. Commence review and development of new Economic Development Strategy in consultation with the Economic Development Steering Group and key stakeholders	1. 100%	1. 100%	On target. Stage 1 of the development of a new Economic Development Strategy has commenced and an initial engagement session was undertaken with the Economic Development Steering Group in December 2020 to inform this body of work.

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.2 Optimise the use of appropriately zoned land for business uses

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.1.2.1 Finalise Local Environmental Plan (LEP) and Development Control Plan (DCP) amendments in relation to a business park near Port Macquarie Airport (UGMS Action 15)	Land Use Planning, (Development Assessment)	1. Final report to Council re Local Environmental Plan (LEP) and Development Control Plan (DCP) amendments by 30 December 2020	1. 100%	1. 100%	Achieved. The amended Local Environment Plan (LEP) enabling the development of a business park near the Port Macquarie Airport was published on the NSW Legislation website on 10 September 2020. The Development Control Plan (DCP) provisions, which aim to coordinate high quality and integrated development across the Business Park, commenced on the same date as publication of the LEP amendment.
3.1.2.2 Review and prepare planning proposals for specific sites within the Port Macquarie-Hastings Local Government Area based on priorities as determined by Council	Development Assessment	1. Report to Council bi- annually on progress and status of site specific amendments	1. 100%	1. 100%	On target. Report on the status of site specific Planning Proposal requests to amend the Local Environmental Plan was presented to Council in December 2020. Next report to Council anticipated in June 2021.
3.1.2.3 CW Greenmeadows Drive - Development Planning and Feasibilities	Strategy	1. Consider Greenmeadows Drive appropriateness for strategy on community use assets by 30 June 2021	1. 100%	1. 100%	On target. Discussions have commenced with Council's Engagement Team on the appropriateness and the community sentiment on a community facility at Greenmeadows Drive. The competing use is a residential development.

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.3 Implement Major Events Strategy

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.1.3.2 Implement the Port Macquarie-Hastings Events Plan	Economic and Cultural Development	1. Implementation of Events Plan actions relating to 'Major and Community Events'	1. 100%	1. 100%	On target. Work on high priority objectives in the event action plan are progressing. This includes a focus on planning to increase brand exposure and recognition through events (such as new events like Nitro Circus and Surfing Australia Championships), building a mix of Council supported events in the region via new sponsorship and grants. This year, due to COVID we supported our first online event Motorfest.
		2. Successful distribution of Events Grants and Sponsorships	2. 100%	2. 100%	On target. Council supported 3 major events during Oct - December 2020 quarter. These events resulted in a combined economic impact of over \$3.7 million for our community. One of these 3 events was the NSW Touch State Cup which is generally our 3rd largest event of the year. This year there were no spectators allowed at the State Cup due to COVID. The Event Sponsorship Program has recently opened, the funding round for events being held in the second half of 2020. Liaison with Event Owners (currently sponsored/in receipt of grants) is ongoing to ensure oversight of contract deliverables.

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.4 Implement the Destination Management Plan

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.1.4.1 Work with stakeholders to implement actions from the Destination Management Plan in accordance with the identified strategic outcomes	Economic and Cultural Development	1. Implement actions within the Destination Management Plan (DMP)	1. 100%	1. 100%	On target. Implementation activities under the Destination Management Plan have continued including delivery of the annual destination campaign, continued destination PR program delivery and ongoing industry communications.
		2. Increase new monthly visits to the website by more than 15% in 12 months	2. 100%	2. 100%	On target. Visits to the website compared to the previous 12 month period have increased by 30%, exceeding the 15% target.
3.1.4.2 Greater Port Macquarie Brand Review	Economic and Cultural Development	1. Brand Review project developed and delivered in accordance with project plan	1. 100%	1. 100%	On target. Request for quotation for Brand Consultant currently in market, closing late January 2021.
3.1.4.3 Public Art, Audit and Maintenance	Economic and Cultural Development	1. Complete public art audit and commence maintenance plan	1. 100%	1. 100%	On target. Public Art audit is complete and maintenance report pending.

Community Strategic Plan: 3.3 Embrace opportunity and attract investment to support the wealth and growth of the community

Delivery Program Objective: 3.3.1 Develop, manage and maintain Port Macquarie Airport as a key component of the regional transport network and continue to grow the airport's contribution to the regional economy

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.3.1.1 Continue to monitor, plan & implement the PMQ Airport Master Plan to meet demand and regulatory reqs - Commence design of future infrastructure improvements, includes public car park expansion	Commercial Business Units	1. Deliver identified actions from the Airport Master Plan according to approved project plan	1. 100%	1. 100%	On target. Parallel Taxiway - Final design continuing. Environmental Impact Assessment (EIS) and DA due to be submitted for assessment in Q3 2020-21. Airport Weather Station (AWS) relocated in October 2020. Biodiversity Certification Agreement - implementation continuing post approval. Australian Government Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Referral - approved November 2020. Airport Business and Technology Park - Local Environmental Plan (LEP) rezoning and Development Control Plan (DCP) approved in September 2020.
3.3.1.2 Support, facilitate and advocate for regular public transport (RPT) airline services at Port Macquarie Airport	Commercial Business Units	1. Increase in passenger numbers compared to previous year	1. 100%	1. 14%	Behind schedule. Passenger numbers for July to Dec 2020 are down 86% when compared to July to Dec 2019 due to the impact of COVID-19.
3.3.1.4 CW Port Macquarie Airport Parallel Taxiway Stage 1 and General Aviation pavement renewal – finalise detailed design	Commercial Business Units (Project Delivery)	1. Finalise detailed design of Airport Parallel Taxiway Stage 1 and General Aviation pavement renewal	1. 100%	1. 100%	On target. Final design continuing. Environmental Impact Assessment (EIS) and DA due to be submitted for assessment in Q3 2020-21. Airport Weather Station (AWS) relocated in October 2020.
3.3.1.5 Continue to monitor, plan and implement the Port Macquarie Airport Biodiversity Certification Strategy and related environmental approvals	Commercial Business Units, Environment and Regulatory Services	1. Deliver identified actions from the Biodiversity Certification Strategy and related environmental approvals according to approved project plan	1. 100%	1. 100%	On target. Biodiversity Certification Agreement - implementation continuing post approval. Australian Government Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Referral approved November 2020.

Community Strategic Plan: 3.3 Embrace opportunity and attract investment to support the wealth and growth of the community

Delivery Program Objective: 3.3.1 Develop, manage and maintain Port Macquarie Airport as a key component of the regional transport network and continue to grow the airport's contribution to the regional economy

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.3.1.6 CW Operate and maintain Port Macquarie Airport in accordance with regulatory and safety requirements	Commercial Business Units	1. Carry out daily aerodrome inspections according to regulatory requirements	1. 100%	1. 100%	On target. All inspections carried out in accordance with regulatory requirements.
		2. Carry out maintenance / refurbishment of Council-owned hangars according to approved project plan	2. 100%	2. 100%	On target. Hangar maintenance undertaken as required.
		3. Ensure airport operational manuals are reviewed by 30 June	3. 100%	3. 100%	On target. Airport Operations Manual and Transport Security Program updated progressively throughout the year as required.
		4. Upgrade passenger security screening equipment by 31 December 2020	4. 100%	4. 100%	On target. December deadline extended due to COVID-19. New security screening equipment to be installed early February 2021.
3.3.1.7 Finalise development planning for the Port Macquarie Airport Business and Technology Park - (multi-year project)	Strategy	1. Finalise development planning by 30 June 2021 according to approved project plan	1. 100%	1. 100%	On target. The Port Macquarie-Hastings Local Environmental Plan (Amendment No.56) relating to Council's Airport and Thrumster lands plus adjoining private property, commenced 10 September 2020. The LEP aims to support the development of the Port Macquarie airport precinct through the introduction of appropriate zones and development controls and identification of land that has been biodiversity certified.

Community Strategic Plan: 3.4 Partner for success with key stakeholders in business, industry, government, education and the community

Delivery Program Objective: 3.4.3 Encourage innovation that will support our growth as a regional city including smart community technology

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.4.3.3 Implement actions from Council's Smart Community Roadmap	Economic and Cultural Development	1. Smart Communities Initiatives developed and implemented in accordance with priorities identified in Roadmap	1. 100%	1. 100%	On target. Smart Community Roadmap adopted by Council in October 2020. Consideration of integration opportunities into strategies and projects across the organisation is underway.

Your Business and Industry Page 57

COMMUNITY THEME 4 Your Natural and Built Environment

What we are trying to achieve

A connected, sustainable, accessible community and environment that is protected now and into the future.

Community Strategic Plan: 4.1 Provide (appropriate) infrastructure and services including water cycle management, waste management, and sewer management

Delivery Program Objective: 4.1.1 Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.1.01 CW Construction planning for the Sancrox Reservoir to Area 13 (Thrumster) trunk main (DN750)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Commencement of the construction of the Sancrox Reservoir to Area 13 Thrumster trunk main)	1. 100%	1. 90%	Monitoring required. Status remains unchanged from Sept 2020 reporting period. The design phase for this project is complete however, the project has been placed on hold pending a development application for a new service centre which being lodged on one of the lots that the pipeline is proposed to pass through. Given the uncertain timeframe to resolve the issues pertaining to the lot with the proposed service centre, Council will look into alternative options to traverse this portion of land. If an alternative is variable, stakeholder consultation will need to be undertaken prior to moving into the tender phase. The re-commencement of the project will be subject to negotiations with the landowner to ensure that unnecessary re-work is not undertaken. These works are now expected to be complete in the 2021-2022.

Delivery Program Objective: 4.1.1 Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.1.04 CW Installation of new water supply services to residential and business premises to cater for new development	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (new water supply services to residential and business premises)	1. 100%	1. 100%	On target.
4.1.1.16 CW Thrumster Reclaimed Water Interim Supply - Rising Main to Thrumster Reservoir - Booster Pumping Station and Interim Reservoir - undertake construction	Infrastructure Operations, (Project Delivery)	1. Deliver project according to approved project plan (Thrumster Reclaimed Water Interim Supply)	1. 100%	1. 100%	On target, against revised milestones. Construction continuing via contract, works to continue into 2020-2021 and are due for completion in Q1/Q2 2021-2022 FY including interim recycled water reservoir and interconnection mains.
4.1.1.18 CW Construction of a water main - Between Sancrox Reservoir and Wauchope	Infrastructure Operations, (Project Delivery)	1. Deliver project according to approved project plan (Construction of a water main - Between Sancrox Reservoir and Wauchope)	1. 100%	1. 100%	Achieved. Project complete with works finalised during November 2020.
4.1.1.26 CW Continue construction of the Southern Arm Trunk Main (DN750) - Pacific Hwy to Bonny Hills	Infrastructure Planning, (Project Delivery)	1. Deliver programs according to approved schedule (Construction of the Southern Arm Trunk Main)	1. 100%	1. 85%	Behind schedule. Project pre-construction phase was previously on hold awaiting the completion of road corridor property acquisitions along Houston Mitchell Drive. An approved pathway to dedication of road corridor has however now been finalised during this reporting period. Project delivery planning has therefore commenced during this reporting period with construction expected to span over future financial years subject to future funding allocation(s).

Your Natural and Built Environment Page 59

Delivery Program Objective: 4.1.1 Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.1.27 CW Commencement of design for the Water treatment/Filtration Plant at Cowarra Dam	Infrastructure Planning	1. Deliver programs according to approved schedule (Commencement of design for the Water treatment/Filtration Plant at Cowarra Dam)	1. 100%	1. 100%	On target. Project on track to achieve allocated expenditure. Scoping study for the works is currently being finalised by Public Works under the management of the Infrastructure Planning team. Project Delivery will commence steering the project from the completion of the scoping study. Next stage of the project expected to be a concept design and environmental approvals pathway assessment which will span across multiple financial years.
4.1.1.28 CW Preconstruction Works - Trunk Main from Bonny Hills to Kew (Area 12) Reservoir - Stage 1	Infrastructure Planning, (Project Delivery)	1. Deliver programs according to approved schedule (Preconstruction Works - Trunk Main from Bonny Hills to Kew (Area 12) Reservoir - Stage 1)	1. 100%	1. 100%	On target. Project initiation and planning works continued during this reporting period. The design phase of this project will continue into 2020-2021 financial year.
4.1.1.29 CW Marbuk Motorised Water Main Valve - Relocation	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved schedule (Marbuk Motorised Valve - Relocation)	1. 100%	1. 100%	On target. Project charter submitted for approval, quotes received for materials.
4.1.1.31 CW Water Supervisory Control and Data Acquisition (SCADA) System - Replacement	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved project plan (Water Supervisory Control and Data Acquisition (SCADA) System - Replacement)	1. 100%	1. 100%	On target. Planning underway, specifications nearing completion

Your Natural and Built Environment Page 60

Delivery Program Objective: 4.1.1 Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.1.32 CW Replacement of 3 Villages River Inlet Platform Structures	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved schedule (Replacement of 3 Villages River Inlet Platform Structures)	1. 100%	1. 100%	On target. Preliminary works underway including development of request for quotation.
4.1.1.34 CW Preconstruction works for the Granite Street Reservoir rehabilitation/renewal	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved schedule (Preconstruction works for the Granite Street Reservoir rehabilitation/renewal)	1. 100%	1. 100%	On target. However, currently under review. This action is pending completion of OP action 4.1.1.26 and may need to be deferred to outer years.
4.1.1.35 CW Preconstruction of Widderson St Reservoir Roof Replacement	Infrastructure Planning	1. Deliver programs according to approved schedule (Preconstruction of Widderson St Reservoir Roof Replacement)	1. 100%	1. 100%	On target. Preliminary project planning works are underway.
4.1.1.36 CW Water critical infrastructure - Site Security Upgrades	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved schedule (Water critical infrastructure - Site Security Upgrades)	1. 100%	1. 100%	On target. Preliminary works underway including project charter
4.1.1.39 CW Telemetry Microwave link replacement Bonny Hills to Camden Haven	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved schedule (Telemetry Microwave link replacement Bonny Hills to Camden Haven)	1. 100%	1. 100%	On target. Government contract supplier estimates to be supplied to complete project charter.

Your Natural and Built Environment Page 61

Delivery Program Objective: 4.1.1 Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.1.40 CW Design of Rock Ramp to secure water level at Koree Island Pumping Stations Intake Pool	Infrastructure Planning	1. Deliver programs according to approved project plan (Design of Rock Ramp to secure water level at Koree Island Pumping Stations Intake Pool)	1. 100%	1. 100%	On target. Design to be completed for review in February 2021. On track to be completed by end of 2021 financial year.
4.1.1.42 CW Installation of Baffles within Reservoirs to ensure chlorination contact time for disinfection	Infrastructure Operations	1. Deliver programs according to approved schedule (Installation of Baffles within Reservoirs to ensure chlorination contact time for disinfection)	1. 100%	1. 100%	On target. Preliminary works underway including request for quotations.
4.1.1.43 CW Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps - Water sites	Infrastructure Planning, (Infrastructure Operations)	1. Deliver programs according to approved schedule (Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps - water sites)	1. 100%	1. 100%	On target. North Haven Booster pump station and Lake Road Booster pump station identified for upgrades. Work has been completed for the Lake Road Booster and North Haven Booster will be completed in the third quarter of 2020- 2021.
4.1.1.44 CW Wauchope Water Treatment Plant upgrade project	Infrastructure Planning, (Project Delivery)	1. Deliver programs according to approved schedule (Wauchope Water Treatment Plant upgrade project)	1. 100%	1. 100%	On target. This emergency water supply security project has continued in the construction phase during the reporting period. The project is on track for construction completion in late 2020 whereby the throughput capacity of the Wauchope Water Treatment plant will be effectively tripled in capacity.

Delivery Program Objective: 4.1.1 Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.1.45 CW Water Supply Security Projects	Infrastructure Planning, (Project Delivery)	1. Deliver programs according to approved schedule (Water Supply Security Projects)	1. 100%	1. 100%	On target. Project split into various sub- projects including: Investigations of desalination plant (Placed on hold). Wauchope Water Treatment Plant Upgrade (reported as separate item). Cowarra Booster Pump Station construction.
4.1.1.46 CW Bonny Hills Recycled Water System Upgrade	Infrastructure Planning, (Project Delivery)	1. Deliver programs according to approved schedule (Bonny Hills Recycled Water System Upgrade)	1. 100%	1. 75%	Behind schedule. Construction tender awarded during this reporting period for upgrade to recycled water treatment process at Bonny Hills Sewerage Treatment Plant. Program for completion extends into 2021.

Delivery Program Objective: 4.1.2 Develop and implement annual maintenance and preventative works program for water supply assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.2.1 CW Conduct water asset replacement and renewal programs for live water mains, water meters, renewals and minor works and switchboards	Infrastructure Operations	1. Deliver programs according to approved schedule (Live water mains, water meters, renewals and minor works, pumps, switchboards and flow meters)	1. 100%	1. 100%	On target. Water Supply infrastructure renewals being carried out as required
4.1.2.2 CW Carry out programmed replacement of Water Treatment Plant (WTP) electrical and mechanical assets	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Carry out programmed replacement of Water Treatment Plant (WTP) electrical and mechanical assets)	1. 100%	1. 100%	On target. Multiple projects underway

Your Natural and Built Environment Page 63

Delivery Program Objective: 4.1.3 Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.3.01 CW Commence construction of the Port Macquarie sewer rising main, Port Macquarie	Infrastructure Operations, (Project Delivery)	1. Deliver project according to approved project plan (Commence construction of the Port Macquarie Sewer rising main (Sewer Pump Station)		1. 100%	Achieved. Project complete. Works finalised during December 2020.
Construction - Long Flat, Comboyne, Telegraph Point Oper	Infrastructure Operations, (Project Delivery)	1. Deliver project for Comboyne Sewerage Scheme according to approved project plan	1. 100%	1. 100%	On target. This project continues from previous FY's. Ledonne were engaged to undertake the works in August 2018 and have progressed with installation of pipework and are nearing completion with construction. Construction completion of the Comboyne scheme is expected in early 2021.
	Long Flat Scheme av	2. Deliver project for Long Flat Sewerage Scheme according to approved project plan	2. 100%	2. 100%	On target. This project continues from previous FY's. Ledonne were engaged to undertake the works in August 2018 and have progressed with installation of pipework and commenced early works for the construction. Construction completion of the Long Flat scheme is expected in early 2021.
		3. Deliver project for Telegraph Point Sewerage Scheme according to approved project plan	3. 100%	3. 100%	Achieved. This project continues from previous FY's. Ledonne were engaged to undertake the works in August 2018 and have progressed with installation of pipework and are nearing completion with construction. Construction completion of the Telegraph Point scheme is complete.

Delivery Program Objective: 4.1.3 Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.3.15 CW Commencement of the construction of the Area 14 reclaimed Inlet trunk main (DN250), Bonny Hills	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Reclaimed Water - Area 14 Reclaimed Trunk Main)	1. 100%	1. 100%	Achieved. Project Complete
4.1.3.18 CW Continuation of preconstruction of Thrumster Sewerage treatment Plant (Area 13) - Phase 1	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Preconstruction of Thrumster Sewerage Treatment Plant (Area 13)	1. 100%	1. 75%	Behind schedule. Project has been delayed awaiting the completion of the Integrated Water Cycle Management Strategy. Project is forecast to commence in the last quarter of the 2020-2021 financial year.
4.1.3.22 CW Investigation, Design and Construction of Kew Sewer Treatment Plant (STP) Upgrade (Multi-Year project)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Investigation, Design and Construction of Kew Sewer Treatment Plant (STP) Upgrade)	1. 100%	1. 100%	On target, against revised milestones, project to continue through into 2021/22. Port Macquarie-Hastings Council partnered with NSW Public Works Advisory for the delivery of the concept design phase for this project. the Project is now progressing into the detailed design and investigations phase. The construction phase of this project is estimated to commence not before 2021 based on current project status.
4.1.3.23 CW Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps – Sewer Sites	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Annual Energy Efficiency Initiatives allocation)	1. 100%	1. 100%	On target. Port Macquarie pump station Number 8 identified for upgrades. Work commenced and is ongoing.
4.1.3.24 CW Inlet Works Replacement for Port Macquarie Sewer Treatment Plants (STP)	Infrastructure Operations	1. Deliver project according to approved project plan (Inlet Works Replacement for Port Macquarie Sewer Treatment Plants)	1. 100%	1. 100%	On target.

Your Natural and Built Environment Page 65

Delivery Program Objective: 4.1.3 Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.3.25 CW Integrated Water Cycle Management Strategy Delivery (Multi-Year Project)	Infrastructure Planning	1. Deliver project according to approved project plan (Integrated Water Cycle Management Strategy)	1. 100%	1. 100%	On target. Project progressing, community consultation due February 2021. Project timeline extended to the end of 2021.
4.1.3.26 CW Preconstruction works for upgrade of Lake Innes Sewerage Pump Station #71 (PMSPS71)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Preconstruction works for upgrade of Lake Innes Sewerage Pump Station #71 (PMSPS71)	1. 100%	1. 100%	On target. Project is on track against revised milestones. Project initiation and planning works commenced during this reporting period. The design phase of this project is expected to continue into 2020- 2021 financial year.
4.1.3.27 CW Port Macquarie Waste Water Treatment Plant Odour control mitigation works	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Port Macquarie Waste Water Treatment Plant Odour control mitigation works)	1. 100%	1. 100%	On target. Multiple projects underway Temp dosing in and running medium term dosing scoped and ordered.
4.1.3.28 CW Camden Haven Waste Water Treatment Membrane Replacements	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Camden Haven Waste Water Treatment Membrane Replacements)	1. 100%	1. 100%	On target. Project plan approved, tender scope and project management engagement request for quotation being developed.
4.1.3.29 CW Preconstruction of Wauchope Waste Water Treatment Plant Inlet Rationalisation	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Preconstruction of Wauchope Waste Water Treatment Plant Inlet Rationalisation)	1. 100%	1. 100%	On target. This project is programmed to commence in Q4 of 2020-2021 FY.

Your Natural and Built Environment Page 66

Delivery Program Objective: 4.1.3 Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.3.30 CW Bonny Hills Waste Water Treatment Plant Aerator Replacements	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Bonny Hills Waste Water Treatment Plant Aerator Replacements)	1. 100%	1. 100%	On target. Preliminary works underway, request for quotation out awaiting second quotation.
4.1.3.31 CW Replace Sewer Telemetry Radios Wauchope and Kew	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Replace Sewer Telemetry Radios Wauchope and Kew)	1. 100%	1. 100%	On target. Final design meeting planned for 3 week January before completion of Project Plan.
4.1.3.32 CW Sewer Distributed Network Protocol (DNP3) Telemetry Processor roll out Port Macquarie	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Sewer Distributed Network Protocol (DNP3) Telemetry Processor roll out Port Macquarie)	1. 100%	1. 100%	On target. Roll out of processors underway.
4.1.3.33 CW Sewer Distributed Network Protocol (DNP3) Telemetry Processor roll out Wauchope and Kew	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Sewer Distributed Network Protocol (DNP3) Telemetry Processor roll out Wauchope and Kew)	1. 100%	1. 100%	On target. Planning underway.
4.1.3.34 CW Port Macquarie Sewer Pump Station 13 Catchment Reline	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Port Macquarie Sewer Pump Station 13 Catchment Reline)	1. 100%	1. 100%	On target.

Your Natural and Built Environment Page 67

Delivery Program Objective: 4.1.3 Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.3.35 CW Preconstruction works for Port Macquarie Sewer Pump Station 21 Refurbishment	Infrastructure Planning	1. Deliver project according to approved project plan (Preconstruction works for Port Macquarie Sewer Pump Station 21 Refurbishment)	1. 100%	1. 100%	On target. Preliminary works underway. Project under review, possibly to be deferred to later time period. Review will be completed prior to next report.
4.1.3.36 CW Preconstruction works for Camden Haven Sewer Pump Station 2 Refurbishment	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Preconstruction works for Camden Haven Sewer Pump Station 2 Refurbishment)	1. 100%	1. 100%	On target. Project is on track against revised milestones. Project initiation and planning works commenced during this reporting period. The design phase of this project is expected to continue into 2020- 2021 financial year.
4.1.3.37 CW Kew/Kendall Sewer Pump Station 7, 8 and 9 Supervisory control and data acquisition (SCADA) Upgrade	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Kew/Kendall Sewer Pump Station 7, 8 and 9 Supervisory control and data acquisition (SCADA) Upgrade)	1. 100%	1. 100%	On target. Planning underway. Final design nearing completion.
4.1.3.38 CW Preconstruction works for upgrade of Port Macquarie Sewerage Pump Station #18	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Preconstruction works for upgrade of Port Macquarie Sewerage Pump Station #18)	1. 100%	1. 100%	On target. Project is on track against revised milestones. Project initiation and planning works commenced during this reporting period. The design phase of this project is expected to continue into 2020- 2021 financial year.
4.1.3.39 CW Sewer Critical Infrastructure Site Security Upgrades	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Sewer Critical Infrastructure Site Security Upgrades)	1. 100%	1. 100%	On target. Public Works Advisory preparing tender for site security upgrades.

Your Natural and Built Environment Page 68

Delivery Program Objective: 4.1.3 Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.3.40 CW Preconstruction works for upgrade/relocation of Port Macquarie Sewerage Pump Station #1 for Aquatic Centre Project	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Preconstruction works for upgrade/relocation of Port Macquarie Sewerage Pump Station #1 for Aquatic Centre Projects)	1. 100%	1. 0%	Deferred. This project has been deferred to a future operational plan given that it will not be required until funding for the Aquatic facility is confirmed. Consideration to the relocation of the pump station will be given during the Aquatic Facility design.

Delivery Program Objective: 4.1.4 Develop and implement annual maintenance and preventative works program for sewerage assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.4.1 CW Programmed replacement of Sewer Pumps and Electrical switchboards at Sewage Pump Stations	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Programmed replacement of Sewer Pumps and Electrical switchboards at Sewage Pump Stations)	1. 100%	1. 100%	On target. Asset renewal being undertaken as required.
4.1.4.4 CW Carry out programmed replacement of Sewer Treatment Plant (STP) electrical and mechanical assets	Infrastructure Operations	1. Deliver project according to approved project plan (Carry out programmed replacement of Sewer Treatment Plant (STP) electrical and mechanical assets)	1. 100%	1. 100%	On target. Multiple projects underway.

Delivery Program Objective: 4.1.4 Develop and implement annual maintenance and preventative works program for sewerage assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.4.5 CW Conduct sewer assets replacement and maintenance programs for Sewer Rehabilitation and Relining Works	Infrastructure Operations	1. Deliver project according to approved project plan (Conduct sewer assets replacement and maintenance programs for Sewer Rehabilitation and Relining Works)	1. 100%	1. 100%	On target.

Delivery Program Objective: 4.1.5 Work towards planning, investigation, design, construction of stormwater assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.5.06 CW Continue design and construction for Black Swan Terrace - Stormwater detention facility (multi-year project)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Black Swan Terrace - Stormwater detention facility)	1. 100%	1. 100%	On target. Project plan endorsed and design engagement awarded during this reporting period. This project is expected to be a multi-year project due to land acquisition requirements.
4.1.5.08 CW Stormwater Remediation Panorama Drive Bonny Hills - Detailed Designs of remedial options	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Stormwater Remediation Panorama Drive Bonny Hills)	1. 100%	1. 100%	On target. Project planning underway. Project completion expected prior to end of financial year.

Delivery Program Objective: 4.1.5 Work towards planning, investigation, design, construction of stormwater assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.5.09 CW Investigation of Stormwater Remediation Options - Bellbowrie/Bay Street Catchment	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Investigation of Stormwater Remediation Options - Bellbowrie/Bay Street Catchment)	1. 100%	1. 85%	Behind schedule. Design is behind milestone dates mainly associated with variations introduced to the original scope. Consultant has been on hold awaiting approval to commence variation works prior to finalising original scope items. Approval has been given to commence variation works and an updated program is to be provided to include variation and complete all remaining deliverables (design report, design drawings, cost estimates).
4.1.5.10 CW Stormwater Remediation Designs – Design of drainage improvement works	Infrastructure Planning	1. Deliver project according to approved project plan (Stormwater Remediation Designs –Design of drainage improvement works)	1. 100%	1. 100%	Achieved. Design works undertaken when required.
4.1.5.11 CW Detailed Designs of Stormwater Remediation measures identified in the Westport Stormwater Management Plan including Gordon Street to Buller Street Port Macquarie works	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Detailed Designs of Stormwater Remediation measures identified in the Westport Stormwater Management Plan)	1. 100%	1. 100%	On target. Multi year project. Consultant engaged to undertake detailed stormwater catchment analysis and detailed designs. Designs are progressing well and project is on track.
4.1.5.12 CW Stormwater Remediation - 35 Hart Street - Investigation of stormwater remediation - Planning and Designs	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Stormwater Remediation - 35 Hart Street	1. 100%	1. 100%	On target. Project planning to be commenced in early 2021 with completion of design expected within the 2020-2021 financial year.

Delivery Program Objective: 4.1.5 Work towards planning, investigation, design, construction of stormwater assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.5.13 CW Stormwater Remediation - 10 Dilladerry Cres, Port Macquarie - Overflow swale plus system augmentation	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Stormwater Remediation - 10 Dilladerry Cres, PMQ)	1. 100%	1. 100%	Achieved. Project complete.

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.6.02 Undertake annual canal maintenance for Settlement Shores and Broadwater canals as required	Infrastructure Planning, (Infrastructure Operations)	1. Undertake canal maintenance works in accordance with the rolling priority program and risk management processes	1. 100%	1. 100%	On target. Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.
4.1.6.05 Settlement Shores canals - Major Maintenance and Dredging	Infrastructure Planning, (Project Delivery)	1. Deliver project to approved project plan (Settlement Shores Canals Major Maintenance and Dredging)	1. 100%	1. 100%	Achieved. Project complete.
4.1.6.07 CW Carry out the Stormwater Renewal Program	Infrastructure Planning, (Infrastructure Operations)	1. Deliver program according to approved schedule (Stormwater Renewal)	1. 100%	1. 100%	On target. The 2020-2021 Stormwater Renewal is currently in the planning and procurement phase with the programme to include the following projects: Stormwater Relining: Alma St, North Haven Short St, Port Macquarie Graham St, Kendall Ocean Dr, North Haven
4.1.6.18 Carry-out stormwater maintenance program including inspections, monitoring and repair works	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project to approved project plan (Stormwater maintenance program)	1. 100%	1. 100%	On target. Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.

Delivery Program Objective: 4.1.6 Develop and implement annual maintenance and renewal programs for stormwater assets

Delivery Program Objective: 4.1.6 Develop and implement annual maintenance and renewal programs for stormwater assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.6.19 Carry-out stormwater engineering investigations in response to identified issues from both reactive and proactive inspections	Infrastructure Planning	1. Engineering Investigations completed for all complex issues raised	1. 100%	1. 100%	On target. Additional investigations and designs are undertaken throughout the year as required. Investigations works for this quarter have been prioritised for previously identified Operational Plan projects, and further work will be done in the later quarters of this year as design work slows down during construction phases of other projects.
4.1.6.20 Stormwater Asset Management Condition Rating of stormwater assets via CCTV inspections, including of newly constructed works	Infrastructure Planning, (Infrastructure Operations)	1. In accordance with adopted programs and proactive maintenance requirements based on risk	1. 100%	1. 100%	On target. Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.
4.1.6.21 Develop Urban Stormwater Catchment Management Plans for each of the 62 sub-catchments	Infrastructure Planning	1. Deliver project according to approved project plan (Develop Urban Stormwater Catchment Management Plans)	1. 100%	1. 100%	On target. This project has been assigned to relevant officers with preliminary scoping undertaken. A draft project charter is planned to be developed in early 2021.
4.1.6.22 CW North Haven Flood Mitigation Works - investigation and concept design of remedial works	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (North Haven Flood mitigation Works - investigation and concept design of remedial works)	1. 100%	1. 80%	Behind schedule. Project planning commenced in Dec 2020 due to COVID and other grant funded project priorities. It is aimed to complete the works within the 2020-2021 financial year however, works may progress into the 2021-2022 financial year if found to be more complex than initially expected.

Delivery Program Objective: 4.1.7 Develop and implement effective waste management strategies

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.7.06 Ensure effective recycling and recovery of domestic waste through Material Recovery Facility (MRF)	Commercial Business Units	1. Recovery of domestic waste through Material Recovery Facility complete by 30 June 2021	1. 100%	1. 100%	On target. Recovery (recycling) of domestic waste through Material Recovery Facility (MRF) continuing as required.
4.1.7.07 Ensure effective recycling and recovery of organic waste through Organic Recovery Facility (ORF)	Commercial Business Units	1. Capture carbon credit data associated with waste diversion to Organic Resource Recovery Facility (ORRF) for reporting purposes	1. 100%	1. 100%	On target. Recovery of domestic waste through Organic Recovery Facility (ORF) continuing. Carbon credit data captured as required.
		2. Recovery of domestic waste through Organic Recovery Facility complete by 30 June 2020	2. 100%	2. 100%	On target. Recovery of domestic waste through Organic Recovery Facility (ORF) continuing as required.
4.1.7.09 Deliver efficient waste and recycling services at all WasteTransfer Stations	Commercial Business Units	1. Operation of all Waste Transfer Stations undertaken in accordance with regulatory requirements	1. 100%	1. 100%	On target. Waste Transfer Stations operations undertaken in accordance with regulatory requirements.
4.1.7.13 Address illegal dumping and provide clean up programs	Commercial Business Units	1. Illegal dumping and clean up programs delivered by 30 June 2021	1. 100%	1. 100%	On target. Illegal dumping and clean up programs undertaken as required.
4.1.7.14 Commence Multi Unit Dwelling Organics Recovery Project	Commercial Business Units	1. Deliver project according to approved project plan (Multi Unit Dwelling Organics Recovery Project)	1. 100%	1. 100%	On target. Project to be completed by 30 June 2021.

Your Natural and Built Environment Page 74

Delivery Program Objective: 4.1.7 Develop and implement effective waste management strategies

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.1.7.20 Deliver "Better Waste and Recycling" Initiatives (Office of Environment and Heritage)	Commercial Business Units	1. Deliver projects according to approved Office of Environment and Heritage (OEH) project plans	1. 100%	1. 100%	On target. Identified waste education projects continuing.
4.1.7.23 CW Caimcross Recycling Industrial Zone Improvements - Concrete Processing Facility Establishment Stage 1 - EIS, Design, Planning & Approvals	Commercial Business Units	1. Deliver project according to approved project plan (Cairncross Recycling Industrial Zone Improvements - Concrete Processing Facility Establishment Stage 1)	1. 100%	1. 0%	Deferred. Project re-prioritised and removed from 2020-2021 Operational Plan via the Monthly Budget Review in November 2020 report presented to the Ordinary Council Meeting held on 9 December 2020.
4.1.7.26 CW Caimcross Waste Depot - Facility Upgrade and Expansion Approvals	Commercial Business Units	1. Deliver project according to approved project plan (Cairncross Waste Depot - Facility Upgrade and Expansion Approvals)	1. 100%	1. 100%	On target. Construction tender awarded in December 2020, with landfill construction expected to commence in January 2021.
4.1.7.27 Continue to monitor, plan and implement the Waste Strategy 2017 - 2024 in accordance with regulatory requirements and industry best practice - (multi-year project)	Commercial Business Units	1. Deliver identified actions from the Waste Strategy 2017-2024 according to approved project plan	1. 100%	1. 100%	On target. The current Waste Strategy actions are being delivered as required. The Waste Strategy is expected to be reviewed following the release of the new NSW 20 year Waste Strategy due in 2021.
4.1.7.28 Deliver efficient waste collection services, including domestic, commercial and public place	Commercial Business Units	1. Waste collection services delivered as required	1. 100%	1. 100%	On target. Waste collection services delivered as required.
4.1.7.29 Ensure effective operation of Cairncross waste management facility including effective disposal of waste to landfill	Commercial Business Units	1. Capture the tonnage of waste to landfill for environmental reporting		1. 100%	On target. Reporting completed as required.

Delivery Program Objective: 4.1.7 Develop and implement effective waste management strategies

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Operation of Cairncross waste management facility undertaken in accordance with regulatory requirements	2. 100%	2. 100%	On target. Operations undertaken as required.
4.1.7.30 Undertake Waste Education and Marketing campaigns	Commercial Business Units	1. Waste Education and Marketing campaigns delivered according to approved programs	1. 100%	1. 100%	On target. Waste education campaigns delivered as required in support of Council's Waste Strategy and services.
4.1.7.31 Operate and maintain waste facilities in accordance with regulatory requirements and industry best practice		1. Deliver projects including landfill gas monitoring according to approved project plans	1. 100%	1. 100%	On target. Gas landfill monitoring ongoing. Gas trial initiated in September 2020 at Cairncross landfill with report expected to be completed in early 2021 on the outcomes of the trial.

Community Strategic Plan: 4.2 Aim to minimise the impact of natural events and climate change, for example, floods, bushfires and coastal erosion

Delivery Program Objective: 4.2.1 Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.2.1.01 Deliver the annual bushfire risk mitigation program for Port Macquarie-Hastings Council.	Environment and Regulatory Services	1.90% of the annual bushfire risk mitigation program delivered	1. 100%	1. 100%	On target. Works on the ground are continuing. Some sites have caused disruption to the program because of a lack of environmental approvals but work will continue in Q3 and Q4.
		2. RFFF estimates are submitted to the RFS for the following financial year grant application	2. 100%	2.0%	Yet to commence. Bids for Rural Fire Fighting Fund funding will commence in Q3.

Delivery Program Objective: 4.2.1 Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.2.1.02 Implement actions from the Flying Fox Camp Management Plan for Kooloonbung Creek	Environment and Regulatory Services	1. Attend community meetings x two (six monthly)	1. 100%	1. 100%	On target. Meeting held with community members in December 2020 via on line platform.
		2. Develop educational materials	2. 100%	2. 100%	Achieved. Signage designed and erected at Kooloonbung Creek along with website materials.
		3. Develop protocols to manage incidents	3. 100%	3. 100%	Achieved. Protocols created by NSW government, information available on website.
		4. Investigate alternative habitat	4. 100%	4. 100%	On target. Correspondence with NSW Save Our Species (SOS) section of Department of Planning, Industry and Environment has provided guidance for selection of alternative habitat locations.
		5. National flying-fox census count x 4 (quarterly)	5. 100%	5. 100%	On target. November (quarterly census) was completed in Nov 2020, results on PMHC website.
		6. Operation of sprinkler system and monitoring ongoing	6. 100%	6. 100%	On target. Monitoring and operation of sprinkler system is occurring on an as needed basis.
4.2.1.03 Investigation of appropriate floodplain mitigation measures and strategies to reduce flood risk in the Hibbard Precinct Catchment	Environment and Regulatory Services	1. Begin investigation into options for mitigation measures	1. 100%	1.0%	Yet to commence. Project is scheduled to begin in Q4 if resources are available.
		2. Community consultation undertaken	2. 100%	2.0%	Yet to commence. Works will commence in Q4 if resources are available.
		3. Grant application submitted and obtained	3. 100%	3.0%	Not available. Required to be removed from the OP for this year due to resourcing constraints.
4.2.1.04 Implementation of flood mapping updates associated with Hastings River Flood Study	Environment and Regulatory Services	1. GIS flood mapping completed and available to community	1. 100%	1. 0%	Yet to commence. Work to commence in Q4.

Your Natural and Built Environment Page 77

Delivery Program Objective: 4.2.1 Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.2.1.05 Continue to ensure development compliance to achieve sound environmental outcomes - Vegetation Management Plans (VMP), Koala Plans of Management (KPoM) developed, registered, implemented and monitored	Environment and Regulatory Services	1. Create workflow management processes for VMPs and KPOMs using Authority	1. 100%	1.0%	Yet to commence. Works will commence in Q4.
		2. Register, respond and undertake initial action on customer requests associated with VMP's within 14 days	2. 100%	2. 100%	On target. Nine VMP referrals requested in Q2 all actioned with in the timeframe required.
		3. Undertake mapping of vegetation management plans and koala plans of management with dedication years	3. 100%	3. 100%	Achieved. Maps have been produced by GIS team of all KPoM and VMP's known to Council.
4.2.1.06 Development of environmental program of works (registration, implementation, monitoring) to ensure compliance to Airport biocertification	Environment and Regulatory Services	1. Ongoing monitoring, generate reports, manage budgets for payment of contracts and write final report pertinent to on-ground environmental management actions	1. 100%	1. 100%	On target. Llimited weed control and feral animal control occurred in Q2, additional staffing resources will now allow for more time to be spent on contract management of the airport.
		2. Undertake scoping, briefing preparation, and requisition of appropriate services	2. 100%	2. 100%	On target. Limited weed control and feral animal control occurred in Q2, additional staffing resources will now allow for more time to be spent on contract management of the airport.
4.2.1.07 Continue to provide environmental impact or conditions advice on proposed development or proposed construction works	Environment and Regulatory Services	1. Referrals to DA applications is undertaken within 14 days	1. 100%	1. 100%	On target. Referrals are being managed by the team to ensure a timely turn around. 14 DA referrals in Q2 were received. Eight pre-lodgement meetings were attended.

Your Natural and Built Environment Page 78

Delivery Program Objective: 4.2.1 Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.2.1.08 Investigation of appropriate floodplain mitigation measures and strategies to reduce flood risk in the Wrights and Yarranabee Creeks	Environment and Regulatory Services	1. Community consultation begun	1. 100%	1.0%	Yet to commence. Works will commence in Q4 if resources are available
		2. Grant application submitted and obtained	2. 100%	2. 100%	Not available. Required to be removed from the OP for this year due to resourcing constraints.
4.2.1.09 Continue to develop a Flood Study for the North Brother Local Catchments - facilitation of stormwater remediation	Environment and Regulatory Services, (Infrastructure Planning)	1. Development of a North Brother Flood Study underway to facilitate future stormwater remediation	1. 100%	1. 100%	On target. Following community consultation. the draft Options Report was endorsed at the September 2020 Ordinary Council Meeting. Project is on track with the Draft North Brother Local Catchments Floodplain Risk Management Study and Plan due to be submitted during January 2021.
4.2.1.11 Undertake preparatory work for new stormwater system at Illaroo Road	Environment and Regulatory Services	1. Completion of Aboriginal Archaeological investigation	1. 100%	1. 100%	On target. Aboriginal heritage work completed on site. No requirement for any further permits or works to be completed.
		2. Removal of asbestos	2. 100%	2. 100%	On target. The Aboriginal Archaeological study was completed in Q2 which now allows staff to move forward with the removal of asbestos from the site pending agreement by Crown Lands.
4.2.1.13 Consult with community regarding funding model options for Illaroo revetment wall	Environment and Regulatory Services	1. Consultation with community undertaken	1. 100%	1. 100%	On target. Finalising the community engagement and education plan. Two meetings are scheduled, the first is with directly affected residents on Feb. 17th and second is with key stakeholders on 23 Feb 2021.
4.2.1.14 Coast and estuary management committee	Environment and Regulatory Services	1.4 committee meetings held per year	1. 100%	1. 100%	On target. Three meetings held in first six months, additional meetings scheduled during 2021 will meet the target.

Delivery Program Objective: 4.2.1 Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.2.1.15 Compliance with Seagrass Assessment and Intertidal Wetland Rehabilitation Plan for the Stingray Creek Bridge Replacement Work	Environment and Regulatory Services	1. 4 year post construction sea grass monitoring completed	1. 100%	1. 100%	On target. GHD consulting has undertaken final round of sea grass monitoring in November 2020. Final report due to Council early Q3 (January 2021).
		2. Fence erected on offset site	2. 100%	2.0%	Yet to commence. Work to commence in Q4.
		3. Offset site mapped to determine vegetation integrity	3. 100%	3. 100%	On target. Ecosure consulting completed field study in Nov 2020. Final report to be released to Council in 2021.
4.2.1.16 Development of a Coastal Management Program for Lake Cathie	Environment and Regulatory Services	1. Undertake the initial development of a scoping study for Coastal Management Program specific to Lake Cathie	1. 100%	1. 100%	On target. Scoping study was placed on public exhibition and distributed for comment to key stakeholders. Edits are being completed on scoping study which will be finalized in Q3.
4.2.1.17 Develop the annual bushfire risk mitigation program for Council lands prepared in accordance with the Bush Fire Risk Management Plan	Environment and Regulatory Services	1. The annual bushfire risk mitigation program is adopted by Council by 30 September 2020	1. 100%	1. 50%	Behind schedule. Project has been delayed due to additional on-ground requirements and associated environmental approvals required. Work will recommence on this project in quarter three.
4.2.1.18 Flood Mapping - Updated Flood Maps including LEP maps, External Customer Mapping Porta and Automated Flood Certificates	Environment and Regulatory Services	1. All Council adopted flood studies mapped and accessible to internal and external customers via LEP	1. 100%	1. 0%	Yet to commence
		2. Flood mapping portal scoping study completed	2. 100%	2.0%	Yet to commence. Work to commence in Q4.
		3. Online portal developed and tested	3. 100%	3.0%	Yet to commence. Work to commence in Q4.
		4. Project plan and possible consultant engagement completed	4. 100%	4.0%	Yet to commence. To be commenced in Q4.

Your Natural and Built Environment Page 80

Delivery Program Objective: 4.2.2 Promote strategies to mitigate Climate Change

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.2.2.1 Undertake development of a Sustainability and Climate Change Strategy	Environment and Regulatory Services	1. Sustainability and Climate Change Strategy developed and adopted by 30 June 2021	1. 100%	1. 100%	On target. Sustainability Coordinator recruitment in January. Strategic working on strategy. Sub-committee to be formed.

Community Strategic Plan: 4.3 Facilitate development that is compatible with the natural and built environment

Delivery Program Objective: 4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.3.1.1 Ensure development assessment, building certification and subdivision certification activities are completed efficiently and in accordance with legislation	Development Assessment	1. Capture the number of applications and processing times, together with a commentary on development trends and report to Council quarterly	1. 100%	1. 100%	On target. Applications determined year to date (1 July 2020 to 31 December 2020) include: 681 Development Applications with an average processing time of 49 days, 117 Modifications with an average processing time of 36 days, 517 Building Construction Certificates with an average processing time of 12 days and 197 Complying Development Certificates with an average processing time of 12 days.
4.3.1.2 Ensure the Development Assessment Panel operates in accordance with their charter and all applications are accurately determined	Development Assessment	1. Have no successful legal appeals relating to process errors	1. 100%	1. 100%	On target. No legal appeals have been received during the July-Dec 2020 period.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.02 Develop a Regional Integrated Transport Strategy (Multi-year project)	Infrastructure Planning, (Strategy)	1. Deliver project according to approved project plan (Develop a Regional Integrated Transport Strategy)	1. 100%	1. 100%	On target. Planning has commenced on the production of the strategy and the key inputs and principles for consideration. The strategy will be aligned and informed by the Local Strategic Planning Statement.
4.4.1.03 CW Footpath, Cycleway and Pedestrian works	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath, Cycleway and Pedestrian works)	1. 100%	1. 100%	On target. A number of sections of path have already been constructed (including Burrawan and Ackroyd streets) with the remainder to be complete before the end of financial year.
4.4.1.10 CW Lake Road - continuation of detailed design of dual lanes - Jindalee to Fernhill intersections and Chestnut Road to Ocean Drive - multi-year project	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Lake Road - continuation of detailed design of dual lanes)	1. 100%	1. 100%	Achieved. Project complete. The project was delivered behind the original schedule due to an increase in scope. Construction of the works is now pending allocation of budget in future financial years.
4.4.1.12 CW Beechwood Road - continue the design for Stages 5 and 6 of Beechwood Road reconstruction - Riverbreeze to Waugh Street - multi-year project	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Beechwood Road - continue the design for Stages 5 and 6 of Beechwood Road reconstruction (Riverbreeze to Waugh Street)	1. 100%	1. 100%	On target. Original schedule revised. Stage 5 designs completed during quarter one of 20202021. Stage 6 is limited to concept designs only, including higher level crossing of Yippen Creek to improve flood access. Progressing in accordance with planning decision from Council regarding primary flood access prior to progressing the design. Expected to be complete in 2020-2021 financial year.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.13 CW Hastings River Drive - Hughes Place to Boundary Street upgrade (Multi-year project)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Hastings River Drive - Hughes Place to Boundary Street upgrade)	1. 100%	1. 85%	Behind schedule. This project continues from 2017-2018 financial year. Design consultant engaged to undertake detailed design and environmental approvals. Detailed designs are nearing completion. The contractor has experienced some delays in meeting scheduled progress with the project only recently progressing to the final stage of Development Approval submission. The construction of this segment of Hastings River Dr is subject to additional funding being allocated/secured.
4.4.1.21 CW Dunbogan Bridge - Reid Street - undertake substructure rehabilitation (Multi-year project)	Infrastructure Planning	1. Deliver project according to approved project plan (Dunbogan Bridge - Reid Street)	1. 100%	1. 100%	On target. Pedestrian Balustrade Rail (PBR) replacement for the Dunbogan Bridge delivery on track. Engagement of contractor to deliver Project proceeding following Request for Tender T-20-18 and approval to proceed following Ordinary Council Meeting in September 2020. Commencement of fabrication in November 2020, and onsite works in January 2021.
4.4.1.22 CW Kindee Bridge - structural repairs and Bridge Replacement optioneering (Multi-year project)	Infrastructure Planning	1. Deliver project according to approved project plan (Kindee Bridge - structural repairs and bridge replacement optioneering)	1. 100%	1. 100%	On target. Stage 2 structural repair works complete in October 2020. Planning underway for Stage 3 works (pile repairs) for continued delivery in 2020-2021 and 2021-2022. Bridge replacement optioneering complete, community consultation regarding future replacement options planning underway with engagement commencing in February 2021.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.32 Continue corridor planning - Kendall Road - Ocean Drive - Hastings River Drive regional road corridor (MR538/MR600) - multi-year project	Infrastructure Planning	1. Corridor planning - Kendall Road - Ocean Drive- Hastings River Drive regional road corridor commenced	1. 100%	1. 100%	On target. This project has progressed and is currently on target. Council's contractor has completed Working Paper 1 Site Inspection Report, and Working Paper 2 Current Performance.
4.4.1.34 CW Kew Main Street Upgrade	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Kew Main Street Upgrade)	1. 100%	1. 85%	Behind schedule. This project continued from the 2017-2018 financial year following the announcement of funding from the Federal Government. The detailed design phase of the project is currently nearing completion with multiple rounds of community consultation now complete. The project has been delayed due to the efforts required to ensure the community is accepting of what is proposed in the design. Construction works are expected to commence in April 2021 and completed in quarter one of 2021-2022.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.37 CW Local Roads Proactive Transport Program	Infrastructure Planning, (Infrastructure Operations)	1. In accordance with adopted programs and preventative maintenance requirements (Local Roads Proactive Transport Program)	1. 100%	1. 100%	On target. The 2020-21 Road Rehabilitation and Resealing Program is currently in the planning phase with the program likely to include the following projects: Planning Phase (Road Resurfacing and Rehabilitation): Toorak Ct, Port Macquarie Acacia Ave, Port Macquarie Highfields Cct, Port Macquarie Hay St, Port Macquarie Ballina Cr, Port Macquarie Herschell St, Port Macquarie (dependent on funding) Ocean Dr, Bonny Hills (Binbilla to Panorama) (dependent on funding) Wingham Rd, Comboyne (dependent on funding) The rehabilitations and resurfacing has already commenced and will be progressively completed until June 2021. The final program dates are yet to be finalised. Delivery Phase (Road Resurfacing and Rehabilitation): Belah Rd, Port Macquarie - completed Jindalee Rd, Port Macquarie - completed Comboyne Rd, Comboyne (Township to Stennets) - underway Planning Phase (Road Resealing): Lighthouse Beach Local Streets, Port Macquarie Greenmeadows Local Streets, Comboyne Widderson St, Port Macquarie Kindee Rd, Kindee Bangalay Dr, Port Macquarie. The reseals are likely to commence in January starting with the Greenmeadows area and progressively completed over the hotter summer period until March 2021. The final programme dates are yet to be finalised.

Your Natural and Built Environment Page 85

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.42 CW John Oxley Drive Upgrade – Detailed Design – The Ruins Way to Wrights Road (Oxley Highway)	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (John Oxley Drive Upgrade)	1. 100%	1. 100%	On target. Local consultants Hopkins Consulting are nearing completion of the detailed design phase with 100% design deliverables being submitted to council during this reporting period. The construction phase of the project is pending the availability of budget in future FY's.
4.4.1.44 Conduct sealed road network condition survey	Infrastructure Planning	1. Undertake condition rating of Council's transport assets by 30 June 2021	1. 100%	1. 100%	On target. This project was expected to commence in early 2021, though due to unexpected absences of team key members will delay commencement and completion to later in 2020-2021.
4.4.1.45 CW Ocean Drive duplication - Matthew Flinders Drive to Greenmeadows (Multi-year project)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Ocean Drive duplication - Matthew Flinders Drive to Greenmeadows)	1. 100%	1. 100%	On target. Ongoing progress and discussion with Transport for NSW (T4NSW) during this reporting period, including the proposed project steering group initiation with T4NSW as co project sponsor. The progress and development of the construction tender documentation will be the initial focus for the project steering group, noting also that the overall project funding shortfall of \$30M remains.
4.4.1.46 CW Design and investigations for Gordon Street Pavement Reconstruction and Service Relocations - between Ocean Drive and Horton Street	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Design and investigations for Gordon Street Pavement Reconstruction)	1. 100%	1. 100%	Achieved. Design project complete. Construction planning commencing (refer separate line item for construction).

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.48 Development Contribution Plan (Roads) Review and Update	Infrastructure Planning	1. Deliver project according to approved project plan (Development Contribution Plan (Roads) Review and Update)	1. 100%	1. 90%	Monitoring required. Project scoping was deferred due to other higher priority program activities. This project will be reinitiated with the Strategy Group, which is yet to occur. Planning to occur by April 2021.
4.4.1.49 CW Transport and Traffic various design works - additional Transport and Stormwater Designs	Infrastructure Planning	1. Deliver project according to approved project plan (Transport and Traffic various design works - additional Transport and Stormwater Designs)	1. 100%	1. 100%	On target. Additional designs and transport and traffic designs are undertaken throughout the year as required. Design works for this quarter have been prioritised for previously identified Operational Plan projects, and further design will be done in the later quarters of this year as design work slows down during construction phases of other projects.
4.4.1.51 CW Installation of new bus shelters as per the Community Passenger Transport Infrastructure Grant Scheme (CPTIGS) Program	Infrastructure Planning, (Project Delivery)	1. Bus shelter installations completed as per the program	1. 100%	1. 100%	On target. Bus Shelter installation ongoing since last reporting period and due for completion prior to June 2021.
4.4.1.52 AUS-SPEC Review - Undertake a comprehensive review of Councils full suite of design and construction specifications - multi-year project	Infrastructure Planning	1. Deliver project according to approved project plan (AUS- SPEC Review)	1. 100%	1. 40%	Behind schedule. Implementation of revised specifications have been delayed by other higher priority projects. This project is continuing and ongoing.
4.4.1.55 CW Beach to Beach - shared path project at Camden Haven	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Beach to Beach - shared path project at Camden Haven)	1. 100%	1. 100%	Achieved. Final section of D9 path installation is now complete.
4.4.1.59 CW Gordon/Horton Street - intersection upgrade - details designs	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Gordon/Horton Street - intersection upgrade - details designs)	1. 100%	1. 100%	On target. Project was placed on hold pending advice from Transport for NSW regarding the approval process for the traffic signal design. The project has now recommenced and is expected to be complete by end of financial year.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.61 CW Continuation of Bago Road Rehabilitation (Milligan's Rd to Bluewater Cres)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Bago Road Rehabilitation - Milligan's Rd to Bluewater Cres)	1. 100%	1. 100%	Achieved. Works complete.
4.4.1.62 CW Reconstruction of The Ruins Way (Major Innes Road to Sitella St)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Reconstruction of The Ruins Way (Major Innes Road to Sitella St)	1. 100%	1. 100%	Achieved. Construction has progressed to completion during this reporting period. The Ruins Way upgrade was successfully re opened to traffic in December 2021.
4.4.1.63 CW Pembrooke Road - Stoney Creek Bridge Upgrade - Detailed Design	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Pembrooke Road - Stoney Creek Bridge Upgrade - Detailed Design)	1. 100%	1. 75%	Behind schedule. Project scope of works has been finalised and design phase project planning has commenced. Project is expected to carry over into the 2021- 2022 financial year due to the complexity of the design and delay in design commencement.
4.4.1.64 CW Koala Street Upgrade - Concept Design	Infrastructure Planning	1. Deliver project according to approved project plan (Koala Street Upgrade - Concept Design)	1. 100%	1. 100%	On target. Project has been assigned to a Project Officer and a design review and preliminary concept design has been prepared for review in December.
4.4.1.65 CW Scrubby Creek Bridge - Detailed Design	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Scrubby Creek Bridge - Detailed Design)	1. 100%	1. 100%	On target. Construction contract has been awarded to Eire constructions with works commenced in October 2020. Completion is expected by Christmas 2020 subject to weather.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.66 CW Kindee Bridge Upgrade Detailed Design	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Kindee Bridge Upgrade - Detailed Design)	1. 100%	1. 75%	Behind schedule. Kindee bridge maintenance and repair works have been prioritised ahead of the initiation of this broader bridge replacement project. Project initiation now expected in the last quarter of 2020-2021 financial year.
4.4.1.67 Transport Network Improvement Planning Project - Options Assessment and Strategic Business Case (Including Review of Orbital Road Options) - (multi-year project)	Infrastructure Planning	1. Deliver project according to approved project plan (Transport Network Improvement Planning Project)	1. 100%	1. 100%	On target. The Transport Network Improvement Planning Project has continued in 2020-2021 with key components including stakeholder and community consultation undertaken in the first quarter. As part of the consultation process, Transport for NSW were allowed the opportunity to review preliminary studies in November and December. A revised program based on this review is expected to be developed and provided in early 2021.
4.4.1.70 CW Pedestrian Refuge - Horton Street - Clarence Street and William Street - Detailed Design and Construction	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Pedestrian Refuge - Horton Street - Clarence Street and William Street - Detailed Design and Construction)	1. 100%	1. 80%	Behind schedule. This project requires a level of community and Town Centre Master Plan Committee engagement prior to completion of the design. This is expected to push the completion of the works into the 2021-2022 financial year.
4.4.1.71 Work with National Parks and Wildlife Services to adjust road boundaries	Infrastructure Planning	1. Boundary adjustments commenced	1. 100%	1. 20%	Behind schedule. Discussion have been initiated with NPWS for the adjustment of road boundaries, however still no response. The adjustment of Houston Mitchell Drive is progressing with formal revocation of the National Park complete - now land acquisition and dedication to public road can occur.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.77 CW Shared pathway Ocean Drive (Brotherglen Drive to Sirius Drive Lakewood)	Infrastructure Planning	1. Deliver project according to approved project plan (Shared pathway Ocean Drive - Brotherglen Drive to Sirius Drive Lakewood)	1. 100%	1. 100%	Achieved.
4.4.1.80 CW Boundary Street Upgrade - Detailed Design and Environmental Approvals	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Boundary Street Upgrade - Detailed Design and Environmental Approvals)	1. 100%	1. 100%	On target. Detailed design contract awarded to local consultant Hopkins. Design works progressing. Design and investigations will be ongoing into the 2021 -2022 financial year based on consultants program.
4.4.1.81 CW Bril Bril Road Sealing - Investigations and concept design	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Bril Bril Road Sealing - Investigations and concept design)	1. 100%	1. 90%	Monitoring required. Project Planning delayed by COVID and other grant funded priority projects. Project design phase expected to be continue into 2021-2022 FY.
4.4.1.82 CW School to School share path project - detailed design and planning approvals for highest priority sections	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (School to School share path project - detailed design and planning approvals for highest priority sections)	1. 100%	1. 100%	On target .Project planning has commenced. With no obvious construction opportunities, the funding for this financial year is expected to be expended on design and approvals. It is likely that the budget will be sufficient to complete these works however, some funds may be carried over into the 2021-2022 financial year.
4.4.1.83 CW Gordon Street Upgrade - Road Resurfacing, Stormwater flood mitigation and water main renewal works (multi-year project)	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Gordon Street Upgrade - Road Resurfacing, Stormwater flood mitigation and water main renewal works)	1. 100%	1. 100%	On target. Construction planning underway with the construction expected to commence in March 2021. Construction tender advertised during Dec 2020, targeting Feb 2021 contract award. Project will carry over into 21/22 FY with additional funds to be allocated to allow completion of the project.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.84 CW Bago Road Rehabilitation of Stage 3 - Bluewater Crescent to Cameron Street	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Bago Road Rehabilitation of Stage 3 - Bluewater Crescent to Cameron Street)	1. 100%	1. 100%	On target. Project on track for completion prior to end of reporting period. Construction commenced in Dec 2020 ahead of program due to contractor availability.
4.4.1.85 Lake Cathie Bridge (Ocean Drive) - Level 3 Investigation and Durability Assessment	Infrastructure Planning	1. Deliver project according to approved project plan (Lake Cathie Bridge (Ocean Drive) - Level 3 Investigation and Durability Assessments)	1. 100%	1. 100%	On target. Level 3 Investigation and durability investigations for Lake Cathie Bridge progressing, with Project Planning underway. Funds diverted via T-20-18 in Ordinary Council Meeting in September 2020. Multi-year progress with planning focus and initial investigations (2020-2021) and Level 3 investigations and procurement activities (2021-2022).
4.4.1.86 Limeburner's Bridge (Shoreline Drive) - Level 3 Investigation and Durability Assessment	Infrastructure Planning	1. Deliver project according to approved project plan (Limeburner's Bridge (Shoreline Drive) - Level 3 Investigation and Durability Assessment)	1. 100%	1. 100%	On target. Level 3 Investigation and durability investigations for Limeburners Bridge progressing, with Project Planning underway. Funds diverted via T-20-18 in Ordinary Council Meeting in September 2020. Multi-year progress with planning focus and initial investigations (2020-2021) and Level 3 investigations and procurement activities (2021-2022).
4.4.1.87 CW Thompsons Bridge Replacement	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Thompsons Bridge Replacement)	1. 100%	1. 100%	On target. Construction underway and near completion. December rain events have negatively impacted project critical path. Project will be complete in early 2021.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.88 CW Lorne Road Sealing - Investigations and concept design	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Lorne Road Sealing - Investigations and concept design)	1. 100%	1. 100%	On target. Planning for the project is ongoing with survey well progressed. The strategic design has commenced in November 2020 with completion expected by the end of financial year 2020-2021,
4.4.1.89 Undertake a detailed traffic analysis of the Sancrox/Thrumster/Fernbank growth area to identify high priority works	Infrastructure Planning	1. Deliver project according to approved project plan (Undertake a detailed traffic analysis of the Sancrox/Thrumster/Fer nbank growth area to identify high priority works)	1. 100%	1. 100%	On target. A draft project charter has been developed. The charter has required extensive internal consultation, data gathering and technical review. It is expected that the charter will be finalised in early 2021.
4.4.1.90 Slipping of Hibbard Ferry	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Slipping of Hibbard Ferry)	1. 100%	1. 100%	On target. Hibbard Ferry slipping was delayed by the slipways, however, is on schedule to commence on 8 February 2021. All initial planning and parts acquisition is complete.
4.4.1.91 CW King Creek Road - Shoulder Sealing and Safety Barrier Installation	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (King Creek Rd - Shoulder Sealing and Safety Barrier Installation)	1. 100%	1. 100%	On target. Project planning and design for the project are now nearing completion with construction expected to commence in Q3 of 2020-2021 FY. Works are expected to be complete within the 2020-2021 financial year.
4.4.1.92 CW Roundabout Installation Owen and Home Streets	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Roundabout Installation Owen and Home Streets)	1. 100%	1. 85%	Behind schedule. This is NSW Government Grant funded project. Project has been consolidated with the Lord St roundabout project. The combined funding of these projects will allow this roundabout to be delivered. Detailed designs are near completion with construction expected to commence in early 2021.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.93 CW Roundabout Installation Lord and Herschell Streets	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Roundabout Installation Lord and Herschell Streets)	1. 100%	1. 100%	Monitoring required. This is NSW Government Grant funded project. This project has been combined with the Owen and Home Street roundabout project. The project funding has been consolidated to allow the Owen and Home roundabout to be delivered.
4.4.1.94 CW Roundabout Installation Nancy Bird Walton Drive, Kendall Road and Ocean Drive	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Roundabout Installation Nancy Bird Walton Drive, Kendall Road and Ocean Drive)	1. 100%	1. 100%	On target. This line item supplements funding for the Kew Main Street upgrade project.
4.4.1.95 CW Bago Road Rehabilitation - Stage 1 - finalisation of Milligans Road resurfacing	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Bago Road Rehabilitation - Stage 1 - finalisation of Milligans Road resurfacing)	1. 100%	1. 100%	On target. Works complete.
4.4.1.96 CW Design and Construction of the Pappinbarra Bridge Replacement	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Design and Construction of the Pappinbarra Bridge Replacement)	1. 100%	1. 100%	On target. Project initiation and design phase planning has been completed in Q1 20/21, A tender for the detailed design of the new bridge has been advertised and awarded to local consultants King and Campbell during Nov 2020. The design phase of this project will continue for the remainder of the 2020-2021 financial year. The construction phase of this project is expected to commence in 2021-2022 financial year.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.97 CW Review of Car Parking Strategy	Infrastructure Planning	1. Deliver project according to approved project plan (Review of Car Parking Strategy)	1. 100%	1. 100%	On target. Project has been assigned to a project Officer, who has developed a draft charter for review in December. It is expected an Request For Quote for external contractors to undertake can be placed in early 2021.
4.4.1.98 CW The Hatch Rd - Reseal Sections - Investigation and design for sealing 3kms of Rd	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (The Hatch Rd - Reseal Sections - Investigation and design for sealing 3kms of Rd)		1. 100%	On target. Funding for the project was formally announced in November 2020. Design and approvals are expected to be completed by late 2021 with construction expected to be complete by mid-2022.
4.4.1.99 CW O'Neills Bridge Replacement - Finalise Land Aquisation	Infrastructure Planning	1. Deliver project according to approved project plan (O'Neills Bridge Replacement)	1. 100%	1. 90%	Monitoring required. This project is the resolution of outstanding land acquisition from a bridge construction project in 2018. There has been no progress of the acquisition by the Property Team due to no responses from the land owners. Continued follow up with the land owners will be undertaken. Followed up with Property Team in December 2020.
4.4.1.99-100 CW Bulli Creek Bridge Replacement - Finalise easements	Infrastructure Planning	1. Deliver project according to approved project plan (Bulli Creek Bridge Replacement)	1. 100%	1. 100%	Achieved.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.99-101 CW Ocean Drive Shared Path Pacific Hwy to Glen Haven Drive - (Undertake final land acquisitions)	Infrastructure Planning	1. Deliver project according to approved project plan (Ocean Drive Shared Path Pacific Hwy to Glen Haven Drive (Undertake final land acquisitions)	1. 100%	1. 90%	Monitoring required. This project is the resolution of outstanding land acquisition from a shared path construction project in 2017. There has been no progress of the acquisition by the Property Team due to no responses from the land owners. Continued follow up with the land owners will be undertaken. Followed up with Property team December 2020.
4.4.1.99-102 Wauchope CBD Pedestrian Redesign - All Stages	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Wauchope CBD Pedestrian Redesign - All Stages)	1. 100%	1. 100%	On target. The Wauchope CDB upgrade works are complete and open to the public. this was a multi-year project.
4.4.1.99-114 CW Captain Cook Bicentennial Drive Rehabilitation	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Captain Cook Bicentennial Drive Rehabilitation)	1. 100%	1. 100%	On target .Construction planning near completion during this reporting period. Site constraints re existing narrow road alignment and National Parks and Wildlife service boundaries are delaying finalisation of this construction planning piece. The project remains feasible for completion prior to end of financial year.
4.4.1.99-115 CW Highfield Circuit Pavement Resurfacing Works	Infrastructure Operations	1. Deliver project according to approved project plan (Highfield Circuit Pavement Resurfacing Works)	1. 100%	1. 100%	On target. Asphalt works are planned for April 2021 upon the conclusion of a local development on Highfield Circuit.

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.99-116 CW Maria River Road Sealing	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Maria River Road Sealing)	1. 100%	1. 100%	On target This project is being delivered in partnership with Kempsey Shire Council (KSC). A Memorandum of Understanding has been established with KSC during this reporting period, confirming PMHC as leading this delivery of this project. A detailed design and approvals outsourced engagement has also been let during this reporting period to local consultant GHD. The project will continue into the 2021-2022 FY as a multi-year project.
4.4.1.99-117 CW Pembrooke Road between Beechwood Rd - Stoney Creek Road Pavement Rehabilitation	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Pembrooke Road between Beechwood Rd - Stoney Creek Road Pavement Rehabilitation)	1. 100%	1. 100%	On target. Works are planned for commencement in June 2021 as per the works program and will extend into the 2021-2022 financial year. The project is expected to take about 3 months. This project will start upon completion of: Road Resealing - Port Macquarie local street Road Resealing - Comboyne local roads Asphalting - Hay St, Highfields Cct, Acacia Ave, Ballina Cres and Chestnut Rd.

Delivery Program Objective: 4.4.2 Develop and implement annual maintenance and renewal programs for transport assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.2.1 CW Undertake road resurfacing and rehabilitation works throughout the local government area in accordance with the rolling priority program and roads maintenance hierarchy	Infrastructure Planning, (Infrastructure Operations)	1. In accordance with adopted programs and preventative maintenance requirements (Road resurfacing works)	1. 100%	1. 100%	On target. The 2020-2021 Road Rehabilitation and Resealing Program is currently in the planning phase with the program likely to include the following projects: Planning Phase (Road Resurfacing and Rehabilitation): Toorak Ct, Port Macquarie Acacia Ave, Port Macquarie Highfields Cct, Port Macquarie Hay St, Port Macquarie Ballina Cr, Port Macquarie Herschell St, Port Macquarie (dependent on funding) Ocean Dr, Bonny Hills (Binbilla to Panorama) (dependent on funding) Wingham Rd, Comboyne (dependent on funding) The rehabilitations and resurfacing has already commenced and will be progressively completed until June 2021. The final programme dates are yet to be finalised. Delivery Phase (Road Resurfacing and Rehabilitation): Belah Rd, Port Macquarie - completed Jindalee Rd, Port Macquarie - completed Comboyne Rd, Comboyne (Township to Stennets) - underway Planning Phase (Road Resealing): Lighthouse Beach Local Streets, Port Macquarie Greenmeadows Local Streets, Comboyne Widderson St, Port Macquarie Kindee Rd, Kindee Bangalay Dr, Port Macquarie. The reseals are likely to commence in January starting with the Greenmeadows area and progressively completed over the hotter summer period until March 2021. The final program dates are yet to be finalised.

Delivery Program Objective: 4.4.2 Develop and implement annual maintenance and renewal programs for transport assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.2.2 Carry out annual unsealed road maintenance program including resheeting, grading, drainage and vegetation and rural roadside vegetation clearing	Infrastructure Planning, (Infrastructure Operations)	1. In accordance with adopted programs and preventative maintenance requirements (annual unsealed road maintenance program)	1. 100%	1. 100%	On target. Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.
4.4.2.3 Carry out annual sealed road maintenance program including resurfacing, jetpatching, heavy patching and installation of roadside furnishings	Infrastructure Planning, (Infrastructure Operations)	1. In accordance with adopted programs and reactive maintenance requirements based on risk (annual sealed road network maintenance program)	1. 100%	1. 100%	On target. Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.
4.4.2.4 Undertake bridges and culverts maintenance and repair program including inspections, monitoring and bridge repair works	Infrastructure Planning, (Infrastructure Operations)	1. In accordance with adopted programs and reactive maintenance requirements based on risk (bridges and culverts maintenance and repair program)	1. 100%	1. 100%	On target. Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.
4.4.2.5 Carry out reactive maintenance to Koala Food Trees and Koala Fencing on Link Rd (Ocean Dr)	Infrastructure Planning, (Environmental Services)	1. In accordance with adopted programs and reactive maintenance requirements based on risk (reactive maintenance to Koala Food Trees and Koala Fencing)	1. 100%	1. 100%	On target. Audit of KPoM completed with list of actions to be undertaken in Q3 and Q4.

Delivery Program Objective: 4.4.2 Develop and implement annual maintenance and renewal programs for transport assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.2.6 Bridgeworks and Road Rehabilitation Program - Undertake regular bridge and geotechnical road pavement tests to inform and develop programme	Infrastructure Planning	1. Deliver project according to approved project plan (Bridgeworks and Road Rehabilitation Program)	1. 100%	1. 100%	On target. The Bridges and Structure Engineer has continued investigations and inspections in preparation for future programs. All required pavement investigations were undertaken in this period, with more detailed investigations planned for 2021.
4.4.2.7 CW Timber Bridges – Renewals and Repairs	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Timber Bridges – Renewals and Repairs)	1. 100%	1. 100%	On target. The 2020-2021 Bridgeworks Programme is currently in the planning phase with the programme likely to include the following projects: Planning Phase: Kindee Bridge, Kindee - Stage 3 Pile strengthening Black Creek Bridge, Lorne Logans Crossing Bridge, Kendall Stoney Creek Bridge, Pembrooke Roods Bridge, Bellangry Bril Bril Bridge, Rollands Plains (dependent on resources) Donkins Flat Bridge, Comboyne (dependent on resources) Old School Bridge, Herons Creek (dependent on resources) The bridge reconstruction and major works have already commenced and will be progressively completed until June 2021. The final programme dates are yet to be finalised. Delivery Phase: Kindee Bridge, Kindee - Stage 2 complete Foxes Bridge, Rollands Plains - complete Tipperary Bridge, Lorne - complete Thompsons Bridge, Rollands Plains - underway

Delivery Program Objective: 4.4.3 Develop and implement traffic and road safety programs

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.3.1 Develop a Road Safety Action Plan and undertake associated safety education and awareness programs identified in the plan	Community	1. Undertake road safety educational programs	1. 100%	1. 100%	On target. Maintaining and improving on the road safety program that operated before the Education Team started has been a priority of the team. Localising our campaigns through local places and people has been a priority. The team have worked hard to develop collaborative partnerships with Transport for NSW and the local Police in order to ensure we are delivering the best campaigns to meet the needs of our community. Campaigns that have run or have been developed to run over the holiday season are: Road Safety Week - yellow ribbon Little Blue Dinosaur Speed on Country Roads-VMS boards on 9 local roads Double demerits Plan B -'What's your Plan B' competition.
4.4.3.2 Install and maintain street lights in accordance with identified priorities	Infrastructure Planning	1. Deliver street lighting program according to approved schedule and prioritisation		1. 100%	On target. This project is expected to commence in early 2021 for delivery later in 2020-2021.

Community Strategic Plan: 4.5 Plan for integrated and connected communities across the Port Macquarie-Hastings area

Delivery Program Objective: 4.5.1 Carry out strategic planning to manage population growth and provide for co-ordinated urban development

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.5.1.07 Review Local Environmental Plan (LEP) and Development Control Plan (DCP) provisions to promote development of the Yippin Creek Urban Release Area (UGMS Action 4)	Strategy	1. Report to Council regarding draft planning outcomes by 30 June 2021	1. 100%	1. 100%	On target. The planning proposal is progressing well and is on budget and schedule. The issue of flood free access is the prominent issue for the Planning Proposal and will require resolution prior to the referral to Department Planning, Industry and Environment.

Community Strategic Plan: 4.5 Plan for integrated and connected communities across the Port Macquarie-Hastings area

Delivery Program Objective: 4.5.1 Carry out strategic planning to manage population growth and provide for co-ordinated urban development

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.5.1.08 Progress Council led precinct planning for the proposed Health and Education Precinct (UGMS Action 13)	Strategy	1. Continue support studies for a planning proposal in consultation with stakeholders by 30 June 2021		1. 100%	On target. The Health and Education Precinct Structure plan progresses on target and on budget. Transport is a key issue and State announcements of projects and funding will be critical to staging and timing of completion.
4.5.1.10 Review LEP and DCP provisions to promote appropriate housing choice options (UGMS Action 1)	Land Use Planning (Development Assessment)	1. Complete Housing Strategy by June 2021	1. 100%	1.95%	Monitoring required. Consultants preparing the Local Housing Strategy for the LGA undertook online targeted stakeholder engagement in late September 2020. The draft housing strategy is under preparation and anticipated to be presented to Council in March/ April 2021 and subject to Council's endorsement, will be placed on public exhibition.
4.5.1.11 Investigate the capacity of land at Ocean Dr/Houston Mitchell Dr for light industrial use and at Ocean Dr/Bonny View Dr for light industrial development or for use as a school (UGMS Act 17)	Land Use Planning (Development Assessment)	1. Final report to Council re Local Environmental Plan (LEP) and Development Control Plan (DCP) amendments by 30 June 2021	1. 100%	1. 95%	Monitoring required. Council has identified this Planning Proposal for finalisation by 30 June 2021 under the NSW Government's Public Spaces Legacy Program. Revisions are proposed by the Proponent to the Planning Proposal and draft Development Control Plan (DCP) provisions to respond to community and State Agency concerns. It is anticipated a report will be presented to Council in February 2021, and subject to Council's endorsement, a revised Planning Proposal and draft DCP will be re- exhibited.
4.5.1.14 Review the Port Macquarie-Hastings Heritage Inventory (UGMS Action 31)	Strategy	1. Complete Stage 2 of the Heritage Inventory review and report to Council by 30 June 2021	1. 100%	1. 90%	Monitoring required. The Heritage Inventory has been documented in Council's Project Planning framework. it is yet to be determined to be a priority for the resources and is being monitored for the delivery timeline.

Community Strategic Plan: 4.5 Plan for integrated and connected communities across the Port Macquarie-Hastings area

Delivery Program Objective: 4.5.1 Carry out strategic planning to manage population growth and provide for co-ordinated urban development

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.5.1.15 Port Macquarie Civic Precinct - Commence investigations for strategic landuse planning of Council owned property	Strategy	1. Investigations commenced for Port Macquarie Civic Precinct Strategic Landuse Planning of Council owned property	1. 100%	1. 100%	On target. The Strategic Land Use Planning is the subject of a budget proposal pending prioritisation of funding. On approval of the budget the Strategy team will prioritise execution of this item.
4.5.1.17 Fernbank Creek/Sancrox - Support Studies	Strategy	1. Fernbank Creek/Sancrox - Support Studies undertaken	1. 100%	1. 100%	On target. The progression of the Structure Plan is on target and on budget.

Delivery Program Objective: 4.5.2 Plan for infrastructure that supports population growth

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.5.2.2 Continue the review of the Major Roads Contributions Plan for completion in 2020-2021 (UGMS Action 23)	Strategy	1. Complete review of draft works program for review of the Major Roads Contributions Plan by 30 June 2021	1. 100%	1. 100%	On target. A review of the Major Roads Contribution Plan will be based on a works program provided by the Transport and Stormwater Network Team. The works program has resource constraints and higher priority projects. Following the production of the new works program, costings and priorities this information will be used to inform the review of the Major Roads Contribution Plan.

Community Strategic Plan: 4.6 Restore and protect natural areas

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.6.1.01 Undertake strategic biosecurity (weed management) program to restore and conserve the natural environment of the Mid North Coast	Environment and Regulatory Services	1. 1,500 km of high risk/priority pathways inspected	1. 100%	1. 100%	On target. 984.7 km completed, additional km's will be completed in Q3 and Q4.

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. 10 media engagements on biosecurity matters	2. 100%	2. 100%	On target. COVID has reduced some media opportunities but more will be sought in Q3 and Q4.
		3. 10 regional weed meetings/workshops attended	3. 100%	3. 100%	On target. Five completed to date, more to be achieved in Q3 and Q4.
		4. 120 urban property inspections undertaken	4. 100%	4. 100%	On target. 76 inspections done to date. Remaining will be done over Q3 and Q4.
		5. 153 high risk site inspections undertaken	5. 100%	5. 100%	On target. 199 inspections undertaken. Completed task for 2020 Operational Plan year.
		6. 2,300 km of roads inspected and treated as high risk pathways	6. 100%	6. 100%	On target. 825km treated to date with a remaining 137 labour days still to allocate to this task. Work will continue in Q3 and Q4.
		7. 240 rural/semi-rural property inspections undertaken	7. 100%	7. 100%	On target. 76 inspections completed, additional inspections to be done in Q3 and Q4.
		8. 60 days managing priority weeds in Council's drainage reserves	8. 100%	8. 100%	On target. 33 days managing priority weeds in Council's drainage reserves is completed.
		9. 680 ha inspected and treated for priority weeds	9. 100%	9. 100%	On target 304 ha of land inspected and treated for priority weeds. 100 labour days remaining for this task.
		10. Deliver two training workshops provided to community and relevant stakeholders	10. 100%	10. 100%	On target. One workshop delivered in 2020
4.6.1.02 Tenure blind aquatic weed control targeting mainly Salvinia in static water bodies	Environment and Regulatory Services	1.46 sites inspected and treated for aquatic weeds	1. 100%	1. 100%	On target. Six site inspected, treated for aquatic weeds but work on this target is not to commence with a full roster until Q3.

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.6.1.05 Implement the Bushland Regeneration Management Program and collaborate with various community groups (e.g. Landcare)	Environment and Regulatory Services	1. All Council reserves are mapped to determine the ecological value based on benefits and constraints	1. 100%	1. 100%	On target. Ecosure consultancy has completed part 1 of the brief which identifies a decision making matrix to assist Council in managing bushland site selection and management practices.
		2. Undertake management of Council reserves that are deemed of significant ecological value following guidance and direction from the Ecological Restoration report	2. 100%	2.0%	Yet to commence. Works to commence in Q3.
4.6.1.06 Inform and educate residents, industry and community groups about Council's tree management requirements within the Port Macquarie-Hastings 2013 Development Control Plan (DCP)	Recreation, Property and Buildings	1. Develop and implement educational material and delivery program	1. 100%	1. 100%	On target. Educational material delivered via correspondence and conversations regarding different legislative requirements, including civil advice letters, Local Land Services, Office of Environment and Heritage jurisdiction, meetings with contractors and residents regarding Development Control Plan provisions and application process.
		2. Provide advice in accordance with service standards and industry best practice	2. 100%	2. 97%	Behind schedule. Total number of active CRM's is 471. 246 (Public), 99 (storm), 77 (Private), 26 (Illegal tree works) and 23 (Other). 35 CRM's currently exceed service standard. Additional information: 131 enquires (74 public and 57 private phone and email enquires). This does not include calls transferred from call centre to mobile or landline. In addition, there were 42 internal enquiries and 10 hours for rural road/fire related inspections.

Your Natural and Built Environment Page 104

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		3. Undertake investigations in relation to all reported illegal tree works	3. 100%	3. 100%	On target. 26 illegal tree incidents reported and investigated during this reporting period.
4.6.1.08 Commence implementation of identified actions from the adopted Koala Population Recovery Strategy (UGMS Action 29)	Environment and Regulatory Services	1. Detailed map which identifies Koala Road strike hot spots in Port Macquarie Urban area	1. 100%	1. 100%	Achieved. Map produced.
4.6.1.12 Undertake bush regeneration on sites related to development and infrastructure projects	Environment and Regulatory Services	1. Consultation with community undertaken	1. 100%	1. 100%	On target. Currently finalizing contracts for works in 2021 on infrastructure projects to ensure works are compliant with vegetation management plan requirements.
4.6.1.13 Undertaken priority weed control for high priority weed species	Environment and Regulatory Services	1. Management on sites is monitored and reported on upon completion of works	1. 100%	1. 100%	On target. Priority weed control is occurring by both Council staff and contractors. Ongoing monitoring and control will continue in Q3 and Q4.
		2. New contracts are scoped, briefs are prepared and services are secured for work for 20/21 operational year	2. 100%	2. 100%	On target. Contracts released and actioned for Bitou bush and Gloriossa Lily, additional works to be released in Q3 and Q4.
4.6.1.14 Undertake targeted control of priority weed trees on a tenure-blind basis	Environment and Regulatory Services	 Contract sites are monitored and reported on upon completion of works 	1. 100%	1. 100%	On target. Works are well over half way completed for this target and are on track for this time of year. New and final contracts for works will be undertaken in early 2021 with all works to be completed by end of financial year. Contracted work for Lighthouse Beach bitou bush and gloriosa lilly at multiple locations.

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. New contracts are scoped, briefs are prepared and services are secured for work for 20/21 operational year	2. 100%	2. 100%	On target. Contracts released and fulfilled for Camphour Laurel works on Lord Street. Additional contracts being released in Q3 and Q4.
4.6.1.15 Environmental Compliance Auditing	Environment and Regulatory Services	1. Creation of template site inspection checklist		1. 100%	On target. A draft auditing document is currently being used. A finalised version will be built over Q3 and Q4 by the new Environmental Audit Officer.
		2. Toolbox talks have been held with relevant teams to relay information regarding environmental management procedures	2. 100%	2. 100%	On target. Toolbox talks have been conducted.
		3. Undertake 10 site inspections throughout the year to audit environmental compliance	3. 100%	3.0%	Yet to commence. Project is scheduled to begin in Q3.
4.6.1.16 Commence the Natural Resources asset and maintenance register	Environment and Regulatory Services	1. Carry out priority maintenance actions within the budget allocated	1. 100%	1. 100%	On target. Work is scheduled for fence maintenance in early 2021 and discussions with Roads Team has occurred to inform them of non-compliance with koala plan of management and the need for a koala stile to be built. Further discussions to be conducted in the third quarter of 2020-2021.

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		2. Create the Natural Resources Management asset register APP which records location and condition of assets	2. 100%	2. 100%	On target. Work is ongoing with the use of collector to record location and status of assets. New Environmental Audit Officer began in December which will enable even more work to be completed in before the end of financial year.
		3. Map all Natural Resources Management assets	3. 100%	3.0%	Yet to commence. Works to commence in Q3.
		4. Write the management plan which outlines maintenance and replacement actions	4. 100%	4.0%	Yet to commence. Works to commence in Q4.
4.6.1.17 Review of Environmental Factors (REF) Training and process/capability improvement	Environment and Regulatory Services	1. Conduct a Pre and Post training survey of REF Authors	1. 100%	1.0%	Yet to commence. Works will commence in Q4.
		2. Create new training and process documents (Environmental inducti on and awareness training, Environmental Work Method Statement (EWMS), procedures, environmental inspection checklist)	2. 100%	2.0%	Yet to commence. Works will commence in Q4 with new resources.
		3. Establish a baseline data set - tracking duration of REF process	3. 100%	3. 100%	On target. Data collection is occurring.

Your Natural and Built Environment Page 107

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
		4. Provide internal staff with 4 environmental training opportunities during the year	4. 100%	4. 100%	On target. Two training events have occurred in first half of the year including REF training and also illegal clearing and reporting training. Aboriginal heritage training scheduled for Q3.
		5. Write a report which details out the demonstrated actions against recommendations, prior to deadlines, which are stated in Houston Mitchell Drive audit report		5.0%	Yet to commence. Commence work in Q4.
4.6.1.18 Partridge Creek Acid Sulphate Soils Wetland Management	Environment and Regulatory Services	1. 12 site inspections of weir conducted each year	1. 100%	1. 100%	On target. Six site inspections completed, six more to be completed over Q3 and Q4.
4.6.1.19 Actions from the Ecological Restoration report implemented	Environment and Regulatory Services	1. Bushland management undertaken on identified sites	1. 100%	1. 100%	On target. Ongoing bushland management work is being undertaken in the LGA as required.
		2. Creation of policy for native vegetation offset to better reflect current management practices	2. 100%	2. 0%	Yet to commence. Works will commence in Q4.
		3. Investigation for new lands for Development Control Plan (DCP) offsets	3. 100%	3. 0%	Yet to commence. Works will commence in Q4.
		4. Investigation of feasibility of bushland reserves becoming stewardship sites	4. 100%	4. 0%	Yet to commence. Works will commence in Q3.

Delivery Program Objective: 4.6.1 Develop and implement a range of programs for the environmental management of lands within the local government area

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.6.1.20 Wild deer management in PMHC	Environment and Regulatory Services	1. Implement PMHC specific management actions generated from the Hastings Wild Deer Program	1. 100%	1. 100%	On target. Culling of deer at Port Macquarie Dam has occurred on three occasions, removal of 15 deer so far. Additional contracts being released in Q3 and Q4.
4.6.1.21 Tip Gravel Road Environmental Protect Biodiversity Conservation (EPBC) Act Koala Management Plan	Environment and Regulatory Services	1. Inspect fences annually	1. 100%	1. 100%	On target. Fences are inspected on a quarterly basis.
inditugement hum		2. Submit compliance report outlining actions undertaken	2. 100%	2. 100%	Achieved. Report was submitted in November 2020. A non-compliance issue was identified with the speed humps needing to be reinstated. This request has been sent to Roads for action and rectification.
		3. Undertake camera monitoring 3 times per year	3. 100%	3. 100%	On target. Camera monitoring has taken place in November 2020.
4.6.1.22 Undertake audit of Coastal Vegetation State Environmental Planning Policy (SEPP) mapping	Environment and Regulatory Services	1. Map of Coastal Vegetation SEPP mapping audited for accuracy in PMHC LGA	1. 100%	1. 100%	On target. Initial works were undertaken by NSW government, Council is awaiting results.
		2. Report outlining mapping inaccuracies in PMHC LGA	2. 100%	2. 100%	On target. Completion of Aboriginal Archaeological work completed in Q2. REF is in for review with Environmental Planner. Application from Crown Lands license is pending.
4.6.1.23 Provide support for the implementation of the Coastal Koala Plan of Management (CKPoM)	Environment and Regulatory Services	1. Develop a program of actions that are relevant to the Natural Resource Management team which are generated from the CKPoM	1. 100%	1.0%	Not available. This project is no longer achievable in the 2020-2021 Operational Plan year as the CKPoM has not been adopted by Council.

Community Strategic Plan: 4.7 Provide leadership in the development of renewable energy opportunities

Delivery Program Objective: 4.7.1 Promote renewable energy outcomes within Council

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.7.1.06 CW Install solar energy systems at selected existing Council facilities	Recreation, Property and Buildings	1. Install solar energy systems at identified Council facilities	1. 100%	1. 100%	Achieved. The three PV projects for the Wauchope, Laurietion and Kendall Pool sites have been completed July 2020 and are operational.
4.7.1.09 CW Install Solar Panels at Port Macquarie Sewerage Treatment Plant (STP)	Infrastructure Operations, (Strategy)	1. Deliver project according to approved project plan (Install solar energy systems at Port Macquarie Sewerage Treatment Plant (STP)	1. 100%	1. 90%	Monitoring required. A design review of the PV installation at the Port Macquarie Sewage Treatment Plant is required. The installation program will be determined by the design review and is being monitored.
4.7.1.10 CW Installation of Solar Panels - Wauchope Water Treatment Plant (WTP)	Infrastructure Operations, (Strategy)	1. Deliver project according to approved project plan (Installation of solar energy panels - Wauchope Water Treatment Plant (WTP)	1. 100%	1. 100%	On target. The Wauchope Water Treatment Plant installations are on program.

Community Strategic Plan: 4.8 Increase awareness of issues affecting our environment, including the preservation of flora and fauna

Delivery Program Objective: 4.8.1 Ensure all Council operations comply with environmental standards and regulations

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.8.1.1 Operate and maintain water treatment plants in accordance with adopted maintenance programs and scheme requirements	Infrastructure Operations	1. Monitor plants continuously with plant breakdowns attended to within 24 hours	1. 100%	1. 100%	On target. All plants monitored via SCADA-C and outages actioned.
4.8.1.2 Operate the water supply network to ensure public health and safety	Infrastructure Operations	1. Ensure any public health and safety issues in relation to water supply are responded to in line with service standards	1. 100%	1. 100%	On target. Inquiries responded to in accordance with service standards.

Community Strategic Plan: 4.8 Increase awareness of issues affecting our environment, including the preservation of flora and fauna

Delivery Program Objective: 4.8.1 Ensure all Council operations comply with environmental standards and regulations

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.8.1.3 Maintain and operate storage dams in accordance with Australian National Committee On Large Dams (ANCOLD) guidelines	Infrastructure Operations	1. Ensure any issues in relation to the operation and maintenance of storage dams are handled in line with ANCOLD guidelines		1. 100%	On target. Dams being managed in accordance with ANCOLD guidelines.
4.8.1.4 Operate and maintain sewerage treatment plants in accordance with environmental licences, adopted maintenance programs and scheme requirements	Infrastructure Planning, (Infrastructure Operations)	1. Monitor plants continuously with plant breakdowns attended to within 24 hours	1. 100%	1. 100%	On target. All plants monitored via ClearSCADA and outages actioned.
4.8.1.5 Operate the sewerage network to ensure service delivery meets public health and safety requirements	Infrastructure Operations	1. Ensure any public health and safety issues in relation to sewerage network are responded to in line with service standards	1. 100%	1. 100%	On target. Enquiries responded to in accordance with service standards. Three reportable surcharges occurred in this quarter.

Delivery Program Objective: 4.8.2 Increase community awareness and enable access to the natural environment

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.8.2.1 Deliver bushfire preparedness and planning programs to the community	Environment and Regulatory Services	1. Attendance at BFMC and bushfire risk meetings - 90% participation	1. 100%	1. 100%	On target. Council staff were in attendance via video conference at the November 2020 meeting.
		2. Attendance at relevant industry training and workshops - 90% participation	2. 100%	2. 100%	On target. No meetings to attend in last quarter.
		3. CRM completion 100% within the relevant service standards - variable	3. 100%	3. 100%	On target. Customer requests are being answered in an appropriate time frame.

Your Natural and Built Environment Page 111

Community Strategic Plan: 4.8 Increase awareness of issues affecting our environment, including the preservation of flora and fauna

Delivery Program Objective: 4.8.3 Promote Biodiversity Programs

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.8.3.1 Continue implementation of identified actions from the adopted Biodiversity Strategy	Environment and Regulatory Services	1. Implement actions from the following plans (outlined in specific OP plan goals) Koala Recovery Strategy,Flying-fox Camp Mngt plan, Ecological restoration report, MNC Feral Deer Strategy		1. 100%	On target. Management of feral deer undertake, koala road strike map completed, flying fox management program undertaken.
4.8.3.2 PMHC in partnership with JO, KPS, and DPIE support the ongoing work of the Koala Recovery Partnership Program	Environment and Regulatory Services	1. Operational objectives of the Koala Recovery Partnership Program are met	1. 100%	1. 100%	On target. Research program to understand koala abundance based on vegetation was undertaken in quarter two with additional work to be completed in Q3 and Q4.
4.8.3.3 Dunbogan Flood Access - salt marsh offset	Environment and Regulatory Services	1. Salt Marsh offset contract is completed	1. 100%	1. 100%	On target. Tree removal works and weed contract is completed on site. Further planting and maintenance to occur in Q3 and Q4.



COVID-19 RECOVERY ADDENDUM TO THE ONE YEAR OPERATIONAL PLAN **2020-2021**

Community Strategic Plan: 1.1 Inform and engage with the community about what Council does using varied communication channels

Delivery Program Objective: 1.1.5 Develop an effective and coordinated community focused Communications Strategy

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
1.1.5.5 Communication – to community – use of funding/that projects have been added to Operational Plan - COVID RELIEF RESERVE FUNDING	Customer Experience and Communication	1. Community is informed of projects and funding via various communication channels including website, media release and social media	1. 100%	1. 100%	On target. Completion by end of Q3 in the 2020-2021 Financial year.

Community Strategic Plan: 2.1 Create a community that feels safe

Delivery Program Objective: 2.1.1 Support community safety initiatives

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.1.1.2 Work with Pappinbarra residents and the Rural Fire Service (RFS) to develop and implement a community fire-safety plan - COVID RELIEF RESERVE FUNDING	Community	1. Deliver project according to approved project plan (Work with Pappinbarra residents and the Rural Fire Service (RFS) to develop and implement a community fire-safety plan)		1. 100%	On target. Work and engagement has commenced with the community and the Wauchope RFS to develop this community plan. It is on target for completion by June 2021.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 113

Community Strategic Plan: 2.3 Provide quality programs, community facilities and public spaces, for example, community halls, parks and vibrant town centres

Delivery Program Objective: 2.3.1 Ensure access to community facilities and activities: including access to natural environment

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.1.3 Public Spaces Interpretation Strategy and Guidelines - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Public Spaces Interpretation Strategy and Guidelines)	1. 100%	1. 100%	On target. Project planning has commenced.

Delivery Program Objective: 2.3.2 Provide a range of inclusive sporting and recreational opportunities and facilities to encourage a healthy and active lifestyle

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.2.07 CW Laurieton Sports Complex – installation of multipurpose court - COVID RELIEF RESERVE FUNDING	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Laurieton Sports Complex – installation of multipurpose court	1. 100%	1. 100%	On target. Project planning commenced. Target to complete works in last quarter.
2.3.2.08 CW Laurieton Sports Complex – installation of multipurpose court (part funding) - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Laurieton Sports Complex – installation of multipurpose court	1. 100%	1. 100%	On target. Project planning commenced. Target to complete works in last quarter.
2.3.2.09 CW Install a sheltered seating area, picnic table and rubbish bins at Kendall Park - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Install a sheltered seating area, picnic table and rubbish bins at Kendall Park) - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	1. 100%	1. 100%	On target. Contractor mobilizing with construction set to commence by January 2021 and complete by February 2021.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 114

Community Strategic Plan: 2.3 Provide quality programs, community facilities and public spaces, for example, community halls, parks and vibrant town centres

Delivery Program Objective: 2.3.2 Provide a range of inclusive sporting and recreational opportunities and facilities to encourage a healthy and active lifestyle

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.2.10 CW Increased seating and shade at Charlie Watt Reserve - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Increased seating and shade at Charlie Watt Reserve)	1. 100%	1. 100%	On target. Contractor mobilizing with construction set to commence by February 2021 and complete by March 2021
2.3.2.11 Contribution to Creek to Creek Trail Development - COVID RELIEF RESERVE FUNDING	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Contribution to Creek to Creek Trail Development)	1. 100%	1. 100%	On target. Project planning commenced. Construction due to commence in third quarter 2020-2021.

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.3.22 CW Wauchope Rotary Youth Hall external repaint westem side - COVID RELIEF RESERVE FUNDING	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Wauchope Rotary Youth Hall external repaint western side)	1. 100%	1. 100%	On target. Funding has been secured, works are programmed to be completed prior to March 2021, we may start earlier dependant on contractors availability.
2.3.3.23 CW Stuarts Park Building beautification - COVID RELIEF RESERVE FUNDING	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Stuarts Park Building beautification)	1. 100%	1. 100%	On target. Funding has been secured, works are programmed to be completed prior to March 2021, we may start earlier dependant on contractors availability.
2.3.3.24 CW Wauchope Stadium Cladding Replacement - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Wauchope Stadium Cladding Replacement)	1. 100%	1. 100%	On target. Funding has been secured, works are programmed to be completed prior to March 2021, we may start earlier dependant on contractors availability.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 115

Community Strategic Plan: 2.3 Provide quality programs, community facilities and public spaces, for example, community halls, parks and vibrant town centres

Delivery Program Objective: 2.3.3 Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.3.25 CW Jubilee Hall – external repaint - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Jubilee Hall – external repaint)	1. 100%	1. 100%	On target. Funding has been secured, works are programmed to be completed prior to March 2021, we may start earlier dependant on contractors availability.

Delivery Program Objective: 2.3.4 Plan, investigate, design and construct open spaces, recreational and community facilities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.4.32 CW North Shore Fish Cleaning table - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (North Shore Fish Cleaning table)	1. 100%	1. 100%	On target. community engagement ongoing. Project completion by June 2021.
2.3.4.33 CW CSU-Googik Connection Consultancies - COVID RELIEF RESERVE FUNDING	Infrastructure Planning	1. Deliver project according to approved project plan (CSU- Googik Connection Consultancies)	1. 100%	1. 100%	On target. A Project Officer has been recruited in September 2020 to undertake specialised transport projects. Preliminary investigations and concept design review has been undertaken in this quarter.
2.3.4.34 CW Lake Cathie Foreshore Reserve Master Plan – Stage 2 works - COVID RELIEF RESERVE FUNDING	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Lake Cathie Foreshore Reserve Master Plan – Stage 2 works)	1. 100%	1. 100%	On target. Project Planning commenced. Target to complete works in last quarter.

Delivery Program Objective: 2.3.6 Support a range of inclusive community activities and programs

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.3.6.11 Port Macquarie Hastings (PMH) Cares - COVID RELIEF RESERVE FUNDING	Community	1. Deliver project according to approved project plan (Port Macquarie Hastings (PMH) Cares)	1. 100%	1. 100%	On target. Six community volunteers underway, and planning has commenced for a Volunteer drive early in the New Year.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 116

Community Strategic Plan: 2.5 Promote a creative and culturally rich community

Delivery Program Objective: 2.5.1 Support cultural activities within the community

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
2.5.1.9 Artwalk delivery - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Artwalk delivery)	1. 100%	1. 100%	Achieved. ArtWalk was successfully delivered as a COVID-safe event from 1 - 8 October 2020.

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.1 Assist the growth of local business and industry, ensuring this is a central consideration of Council activities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.1.1.03 Tourism product and trade market development Stage 2 - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Tourism product and trade market development Stage 2)	1. 100%	1. 100%	On target. Google DMO Workshops delivered late November 2020 and Tourism Marketing Academy online resources launched early December 2020. Trade development meetings held late November and early December 2020 with ongoing support, UberMedia dashboard went live late in late November 2020 and the Google operator Audit is currently underway.
3.1.1.04 Additional Investment in tourism PR and Marketing - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Additional Investment in tourism PR and Marketing)	1. 100%	1. 100%	Achieved. Campaign activity successfully delivered and concluded at the end of November 2020.
3.1.1.05 Tourism - Visiting Friends and Relatives Program development - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Tourism - Visiting Friends and Relatives Program development)	1. 100%	1. 100%	On target. Project planning has commenced.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 117

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.1 Assist the growth of local business and industry, ensuring this is a central consideration of Council activities

Operational Plan Activity 2020 - 2021			YTD Actual	Comment on Progress	
3.1.1.06 Website Food and Wine Trail Development - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Website Food and Wine Trail Development)	1. 100%	1. 100%	On target. Expressions of Interests released to market late November 2020. Website structure changes currently under development and engagement with individual operators commenced.
3.1.1.07 Reboot, Refresh, Restart COVID-19 Careers Pop-ups - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Reboot, Refresh, Restart Covid- 19 Careers Pop-ups)	1. 100%	1. 100%	On target. Reboot, Refresh Restart calendar delivered over October/November 2020, including keynote webinar, pop-up, and a range of collaborative efforts with local service providers. Planning delivery of further initiatives from early 2021.
3.1.1.08 Grant writing workshops - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Grant writing workshops)	1. 100%	1. 100%	On target. Planning underway to program grant writing workshops in the first half of 2021. Noting that COVID restrictions are lifting to enable people to gather for workshops and for venue bookings. "PMHC Grant Finder" was launched on 1 December 2020. This is a bespoke grants search engine and PMHC partnered with Grant Guru to deliver the grant finder portal. Business, community groups, sporting clubs and event organisers can use this powerful search engine to search for grants. This is a useful tool for our community and staff.
3.1.1.09 Arts, Culture and Creative Industries content development and marketing - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Arts, Culture & Creative Industries content development and marketing)	1. 100%	1. 100%	On target. Strategy and concept development work completed. Digital and print campaign activity scheduled from February 2021. Photography briefed and booked and the design toolkit has been prepared.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 118

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.1.1 Assist the growth of local business and industry, ensuring this is a central consideration of Council activities

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.1.1.10 Cultural industries – Networking and mentoring - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Cultural industries – Networking and mentoring)	1. 100%	1. 100%	On target. Data secured from the Cultural Economy Project has been reviewed to identify skills development needs and initial discussions have taken place with the training providers.
3.1.1.11 Creative and Arts Trails development - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Creative and Arts Trails development)	1. 100%	1. 100%	On target. Expressions of Interests released to market late November 2020. Website structure changes currently under development and engagement with individual operators commenced. This project will be delivered in partnership with the food and wine trails.
3.1.1.12 Program to encourage use of vacant commercial spaces - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Program to encourage use of vacant commercial spaces)	1. 100%	1. 100%	On target. Planning underway, including engagement with and research into other regional vacant shopfront activations programs.

Delivery Program Objective: 3.2.1 Support vibrant commercial, tourism, recreational and or community hubs across the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.2.1.3 CW Towns Gateway entrance strategy - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Towns Gateway entrance strategy)	1. 100%	1. 100%	On target. Project planning to commence in early 2021.
3.2.1.4 CW Port Macquarie Lumiere night time installation - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Port Macquarie Lumiere night time installation)	1. 100%	1. 100%	On target. Contractor agreement issued and project commenced.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 119

Community Strategic Plan: 3.1 Embrace business and a stronger economy

Delivery Program Objective: 3.2.1 Support vibrant commercial, tourism, recreational and or community hubs across the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress	
3.2.1.5 CW Port Macquarie Lumiere Night time installation – infrastructure component - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	frastructure component - ROADS AND Cultural		1. 100%	1. 100%	On target. Contractor agreement issued and project commenced.	
3.2.1.6 Tourism and Cultural Development Project Officer - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (Tourism and Cultural Development Project Officer)	1. 100%	1. 100%	Achieved. Recruitment completed in October 2020 and projects allocated.	
3.2.1.7 CW Renew the maps "Comboyne Plateau" outside Udder Cow Café and in Pioneer Park - COVID RELIEF RESERVE FUNDING	Community	1. Deliver project according to approved project plan (Renew the maps "Comboyne Plateau" outside Udder Cow Café and in Pioneer Park)	1. 100%	1. 95%	Monitoring required. Working with the Community Council Action Team to determine the project and the community expectations. This project is planned for the second half of the financial year. The extent of the projects is still to be determined.	

Delivery Program Objective: 3.4.3 Encourage innovation that will support our growth as a regional city including smart community technology

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
3.4.3.4 CW CBD Wifi (Wauchope, Laurieton, expand Port) - COVID RELIEF RESERVE FUNDING	Economic and Cultural Development	1. Deliver project according to approved project plan (CBD Wifi (Wauchope, Laurieton, expand Port)	1. 100%	1. 100%	On target. Project plan being finalised for project delivery by 30 June 2021.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 120

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.1.99-103 CW Footpath – The Parade: Ocean St to Surf Club car park (NW side); 260m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – The Parade: Ocean St to Surf Club carpark (NW side); 260m) - COVID-19 RECOVERY	1. 100%	1. 100%	On target. Project planning near completion for construction commencing in early 2021.
4.4.1.99-104 CW Footpath – Lake Street: Tunis St to Seymour St (Wside); missing links; 120m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – Lake Street: Tunis St to Seymour St)	1. 100%	1. 100%	On target. Project planning near completion for construction commencing in early 2021.
4.4.1.99-105 CW Footpath – Comboyne St to Graham St connection at Kendall Services Club - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – Comboyne St to Graham St connection at Kendall Services Club)	1. 100%	1. 100%	On target. Project planning is near completion Planned construction commencing in Jan 2021.
4.4.1.99-106 CW Footpath – Hill Street: Pioneer Park to Main Street (W side);180m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – Hill Street: Pioneer Park to Main Street (W side); 180m)	1. 100%	1. 100%	On target. Project planning near completion for construction commencing in early 2021.
4.4.1.99-107 CW Footpath – Parker Street: Wauchope High School to Bain Street (W side); 160m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – Parker Street: Wauchope High School to Bain Street (W side); 160m)	1. 100%	1. 100%	On target. Project planning near completion for construction commencing in Jan 2021.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 121

Delivery Program Objective: 4.4.1 Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Operational Plan Activity 2020 - 2021	Plan Activity Lead Success Measures Target YTD Actual Responsibility Plan Activity Plan		YTD Actual	Comment on Progress	
4.4.1.99-108 CW Footpath – Rushcutter Way: Moondara Tce to Bangalay Dr (SE side); 200m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – Rushcutter Way: Moondara Tce to Bangalay Dr (SE side); 200m)	1. 100%	1. 100%	On target. Project planning near completion for construction commencing in early 2021.
4.4.1.99-109 CW Footpath – Major Innes Road: Braeroy Dr toThe Ruins Way (E side); 320m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Major Innes Road: Braeroy Dr to The Ruins Way (E side); 320m)	1. 100%	1. 100%	On target. Project planning has been completed with construction commencing in late December 2020. This project will be completed prior to end of financial year 2020-2021.
4.4.1.99-110 CW Footpath – Watonga Street: Connection to Matthew Flinders Dr; 35m - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (Footpath – Watonga Street: Connection to Matthew Flinders Dr; 35m)	1. 100%	1. 100%	On target. Project planning progressing towards completion including detailed design of stairs, planned for construction commencing in Mar 2021.
4.4.1.99-111 CW New bus shelters (3 or 4) and landing pads - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Infrastructure Planning, (Project Delivery)	1. Deliver project according to approved project plan (New bus shelters (3 or 4) & landing pads)	1. 100%	1. 100%	On target. Project planning progressing towards completion, planned for construction commencing in early 2021.
4.4.1.99-112 CW Install seating beside Anzac Memorial (Comboyne) - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Recreation, Property and Buildings	1. Deliver project according to approved project plan (Install seating beside Anzac Memorial (Comboyne)	1. 100%	1. 100%	On target. Contractor mobilizing with construction set to commence by January 2021 and complete by February 2021.
4.4.1.99-113 Laurieton Main Street Masterplan development - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Strategy	1. Deliver project according to approved project plan (Laurieton Main Street Masterplan development)	1. 100%	1. 100%	On target. An inception meeting was held with the Camden Haven Chamber of Commerce on 7 October 2020. The Enquiry by Design is in progress and is being led by the Group Manager Community.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 122

Delivery Program Objective: 4.4.2 Develop and implement annual maintenance and renewal programs for transport assets

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.2.8 CW Kendall Bridge - expansion joints rehabilitation - COVID RELIEF RESERVE FUNDING	Infrastructure Planning	1. Deliver project according to approved project plan (Kendall Bridge expansion joints rehabilitation)	1. 100%	1. 100%	On target. Kendall Bridge Joint Rehabilitation delivery on track with detailed project planning, procurement activities and approvals in progress, following approval of Project in Ordinary Council Meeting in August 2020.
4.4.2.9 CW Hay Street Resurfacing – Port Macquarie - COVID RELIEF RESERVE FUNDING	Infrastructure Planning, (Infrastructure Operations)	1. Deliver project according to approved project plan (Hay Street Resurfacing – Port Macquarie)	1. 100%	1. 100%	On target. Detailed planning to be finalised early 2021 for completion in April/May 2021.

Delivery Program Objective: 4.4.3 Develop and implement traffic and road safety programs

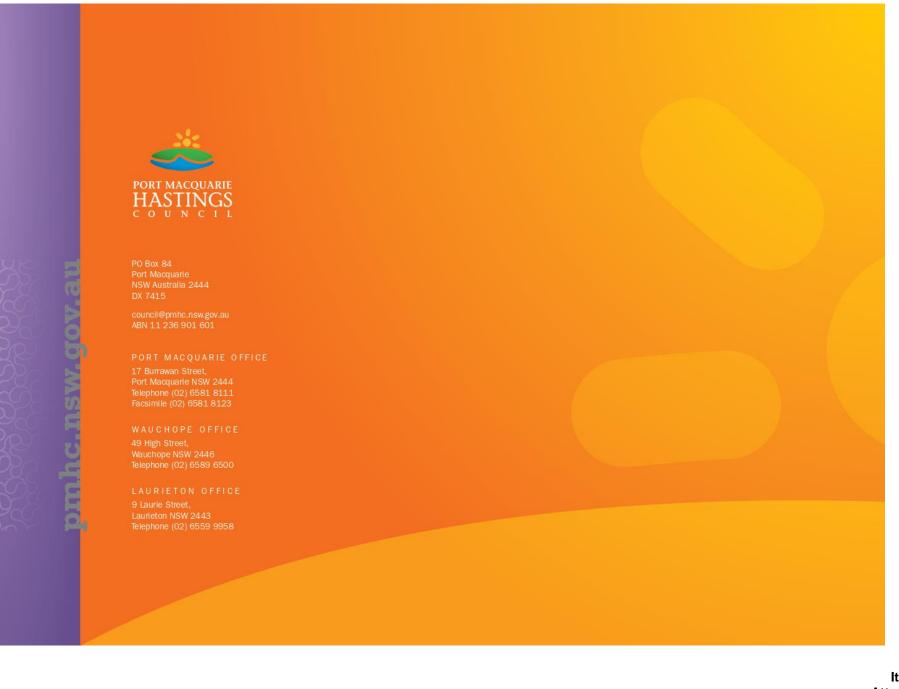
Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.4.3.3 CW Install signage on Pappinbarra Road for speed reduction to help protect wildlife and to improve road safety - COVID RELIEF RESERVE FUNDING	Infrastructure Planning	1. Deliver project according to approved project plan (Install signage on Pappinbarra Road for speed reduction to help protect wildlife and to improve road safety)	1. 100%	1. 100%	On target. Project has commenced with a draft charter developed in this quarter. Works are expected to commence in 2021.
4.4.3.4 CW Rural Road Safety Improvements – linemarking, signs - COVID RELIEF RESERVE FUNDING	Infrastructure Planning	1. Deliver project according to approved project plan (Rural Road Safety Improvements – linemarking, signs)	1. 100%	1. 100%	On target. Project has commenced with a draft charter developed in this quarter. Works are expected to commence in 2021.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 123

Delivery Program Objective: 4.7.1 Promote renewable energy outcomes within Council

Operational Plan Activity 2020 - 2021	Lead Responsibility	Success Measures	Target	YTD Actual	Comment on Progress
4.7.1.11 CW Solar PV - Airport - ROADS AND COMMUNITY INFRASTRUCTURE PROGRAM	Commercial Business Units	1. Deliver project according to approved project plan (Solar PV airport)	1. 100%	1. 100%	On target. \$140k funding approved at the August 2020 Council meeting. Project planning and design continuing with construction due to be undertaken in Quarter four of 2020-2021.

COVID-19 RECOVERY ADDENDUM TO THE 2020 - 2021 OPERATIONAL PLAN Page 124



Glasshouse Financial Statements for the period ending 31 December 2020

		Current Annual Budget	Budget	Current Actual	Variance	Variance	Budget	Year to Actual	Variance	Variance
Operating No	tes \$	\$	\$	\$	\$	%	\$	\$	\$	%
Operating Income										
Operating Contributions and Grants	0	0	0	0	0		0	0	0	
Venue Hire (including hirer promotors events) Performing Arts - Show Income	529,950 151,368	529,950 151,368	85,944 11,414	81,607 16,693	(4,337) 5,279	95% 146%	87,633 13,916	93,660 17,562	6,027 3,646	107% 126%
Gallery - Income	18,581	18,581	3,679	2,253	(1,426)	61%	6,178	1,629	(4,549)	26%
VIC - Income	2,592	,	648	269	(379)	42%	1,296	414	(882)	32%
Bar/Café Sales Retail Income	131,336 30,947	131,336 30,947	23,127 7,737	5,587 13,666	(17,540) 5,929	24% 177%	35,628 7,737	8,057 26,478	(27,571) 18,741	23% 342%
Rental Income received	0		0	0	0	11170	0	20,470	0	54270
Sponsorships/Donations/Memberships	20,700	20,700	5,175	2,826	(2,349)	55%	10,350	3,333	(7,017)	32%
Operating Income Total	885,474	885,474	137,724	122,900	(14,824)	89%	162,738	151,133	(11,605)	93%
Operating Expenditure	101.000	40.4.000	400.000	04 550	04.400	700/	004.050	040 705	54.047	0.407
Building Operational Expenses Building Maintenance	484,302 248,696	484,302 248.696	102,990 101,924	81,558 24,459	21,432 77,465	79% 24%	264,952 150.848	213,735 127.618	51,217 23,230	81% 85%
Administration Operational Expenses	76,864	76,864	18,091	10,393	7,698	57%	39,957	25,806	14,151	65%
Salaries and oncosts	1,591,780	1,577,742	397,947	328,567	69,380	83%	781,856	594,992	186,864	76%
Community Discount Bar/Café Operations	75,000 53,498	75,000 53,498	18,750 13,374	1,028 1,956	17,722 11,418	5% 15%	37,500 26,748	1,328 2,224	36,172 24,524	4% 8%
Marketing and Promotion	75,768	75,768	18,939	5,947	12,992	31%	37,878	9,319	28,559	25%
Performing Arts - Show Expenditure	284,400	,	48,603	31,436	17,167	65%	82,206	31,643	50,563	38%
Gallery Expenditure Retail Expenditure	196,454 3,492	239,371 3,492	68,616 873	32,016 180	36,600 694	47% 21%	124,149 1,746	60,980 180	63,169 1,567	49% 10%
Venue Hire Costs (including hirer promotors events)	240,480	240,480	56,870	38,090	18,780	67%	110,740	56,932	53,808	51%
Sponsorship/Donations/Memberships Expense	6,000	,	1,497	920	577	61%	2,994	920	2,074	31%
Council Overheads Operating Expenditure Total	451,036 3,787,770	451,036 3,816,649	<u>112,728</u> 961,202	<u>112,749</u> 669,299	(21) 291,903	<u>100%</u> 70%	225,456 1,887,030	225,498 1,351,175	(42) 535,855	<u>100%</u> 72%
Operating Surplus (Deficit)	(2,902,296)	(2,931,175)	(823,478)	(546,399)	277,079	66%	(1,724,292)	(1,200,042)	524,250	70%
Interest and Depreciation										
Interest Repayments	416,597	416,597	193,409	220,331	(26,922)	114%	193,409	220,331	(26,922)	114%
Depreciation Interest and Depreciation Total	<u>1,058,352</u> 1,474,949		264,588 457,997	264,588 484,919	(26,922)	<u>100%</u> 106%	529,176 722,585	529,176 749,507	(26,922)	<u>100%</u> 104%
Total Operating Surplus (Deficit)	(4,377,245)	(4,406,124)	(1,281,475)	(1,031,317)	250,158	80%	(2,446,877)	(1,949,548)	497,329	80%
<u>Capital</u>										
Capital Income Capital Contributions and Grants	0	0	0	0	0		0	0	0	
Depreciation	1,058,352	-	264,588	264,588	0	100%	529,176	529,176	0	100%
Capital Income Total	1,058,352	1,058,352	264,588	264,588	0	100%	529,176	529,176	0	100%
Capital Expenditure										
Acquisition of Assets	66,000		16,800	2,109	14,691	13%	22,400	16,867	5,533	75%
Transfers to Reserves Loan Principal Repayment	0 1,861,023	-	0 920.739	0 920,739	0	100%	0 920,739	0 920,739	0	100%
Capital Expenditure Total	1,927,023		937,539	922,848	14,691	98%	943,139	937,606	5,533	99%
Total Capital Surplus (Deficit)	(868,671)	(868,671)	(672,951)	(658,260)	14,691	98%	(413,963)	(408,430)	5,533	99%
Total Cash Position (before funding)	(5,245,916)	(5,274,795)	(1,954,426)	(1,689,577)	264,849	86%	(2,860,840)	(2,357,978)	502,862	82%
Funded By:-										
Reserves	66,000		16,800	2,109	14,691	13%	22,400	16,867	5,533	75%
Other Funds General Council Revenue	0 5,179,916		0 1,937,626	0 1,687,468	0 250,158	87%	0 2,838,440	0 2,341,111	0 497,329	82%
Total Cash Funding Sources	5,245,916		1,954,426	1,689,577	264,849	86%	2,860,840	2,357,978	502,862	82%

Item 10.16 Attachment 1

Page 287

GLASSHOUSE PLAN 2020 - 2022 - UPDATE ON PROGRESS ACHIEVED AGAINST ACTIONS – DECEMBER 2020

Key Outcomes:	Actions:	Progress achieved as at 31 December 2020
Enhancing utilisation, visitation and participation	Cultural Plan Action 1.3 Venues and spaces	
Ensuring the delivery of high quality cultural, community and commercial	1.3.1 Market and promote the Glasshouse performance, exhibition and event spaces as the premier venue in the region	Participated in the Destination North Coas raise the profile of the venue in the busine
activities	1.3.2 Investigate opportunities and implement strategies to promote greater utilisation and activation of the Glasshouse performance, exhibition and event spaces, including consideration of reduced fees and charges options for the Studio and Podium spaces	 Council's 2020-2021 Schedule of Fees an additional Studio and Podium venue h more flexibility for venue hirers; new 30% venue hire discount for Stud organisations and local performance a
	1.3.3 Undertake Glasshouse Back of House maintenance (OP 2.5.1.2 CW) to ensure continued technical excellence, enhanced customer experiences and/or improved efficiency in the delivery of Glasshouse events	 Planned preventative maintenance on the including: LED coloured lighting installed in the g Glass window replaced; Fly system inspected and certified; Orchestra pit lift inspected and certifie Theatre and Studio Dimmer racks ser Annual Fire safety statement complete Air conditioning BMS upgraded, hardw All lifts serviced as per schedule; Venue workshop renovated.
	Cultural Plan Action 1.4 Showcase programs	
	1.4.1 Manage the delivery of a range of high quality performing and visual arts events at the Glasshouse in consideration of Council's Cultural Plan (OP 2.5.1.3)	 Planning undertaken for the 2021 Glassho to be held in March 2021; Presented four (4) productions as part of t performances by Sydney Theatre Compar with over 1140 tickets sold; Presented eight (8) exhibitions in the Registron the Australian Design Centre and Th
	1.4.2 Facilitate opportunities to showcase locally-developed, high-quality performing and visual arts events at the Glasshouse	 Presented three (3) exhibitions in the galle artists; Supported Artwalk, showcasing over thirty art gallery initiative; Developed the Plug and Play packages to Port Macquarie Performing Arts (PMPA) a performances.
	1.4.3 Attract international standard commercial touring productions to the Glasshouse	Impacted by COVID-19 restrictions.
	Cultural Plan Action 1.8 Professional development opportunities	
	1.8.1 Deliver professional development opportunities for artists and our community in conjunction with the Glasshouse performing and visual arts programs	Impacted by COVID-19 restrictions.
	Cultural Plan Action 2.1 Inclusive programs and events	
	2.1.1 Develop and deliver a range of education and public programs associated with the Glasshouse performing and visual arts programs, to encourage participation in arts and cultural experiences by all sectors of our community, including young people, seniors, people with a disability, and Aboriginal people	Delivered the 2021 Education @ Glasshot format due to COVID-19 restrictions).
	2.1.2 Investigate digital programming opportunities to increase the accessibility of Glasshouse programs and events	Planned for inclusion in the 2021 program
	Cultural Plan Action 2.4 Community-based and community-led programs	
	2.4.1 Implement strategies within a framework of fair and equitable access, to enhance utilisation and encourage community participation	Community venue hire discount, available incorporated community groups, registere 40% to 50% as part of Council's 2020-202

ORDINARY COUNCIL 17/02/2021

-	-
.,	n
_	U

ast Business Events Reboot Roadshow to ness events market.
and Charges includes: e hire options with reduced fees offering
tudio hire to assist local performing arts e artists to access this performance space. he building and equipment completed,
e ground floor bar foyer;
fied; erviced and repaired; leted; rdware and software version;
shouse Theatre Program Launch event due
of the 2020 Theatre Program, which included bany and The Manhattan Short Film Festival
egional Gallery, including touring exhibitions The Australian War Memorial.
allery featuring works by over fifty (50) local
rty (30) local artists in the longest footpath
to support local dance schools including) and La Vive Studios who delivered multiple
house Program Launch event (new virtual
am.
ble to incorporated not-for-profit groups, ared charities and schools, increased from 2021 Schedule of Fees and Charges.

GLASSHOUSE PLAN 2020 - 2022 - UPDATE ON PROGRESS ACHIEVED AGAINST ACTIONS – DECEMBER 2020

Key Outcomes:	Actions:	Progress achieved as at 31 December 202
	2.4.2 Provide a high level of professional, technical and marketing support to community hirers to assist in the co- ordination and delivery of community events and to build future capability	 Support provided to local organisations in Theatre Oz and Council events including Think Live Stream events for Community awards; Provided production and technical service and R U OK campaigns to support PMHC Provided technical and event coordination section for the delivery of Council's extern including; The Christmas Bell, Drive In M
Developing successful partnerships	Cultural Plan Action 3.1 Collaborative partnerships	
Working with key stakeholders in the community, government and industry to support the delivery of cultural, community and commercial activities	3.1.1 Partner with key stakeholders in the community, government and industry to support the delivery of cultural and community programs	 Continued to develop a number of corpor with the Glasshouse Marketing and Sales programs, including the Glasshouse Four number of regional / local organisations a
·	3.1.2 Develop the Glasshouse Membership Program and associated marketing initiatives to build customer loyalty and repeat visitation	
	3.1.3 Deliver a range of Visitor Information services within the Glasshouse to market our region's rich and diverse experiences	 Ongoing - the VIC reopened to the public Monthly VIC updates presented to the GF
	Cultural Plan Action 3.2 Cultural marketing and communications plan	
	3.2.1 Review and update the Glasshouse Marketing and Sales Plan	Glasshouse Marketing and Sales Plan re
	3.2.2 Implement targeted marketing and sales strategies to increase awareness, enhance utilisation, increase event visitation and maximise cultural, community and commercial outcomes	Ongoing - current focus on digital books,
Promoting viability and ensuring good governance	Cultural Plan Action 4.1 Funding	
Applying a prudent financial management focus and open and transparent decision-	4.1.1 Apply a prudent financial management focus to all cultural, community and commercial activities to support long-term efficiency, effectiveness and viability of the Glasshouse	See attached 2020-2021 Financial Stater
making, to manage the net cost of the operation of the Glasshouse to the community	4.1.2 Increase operating revenue at the Glasshouse (OP 1.5.3.1)	See attached 2020-2021 Financial Stater of the venue / cancellation of events.
	4.1.3 Review current revenue sources and investigate the commercial viability of identified new revenue sources (OP 1.5.4.1)	 Glasshouse venue hire fees benchmarke using data published by the national peak Australia; New venue hire options included in Coun Charges.
	4.1.4 Identify Australian and NSW State Government grant funding opportunities to support the delivery of cultural programs and maintenance of venue technical infrastructure	
	4.1.5 Review Glasshouse sponsorship / partnership and membership programs and identify new opportunities to support the delivery of cultural and community programs	 Ongoing - current focus on Partnership re Secured one (1) new show sponsor for 20
	4.1.6 Investigate and develop a Fundraising Strategy to support the delivery of cultural and community programs and the long-term viability of the Glasshouse	Planned for 2021.
	Cultural Plan Action 4.7 Cultural performance measure	
	4.7.1 Present biannual reports to Council detailing Glasshouse performance against the Glasshouse Plan, key operational and financial performance measures, and Council's Cultural Plan Objectives	Report presented in August 2020.
	4.7.2 Undertake an economic impact assessment to measure and report on the benefits of the Glasshouse to the local and regional economy	Planned for 2021 subject to COVID-19 re

ORDINARY COUNCIL 17/02/2021

20
including PMPA, La Vive Studios and g, Think 2050 Youth Summit and Future y Engagement and PMHC staff service
ces for the delivery of Wellbeing Wednesday IC staff during COVID restrictions; on to Destination and Cultural Development rnal events to support COVID recovery Movie.
orate partnerships / sponsorships consistent es Plan to support the delivery of cultural unding Sponsors, Create NSW and a and businesses.
38 Glasshouse Members registered for the the cancellation of the 2020 Theatre twe been extended until December 2021.
ic on 2 June 2020; GPM Tourism Marketing Sub-Committee.
eview planned for 2021.
, EDMs and social media activity.
ement.
ement - impacted by COVID-19 and closure
ed against other similar regional venues ak body Performing Arts Connections
ncil's 2020-2021 Schedule of Fees and
he NSW State Government for the 2021- n, from the Create NSW Arts and Cultural uccessful.
renewals. 2021.
estrictions.

	Project Owner	Proposed Description of Activities	Allocation	Complete	Progress Update
1	РМНС	Small business workshop series - future proofing your business; 'how to get through winter', cashflow management. Business Education with CSU Business Recovery Roadshow	\$ 20,000.00		Physical workshops postponed due to COVID-19. Online events and methods for sharing recovery education delivered with regional partners.
2	РМНС	Collateral for 3 x Expos "our region is open for business". Council stall when Expo's are open. New for PMHC - NDIS State Conferences NSW and Qld satchel insert tailored investment attraction, New for PMHC Exhibiting at Sydney Build Expo (now 2021), new for PMHC Exhibiting at Advanced Manufacturing Exhibition (now 2021)	\$ 10,000.00	30/03/2021	Purchase of collateral for expos: satchel drops booked, collateral designed and delivered, expos postponed due to COVID- 19 to late 2020 and early 2021, satchel- drops postponed until further notice. New opportunities to achieve outcomes being explored.
3	РМНС	Winter Destination marketing campaign, promote upcoming events - visitors to come to the region, 'holiday here', expanded marketing. Motorcycle Friendly ride guide updated, print and distribution - bushfire affected roads now open.	\$ 70,000.00		Motorcycle Friendly Wauchope Map design completed, printed and distributed. Destination campaign activity delivered. Engagement with local tourism businesses to deliver product development training and increase distribution through wholesal and retails channels.
4	Camden Haven Chamber of Commerce	"Our way to recover" video and print content development and education campaign. Engage a journalist and videographer to interview Camden Haven farmers to showcase four different styles of farming, their land, their techniques, their property, their product, and where and how residents and businesses can access it.	\$ 20,000.00	30/11/2020 Completed	Production and launch of the Farmers vide campaign.
5	Camden Haven Chamber of Commerce	Camden Haven River Festival - new event. Procurement of art installations by local artists, local providores, outdoor hubs of entertainment that will be installed along the river banks.	\$ 30,000.00	31/03/2020	Extension approved by State Govt for funding to be expended from November 2020 to March 2021. Funding is allocated t commisisoning art installations which are then stored in readiness for the re- scheduled Festival in July 2021.
6	Wauchope Chamber of Commerce	Creative Wauchope 'Social-Distancing Festival'. Local art and craft tutors deliver online workshops using digital platforms. Art kits available for collection / pick up and follow along online tutorials.	\$ 10,000.00		Workshops delivered in the first week of October in conjunction with Art Walk 2020
7	Wauchope Chamber of Commerce	"Our way to recover" video and print content development and education campaign.	\$ 20,000.00		"Hello Hastings Hinterland" campaign launched with video content, campaign extended with pocket guides with a print run of 5000.
8	РМНС	Community Resilience Workshops run in conjunction with Lifeline Australia.	\$ 25,000.00	31/03/2021	Lifeline delivering series of Mental Health First Aid, Accidental Counsellor and Domestic & Family Violence Workshops at Lake Cathie, Pappinbarra, Wauchope and Port Macquarie. 5 Workshops completed, with 3 workshops scheduled.
9	РМНС	Community and Council Action teams at Regional Halls - series of small community in recovery BBQ's and events (approx 10)	\$ 20,000.00	30/03/2021	Was delayed due to impacts of Covid on community gatherings. Workshops scheduled in the New Year with The
					Wholsome Collective.

Project Update: \$250k NSW Bushfire Community Resilience and Economic Recovery Fund

Number	Project Owner	Project	Allocation	Complete	Progress update
DRF1	РМНС	ldentified projects by Community Recovery Officer.	\$120,000.00	30/06/2021	Ongoing. Arranged transport of 102 kilo generators donated by GIVEIT from Kempsey collection point to residents in need. \$4k towards Long Flat electronic Fire Warning Sign, \$20k Lank Bain upgrade of water provision, \$10k towards gratitude RFS murals.
DRF2	РМНС	Staff Resilience training /workshops	\$50,000.00	30/06/2021	14/7/20 Launched stage one and two of staff resilience program. Prepare Leaders self paced online training accessable to people managers for 12 months. Managing Stress in Times of Uncertainty self paced online training accessable to all staff for 12 months. Plans to deliver face to face workshops to all staff have halted and will progress when the COVID risk reduces.
DRF3	РМНС	EOC - upgrade Communications, printing, telephone, smart projectors	\$45,000.00	30/06/2021	Request For Quote process completed and contract awarded. Vendor engaged with purchase of equipment to occur shortly, along with confirmation of installation timelines.
DRF4	РМНС	Community celebration for the RFS and all volunteer services virtually and gratitude murals in fire effected townships	\$60,000.00	20/12/2020 COMPLETED	Council delivered a series of gratitude murals in fire-effected townships and combined a "thank you to RFS volunteers". The "Christmas Bell: video created an end of year Christmas entertainment celebration in a virtual platform to unveil the murals and have performances from across the LGA and to thank the volunteers.
DRF5	РМНС	Marketing campaign / to urism / business	\$100,000.00	31/11/2020 COMPLETED	The Destination marketing campaign activity transitioned in market at the start of July and concluded at the end of November. The campaign led with a strong digital presence including activity across new audio formats such as Spotify and Podcasts that were followed by a high impact outdoor presence in key visitor markets. A strong 'support local' message featuring local operators was incorporated. The campaign performed well and met all KPI's and targets.
DRF6	Wauchope Showground	Wauchope Showground \$90k new amenity Block, \$210k contribution towards new stables	\$300,000.00	1/11/2020 COMPLETED	Construction of new toilet block and 3 x rows of 24 stables. Wauchope Showground site more prepared as evacuation centre for residents, farmers and their horses/animals.
DRF7	Bunyah Local Aboriginal Land Council	Bunyah and State Forests develop 10 person Aboriginal Cultural burning team - training program, PPE, chainsaws, mowers look after LALC properties		1/12/2020 COMPLETED	State Forests has provided the training program for free. Funds used to purchase Personal Protection Equipment (PPE) for the trained team and purchase of chainsaws, mowers etc.
DRF8	Birpai Local Aboriginal Land Council	Upgrade to Community Shed and outdoor kitchen	\$45,000.00	1/12/2020 COMPLETED	Upgrades to Birpai community facilities. \$38k for upgrade to Community Shed - ceiling fans, awning over footpath to bathrooms, external lighting, screening of outdoor area to keep out mozzies. \$7k repairing of cooktop and rewiring outdoor kitchen.
DRF9	Ken dall Showground	Kendall Showground upgrade toilet amenities-and preparedness as evacuation centre	\$50,000.00	19/8/2020 COMPLETED	Bright new and improved ammenities block has been completed. The revamp includes renewed ceiling, new lighting, non-slip floor tiles, bright white wall tiles, new mirrors, complete paint out, skylights, new lockable doors on toilet and shower cubicles and new soap and paper towel dispensers. The revamp to the amenities ensures an easy to clean, safer environment facility for all ground users to enjoy. The Society Board are thrilled to have had local tradesmen working on the site. The project upgrade will ensure preparedness for future crisis and used as an evacuation centre.
DRF10	Port Macquarie Chamber of Commerce	Awareness Video / showcase business, local producers, buy local	\$20,000.00	31/12/2020 COMPLETED	Delivery of the Buy Local Campaign to support local businesses recover from Bushfires & now COVID19.
DRF11	Commerce Rollands Plains Community Association	Procurement and installation of equipment to aid in emergency situations for the RP Recreational Reserve	\$8,200.00	31/12/2020 COMPLETED	200,000L water tank installed. Construction of concrete slab and large roofed area alongside canteen to enable undercover outdoor gathering for groups and a safe place for future emergency workers and evacuees. Installed 2 door commercial fridge, gas upright stove and range hood.

Project Update: \$1.4m Commonwealth Bushfire Disaster Recovery Funding

Number	Project Owner	Project	Allocation	Complete	Progress update
DRF12	РМНС	RFS requested purchase of Electronic Fire Danger Sign instead as a priority. Is able to be activated remotely and updated live with urgent messages/warnings for the community.	\$10,000.00	31/03/2021	In conversations with Steve Farrell (A/District Coordinator - Community Preparedness, Mid Coast NSW Rural Fire Service) and Inspector Guy Duckworth (District Co-ordinator Mid Coast NSW Rural Fire Service). They have requested purchase of an Electronic Fire Danger Sign (EFDS). Sign is able to be activated remotely and updated live with urgent messages/warnings for the community. Pricing is \$14k, additional \$4k allocated from the DRF1 budget.
DRF13	Long Flat Hall & pre- school	Long Flat Hall and preschool install stand alone accessible (disability) toilet and linking path, ramp to hall (has steps)		31/03/2021	Design completed and awaiting DA approvals and then works will commence so that Long flat Community Hall is disability friendly and fit for purpose as an evacuation centre.
DRF14	Long Flat Hall & pre- school	Long Flat Hall and preschool · link to new sewerage connection	\$10,000.00	30/06/2021	On standby to connect when new sewer system becomes available.
DRF15	Telegraph Point Hall	Telegraph Point Hall - connection to new sewerage system / waiver of connection fee	\$8,000.00	1/7/2020 COMPLETED	Connection to the new sewerage system has been completed. The environment of Telegraph Point has been improved by the new sewerage system and removal of the old septic tank.
DRF16	Comboyne Hall	Sewer-connect	\$10,000.00	30/06/2021	On standby to connect when new sewer system becomes available.
DRF17	Comboyne Museum	Comboyne Museum Hurrell House - sewer connection for new toilet amenities	\$10,000.00	30/06/2021	On standby to connect when new sewer system becomes available. The site can then be used as a future evacuation site for caravans, RV's etc
DRF18 A	РМНС	Allocate to Cultural Grants Program	\$20,000.00	30/06/2021	Change approved by National Bushfire Recovery Agency to allocate to Council grants program. The grants program will be co- ordinated by Council and the round will open for applications in March 2021.
DRF18 B	Pappinbarra Rural Fire Brigade	Pappinbarra RFS Brigade site including an awning, concrete and electrical	\$25,000.00	30/11/2020 COMPLETED	Works included an awning, concrete and electrical works, steel watertank and generator lock up cage.
DRF19	РМНС	Erosion and sediment control. Temporary/short term control measures in fire affected landscapes where sufficient ground cover to suppress erosion and soil loss no longer exists, road side cuttings etc.	\$150,000.00	30/06/2021	PMHC has assessed over 1900 parcels of land to create a shortlist of 19 potential sites for environmental restoration / remediation. An inspection of these sites identified a parcel of PMHC land located off Peppermint Crescent, Wauchope as being suitable. Emergency land clearing by NSW State Forest was undertaken along the northwest portion of this parcel to protect neighbouring properties. This has left the area vulnerable to erosion impacts, potentially increased sedimentation of Blackbutt Creek, exposed illegally dumped material in this area and damaged PMHC signage. Works undertaken to date include the removal of illegally dumped material, invasive weed spraying, delineating the sites Asset Protection Zone (APZ) and installing erosion and sediment control. Further works proposed at the site include upgrading stormwater drainage through the impacted area, revegetating the impacted bushland and installing community signage. The selected environmental restoration / remediation project will aim to be completed by 30 June 2021 with 10% of funding allocated for ongoing maintenance works until 30 June 2022.
DRF20	РМНС	Beechwood Hall improvements	\$20,000.00	30/06/2021	Refurbishment of hall kitchen to enable catering for community briefings, workshops and fit for purpose as an evacuation centre.
DRF21	Byabarra Recreation & Public Hall	Byabarra Hall improvements	\$20,000.00	31/12/2020 COMPLETED	Completed - purchase of new oven and range for hall kitchen and improvement to overall security of hall and surrounds. Benefits that vandalism and undesirable activities seemed to have ceased.
DRF22	Comboyne Hall	Comboyne Hall improvements	\$20,000.00	30/06/2021	Planning commenced for hall improvements.
DRF23		Ellenborough Hall improvements	\$20,000.00	31/12/2020	Committee reviewing long-term future of the community hall and preparation as an evacuation centre. Likely priority project is new roof replacement so that hall can function as an evacuation centre.

Number	Project	Project	Allocation	Complete	Progress update
	Owner				
DRF24	Hollisdale Pappinbarra Hall	Hollisdale Hall improvements	\$40,000.00	30/06/2021	Hall Committee are progressing quotes and monitoring availability of contractors for capital works and COVID 19 restrictions to be eased to be able to run 'Reconnecting community' and 'Youth Resilence' programs. Completed installation to NBN service to the Hall. This allows access to services using free Wi-Fi for those without connectivity in their homes (due to fire, service availability or socio-economics reasons) to access the internet for social interactions, school support, online heath and government agency/services. This will also be a valuable service next time the hall is used as an emergency relief centre.
DRF25	Kindee Hall	Kindee Hall - Finish disability accessible toilet	\$20,000.00	30/6/2020 COMPLETED	New accesible amenities completed. Hall is now fit for purpose to host community meetings and briefings and as an evacuation site for local residents.
DRF26	РМНС	Lake Cathie Hall improvements	\$20,000.00	30/11/20 COMPLETED	22,000 litre water tank installed, rainwater connections, pump installation, shipping container and accessable path have been completed to link the Lake Cathie Community Hall with the Community Garden.
DRF27	РМНС	Laurieton Arts Hall / Longworth Park improvements	\$20,000.00	30/06/2021	Liason with Community Recovery Officer and Building Services to identify priority improvements to enable hall fit for purpose for community evacuation and meetings/ briefings.
DRF28	РМНС	Pembrooke Hall maintenance	\$20,000.00	30/06/2021	Community Recovery Officer liasing with CCAT, Hall Custodian and Building Services to determine priority hall maintenance project. Investigations on how to achieve outcomes has commenced, meetings held with stakeholders.
DRF29	Rollands Plains Hall	Rollands Plains Hall improvements	\$20,000.00	30/06/2021	The Hall Committee is sourcing quotations and materials with works scheduled for completion mid-year. The Hall Committee has noted that the local community will be far better equipped in times of threats, ranging from flood to fire with the Hall improvements.
DRF30	Telegraph Point Hall	Telegraph Point Hall amenities and accessible toilet construction	\$20,000.00	30/06/2021	Connection to the new sewerage system has been completed. The Hall Committee are planning to build an accessible amenities block in order for the hall to be the Emergency Evacuation Centre for Telegraph Point in case of future natural disasters.
DRF31	РМНС	Bellangry - Woodlands Reserve works	\$40,000.00	30/06/2021	Community Recovery Officer liasing with CCAT, Community and Building Services and founding family. Distribution of concepts of priority project to community scheduled for late February.
DRF32	Long Flat	COMPLETED. Contractor JR Richards to remove rubbish at Long Flat.	\$467.00	28/02/2020 COMPLETED	Completed. Removal of rubbish and rubbish bins left from stranded travellers due to bushfire road closures.

TOTAL \$ 1,416,667



Authorised by:	<authority></authority>
Authorised date:	DD/MM/YYYY
Effective date:	DD/MM/YYYY
Next review date:	DD/MM/YYYY
File Number:	##########

WATER SUPPLY POLICY 2021

1. INTRODUCTION

Port Macquarie-Hastings Council (PMHC) is committed to reliably supplying high quality drinking water which consistently meets or exceeds the 2011 Australian Drinking Water Guidelines (ADWG), our customer's expectations and regulatory requirements. This policy **replaces** the Water Supply Policy 2015 amended 4 December 2018.

2. POLICY STATEMENT AND SCOPE

PMHC has a demonstrated commitment to:

- maintain and implement a water management system that is consistent with the Australian Drinking Water Guidelines and to the satisfaction of NSW Health
- use a risk-based approach to ensure that all potential risks to water quality are identified and
 effective measures are taken to minimise any threat to drinking water quality at all points along
 the delivery path from catchment to the customer's tap
- undertake accurate, timely, and meaningful monitoring and reporting to supply timely and relevant information to our customers and regulators that supports confidence in our drinking water supply
- ensure effective incident and emergency response plans are in place, reviewed and executed as required
- ensure all PMHC's water supply staff and contractors involved in the supply of drinking water are aware of the importance of maintaining drinking water quality at all times, including the provision of regular water industry training and qualification in these areas
- · respond to customers' concerns in a timely manner
- engage in the development of industry regulation and guidelines, and undertake targeted research and development
- use a Total Water Cycle Management approach to identify issues and inform long-term planning and strategies affecting PMHC, and to continually review and improve our work practices by assessing the performance of our water supply against criteria including the 2011 Australian Drinking Water Guidelines considering our customers, our regulators, and our business drivers.

This policy applies to all PMHC employees and contractors, and to any person or organisation acting for or representing PMHC.

The Water Supply Policy is the overarching document supported by four separate procedures outlining the details of water supply in the area. These are as follows:

- PMHC Water Supply Procedure 2021, covering:
 - Water Supply System
 - Water Supply Services
 - New Water Connections, Water Metering and Development Issues.
- PMHC Water Conservation and Drought Management Procedure 2021, including water restrictions
- PMHC Recycled Water Procedure 2021
- PMHC Water Supply Tariffs and Billing 2021

3. RESPONSIBILITIES AND AUTHORITIES

The Group Manager Infrastructure Planning is responsible and accountable for:

WATER SUPPLY POLICY 2020

UNCONTROLLED IF PRINTED

Page 1 of 3

- Implementing and communicating this policy
- Monitoring compliance of this policy
- Ensuring this policy is reviewed and updated to meet external compliance.

The Water Supply Policy is applicable to all persons and properties with the Local Government Area who use or access the local water supplies.

4. REFERENCES

- Australian Drinking Water Guidelines 2011
- Public Health Act 2010
- Local Government Act 1993
- Fluoridation of Public Water Supplies Act 1957
- PMHC Drinking Water Management System.

5. GLOSSARY OF TERMS AND DEFINITIONS

ADWG AS Auspec Augmentation AWA	Australian Drinking Water Guidelines* Australian Standard Standards for construction and design for water supply Increase of capacity of a treatment plant Australian Water Association
BASIX	Building Sustainability Index
CEO	1st tier management position and titled as such
CS0	Community Service Obligation
Council officer	A member of Council staff
DCP	Development Control Plan
DPWS	Department of Public Works and Services
DSP	Development Servicing Plan
Director	2nd tier management position and titled as such
EPA	Environment Protection Authority
Greywater	Wastewater from washing machines, laundry tubs, showers, hand basins and baths (excludes wastewater from kitchens, toilets, urinals or bidets)
kL	Kilolitre (1,000 litres)
kPa	Kilopascals
LEP	Local Environmental Plan
mg/L	Milligrams per litre
ML	Megalitre (1 million litres)
NSW	New South Wales
PPP	Plan, Pot-Hole and Protect
PCA	Plumbing Code of Australia
PE	Polyethylene
PMHC Detable Water	Port Macquarie-Hastings Council
Potable Water	Drinking water
Recycled Water	Water that has been treated and provided for reuse
REP RPZD	Regional Environmental Plan Reduced Pressure Zone Device
SCADA	Supervisory Control and Data Acquisition
SEPP	State Environmental Planning Policy
water	Refers to both potable and recycled water unless specified
WTP	Water Treatment Plant

*** Australian Drinking Water Guidelines**: Australian Drinking Water Guidelines 2011, including the framework for management of drinking water quality, as amended or updated from time to time.

6. PROCESS OWNER

The Group Manager Infrastructure Planning is the policy owner and can be contacted for any information in relation to this policy.

UNCONTROLLED IF PRINTED

7. AMENDMENTS

This replacement policy is a complete reworking of the Water Supply Policy 2015 and amendments dated 20 July 2016 and 4 December 2018.

UNCONTROLLED IF PRINTED

Page 3 of 3

Item 10.19 Attachment 1 Page 296



Water Conservation and Drought Management Procedure 2021

PMHC Water Conservation and Drought Management Procedure 2021

Item 10.19 Attachment 2 Page 297

Contents

Pa	ag	e
----	----	---

1.	Water Conservation	1
1.1	The Efficient Use of Water	1
1.1.1 B/	ASIX – the NSW Government's 'Building Sustainability Index'	
1.2	Water Conservation Measures	2
1.3	Water Loss Management	3
1.3.1	What is 'water loss'?	
1.3.2	Leak Reduction Program3	
1.3.3	Pressure Reduction Program3	
1.3.4	Watermain Renewals Program3	
1.3.5	Meter Replacement Program3	
1.3.6	Customer's water system	
1.4	Community Education	4
1.5	Rainwater Tanks	5
1.5.1	Introduction5	
1.5.2	PMHC approval5	
1.5.3	Exempt Development5	
	Creative tex Device	6
1.6	Greywater Reuse	0
1.6 1.6.1	PMHC approval	0
		U
1.6.1	PMHC approval6	_
1.6.1 1.6.2	PMHC approval	_
1.6.1 1.6.2 2 .	PMHC approval	7
1.6.1 1.6.2 2. 2.1	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7	7
1.6.1 1.6.2 2. 2.1 2.1.1	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7	7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7	7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2 2.1.3 2.1.4	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7 Declaring measures for drought management 7	7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2 2.1.3	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7 Declaring measures for drought management 7 Notification 7	7 7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2 2.1.3 2.1.4 2.2	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7 Declaring measures for drought management 7 Notification 7 Water Restrictions 7	7 7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2 2.1.3 2.1.4 2.2 2.2.1	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7 Declaring measures for drought management 7 Notification 7 Water Restrictions 7 Introduction 8	7 7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2 2.1.3 2.1.4 2.2 2.2.1 2.2.1	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7 Declaring measures for drought management 7 Notification 7 Water Restrictions 7 Introduction 8 Evel 1 Moderate Water Restrictions 10 Level 2 High Water Restrictions 11	7 7
1.6.1 1.6.2 2. 2.1 2.1.1 2.1.2 2.1.3 2.1.4 2.2 2.2.1 2.2.1 2.2.1 2.2.2 2.2.3	PMHC approval 6 Owner's responsibility 6 Drought Management 6 Objectives and Notification 7 Objectives 7 Water conservation and demand management 7 Declaring measures for drought management 7 Notification 7 Water Restrictions 7 Introduction 8 evel 1 Moderate Water Restrictions 10	7 7

1. Water Conservation

1.1 The Efficient Use of Water

Port Macquarie-Hastings Council (PMHC) encourages the efficient use of water. In accordance with the current *Local Government Act*, property owners, occupiers or managers must take any reasonable action to prevent waste and misuse of water. PMHC has developed a strategy to ensure conservation and demand management is a priority in the Local Government Area, with the aim of promoting efficient water usage and reducing water wastage.

The benefits of water conservation and demand management include:

- the potential to defer capital and recurrent expenditures in the water system by reducing excessive consumption;
- providing consumers with greater control over the size of their water bills by following the NSW Government's current Guidelines for Best-Practice Management of Water Supply and Sewerage to increase the proportion of the bill based on usage; and
- improving environmental performance (such as reducing water extraction and energy consumption) by reducing waste and misuse of water resources.

PMHC's strategy for conservation and demand management includes the following components:

- water pricing reform by following the NSW Government's current Guidelines for Best-Practice Management of Water Supply and Sewerage
- Water Conservation Measures, to encourage the efficient use of water and recycled water
- minimising losses in the water system, including a meter replacement program
- community education programs
- building code measures, including the promotion of NSW Government initiatives like BASIX, and
- investigating and developing water recycling schemes, such as recycled water and effluent reuse to substitute for potable (drinking) water.

1.1.1 BASIX - the NSW Government's 'Building Sustainability Index'

Introduced by the NSW Government as a world-first sustainability tool in July 2004, the BASIX is a major initiative to reduce the amount of drinking water consumed and greenhouse gas emitted by new homes throughout NSW. In the Port Macquarie-Hastings Local Government Area, the BASIX Policy includes a requirement for all new homes, from single dwellings to high-rise developments, to reduce the amount of drinking water used by 40% compared to homes built prior to the introduction of BASIX. This can be achieved through a range of water saving measures, such as water efficient shower heads, dual-flush toilets, use of recycled water, rainwater tanks, greywater treatment systems and more. From October 2006, BASIX also applies to alterations and additions to residential dwellings, swimming pools and spas.

1.2 Water Conservation Measures

PMHC introduced Water Conservation Measures in 2004 and reaffirmed this decision via Council resolution in 2005, 2013, 2016 and December 2018.

These measures can assist residents in better managing their water use, which will deliver significant financial, environmental and social benefits to the community.

The following Water Conservation Measures are encouraged by PMHC:

Watering gardens and lawns:

- avoid the use of hoses, sprinklers or watering systems between 9am and 4pm;
- fit hoses with a water cut-off trigger or control nozzle; and
- use watering cans and buckets instead of a hose.

Cleaning vehicles, houses, boats and outboard motors:

- where possible, wash vehicles, boats and outboard motors on the lawn; and
- fit hoses with a water cut-off trigger or control nozzle.

Topping-up swimming pools:

 monitor the filling and topping-up of swimming pools and spas so as to avoid pool overflow and water wastage.

Cleaning driveways, paths and hardstand areas:

- use brooms, vacuum cleaners or air blowers to remove loose material; and
- use an approved water efficient nozzle (less than 9 litres per minute) or high pressure cleaning unit fitted with a water cut-off trigger or control nozzle.

All commercial and industrial buildings, building and construction activities and landscaping industries:

- avoid the use of watering systems between 9am and 4pm;
- fit hoses with a water cut-off trigger or control nozzle; and
- use recycled water for dust suppression.

1.3 Water Loss Management

1.3.1 What is 'water loss'?

PMHC is committed to minimising water loss in the water supply system. Water loss is the amount of water that PMHC supplies into the system that is not accounted for in the sum of individual customer meter readings. Water loss issues can include:

- leaks in the water system
- unmetered water use e.g. for firefighting or mains flushing
- unauthorised water use e.g. theft and illegal connections
- under-registration of customer meters (i.e. meter not registering full flow passing through it), or
- errors in the water system meters.

1.3.2 Leak Reduction Program

PMHC regularly checks reservoir zones in the water supply system to determine if major leaks are occurring.

PMHC uses its computerised Supervisory Control and Data Acquisition (SCADA) system to monitor flows and reservoir levels. This information is used to target sites for investigations and leakage surveys where required.

PMHC encourages residents to report any leaks in the water system.

1.3.3 Pressure Reduction Program

PMHC reduces excessive pressure in the system by appropriate reservoir zonings and through the installation of pressure-reducing valves. This reduces the quantity of water lost through leaks, which may decrease maintenance requirements and extend the life of watermains.

1.3.4 Watermain Renewals Program

PMHC has an annual Watermain Renewals Program to ensure the integrity and performance of our water supply network, this includes replacing any watermains that are in poor-performing condition or that have significantly degenerated due to age.

1.3.5 Meter Replacement Program

PMHC has a Meter Replacement Program to replace ineffective or ageing meters. The replacement of meters occurs after analysis of PMHC's entire fleet of meters and is not based on customer requests.

This program includes the physical replacement of 25mm residential meters with 20mm meters (these are currently being charged as a 20mm meter).

PMHC will replace the meters identified under this program at no cost to the property owner and will endeavour to notify residents at the time of replacement and advise that a new meter has been installed.

1.3.6 Customer's water system

PMHC encourages property owners to properly maintain pipes and fittings in their water system and promptly fix any leaks. For example, a toilet cistern leaking at a rate of 1 litre per minute will add over \$1,700 to the annual water charge over a 12 month period based on 2020/21 water charges. If the property usage threshold has already been met, this figure will double.

1.4 Community Education

PMHC is committed to an ongoing customer education campaign focusing on the importance of conserving our valuable water resources. In this endeavour, PMHC works in partnership with the broader community, environmental groups, schools, local businesses and other government agencies.

PMHC's community education program is designed to increase public awareness about water issues and efficiencies, by providing:

- current and accurate information on PMHC's website for all aspects relating to water, such as the water treatment process, water testing, water conservation measures and water restrictions
- demonstration of measures already being implemented to minimise impact on the environment and improve the efficiency and quality of water services provided to the public
- tours of PMHC's water facilities to raise awareness of where water comes from, the water treatment process, how water is sent to the customer's house, recycled water, and the work done by PMHC staff
- field trips and education programs for schools
- information displays at shopping centres and major community events
- participation and community tours during National Water Week in October each year
- promotion of the national Water Efficiency Labelling and Standards (WELS) scheme, which has been developed to provide customers with reliable information on the relative efficiency of domestic appliances, e.g. shower roses and washing machines
- brochures and other materials to inform the community, e.g. PMHC's Water Efficient Garden booklet, Frequently Asked Questions on Water Restrictions, Water Conservation brochure and a list of locations for the 'Choose Tap' water bottle refill and drink stations
- regular promotions and community information on water-related issues via media outlets.

1.5 Rainwater Tanks

1.5.1 Introduction

In areas where a dual reticulation non-potable water supply is not available, PMHC encourages the installation of rainwater tanks retrofitted to homes or as a requirement of BASIX, noting that:

- rainwater is a valuable natural resource and so should be collected for household use where possible
- rainwater collection systems assist in reducing some of the negative impacts associated with stormwater run-off particularly in urban areas
- the use of a rainwater collection system is a way of conserving potable water supplies as it can
 provide a water source for a range of household tasks including toilet flushing, laundry and
 external uses such as garden watering, topping-up swimming pools and car washing
- using rainwater will reduce water bills and community infrastructure costs
- using rainwater can also aid self-sufficiency, providing a back-up supply in case of water restrictions caused by drought, peak supply shortage, or water quality problems
- 'NSW Health supports the use of rainwater tanks for non-drinking uses, such as toilet flushing, washing clothes or in water heating systems'

Should consumers wish to use rainwater for all domestic purposes, it is important that the advice contained in NSW Health Guideline GL2007_009 of June 2007 is considered. Advice can be found at: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2007_009.pdf

1.5.2 PMHC approval

Where approval from PMHC is required, the siting, design and erection of rainwater tanks must be in accordance with PMHC requirements.

Rainwater Tank Guidelines and standard arrangement installation drawings are available from PMHC's website at:

https://www.pmhc.nsw.gov.au/Services/Water/Water-in-the-home/Rainwater-tanks.

PMHC must be contacted to determine whether development approval is required.

1.5.3 Exempt Development

The installation of a rainwater tank does not require PMHC approval if the installation meets requirements set out in State Environmental Planning Policy (SEPP) Exempt and Complying Development.

1.6 Greywater Reuse

1.6.1 PMHC approval

PMHC approval is required for customers wishing to install and operate a system for diverting greywater generated on their residential premises. However, in accordance with current *Local Government (General) Regulations*, domestic greywater diversion may be carried out without PMHC approval **if**:

- it is carried out in accordance with the current *Plumbing Code of Australia* and a sewage management facility is **not** installed on the premises, and
- the following performance standards are achieved:
 - prevention of the spread of disease by micro-organisms;
 - o prevention of the spread of foul odours;
 - o prevention of contamination of water;
 - o prevention of degradation of soil and vegetation;
 - o discouragement of insects and vermin;
 - ensuring that persons do not come into contact with untreated sewage or effluent (whether treated or not) in their ordinary activities on the premises; and
 - o minimisation of any adverse impacts on the amenity of the premises and surrounding lands.

1.6.2 Owner's responsibility

Property owners are responsible for greywater systems, and any impacts of using greywater on the premises. It is the owner's responsibility to meet the performance standards for greywater reuse

7

2. Drought Management

2.1 Objectives and Notification

2.1.1 Objectives

Objectives of the Port Macquarie-Hastings Drought Management Plan are to:

- manage the water supply system with the aim of minimising the impact of drought;
- manage the actions taken in conjunction with the impact of drought on water users and the environment;
- · define the conditions under which water restrictions will be implemented; and
- enable PMHC to meet statutory requirements, e.g. environmental river flow targets to minimise the impact of water supply demands on the river and associated aquatic ecosystems.

PMHC will ensure a systematic, timely, effective and efficient response to drought and emergencies, to minimise disruption and adverse impact on customers.

PMHC are currently developing an Integrated Water Cycle Management (IWCM) Strategy. The strategy will include the following:

- Water Supply Secure Yield Study;
- Drought Management Plan; and
- Demand Management Plan.

2.1.2 Water conservation and demand management

PMHC has adopted a responsible risk management approach to drought situations, which relies on a combination of water conservation and demand management measures, as well as improvements to the existing water supply system.

2.1.3 Declaring measures for drought management

PMHC will initiate measures under the Drought Management Plan if:

- there is a drought; or
- the available stored water, or the available capacity of supply, is so limited as to make extraordinary measures necessary in the general interest of water consumers.

2.1.4 Notification

PMHC will publish a notice in local newspapers outlining the water restrictions that apply in accordance with the Drought Management Plan. This may include the:

- purposes for which the water can be used;
- times when the water can be used;
- methods by which the water can be used; or
- quantities of the water that can be used.

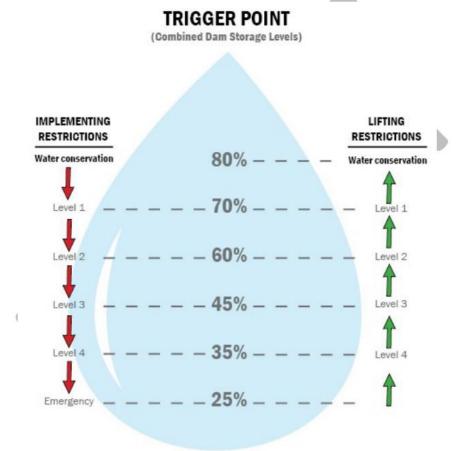
2.2 Water Restrictions

2.2.1 Introduction

Water restriction levels are determined based on an assessment of daily customer demand and water storage levels available in our dams. Predicted weather forecasts and the flow and quality of the rivers is also taken into consideration when implementing water restrictions.

PMHC adopted revised water restriction trigger levels, and the 2014 Uniform Regional Water Restrictions, at the Ordinary Council Meeting of 20 July 2016. These revised water restriction trigger levels of combined total dam storage for both Cowarra and Port Macquarie dams are:





PMHC's CEO has the delegated authority to exercise discretion when imposing water restrictions, giving due consideration to the time of year and prevailing weather conditions. Similarly, the CEO also has the delegation to exercise discretion when lifting water restrictions, giving due consideration to the potential for pumping from the Hastings River and combined storage levels in the dams. Please refer to Dam Levels, and Water Restrictions and Trigger Levels on PMHC's website for more information.

Water restrictions have four levels (Level 1 to Level 4), which can be incrementally implemented to reduce water demands during periods of extended drought conditions.

Emergency Water Restrictions follow on from Level 4 (Severe), and conditions associated with the use of water would be as directed by PMHC at that time.

Similarly, when lifting water restrictions, a step approach is taken based primarily on the combined dam levels. Figure 1 above details the levels and the approximate trigger point for implementing water restrictions, as well as those for lifting water restrictions.

Water Conservation Measures are encouraged at all times. The given specifications relate to potable water unless stated otherwise. There are separate restrictions placed on recycled water, as stated, and no restrictions are placed on rainwater or bore water use (restrictions will apply to tanks which have a potable top up connection). Signage to denote alternate water use is available from hardware stores.

2.2.2 Level 1 Moderate Water Restriction

Watering gardens and lawns:

- use of water sprinklers or fixed hoses is banned
- hand-held hose or drip irrigation can be used for a maximum of 1 hour before 9:00am or after 4:00pm on odd or even days matching house number
- hoses must be fitted with water cut-off trigger or control nozzle
- micro-sprays, with nozzles less than 3mm in diameter, or drip irrigation systems may be used for a maximum of 15 minutes before 9.00am or after 4.00pm matching house number
- watering-cans and buckets can be used at any time
- no domestic water use outside the home on the 31st day of the month.

New turf:

 exemptions for establishing new turf are available. An Exemption from Water Restrictions to Water New Turf' application is available online or from PMHC offices.

Cleaning vehicles, boats and outboard motors:

- car and boat washing (on lawn area): with a bucket and one hand-held hose (for rinsing only) before 9:00am or after 4:00pm on odd or even days matching house number
- boat motor flushing can occur for 5 minutes on lawn area only on day of use.

Topping up swimming pools:

- one hand-held hose can be used for a maximum of 1 hour before 9.00am or after 4.00pm on odd or even days matching house number
- hose must be fitted with a water cut-off trigger or control nozzle.

Cleaning houses, driveways, paths and hardstand areas:

- washing driveways, paved areas, walls and roofs with a hose is banned
- no chemicals or cleaning products are to be used on driveways, paths or hardstand areas; brooms
 or air blowers should be used to remove loose material from driveways, paths and hardstand
 areas with material disposed of in green bin or used as mulch on garden
- watering-cans and buckets can be used at any time.

Sporting fields:

 irrigation systems can only be used between 1.00am to 2.00am on Monday, Wednesday and Friday.

Public gardens:

 hand-held hoses can only be used between 7.00am and 8.00am on Monday, Wednesday and Friday.

Plant nurseries, bowling greens and commercial market gardens:

sprinkler systems can only be used between 7.30am and 9.30am.

Commercial, building and landscaping industries:

- no restrictions to commercial activities (other than nurseries, bowling greens and commercial market gardens), however water saving initiatives are encouraged
- dust suppression permitted with recycled water only
- all water usage and associated activities must not cause pollution as defined under the Protection
 of the Environment Operations [POEO] Act 1997.

Recycled water:

no restrictions on recycled water use.

2.2.3 Level 2 High Water Restrictions

Watering gardens and lawns:

- use of water sprinklers or fixed hoses are banned
- one hand-held hose can be used for a maximum of 30 minutes before 9.00am or after 4.00pm on odd or even days matching house number
- hoses must be fitted with water cut-off trigger or control nozzle
- micro-sprays, with nozzles less than 3mm in diameter, or drip irrigation may be used for a
 maximum of 15 minutes before 9.00am or after 4.00pm on odd or even days matching house
 number
- · watering-cans and buckets can be used at any time
- no domestic water use outside the home on the 31st day of the month.

New turf:

 exemptions for establishing new turf are available. An 'Exemption from Water Restrictions to Water New Turf' application is available PMHC website or from PMHC offices.

Cleaning vehicles, boats and outboard motors:

- car and boat washing (on lawn area): washing may occur with a bucket and one hand-held hose (for rinsing only) before 9:00am or after 4:00pm on odd or even days matching house number
- boat motor flushing: can occur for 5 minutes on lawn area only on day of use.

Topping up swimming pools:

- one hand-held hose can be used for a maximum of 30 minutes before 9.00am or after 4.00pm on odd or even days matching house number
- hose must be fitted with a water cut-off trigger or control nozzle.

Cleaning houses, driveways, paths and hardstand areas:

- washing driveways, paved areas, walls and roofs with hoses is banned.
- no chemicals or cleaning products are to be used on driveways, paths or hardstand areas; brooms or air blowers should be used to remove loose material from driveways, paths and hardstand areas with material to be disposed of in green bin or used as mulch on garden.
- buckets only can be used before 9.00am or after 4.00pm on odd or even days matching house number.

Sporting fields:

 irrigation systems can only be used between 1.00am to 1.30am on Monday, Wednesday and Friday.

Public gardens:

hand-held hoses can be used between 7.00am and 7.30am on Monday, Wednesday and Friday.

Dust suppression:

permitted with recycled water only.

Plant nurseries, bowling greens and commercial market gardens:

hand-held hoses only can be used between 7.30am and 9.30am.

Commercial, building and landscaping industries:

- no restrictions to commercial activities (other than nurseries, bowling greens and commercial market gardens), however water saving initiatives are encouraged.
- dust suppression permitted with recycled water only.
- all water usage and associated activities must not cause pollution as defined under the Protection
 of the Environment Operations [POEO] Act 1997.

Recycled water:

no restrictions on recycled water use.

2.2.4 Level 3 Very High Water Restrictions

- · all outside use of water sprinklers, fixed hoses, micro-sprays, and drip irrigations is banned
- one hand-held hose can be used for a maximum of 10 minutes before 9:00am or after 4.00pm on odd or even days matching house number
- · gardens can be watered by buckets or tank water only
- cars and boats can be washed on grassed areas with a bucket or tank water only
- sporting fields and public gardens can use recycled water only, as per note below; and
- plant nurseries, bowling greens and commercial market gardens may only water under a PMHC license
- no domestic water use outside the home on the 31st day of the month.

Recycled water:

use of recycled water must be in line with Level 1 restrictions for potable water.

2.2.5 Level 4 Severe Water Restrictions

- all external use of drinking water, including sprinklers, micro-sprays, fixed and hand-held hoses is banned
- gardens can be watered with tank water, or recycled water as per note below;
- sporting fields and public gardens may use recycled water only; and
- plant nurseries, bowling greens and commercial market gardens may only water under a PMHC license.

Recycled water:

use of recycled water must be in line with Level 2 restrictions for potable water.

2.2.6 Emergency Water Restrictions

- all external use of drinking water, including sprinklers, micro-sprays, fixed and hand-held hoses is banned
- other uses allowed only as directed and approved by Port Macquarie-Hastings Council
- gardens can be watered with tank water, or recycled water as per note below;
- sporting fields, public gardens, plant nurseries, bowling greens and commercial market gardens may only water under a PMHC license.

Recycled water:

use of recycled water must be in line with Level 3 restrictions for potable water.



Water Supply Tariff and Billing Procedure 2021

PMHC Water Supply Tariff and Billing Procedure 2021

Item 10.19 Attachment 3 Page 311

Contents

Page

1.	Introduction	. 1
2.	Tariffs and Billing	.1
1.1	Water Supply Charges	1
1.1.1	Access charge (Availability charge)1	
1.1.2	Usage charge1	
1.1.3	Major water users	
1.1.4	Water consumption2	
1.2	Concessions, Rebates and Variations	3
1.2.1	Community Service Obligations3	
1.2.2	Pensioner rebate	
1.2.3	Secondary dwelling4	
1.2.4	Dialysis customers4	
1.2.5	Hardship annual charge relief4	
1.2.6	Access charge rebate – Hydraulic issues4	
1.2.7	Interim access charge rebate – Staged development4	
1.2.8	Fire Service charges4	
1.2.9	Variations for unforeseen leaks – All properties5	
1.2.10	Meter testing	
1.3	Billing	7
1.3.1	Water account7	
1.3.2	Changes to water prices7	
1.3.3	Overdue accounts7	
1.3.4	Cutting off or restricting water supply7	
1.3.5	Additional water meter readings8	
3.	Headworks and Distribution Charges	.8

PMHC Water Supply Tariff and Billing Procedure 2021

1. Introduction

The Water Supply Tariff and Billing Procedure is authorised under the Port Macquarie-Hastings Council Water Supply Policy.

The intent is to outline the charges and fees relating to the supply of water to properties, any additional applicable charges (based on individual requirements), and the concessions and rebates available to residents of the Local Government Area.

2. Tariffs and Billing

1.1 Water Supply Charges

Port Macquarie-Hastings Council (PMHC) adopts a water supply tariff structure consistent with the principals outlined in NSW Department of Industry Best-Practice Management of Water Supply and Sewerage Guidelines. The water billing system consists of two charges: an annual 'Access Charge', and consumption 'Usage Charge', i.e.:

Water Supply bill = access charge + usage charge

The tariff structure is based on an 'inclining block tariff', with a Usage Charge per kL for consumption up to a set 'Usage Threshold' and an increased Usage Charge per kL over and above the Usage Threshold - referred to as Tier 1 and Tier 2 usage charges. The Tier 2 Usage Charge is set at twice the Tier 1 Usage Charge.

These water supply charges are determined each year by PMHC through *Fees and Charges* in accordance with the *Local Government Act* 1993. They can be viewed on PMHC's website.

1.1.1 Access charge (Availability charge)

An Access Charge is applicable to all properties fronting a water main to which a water service can be provided. The property must be located within the Water Supply Service Area as outlined within the Developer Servicing Plan (DSP).

The Access Charge cost is dependent on the customer's meter size. The access charge increases with meter size - the larger the meter size, the more water that will be allocated under the Tier 1 usage rate (refer section 1.1.2).

Customers that do not have an individual meter (e.g. older Strata units) are charged as if they had an individual 20mm water meter.

1.1.2 Usage charge

The Usage Charge is applied to the amount of water measured through the water meter. It is charged based on a two-tier tariff. Tier 1 rates per kilolitre are charged up to a set 'Usage Threshold' and Tier 2 rates are charged when yearly consumption exceeds the set level.

For example, the Usage Threshold for a 20mm service is set at 270kL per annum. For every kilolitre up to 270kL, the Tier 1 rate is charged. For every kilolitre used over 270kL, the Tier 2 rate is charged. The 'Usage Threshold' increases with meter size.

PMHC Water Supply Tariff and Billing Procedure 2021

1.1.3 Major water users

For major consumers of water such as caravan parks, mobile/manufactured home estates and retirement villages, the Usage Threshold may be determined individually based on the Developer Charge methodology. Any changes to a customer's Usage Threshold will result in a subsequent change in the applicable Access Charge.

To determine the water Usage Threshold, a 'Major Water User' is defined as a customer:

- with the equivalent of a 100mm or larger water meter (excluding Fire Services), and
- who has an approved development of at least 25 Equivalent Tenements (ETs) refer to PMHC's Development Contributions Assessment Policy.

To become a registered Major Water User, an application must be made to the Water and Sewer Planning section with the following information:

- annual water consumption amounts for previous bills, and
- justification for becoming a registered Major Water User, including a detailed description of the property's use, consistent with the criteria set out in Schedule 1 and 2 of PMHC's Development Contributions Assessment Policy.

For those registered as a Major Water User, further water conservation measures may be imposed, or a full Water Usage Report may be requested.

1.1.4 Water consumption

Annual water consumption for a property is based on the water meter readings taken during that year.

3

1.2 Concessions, Rebates and Variations

1.2.1 Community Service Obligations

In accordance with the *Local Government Act 1993,* PMHC has resolved to provide a Community Service Obligation (CSO) to the following properties by not charging an Access Charge (Usage Charges still apply when water is consumed):

- land owned by the Crown, not being land held under a lease for private purposes (including if it is leased by the Crown to a caretaker at a nominal rent);
- land within a national park, historic site, nature reserve, state game reserve or karst conservation reserve (within the meaning of the National Parks and Wildlife Act 1974), whether or not the land is affected by a lease, licence, occupancy or use;
- that part of land that is the subject of a Conservation Agreement (within the meaning of the National Parks and Wildlife Act 1974);
- land that is vested in, owned by, held in trust by or leased by the Nature Conservation Trust of NSW constituted by the Nature Conservation Trust Act 2001;
- land that is vested in or owned by State Water Corporation and in, on or over which water supply works (within the meaning of the Water Management Act 2000) are installed;
- land that belongs to a religious body and is occupied and used in connection with:
 - o a church or other building used or occupied for public worship, or
 - a building used or occupied solely as the residence of a minister of religion in connection with any such church or building, or
 - o a building used or occupied for the purpose of religious teaching or training, or
 - a building used or occupied solely as the residence of the official head of any religious body in the State or in any diocese within the State.
- land that belongs to and is occupied and used in connection with a school (being a government school or non-government school within the meaning of the Education Reform Act 1990), including:
 - o a playground that belongs to and is used in connection with the school, and
 - a building occupied as a residence by a teacher, employee or caretaker of the school that belongs to and is used in connection with the school.
- land that is vested in the NSW Aboriginal Land Council or a Local Aboriginal Land Council and is declared under Division 5 of Part 2 of the Aboriginal Land Rights Act 1983 to be exempt from payment of rates;
- land that is vested in or owned by Rail Infrastructure Corporation, Rail Corporation NSW or Transport Infrastructure Development Corporation, and in, on or over which rail infrastructure facilities (within the meaning of the Transport Administration Act 1988) are installed; and
- land that is below high water mark and is used for any aquaculture (within the meaning of the Fisheries Management Act 1994) relating to the cultivation of oysters.

1.2.2 Pensioner rebate

In accordance with the *Local Government Act* 1993, PMHC provides eligible pensioners, as prescribed in the *Local Government Act* 1993 and the *Local Government (General) Regulations* 2005, with a reduction to annual water supply charges, resulting in a maximum charge of \$87.50 for eligible properties.

PMHC Water Supply Tariff and Billing Procedure 2021

1.2.3 Secondary dwelling

A secondary dwelling can be defined as an additional structure within the boundaries of a residential property, providing a self-contained habitable dwelling. A secondary dwelling can be separately metered or supplied from the principal residence meter.

To be considered as a secondary dwelling, a number of conditions apply, e.g. size of the structure, nature of use, conditions associated with development. In some cases, the additional dwelling may be considered a dual occupancy/secondary dwelling and may be subject to payment of developer contributions. Refer to PMHC's Development & Environment section for further information.

Where a secondary dwelling is occupied by a dependent relative and where no financial remuneration is paid to the owner of the property, PMHC requires that ratepayers apply annually for classification as a secondary dwelling for water tariff purposes.

1.2.4 Dialysis customers

For customers on a home dialysis machine that requires a water supply to operate, PMHC has agreed to provide up to 125kL of water per year at no charge, based on quarterly usage (i.e. up to 31.25kL of water at no charge per quarter).

1.2.5 Hardship annual charge relief

PMHC will make provisions for financial hardship. Customers can apply for an annual charge reduction, where it can be substantially proven they are experiencing genuine financial hardship.

PMHC will consider providing assistance based on information provided by the resident, including income and expenditure details. Each case is treated individually on merit. More information can be found in PMHC Rates and Charges Hardship Assistance Policy, and applications can be made on the website.

1.2.6 Access charge rebate – Hydraulic issues

PMHC has reduced the Access Charge for a 20mm water meter for residential properties that require a larger meter for hydraulic reasons (battle-axe blocks and low-pressure areas).

PMHC will continue this rebate and will work with these property owners with the view to installing a standard 20mm meter for a domestic water supply under PMHC's normal Meter Replacement Program.

1.2.7 Interim access charge rebate – Staged development

On properties subject to staged development, and where the water service has been sized to serve the site ultimate requirements, the water Access Charge may be reduced each year to the equivalent of the rate for the appropriate sized service required for that stage of the development that has PMHC approval.

An application for such reduction must be made each year and include details of current approvals and an assessment of the size required, in accordance with the current *Plumbing Code of Australia* and AS 3500.

1.2.8 Fire Service charges

All water consumption for Fire Services is charged at the Tier 1 Usage Charge. The Access Charge for Fire Services is dependent on the service size and is charged at 50% of the charge of the equivalent meter size.

1.2.9 Variations for unforeseen leaks – All properties

The property owner is responsible for maintaining all pipes and fittings between PMHC's water meter and the buildings and taps on their property (refer to PMHC Water Supply Procedure 2021). The property owner is also responsible for payment of all water charges based on the water that passes through the water meter, including on-site leaks.

If a customer is unable to pay an account or requires assistance in repaying an account, they may apply for an annual charge reduction due to hardship. See section 1.2.5 above for more information.

Applications will be considered on a case-by-case basis where:

- the water service is constructed of material approved by PMHC for domestic use, including:
 - copper pipe type A to AS1432 (copper alloy fittings to AS3688)
 - polyethylene (PE) pipe for pressure applications (Blue Stripe PN16), with minimum pressure rating of PN16 to AS/NZS 4130:2003
- a defect in the service has occurred which is not readily visible or apparent, and PMHC is satisfied there has been immediate and effective action to make repairs, and
- a copy of the invoice for repairs is provided to PMHC. The invoice must:
 - o be from a licensed plumber and include the licence number
 - show the address where the work was carried out
 - state the nature and location of repairs, including the type of pipe material and length replaced
 - o include a statement that the defect was not readily visible or apparent.
- Depending on the issue and information, a Statutory Declaration may also be required

PMHC will not consider a variation or reduction for an unforeseen leak for fire services or properties serviced with:

- poly lines (except 'Blue Stripe' drinking water pipe manufactured in accordance with AS/NZS 4130:2003: Polyethylene (PE) pipes for pressure applications, with minimum pressure rating of PN16), or
- designated Private Lines.

An approved variation will reduce the charges to an amount which is the greater of: half the charges incurred during the quarter, or the equivalent actual charges incurred for the same quarter of the previous year.

Subsequent bills in the financial year will take into account the adjusted amount rather than the metered amount (e.g. for calculation of any Tier 2 Usage Charges).

Any claims for subsequent leaks must demonstrate that sufficient work has been done to maintain the entire system and include an inspection report by a licensed plumber, advising that the entire service is in good condition and does not require replacement.

1.2.10 Meter testing

If a property owner considers PMHC's water meter is not accurately recording water usage, a request can be made for PMHC to test the meter (after payment of the appropriate fee, as set each year by PMHC through *Fees and Charges*).

If the subsequent test shows the meter is 'over'-recording by more than 3% of the actual quantity of water passing through it, PMHC will:

- replace the meter
- refund any charge paid to test the meter, and
- adjust the latest account on the basis of a daily consumption equal to the average daily consumption during the corresponding meter reading period of the previous year, or previous three years, or similar basis.

If the test shows that the meter is 'under'-recording by more than 3% of the actual quantity of water passing through it, PMHC may:

- replace the meter, and
- adjust the latest account on the basis of a daily consumption equal to the average daily consumption during the corresponding meter reading period of the previous year, or previous three years, providing the corresponding period is considered representative of normal consumption. Otherwise a pro-rata calculation may be considered, e.g. where the occupant has lived at the property for less than a year.

1.3 Billing

1.3.1 Water account

PMHC will issue a water account outlining the water supply, Usage Charge and the water service Access Charge. Residential customers will be sent an account on a quarterly basis, unless otherwise agreed. Commercial customers with high water usage may be sent an account on a monthly basis.

1.3.2 Changes to water prices

The water Usage Charge and Access Charge is set each financial year in accordance with the Local Government Act 1993.

Because the reading of water meters is staggered throughout the year, the actual water consumption for each financial year is taken as the pro-rata consumption between the meter readings that fall on either side of the end of the financial year.

The water account received after the end of the financial year will show the actual water consumption that applies for each charge bracket – split into the 'old' water charges and the 'new' water charges.

1.3.3 Overdue accounts

PMHC charges interest on overdue accounts at a rate set each year by the Department of Local Government in accordance with the *Local Government Act* 1993. The interest accrues on a daily basis.

PMHC will take action to recover overdue accounts, including using external debt collection agencies and legal action, where necessary.

1.3.4 Cutting off or restricting water supply

In accordance with the Local Government (General) Regulation 2005, PMHC may cut off or restrict the supply of water to a property if any:

- water meter used to measure that supply is out of repair or, in the opinion of PMHC, incorrectly
 registers the supply of water, or
- rates or charges in respect of the water supplied to the premises are unpaid.

If PMHC cuts off the supply of water to a property, PMHC may refuse to supply water to those premises until:

- · a water meter is installed on the premises,
- the water meter registers correctly, or
- the outstanding water charges are paid.

PMHC may charge a fee, as set each year through Fees and Charges, for the:

- issue of a 'Notice of Intention to Disconnect Water',
- disconnection of the water supply, and
- reconnection of the water supply.

The Local Government Act 1993 provides that water charges including any accrued interest (and any costs awarded by the courts in proceedings to recover the water charges) are a charge on the land, and PMHC may sell the land (including vacant land) if water charges have remained unpaid for more than five years from the date on which it became payable.

1.3.5 Additional water meter readings

PMHC may arrange for an additional water meter reading and estimated water bill outside the normal billing cycle, after a request by the customer and the payment of the appropriate fee (as set each year by PMHC through *Fees and Charges*) has been received.

3. Headworks and Distribution Charges

Headworks charge is a charge formulated by PMHC, as the Water Authority, to cover the cost of providing, maintaining and extending infrastructure such as pipelines, reservoirs and pump stations. These and distribution charges cover the cost of providing the water supply capacity either within PMHC's existing water supply system or through future capital works.

PMHC has prepared a Development Servicing Plan (DSP) in accordance with Section 64 of the *Local Government Act 1994,* which details the water supply headworks and distribution charges imposed on development areas using PMHC's water supply infrastructure.

Potential development areas that are not included in the current DSP will be subject to separate headworks and distribution charges, which will be based upon the actual cost of providing water supply services.

PMHC Water Supply Tariff and Billing Procedure 2021

Item 10.19 Attachment 3 Page 320



Water Supply Procedure 2021

PMHC Water Supply Procedure 2021

Item 10.19 Attachment 4 Page 321

Contents

Page

Glossary o	of Terms	4
1.	Water Supply Services	1
1.1	Water Supply Schemes	1
1.1.1	Hastings Bulk Water Distribution Scheme1	
1.1.2	Telegraph Point Water Supply Scheme1	
1.1.3	Comboyne Water Supply Scheme1	
1.1.4	Long Flat Water Supply Scheme1	
1.2	Delineation of Responsibility	2
1.3	Water Supply Services	3
1.3.1	All water through an independent house service pipe	
1.3.2	All water connections to be metered3	
1.3.3	Supply of drinking water3	
1.3.4	Cutting off or restricting water supply3	
1.3.5	Drinking water quality4	
1.3.6	water pressure	
1.3.7	Life support/Dialysis5	
1.3.8	Fire hydrants and other fittings5	
1.3.9	Reliance on water supply5	
1.4	Factors affecting Water Supply Service and Infrastructure	6
1.4.1 1.4.2	Unplanned interruptions	
=	Planned interruptions	
1.4.3	Repairs and maintenance	-
1.5 1.5.1	Water Supply Levels of Service PMHC's targeted Levels of Service7	7
1.5.1	Catchment areas, pumping stations and reservoirs	
2.	Water Supply for Development	9
2.1	New Water Connections	9
2.1.1	Water services installation	
2.1.2	Water meter installation9	
2.1.3	Large water services	
2.1.4	Properties previously not rated for water supply	
2.1.5 2.1.6	Strata and multi-residential developments	
2.1.0	Torrens Title developments	
2.1.7	Water connections in rural areas	
2.1.8	Designated private supply lines	
2.1.3	Fire services	
2.1.10	Water Pressure Certificate	
2.1.11	Cross-connection control	
2.1.12	Easement for water service	
2.1.13	Private water hydrants	
2.1.14	Water Metering	13
2.2.1	Meter security	
2.2.2	Meter replacements	
	•	

PMHC Water Supply Procedure 2021

2.2.3	Meter relocation	. 13	
2.2.4	Multiple meters	. 13	
2.2.5	Upsizing/downsizing meters		
2.2.6	Water leakage investigation		
2.2.7	Private water meters	. 14	
2.3	Augmentation of Water Supply System		15
2.3.1	Standards and Specification requirements	. 15	
2.3.2	Headworks and distribution charges	. 15	
2.3.3	Development Consent conditions	. 15	
2.3.4	Extensions and additions to existing developments		
2.3.5	Additional water mains in roads	. 16	
2.3.6	Disconnection of existing services across boundaries	. 16	
2.3.7	Disinfection and pressure testing of new watermains	. 16	
2.3.8	Easement creation for watermains	. 16	
2.3.9	Protection of pipelines and easements	. 17	

PMHC Water Supply Procedure 2021

Item 10.19 Attachment 4 Page 323

Glossary of Terms

ADWG	Australian Drinking Water Guidelines
AS	Australian Standard
Aus Spec	Australian Specification - standards for construction and design for water supply
augmentation	to increase capacity of a treatment plant
DSP	Development Servicing Plan
kL	kilolitre (1,000 litres)
kPa	kilopascals
LGA	Local Government Area
mg/L	milligrams per litre
ML	Megalitre (1 million litres)
PPP	Plan, Pot-Hole and Protect
PCA	Plumbing Code of Australia
PMHC	Port Macquarie-Hastings Council
potable water	drinking water
RPZD	Reduced Pressure Zone Device
water	Refers to both potable and recycled water unless specified
WSAA	Water Services Association of Australia
WTP	Water Treatment Plant

PMHC Water Supply Procedure 2021

1

1. Water Supply Services

1.1 Water Supply Schemes

Port Macquarie-Hastings Council (PMHC) operates and maintains water supply schemes in the areas of Port Macquarie, Wauchope, Camden Haven, Telegraph Point, Comboyne and Long Flat:

1.1.1 Hastings Bulk Water Distribution Scheme

This scheme includes the integrated bulk water supply pumping station, off-creek storage dams and trunkmain network to Wauchope, Port Macquarie and the Camden Haven region. Up to a maximum of 105ML per day of raw/untreated water can be pumped from the Hastings River at Koree Island (5km south-west of Wauchope) depending on river conditions. The raw water is treated with lime and carbon dioxide (water conditioning) to increase alkalinity and stabilise the pH level. Fluoridation and chlorination are also completed at the Rosewood Reservoir site, prior to the water being stored in Rosewood No. 2 and No. 3 Reservoirs. The water in Rosewood Reservoir No. 2 and No. 3 is then gravity fed (i.e. without pumps) to the 2,500ML Port Macquarie and 10,000ML Cowarra Off-Creek Storage Dams. Water is distributed via 37 reservoirs, 19 water pumping stations, 832km of watermains.

1.1.2 Telegraph Point Water Supply Scheme

This scheme is sourced from the Wilson River and serves approximately 250 properties. Water is treated at an ultra-filtration plant and pumped to a storage reservoir before being distributed to customers via 16.8km of reticulation pipelines.

1.1.3 Comboyne Water Supply Scheme

This scheme is sourced from the Thone River and serves approximately 136 properties. Water is treated at an ultra-filtration plant and pumped to a storage reservoir before being distributed via 4.8km of reticulation pipelines.

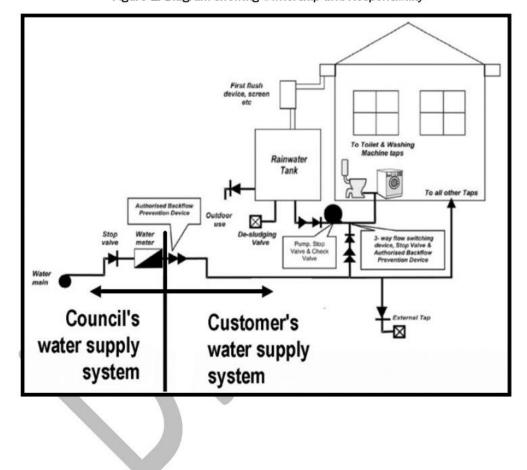
1.1.4 Long Flat Water Supply Scheme

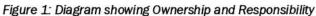
This scheme is sourced from the Hastings River and serves approximately 68 properties. Water is treated at an ultra-filtration plant and pumped to a storage reservoir before being distributed to customers via 4.2km of reticulation pipelines.

1.2 Delineation of Responsibility

The property owner owns and is responsible for maintaining all pipes and fittings, including backflow prevention devices, between PMHC's water system and the buildings and taps on the property. This is referred to as 'the customer's water system'.

PMHC retains ownership of the water meter through a rental agreement. The property owner is responsible for any costs associated with maintaining the water meter and accompanying pipes and fittings. This includes any maintenance or replacement costs. The owner is responsible for any damage to, or theft of the water meter or damage caused by a failure in the customer's water system.





PMHC Water Supply Procedure 2021

Item 10.19 Attachment 4 Page 326

1.3 Water Supply Services

1.3.1 All water through an independent house service pipe

All properties that have a direct street frontage to PMHC's water supply system, must be connected to the PMHC's Water infrastructure by an independent house service pipe (refer *Local Government* (General) Regulation 2005 clause 152).

1.3.2 All water connections to be metered

All water services within the PMHC LGA are to be individually supplied and metered in an approved manner in accordance with the current *Plumbing Code of Australia* and AS 3500. A water meter measures the water supplied directly from PMHC's water supply mains system.

Water meters remain the property of PMHC. It is an offence under the *Local Government Act* 1993 to remove, tamper or interfere with the installed meter. Any person found removing, tampering or interfering with the meter may be subject to legal action.

It is the property owner's responsibility to ensure that the water meter connected to a property is not used to measure the quantity of water supplied by the PMHC to any other premises (refer *Local Government (General) Regulation 2005 clause 156*).

1.3.3 Supply of drinking water

PMHC will supply a customer with drinking water to meet a customer's reasonable health and amenity requirements, except:

- in the case of planned or unplanned interruptions;
- in the case of severe drought or major operational difficulty;
- where PMHC is entitled to restrict or discontinue supply; or
- in the case of events beyond PMHC's reasonable control. Commercial

1.3.4 Cutting off or restricting water supply

PMHC may cut off or restrict the supply of water to premises (refer Local Government (General) Regulation 2005 - clause 144) if:

- any water meter used to measure that supply is out of repair or, in the opinion of PMHC, incorrectly
 registers the supply of water, or
- the water meter is used to measure use of water on another premises, or
- · any charges in respect of the water supplied to the premises are unpaid, or
- in the opinion of the PMHC, that action is necessary because of severe drought or other unavoidable cause or any accident, or
- the owner or occupier or person requiring a supply of water fails to comply with a lawful order or requirement of PMHC as to installing water meters or instruments for measuring the quantity of water supplied, or
- the owner or occupier or person requiring a supply of water fails to comply with a lawful order or requirement of PMHC to repair or alter water connections, pipes, fittings or fixtures connected to PMHC's water supply system, or
- the occupier of the premises contravenes a provision of *Local Government (General) Regulation* 2005, Part 6, Division 2 or fails to comply with any PMHC order or public notice requiring consumers of water to economise its use in time of drought or scarcity of supply.

1.3.5 Drinking water quality

PMHC is committed to supplying high quality drinking water that consistently meets or exceeds the Australian Drinking Water Guidelines 2011 (ADWG), our customer's expectations and regulatory requirements. To achieve this, in partnership with our customers, NSW Health, NSW Office of Water and other relevant government agencies, PMHC will:

- understand, maintain, implement and work to continuously improve a Drinking Water Quality Management System that is consistent with the ADWG 2011, and to the satisfaction of NSW Health;
- use a risk-based approach in which all potential risks to water quality are identified and effective measures are taken to minimise any threat to drinking water quality at all points along the delivery path from catchment to tap;
- conserve and enhance our water supply catchments so our source water is adequately protected;
- manage water quality at every point from the source to the consumer;
- undertake accurate, timely, and meaningful monitoring and reporting to supply prompt and relevant information to our customers and regulators that supports confidence in our drinking water supply;
- ensure effective incident and emergency response plans are in place, reviewed and executed as required;
- ensure all water supply staff and contractors involved in the supply of drinking water are aware of the importance of maintaining drinking water quality at all times, including the provision of regular water industry training and qualification in these areas;
- welcome customer feedback on water quality issues and respond effectively to meet customer concerns and needs;
- engage in the development of industry regulation and guidelines, and undertake targeted research and development aimed at better understanding and improving drinking water quality;
- use a Total Water Cycle Management approach to identify issues and inform long-term planning and strategy;
- continually review and improve our work practices by assessing the performance of our water supply against criteria including the ADWG 2011 (for health and aesthetic), considering our customers, our regulators, and our business drivers;
- incorporate our stakeholder needs into our water quality planning and management activities;
- maintain effective disinfection of the water supply distribution system

The principles in the ADWG 2011 are:

- multiple barriers are required to protect drinking water quality
- the most effective barrier is the protection of source waters
- source water should be protected to the maximum practical degree
- water quality should be maintained at the highest practicable quality, and
- water quality should not be degraded even if it complies with guideline values by a safe margin.

PMHC has adopted a risk management approach to the management of water quality in its water catchment areas and source waters. We conduct drinking water quality assessment studies to determine the water quality risks and hazards present, by using the following approach:

- a hazard is identified
- objectives are created for managing known hazards
- management strategies are employed

- risks associated with the hazard are assessed
- processes become better understood
- management objectives are reviewed, and
- indicators are measured.

Some drinking water quality variations will exist within the Port Macquarie and Camden Haven water supply schemes, which are unfiltered water supplies.

1.3.6 water pressure

PMHC will endeavour to ensure that water is supplied to properties at a minimum pressure of 200 kilopascals (20 metres head of water) at the point of connection to PMHC's water supply main, under normal operating conditions.

A number of designated low water pressure areas have been identified in various locations due to the ground elevation of the affected properties. In these locations, property owners are required to install and maintain approved private break tank and booster pump arrangements.

1.3.7 Life support/Dialysis

Premises connected to the public water supply that require water to operate a home-based life support machine are requested to notify PMHC. PMHC will ensure all practical steps are taken to provide an uninterrupted water service and advance notification of any planned interruption to the water supply service can then be arranged. In addition, PMHC will endeavour to contact the resident as soon as possible in the event of any unplanned interruption and make alternative arrangements for supply. For customers on a home dialysis machine requiring water supply to operate, PMHC has also agreed to a reduction in the usage component of the annual water account.

1.3.8 Fire hydrants and other fittings

PMHC installs and maintains hydrants in its water mains at convenient distances and places for the ready supply of water to extinguish fires and for operational purposes. Hydrants are installed in accordance with AS 2419.

Members of Fire & Rescue NSW and the NSW Rural Fire Service and PMHC's water supply staff are the only persons approved to access or operate fire hydrants. PMHC's water supply staff are the only persons approved to access or operate all other water supply fittings. It is an offence under the *Local Government Act* 1993 to remove, tamper or interfere with PMHC water infrastructure without prior approval from PMHC's Water and Sewer Planning section.

Where a development requires a private hydrant for fire coverage, an annual test report is required for each private in-ground hydrant installation.

1.3.9 Reliance on water supply

Where sites are heavily dependent on a continuous supply of water (e.g. a manufacturing or operational process), it may be prudent to consider contingency arrangements independent of the town water supply in the event of a water supply interruption. Any such arrangements would be at the cost of the individual site owner and would require PMHC approval.

1.4 Factors affecting Water Supply Service and Infrastructure

1.4.1 Unplanned interruptions

Every effort is made by PMHC to ensure a reliable water supply service however in the event of an unplanned interruption, PMHC will minimise inconvenience by:

- restoring the service as quickly as possible;
- providing as much information as practicable based on the best information available at the time;
- · providing an alternative supply of bottled drinking water during such events; and
- flushing the water supply system to reduce the impacts of possible dirty water caused by such events.

Unplanned interruptions include water main breaks and supply interruptions. If problems with the water supply are experienced, customers can contact PMHC on (02) 6581 8111 (business hours) or (02) 6583 2225 (after hours).

1.4.2 Planned interruptions

Planned interruptions to water supply services are necessary to allow for routine maintenance of the water supply system.

PMHC will endeavour to inform affected customers of the expected time and duration of any planned interruption, prior to the work being undertaken.

1.4.3 Repairs and maintenance

PMHC will leave work areas and immediate surrounds as near as possible to the state which existed prior to the works being undertaken, unless otherwise agreed with the property owner.

1.5 Water Supply Levels of Service

1.5.1 PMHC's targeted Levels of Service

The target levels of service for the PMHC water supply system are summarised in Table 1. These levels of service are targets that PMHC aim to achieve and as such are not considered a formal customer contract.

Description	Unit	Level of Service
Availability of Supply		
Normal Quantity Available		
Annual Tier 1 allowance, 20mm meter (refer to Section 3.1.1 Tariff Structure)	kL/property/year	270
Fire Fighting Compliance with Building Codes and Fire & Rescue NSW requirements	% of service area	100%
Pressure Minimum pressure (measured at a flow rate of 0.15 L/s per tenement at PMHC's watermain adjacent to property boundary) Maximum static pressure	Metres head Metres head	20 90
Restrictions to Supply (refer to Section 6 of this document)		
Interruptions		
Planned Interruption		
Notice to domestic customers	Hours	24
Notice to commercial customers	Days	2 7
Notice to industrial customers Notice to special customers (Special customers include schools, nursing homes and home dialysis patients and are given a personal notice.)	Days Days	7
Maximum duration Maximum frequency	Hours Customers/year	8 1
Unplanned Interruption	Hours	6
Maximum duration during working hours	Hours	18
Maximum duration after hours Maximum frequency	Number/year	2
Response Times		
Supply Interruptions Working hours After hours	Hours Hours	1 2
Minor problems/general inquiries		
Oral Written	Working days Weeks	1 3
<u>Time to provide new connection in serviced area</u> for 80% of requests	Working days	20
Water Quality		
Microbiological	% of samples	100%

1.5.2 Catchment areas, pumping stations and reservoirs

Public access to PMHC owned land, including catchment areas surrounding the water supply off-creek storage dams, is restricted and strictly controlled in order to ensure the quality of drinking water supplied to consumers. Similarly, public access to other water supply sites and infrastructure including river intakes, pumping stations, water treatment plants and reservoirs is restricted and strictly controlled at all times.

PMHC maintains an extensive network of telemetry equipment to operate the water supply network. Approaches by external providers for installation of equipment on PMHC telemetry installations or reservoirs will not be considered.

2. Water Supply for Development

2.1 New Water Connections

2.1.1 Water services installation

An application is required to connect to PMHC's water supply system. Refer to 'Water Meter Hire Agreement' on PMHC's website.

The type and location of the connection is at the sole discretion of PMHC.

The minimum water service for individual residential and some small business connections is 20mm. Commercial/business connections require a hydraulic assessment to confirm the service size is adequate. The minimum water service size for industrial premises must be 25mm unless justification is provided in the form of hydraulic calculations by a suitably qualified hydraulic consultant.

Unless an alternative is approved by PMHC, connection pipework from PMHC's water supply system to the meter assembly must be in copper pipe Type A to AS 1432 or PE100 PN16 polyethylene pipe (refer to PMHC Aus Spec).

All pipes, valves, devices, and fittings connected to PMHC's water supply system are to be rated for a safe working pressure of at least 1200kPa (120 metres pressure head) and shall be fit for purpose in accordance with the relevant Australian Standard.

2.1.2 Water meter installation

Water meters are to be located within the property boundary, at the discretion of PMHC. The property owner must ensure the meter is accessible to PMHC's water meter readers at all times, which may include to provision of boundary fences and wall recesses and/or fence setbacks.

Installation of a bollard may be required to protect the water meter as directed by PMHC. For cluster housing or multiple dwellings on a single site, single location central metering is permitted with appropriate easements provided for services and vehicle access.

The charge for a new, single 20mm meter installation is set each year in PMHC's Fees and Charges document. For multiple services or for water meter sizes greater than 20mm, the charge will be the actual cost of installation.

PMHC staff may enter private property to effect any necessary alterations, repairs to or replacement of the water service or water meter. Only PMHC staff may install water meters.

2.1.3 Large water services

All applications for services larger than 25mm are to include:

- hydraulic calculations that address flow, pressure and velocity requirements of AS3500.1;
- a plan, to a scale of not less than 1:100 that clearly indicates the position of the water meter on the property, the type of materials and nominal size of all water service pipes, the position of all stop valves, stop taps, backflow prevention devices and other valves, any water storage to be provided, including air gap requirements, overflow pipe arrangement and any booster pumps; and
- complete details of any fire service, booster pump or irrigation system installed.

2.1.4 Properties previously not rated for water supply

Properties that can be provided with a water service but have not been charged for water supply historically will be charged a connection fee will be levied equivalent to the headworks contribution applicable at the time of application, less the amount previously paid in water access charges, plus the quoted cost of the installation.

2.1.5 Strata and multi-residential developments

Multi-residential developments include multi-storey, Strata, Community Title, Manufactured Home Estate, and integrated housing developments. Each occupancy within a multi-residential development must have their own individual isolation valve and an individual meter located in a position approved by PMHC (refer to the current *Plumbing Code of Australia and AS3500*).

All individual residential units are to be provided with a separate external (i.e. located at the property boundary) or internal water meter to register water usage for each unit with a master meter at the boundary.

The location of internal water meters will be in foyer areas, secure and accessible for meter reading, otherwise a remote reading display facility shall be provided by the property owner, at an approved central location, easily accessible by PMHC water meter readers.

2.1.6 Torrens Title developments

The following water meter arrangements are to be provided for Torrens Title developments:

- individual water meters are to be provided at the property boundary of each Torrens Title with the
 exception of lots designated for future subdivision (i.e. parent lot of large developments);
- individual water meters are to be provided at the property boundary to separate residential and commercial water services within the development site and/or building;
- internal water meters are to be provided for each residential and/or commercial unit and a central
 meter readout station is to be provided adjacent to PMHC's water meters; and
- a single fire service connection point is to be provided for each building (if required).

2.1.7 Non-connection to PMHC's water supply system

Where a property has an alternative onsite water supply source which meets all statutory and guideline requirements including those of NSW Health and Fire & Rescue NSW, the property will only be levied the minimum water 'Access Charge' (i.e. residential 20mm or business/industrial 25mm water 'Access Charge').

Application of the water 'Access Charge' is based on the following provisions:

- fire-fighting coverage and protection is still available and provided by PMHC's hydrants within the street frontage to the property; and
- the area is within the designated water service area and PMHC has made a capital investment to
 provide the opportunity to connect to town water.

Should a water supply service connection be required in the future, the applicable water supply headworks and distribution charges are required to be paid. The amount is credited with any previous payments for headworks and distribution and/or annual water access charges.

2.1.8 Water connections in rural areas

Where a property does not have frontage to PMHC's water supply system, property owners can apply to PMHC to extend the water main. If a property owner wishes to proceed and the application is approved, payment for the extension of PMHC's water supply system (i.e. water main) to an agreed point within the road reserve is required and is to be paid for by the applicant. Applicable headworks charges, as approved in PMHC's Development Servicing Plan and any other fees and charges, as calculated and/or set each year by PMHC through *Fees and Charges*, will apply.

Individual water services traversing parallel to the road are not permitted without formal approval from PMHC's Water and Sewer Engineering Planning Manager.

2.1.9 Designated private supply lines

PMHC no longer supports these types of connections, and new applications will not be considered.

A number of existing private supply lines have been allowed in the past. In these cases the property residence is located a long distance from the PMHC main and water meter, and is generally not in a defined water supply service or residential area. Private supply lines may also have been permitted to pass through a number of properties by agreement with adjoining owners.

Private supply lines are the responsibility of the owner to maintain, including payment of excess water accounts due to failure of the private line.

2.1.10 Fire services

Generally, PMHC's water mains are located on a public road, public reserve/pathway or water supply reserves. A property owner will normally be required to install a private water hydrant (or hydrants) wherever an existing or proposed development is out of the reach of a street hydrant and has a fire compartment exceeding 500 square metres in floor area.

New urban residential release areas shall have hydrants installed to comply with Fire & Rescue NSW's guideline *Fire Hydrants for Minor Residential Development (2016)*. The maximum design spacing for hydrants is 60 metres.

Where fire service coverage from a street fire hydrant is not practical, either a private fire service or a tank storage alternative acceptable to PMHC's Development and Environment Division, Fire & Rescue NSW and NSW Rural Fire Service will be required.

All proposed fire services plans and requests must be submitted to PMHC after they have been certified by a suitably qualified hydraulic consultant and either Fire & Rescue NSW or NSW Rural Fire Service as relevant.

All fire hose reels shall be connected to a metered service (refer to the current *Plumbing Code of Australia*). Where this is not currently the case, PMHC will consult with property owners with the view to installing a complying connection, at the owner's cost.

2.1.11 Water Pressure Certificate

PMHC can provide a water pressure certificate for the hydraulic design of fire service installations, after receipt of the PMHC application form with the nominated flow rate and payment of the applicable fee, as set each year by PMHC through *Fees and Charges*.

2.1.12 Cross-connection control

A backflow prevention device is used to protect water supplies from contamination and may include (but is not limited to) a break tank, registered air gap, pressure vacuum breaker, reduced pressure zone device (RPZD) or testable double check valve.

All backflow prevention devices are the responsibility of the property owner.

Property owners may need to install a backflow prevention device as part of their connection to PMHC's water supply system.

All new connections where activities carried out on the property could endanger health or potentially cause death, must have a backflow prevention device installed in accordance with the current *Plumbing Code of Australia* and AS 3500.

All medical-related facilities are to have an RPZD as a minimum backflow protection.

PMHC may require existing premises connected to PMHC's water supply system to be provided with a backflow prevention device for containment at the property boundary. All backflow prevention devices installed for the purpose of site containment must be registered with PMHC, with payment of the applicable fee, as set each year by PMHC through *Fees and Charges*.

Backflow prevention devices shall be installed on the customer's side of the water meter with no connections between the water meter and the device. On a separate hydrant and sprinkler fire service on a non-residential property, the device shall be installed close to where the water service crosses the property boundary, prior to any booster assembly.

All backflow prevention devices must be tested on an annual basis with a 'Backflow Prevention Inspection Testing and Maintenance Report' submitted to PMHC. PMHC can undertake this work after payment of the applicable fee, as set each year by PMHC through Fees and Charges.

If PMHC determines that the backflow prevention device is unsatisfactory, the owner will be required to repair, maintain, test or replace the backflow prevention device, at the owner's expense.

Backflow prevention devices may reduce the pressure and flow rate of the water supply to the premises. It is the owner's responsibility to undertake, at their cost, any works on the premises necessary to provide adequate water flow rate and pressure for their needs. A licenced plumber shall carry out any works related to the house water supply system.

2.1.13 Easement for water service

The location of water services in easements other than a vehicular access-related easement for the property being served will not be permitted due to the risk of undetected interference with the water service. This can happen in the form of damage, contamination or illegal connection if the easement is not in an area fully accessible to and able to be overseen by the serviced property owner.

2.1.14 Private water hydrants

Where a property owner installs a private water hydrant within their internal water system, all associated maintenance costs are the responsibility of the property owner. This includes the backflow prevention device (single detector-check), gate valves, pipework and associating coating (i.e. maintaining red paint).

Where underground hydrants are installed in a private water system, they shall be spring type, manufactured to AS 3952, with an approved thermal-bonded coating to AS 4158 and installed in accordance with AS 2419.

Private water hydrants must be located on land under the control of the property owner, who will be responsible for all water charges. The hydrant is not to be located in easements or Rights of Carriageway.

Testing requirements for these services is outlined in section 1.3.8.

2.2 Water Metering

This section outlines information and requirements for water meters in the PMHC Local Government Area - this is applicable to both potable and recycled water meters. Note there are further specifications around recycled water fittings detailed in the Recycled Water Information and Guidelines 2021.

2.2.1 Meter security

The owner of the premises on which the water meter is located must, if required by PMHC to do so, protect the meter by enclosing it in a lockable box constructed of metal, wood or other strong durable material.

The owner of the premises must, if PMHC so requires, deposit with PMHC the key to the water meter or, if it is enclosed in a meter-box, the key to the box immediately after the meter or box is installed.

If the property owner wishes to have a lockable meter valve installed, application is to be made to PMHC to carry out this work at the property owner's expense.

2.2.2 Meter replacements

PMHC has a water meter replacement program to ensure accurate recording of water usage through each water meter. PMHC will replace the meter at no cost to the property owner if the meter:

- is found to be defective
- can no longer be reasonably maintained, or
- is replaced as part of a meter replacement program.

PMHC will attempt to notify the property owner at the time of replacement and advise that a new meter has been installed. A mutually acceptable time will be negotiated with commercial customers for the replacement of meters.

PMHC can test your water meter if you feel it is not recording water usage accurately - please complete the application form on our website and make payment of the applicable fee, as set out each year by PMHC through *Fees and Charges*. See clause 1.2.10 Meter Testing in PMHC Water Supply Tariff and Billing Procedure.

2.2.3 Meter relocation

All water service and water meter relocations are at the owner's expense.

2.2.4 Multiple meters

All water services connected to PMHC's water supply system must be through an independent house service pipe and a single water meter. PMHC will work with property owners whose water service connection does not comply with this requirement to install a complying connection at the owner's cost.

2.2.5 Upsizing/downsizing meters

The size of water meters is based on hydraulic considerations. If a property owner wishes to change the size of the installed water meter, an application, with payment of the applicable fee can be made to PMHC for a quote to undertake the works. The application must be accompanied by hydraulic calculations signed off by a suitably qualified hydraulic consultant.

The cost of changing the water meter will be at the owner's expense.

PMHC is not obliged to approve an application to change the size of the water meter.

Where residential customers have been required to install a 25mm water service (e.g. some battleaxe blocks), PMHC will work with the property owner to determine if they can be provided with a 20mm meter, as part of the water meter replacement program.

2.2.6 Water leakage investigation

PMHC can undertake an investigation of water leakage in private water systems, after the payment of the applicable fee, as set each year by PMHC through *Fees and Charges*.

2.2.7 Private water meters

PMHC may permit the use of privately owned meters within the water system if they are of an authorised design and type (WaterMark certified).

If approved for use in a property owner's water system, PMHC sell in-house water meters for an applicable fee, as set each year by PMHC through *Fees and Charges*.

PMHC can read private water meters for an applicable fee, as set each year by PMHC through *Fees and Charges*. Reading of internal water meters will only be undertaken if the following criteria is met:

- The location of internal water meters is in foyer areas, secure and accessible for meter reading, otherwise a remote reading display facility shall be provided by the property owner;
- The meters can be easily accessible by PMHC water meter readers; and
- Installation meets the relevant Council and Australian Standards.

2.3 Augmentation of Water Supply System

2.3.1 Standards and Specification requirements

National Codes Initiative

The Water Services Association of Australia (WSAA) has developed a series of national codes of practice covering the design and construction of water infrastructure. Benefits of these national codes include:

- · Facilitation of consistent national reform and regulation of the water industry;
- Provision of a transitional mechanism for sharing water-industry specialist expertise as internal water resources diminish;
- Provision of a common technical reference for the development of industry training and skills accreditation programs for private sector suppliers;
- Enhancement of the mobility of suppliers, e.g. designers and constructors, by reducing parochial technical impediments to trade; and
- Improvement of the Australian water industry's interface with international companies.

PMHC's Codes

With these benefits in mind, PMHC has progressively adopted the following codes as the foundation to its technical specification (Aus-Spec Design Specifications) for the design and construction of water assets in the PMHC LGA:

- WSAA Polyethylene Pipeline Code WSA01-2004
- WSAA Water Reticulation Code of Australia WSA03-2011 V3.1
- WSAA Pressure Sewerage Code of Australia WSA07 2007 V1.1

PMHC is currently developing a Supplement to each Code, which will contain additional information to cover:

- PMHC's detailed requirements for specific matters, which the Code anticipates individual water agencies will address; and
- Variations to the Code where its requirements are not compatible with PMHC's specific requirements.

The design of any augmentation works required is to be based on guidelines contained within the Aus-Spec Design (ASD) Specification. The ASD Specification currently consists of a supplement Code to accompany the WSAA Water Reticulation Code of Australia - WSA03-2011 V3.1 and includes a suite of ASD design drawings, which can be found on PMHC's website.

2.3.2 Headworks and distribution charges

Headworks and distribution charges are applicable as described in PMHC's Water Supply Tariff and Billing Procedure for any planned augmentation of PMHC's Water Supply System.

2.3.3 Development Consent conditions

Where a Development Consent requires a development to augment water supply infrastructure, the following conditions will apply:

- the design of the augmentation works required shall be based on guidelines contained within the Aus-Spec Design Specification;
- where the infrastructure is included in PMHC's Section 64 Water Supply Contribution Plan, the work may be completed by the developer and offset against the contribution for that development. PMHC may elect to undertake the work, in which case, the full contribution is required;

16

- where PMHC undertakes the work, the contribution required will be calculated by PMHC and paid by the developer prior to the work proceeding. Where the developer undertakes the work and a contribution offset is required, the design and the value of the work shall be approved and agreed upon prior to the work commencing;
- failure by the developer and/or consultant to obtain prior written design approval and cost agreement from PMHC will result in a nil offset being applied to the work; and
- where PMHC has identified potential future demand for infrastructure over and above that required by the development in question, PMHC may elect to increase the size of the infrastructure and meet the additional cost over and above the contribution calculated.

2.3.4 Extensions and additions to existing developments

All internal hydraulics not complaint with current *Plumbing Code* of *Australia* standards and/or presenting a health and safety risk, will be required to upgraded in line with current *Plumbing Code* of *Australia* and AS 3500.

2.3.5 Additional water mains in roads

Where a development results in the need to upgrade watermain pipework, the applicant is required to fund a new watermain capable of serving the proposed development as well as the existing watermain capacity.

Should PMHC request additional capacity, then PMHC will contribute to the approved additional cost.

2.3.6 Disconnection of existing services across boundaries

Where a parcel of land is subdivided, any internal plumbing from the original parent Lot subsequently passing into the annexed Lot, will be disconnected at the boundary.

2.3.7 Disinfection and pressure testing of new watermains

All new watermains that are to be connected to PMHC's water supply system will need to be pressure tested and disinfected prior to commissioning in line with PMHC requirements. Developers must apply to PMHC using the appropriate form and pay the applicable fees and charges for this work, as set each year by PMHC (through *Fees and Charges*).

Connection to the PMHC water supply network is to be completed by PMHC staff or under PMHC supervision as agreed with the applicant. Every effort will be made by PMHC to provide isolation of watermains to permit interconnection at the date, time and for the period requested in this application. If this cannot be accommodated, the applicant will be advised and given notice on a suitable time and any extra charges that may apply.

2.3.8 Easement creation for watermains

In accordance with the Aus-Spec *Design Manual*, the location of watermains that will become part of PMHC's water system on private property is to be avoided. Where a watermain cannot be located in a dedicated public road reserve or access way, it may be located within an appropriately sized and registered easement, subject to PMHC's approval.

Where watermains are located in an easement in favour of PMHC they must be a minimum of five metres wide. Unless there are compelling reasons to the contrary the watermain shall be located in the centre of the easement. Where vehicular access is required along the water main route, the easement width is to be not less than 7.5 metres. Easements in rural zoned areas and steep terrain are generally to be 10 metres wide.

A Registered Surveyor shall survey easements and certify the location of pipelines within the easements.

2.3.9 Protection of pipelines and easements

The location and protection of water supply infrastructure remains the responsibility of the person and/or organisation undertaking any excavation or associated works. The 'PPP' approach of 'Plan, Pot-Hole and Protect' must be applied at all times when works are undertaken in the zone of influence associated with any water supply infrastructure.

Upon request, PMHC will provide plan details and/or onsite locations to assist with the location of water supply infrastructure including buried pipelines and associated fittings. PMHC also provides an online mapping application on our website which enables enquiry about our underground services. However, any damage and/or subsequent failure of these assets due to excavation or other site works will be rectified by PMHC and the cost of such rectification works will be charged to those identified as responsible for such damage and/or failure.

Special conditions including building, structures and excavation exclusion zones apply to all water supply pipelines and/or easements in favour of PMHC on public and private land.



Recycled Water Procedure 2021

Recycled Water Procedure 2021

Page 1 of 11

Item 10.19 Attachment 5 Page 342

Contents

Introduction	3
Aims	3
Supply of Recycled Water	3
Recycled Water Quality	4
Permissible Uses	5
PHMC and User/Owner Responsibilities	5
PMHC Responsibilities5	
User/Owner Responsibilities6	
Connecting Recycled Water	7
Connection of Commercial User7	
Connection to Dual Reticulation in Residential areas8	
Household Plumbing8	
Inspections9	
Recycled Water Tariff	9
Billing	10
Policy Implementation	10
Recycled Water Documents	11
Recycled Water Disconnected from Property	11
	Aims Supply of Recycled Water Recycled Water Quality Permissible Uses PHMC and User/Owner Responsibilities PMHC Responsibilities Supply of Recycled Water Connecting Recycled Water Connection of Commercial User Musehold Plumbing Participation Participation Recycled Water Tariff Billing Policy Implementation Recycled Water Documents

1. Introduction

This policy refers specifically to the Port Macquarie and Lake Cathie / Bonny Hills Recycled Water Schemes. Both drinking water and recycled water are supplied to properties within the new development areas of Lake Cathie/Bonny Hills (Area 14) and Thrumster (Area 13), as well as commercial customers in Port Macquarie. Recycled water is also used throughout the Local Government Area for irrigation of public facilities, unsealed road dust suppression and public toilet flushing. The use of recycled water is a nationally accepted approach to responsible water and environmental management and firms part of Council's commitment to water conservation.

The drinking water and recycled water are supplied in two separate networks, and each household or commercial user will have two independent water supplies and meters. All recycled water pipes, fitting and fixtures are identified by purple-colouring and/or purple-coloured markings and warning signage.

The recycled water is treated to a high level, to ensure the water quality meets the Australian Guidelines for Water Recycling (AGWR 2006) for dual reticulation supply. A multiple barrier treatment process is incorporated into the recycled water supply, which includes microfiltration, UV disinfection and chlorination. The provision of recycled water is a key objective of Council's Integrated Water Cycle Management (IWCM) Strategy, providing a sustainable resource to help secure water supply for the future. Residential connections to recycled water also receive BASIX (Building Sustainability Index) points towards a BASIX certificate, as implemented under the NSW Environmental Planning and Assessment Act

This procedure serves as the Agreement for Supply and Use of Recycled Water, for all recycled water users. The user accepts the terms and conditions of this procedure upon accepting recycled water to the property.

2. Aims

Port Macquarie-Hastings Council (PMHC) is providing recycled water to its customers with the aim to benefit the community as follows:

• ensure integrated and sustainable water resource management through fit appropriate resource substitution, reducing non-essential uses of potable water;

• reduce the amount of effluent discharged into the environment, thus protecting land, surface and groundwater resources, and public health and amenity;

- ensure optimum utilisation of the recycled water system;
- ensure safe and effective utilisation of recycled water;

• respond to current regulatory reforms, legislative requirements and state-wide changes in water management practice, environmental sustainability challenges and stakeholder objectives which ensure optimal water usage and maximum environmental benefit; and

• provide the terms and conditions for Agreement for Supply and Use of Recycled Water, for all recycled water users.

3. Supply of Recycled Water

Supply to commercial customers is determined on a case-by-case basis, and will be dependent on the availability of connection, the proposed use and the availability of supply.

Recycled Water Procedure 2021

Page 3 of 11

When all recycled water users, commercial or residential, accept recycled water on the property via a metered connection and/or paying the usage account, the user accepts the terms and conditions of this Policy.

Agreeing and adhering to the terms and conditions set out in this procedure is mandatory for all users (and premise owners if different from the user) of recycled water.

The Property Owner owns and is responsible for maintain all pipes and fittings, between PMHC's recycled water system and the buildings and taps on the building. For more information on this Delineation of Responsibility, refer to section 1.2 of PMHC Water Supply Procedure 2021. PMHC will supply a customer with recycled water to meet a customer's reasonable health

- and amenity requirements, except:
- in the case of planned or unplanned interruptions;
- in the case of severe drought or major operational difficulty;
- where PMHC is entitled to restrict or discontinue supply; or
- in the case of events beyond PMHC's reasonable control.

PMHC may cut off or restrict the supply of water to premises (refer *Local Government (General) Regulation* 2005 - *clause* 144), as outlined in section 1.3.4 of PMHC Water Supply Procedure 2021.

4. Recycled Water Quality

PMHC is committed to supplying high quality recycled water that consistently meets or exceeds the Australian Guidelines for Water Recycling (AGWR 2006), our customer's expectations, and regulatory requirements. To achieve this, in partnership with our customers, NSW Health, NSW Office of Water and other relevant government agencies, PMHC will:

• understand, maintain, implement and continuously improve a Recycled Water Quality Management System that is consistent with the AGWR 2006 and to the satisfaction of regulators;

• use a risk-based approach in which all potential risks to water quality are identified and effective measures are taken to minimise any threat to recycled water quality at all points along the delivery path from catchment to tap:

manage water quality at every point from the source to the consumer;

• undertake accurate, timely, and meaningful monitoring and reporting to supply prompt and relevant information to our customers and regulators that supports confidence in our recycled water supply network;

 ensure effective incident and emergency response plans are in place, reviewed and performed as required;

• ensure all staff and contractors involved in the supply of recycled water are aware of the importance of maintaining water quality at all times, including the provision of regular water industry training and qualifications in these areas;

 welcome customer feedback on water quality issues and respond effectively to meet customer concerns and needs;

• engage in the development of industry regulation and guidelines, and undertake targeted research and development aimed at better understanding and improving recycled water quality;

• use a Total Water Cycle Management approach to identify issues and inform long-term planning and strategising;

 continually review and improve our work practices by assessing the performance of our water supply against criteria including the AGWR 2006, whilst always considering our customers, our regulators, and our business drivers;

 incorporate stakeholder needs into our recycled water quality planning and management activities; and

maintain effective disinfection of the recycled water supply distribution system,

Recycled Water Procedure 2021

Page 4 of 11

PMHC has adopted a risk-based management approach to the management of recycled water quality and as such has adopted the following principles for the supply of recycled water, and in accordance with the AGWR:

• Protection of public and environmental health is of paramount importance and should never be compromised

• Protection of public and environmental health, dependent on the implementation of a riskbased management approach

• Application of preventative measures and requirements for water quality should be commensurate with the source of the recycled water and the intended use

5. Permissible Uses

Permissible uses for Recycled Water have been determined by PMHC in accordance with NSW Regulatory requirements and the Australian Guidelines for Water Recycling (2006).

Recycled water that is supplied to residents through the dual reticulation system can only be used for the following purposes:

- Toilet flushing
- Cold water washing machine tap
- Irrigating gardens and lawns
- Filling ornamental ponds
- Washing cars, pathways and walls

Recycled water supplied for Council managed facilities and commercial customers has been approved for the following purposes:

- Toilet flushing
- Laundry / clothes washing
- · Irrigating public gardens, open spaces and sports facilities
- Dust suppression
- Amenities wash down
- Vehicle washing and detailing
- Irrigating crops
- Wash down of hardstand and paths
- Site services wash water at Councils Wastewater facilities

Recycled water cannot be used for the following purposes:

- Drinking
- Cooking or other kitchen purposes
- Baths, showers, hand basins or personal washing
- Filling of Swimming Pools
- Water contact recreation (for example, playing under a sprinkler)
- Topping up of rainwater tanks

6. PHMC and User/Owner Responsibilities

6.1 PMHC Responsibilities

It is the responsibility of PMHC to:

• install, maintain and repair the recycled water system up to and including the recycled water meter

Recycled Water Procedure 2021

Page 5 of 11

• use all due care and diligence to ensure, to the best of their ability, that recycled water is of a quality that meets appropriate guidelines and that the supply is uninterrupted, except during times of maintenance and/or emergency situations

• monitor, record and report on the quality and quantity of recycled water supplied to the User in accordance with PMHC's sampling and testing protocol and regime

• carry out inspections of Owner/User premises at various stages including at the time of new installations (i.e. prior to connection to the recycled water supply), every five years or at the request of a customer

 ensure management systems are in place to maintain and repair the recycled water network as required

• provide recycled water that meets or exceeds the standards outlined in the Australian Guidelines for Water Recycling

monitor the quality of recycled water in the network and report these results to Regulators

inform and educate customers about the uses and benefits of recycled water

 independently audit all dual reticulated properties as required by the NSW Department of Primary Industries. All outlets for drinking and recycled water services are to be checked for cross-connections during these audits, and

• respond to customers reporting plumbing compliance issues by organising a site investigation to be performed.

6.2 User/Owner Responsibilities

It is the User/Owner's responsibility to:

accept and adhere to this policy upon accepting recycled water to the property

• use recycled water in accordance with this procedure and the PMHC Water Supply Procedure and Water Conservation and Drought Management Procedure.

ensure any works on private recycled water systems, including pipework, are:

- carried out in accordance with AS3500 and the NSW Code of Practice Plumbing and Drainage 2006;
- designed and installed to prevent any cross-connections between the potable and recycled water systems; and
- ensure all work and maintenance on the recycled water system is undertaken by a NSW Licenced plumber

• seek Section 68 Approvals from PMHC prior to any changes or additions to either potable or recycled plumbing or systems on site

ensure recycled water is used only for suitable purposes

advise anyone entering your property that recycled water is on site and of its correct uses
 ensure recycled water taps are not removed or replaced with conventional taps (may

increase the potential risk for misuse of recycled water and result in a health risk to the customer
 ensure approved signage is displayed at all recycled water outlets, and any missing, damaged or faded signage pertaining to recycled water is replaced or

repaired immediately
 ensure all recycled water fixtures are compliant with conditions in this procedure

 allow access to PMHC staff for the purposes of meter readings, inspection, maintenance and emergency situations

• maintain recycled water pipes and taps in the home or business, up to the outlet side of the water meter.

• ensure that no cross connections are made between recycled water and drinking water systems. Cross connection means connecting drinking water pipes, taps or hoses to recycled water pipes, taps or hoses. Appropriate purple accessories including hoses and sprinklers should be used to connect to the recycled water network.

In addition to the above, Commercial Users shall also be responsible for:

• prepare, implement and comply with the conditions of the approved Site Management Plan

Recycled Water Procedure 2021

Page 6 of 11

• ensure all people who could potentially handle the recycled water and associated infrastructure are appropriately trained and briefed on the safe use of recycled water, and are familiar with PMHC's Recycled Water Policy and, if applicable, the appropriate sections of the *Site Management Plan*

• take out and maintain public liability insurance and workers' compensation.

7. Connecting Recycled Water

Under the Local Government Act 1993, the prior approval of Council is required for any plumbing work involving water supply or recycled water systems and the work must be carried out in accordance with the NSW Code of Practice Plumbing and Drainage 2006 Before the commencement of any plumbing work on dual reticulated premises, builders, property owners or their nominated agents must submit a Section 68 Application under the Local Government Act with Council with the relevant council fees.

All commercial user Section 68 applications submitted to PMHC's Development and Environment Department with proposals for dual plumbing arrangements and use of alternative water sources, are to be referred to the Water and Sewer section, prior to the issuing of the approval.

Council encourages all residential areas that have a water service in designated dual reticulated areas to connected to both supplies.

The installation of drinking and recycled water services is to be executed by, or supervised by, a license plumber in a usual manner in accordance with the NSW Plumbing and Drainage Act (2011), Plumbing Code of Australia, Australian/New Zealand Standards (AS/NZ) 3500.

7.1 Connection of Commercial User

Where the uses differ substantially from domestic uses of the applicant is responsible for nondomestic infrastructure (pumps, water mains etc) or Non-Treatment Barriers are required, then the plumbing requirements shall be determined by Council on application and will be reinforced through an individual Site Management Plan (binding legal document between user and Council).

For further details on PMHC procedures for applying for and implementing a water connection, refer to Section 2 of PMHC's Water Supply Procedure 2021:

Commercial users will be required to prepare, implement and maintain a *Recycled Water Site Management Plan* to demonstrate acceptable practices for the safe and efficient use of recycled water. PMHC staff can assist in the initial preparation of a Site Management Plan if required. This plan is required to be approved by Councils Water and Sewer Planning Section, prior to approval for connection.

The Site Management Plan shall include:

- site details with appropriate maps
- · accurate plans of all on-site plumbing (for potable and recycled water)
- specified uses and application of recycled water on-site
- times for recycled water use, if required
- run-off controls and stormwater management
- WHS policy/provisions for the use of recycled water
- on-site handling of recycled water
- maintenance of the recycled water system,
- auditing, monitoring and reporting requirements, and
- emergency response requirements.

Recycled Water Procedure 2021

Page 7 of 11

Council regularly audits end users to ensure compliance with these conditions and reserves the right to cease supply of recycled water if a user is found to be non-compliant. End user awareness maintained through regular contact with the users and an annual review of the Site Management Plans.

7.2 Connection to Dual Reticulation in Residential areas

Where a recycled water connection has been requested, Council will install both the drinking water meter and the recycled water meter within the property. The meters will be positioned together in one corner of the property that fronts the street. For details on PMHC procedures for applying for and implementing a water connection, refer to section 2 and 3 of PMHC's Water Supply Procedure 2021.

The purple coloured recycled water meter will be installed beside the drinking water meter with approximately 300mm separation distance between the two meters. Like the drinking water meter, the recycled water meter will be installed above ground.

The recycled water meter coupling threads are different to those on the drinking water meter to prevent interchange of the meters.

7.3 Household Plumbing

When carrying out plumbing in the dual water supply area, it should be remembered that the intention of the dual water supply is to conserve our drinking water resources by maximising the use of recycled water

7.3.1 Drinking Water Supply Plumbing

• In a dual water supply area, drinking water plumbing shall be connected as follows: Drinking water must not be connected to toilets and cold water washing machine tap

• One and only one drinking water outdoor tap must be provided (complete with hose connection vacuum breaker). The single outdoor tap must be located nearest to the swimming pool, if a swimming pool has been installed or must be relocated if a pool is contracted afterwards.

• Drinking water piping must not be installed within 100mm above ground or 300mm below ground of any parallel recycled water plumbing

 No cross-connections between drinking and recycled water supply systems are permitted at any point in the system

A strata/body corporate or similar style development may have one or more additional outdoor drinking water taps in common use areas depending on the nature of the proposed uses from those taps, to be approved by Council on a case-by-case basis. There must be one tap per dwelling/water meter, which allows for two taps for dual occupancies, secondary dwellings and the like, but does not apply in units and apartments that have no outdoor fixtures.

7.3.2 Recycled Water Supply Plumbing

In a dual water supply area, drinking water plumbing shall be connected as follows:

• Fixtures and fittings above and below ground must be clearly and permanently marked and labelled with Recycled Water – DO NOT DRINK in accordance to the Australian/New Zealand Standards (AS/NZ 3500).

• Any underground recycled water pipeline must not be installed within 300mm of a parallel drinking water supply pipeline. The pipes may be laid in the same trench provided the 300mm

 separation is maintained. This separation can be reduced to 100mm when the pipes are located above ground.

• Above ground recycled water hose taps must be lilac in colour, have approved fittings with left handed threads on the outlets and have removable handles as per AS/NZ 3500.

• Dual reticulated properties must have at least one external recycled water tap but can have as many more than one as desired.

Recycled Water Procedure 2021

Page 8 of 11

• All toilets and cold water washing machine taps must be connected to the recycled water supply line.

• If grey water is captured on a dual reticulated property it can only be re-used for outdoor purposes and in accordance with the NSW Guidelines (as applicable). No cross connections between grey water supply and recycled water supply are allowed.

• If a rain water tank is installed on the property the rainwater supply shall be independent and have no interconnection or top up device from the drinking water or recycled water supply. Rainwater can only be used for outdoor purposes, including pool-filling and top up and tanks may only have one outdoor tap.

7.4 Inspections

New development inspections will be carried out to ensure that proper plumbing standards are maintained. In dual water supply areas these inspections incorporate special requirements that apply to those areas. In addition, ongoing inspections will occur in dual water supply areas to ensure that the two water supplies are used for their intended and approved uses.

7.4.1 Plumbing During Construction

Three separate inspections must be completed by Council's Building Services after each of the following stages;

Inspection 1 – Front of house run (meter to house)

Inspection 2 – House internal & external

Inspection 3 – Final inspection, all pipework exposed and prior to internal wall cladding to include watermain isolation and service verification

All inspections must be carried out by an authorised Council representative and cannot be conducted by private accredited certifiers. The inspections are carried out to ensure that usual proper plumbing standards are maintained and that the special dual water supply requirements are being adhered to. It is an important measure to protect public safety that occupation of a dwelling does not occur until a satisfactory inspection has occurred after the final commissioning and testing stage of works.

7.4.2 Ongoing Inspection

Ongoing cross connection inspections will be conducted by at least once every five years on every dual reticulated residence. The inspections will be carried out systematically by Council at no cost to the property owner (unless a cross connection is detected.)

If a cross connection is identified during the mandatory inspection, the owner will be responsible for having the problem rectified by a licensed plumber and also for paying Council's costs in inspecting and retesting the plumbing during and following remedial work. In addition, repairs / replacements required as a result of minor non-conformances not related to a cross connection are the responsibility of the owner to rectify, for example, non-compliant and or poorly identified signage, fittings and markers.

Home owners are encouraged to undertake cross connection checks using the seven step cross connection check for dual water supply properties, as detailed on PMHC website.

It is the responsibility of the owner and resident to inform all visitors of the correct use of recycled water.

8. Recycled Water Tariff

The two-tier structure of the recycled water Tariff matches that of the potable water Tariff (see Item 3.1 The Water Supply Tariff).

Recycled Water Procedure 2021

Page 9 of 11

Similarly, the recycled water charges that apply are determined each year through the Operations Plan process in accordance with the Local Government Act 1993.

For individual residential customers provided with both a water meter and recycled water meter a combined water 'Access Charge' (\$/pa) will be applied with an equivalent annual cost to the adopted Water Supply Tariff annual 'Access Charge'.

Recycled water usage will be measured through the recycled water meter and the 'Usage Charge' (\$/kilolitre) will be equivalent to the adopted Water Supply Tariff 'Usage Charge'.

A combined water and recycled water 'usage threshold' of 270kL for a 20mm meter will apply, being the design quantity for an average residential house.

In areas provided with a dual water supply, the threshold will be 135kL each for the potable and recycled water services.

The annual 'Access Charge' for non-residential recycled water customers will be based upon the recycled water meter size.

The 'usage threshold' for non-residential recycled water customers will be based upon the recycled water meter size or the 'capacity' the customer initially bought through Developer Charges.

The Usage Charge and annual Access Charge are currently set at 50% of the charges applicable for potable water for commercial and business customers connected to the Port Macquarie Recycled Water Supply Scheme. These charges will also cover the cost of annual testing of the backflow prevention device installed by PMHC on the User's potable water meter. This is a temporary special incentive arrangement to encourage existing non-residential water customers within the Port Macquarie urban area to convert to the use of recycled water to reduce the demand upon the water supply network. The pricing/charging will be reviewed as the recycled water network expands.

PMHC will issue water accounts which outline the recycled water that is supplied to a property, the resultant Usage Charge, and the recycled water service Access Charge.

Residential customers will be sent an account on a quarterly basis, unless otherwise agreed. Commercial customers with high water usage may be sent an account on a monthly basis.

The User will be required to pay the recycled water bill under the same terms and conditions as the potable water bill, outlined elsewhere in this document.

10. Policy Implementation

Billing

9.

This Policy together with the Agreement for Supply and Use of Recycled Water and the Recycled Water Site Management Plan form the implementation framework for the supply and use of recycled water in Port Macquarie-Hastings local government area and are part of the approval conditions required under Section 60 of the Local Government Act 1993.

Recycled Water Procedure 2021

Page 10 of 11

11. Recycled Water Documents

The current documents that detail the use of recycled water and the operation of PMHC's Recycled Water Scheme include:

- Community Education and Awareness Plan
- Emergency Response Management Plan
- Site Management Plan
- Recycled Water Quality Management Plan
- Recycled Water Annual Report
- Sec 60 of the Local Government Act 1993.

12. Recycled Water Disconnected from Property

Disconnection from the recycled water scheme (and subsequent reconnection to the potable water system) will be considered on a case-by-case basis and in accordance with NSW Health requirements.

Recycled Water Procedure 2021

Page 11 of 11

2 Your Community Life

What we are trying to achieve

A healthy, inclusive and vibrant community.

What the result will be

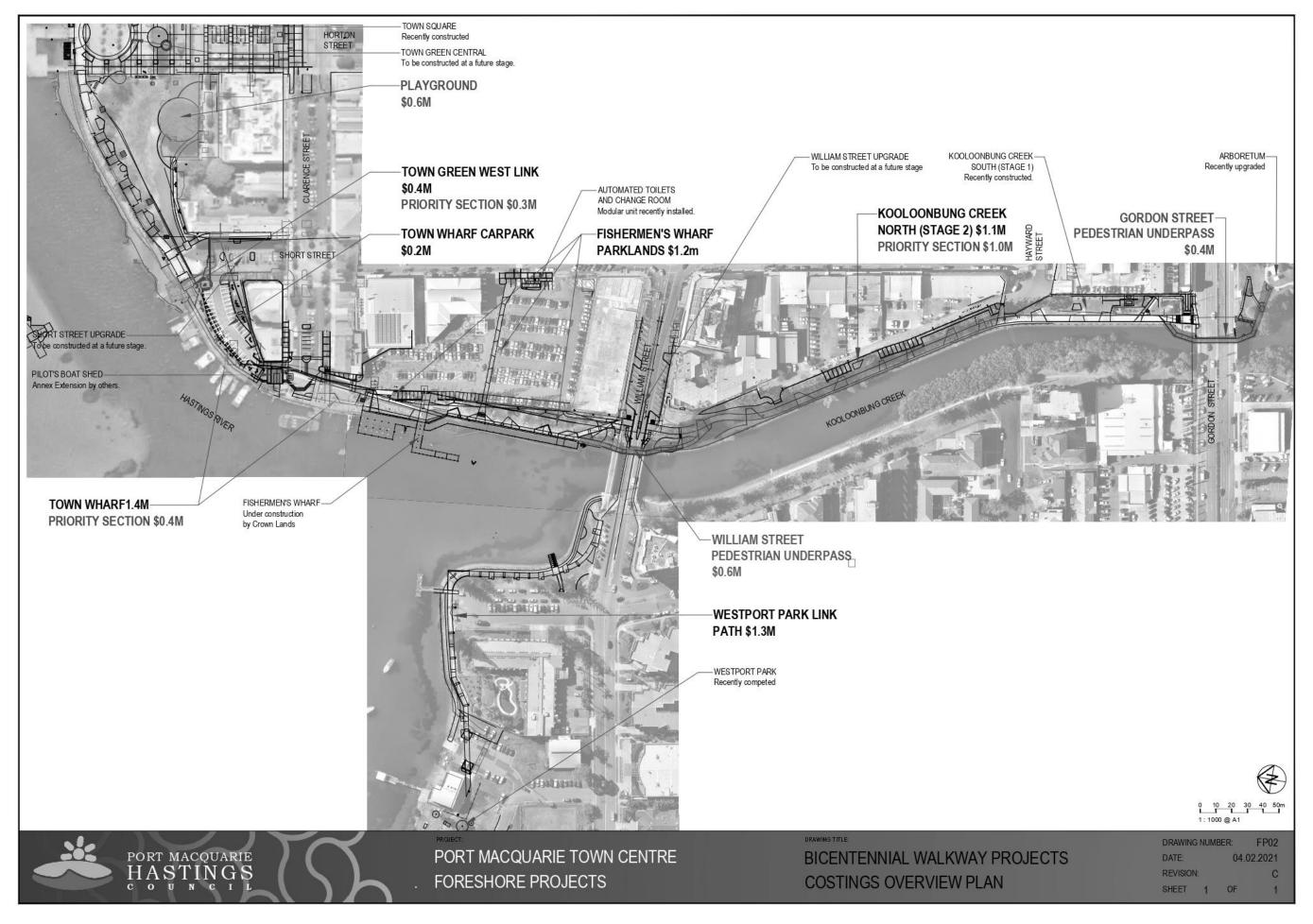
We will have:

- Community hubs that provide access to services and social connections
- A safe, caring and connected community
- A healthy and active community that is supported by recreational infrastructure
- A strong community that is able to identify and address social issues
- Community participation in events, programs, festivals and activities

How we will get there

- 2.1 Create a community that feels safe
- 2.2 Advocate for social inclusion and fairness
- 2.3 Provide quality programs, community facilities and public spaces, for example, community halls, parks and vibrant town centres
- 2.4 Empower the community through encouraging active involvement in projects, volunteering and events
- 2.5 Promote a creative and culturally rich community





ORDINARY COUNCIL 17/02/2021

Item 11.01 Attachment 1 Page 354

3 Your Business and Industry

What we are trying to achieve

A region that is a successful place that has vibrant, diversified and resilient regional economy that provides opportunities for people to live, learn, work, play and invest.

What the result will be

We will have:

- A strong economy that fosters a culture supportive of business and ensures economic development of the region
- Townships, villages and business precincts that are vibrant commercial, cultural, tourism, recreational and/or community hubs
- A region that attracts investment to create jobs
- Partnerships that maximise economic return and create an efficient and effective business environment

How we will get there

- 3.1 Embrace business and a stronger economy
- 3.2 Create vibrant and desirable places
- 3.3 Embrace opportunity and attract investment to support the wealth and growth of the community
- 3.4 Partner for success with key stakeholders in business, industry, government, education and the community



GRANTS REGISTER (2020 - 2021)

Date App. Submitted	Date \$ Advised	Acquittal (Project completed)	Division Applying	Project Title	Grant Program	Organisation Offering the Grant	Grant amount applied for		Am	ounted granted	Funding Type (Local, State, Federal)	Grant Successful?	Estimated preparation time (hours)
1/07/2020	1/08/2020	10/01/2021	Infrastructure	BlazeAid (Wauchope volunteer base camp) Fencing for bushfire affected properties	Resilence NSW. Under NSW Disaster Assistance Guideline C.3 (funding to support large scale, out of area volunteer groups).	Resilence NSW	\$ 80,000.00	\$ -	\$	80,000.00	State	Yes	2
1/07/2020	25/08/2020	10/01/2021	Infrastructure		General Waste Transportation Related Road Deterioration	NSW Public Works Advisory	\$ 1,671.00	\$ -	\$	1,671.00	State	Yes	2
2/07/2020	2/07/2020		Infrastructure	Improving Water Security to Port Macquarie	Emergen cy Water Carting and Infrastructure Fund Program	NSW Planning, Industry & Environment	\$ 2,402,500.00	\$ 7,207,500.00	\$	2,402,500.00	State	Yes	25
25/07/2020	20/10/2020		Strategy & Growth	New Library Van	Regional Cultural Fund	Create NSW	\$ 136,470.00	\$ -	\$	136,470.00	State	Yes	5
27/08/2020	22/12/2020		Airport - Corporate Performance	Security Screening Port Macquarie Regional Airport	Regional Airports Screening Infrastructure	Department of Infrastructure, Transport, Regional Development and Communications	\$ 277,000.00	\$ -	\$	253,131.00	Federal	Partial received 91% of funding request.	12
28/08/2020	10/09/2020	16/11/2020	Strategy & Growth	Create a podcast "Hire, train and retain the best staff for your business".	NSW Small Business Month	NSW Treasury	\$ 2,000.00	\$ -	\$	2,000.00	State	Yes	3
for DA portion. Parkland submission due Feb 2021	8/11/2020 for DA portion.		Development & Environ ment	PMHC Accelerate DA's by 10% . Projects likely \$1.5m Bain Park Wauchope. \$1.1m Westport Park, \$400k Town Beach Amphitheatre	NSW Public Spaces Legacy Program	NSW Dept of Planning, Industry and Environment	\$ 3,000,000.00			To Be Announced	State	TBA	15
1/09/2020	30/10/2020		Infrastructure	0.8km West of Horton St Port Macquarie	Regional Roads Repair Program	Transport for NSW	\$ 286,689.00	\$ 286,689.00	\$	286,689.00	State	Yes	5
1/09/2020	30/10/2020		Infrastructure		Emergency Work & Immediate Reconstruction Work	Transport for NSW	\$ 489,012.00	\$ 29,000.00	\$	489,012.00	State	Yes	7
1/09/2020	30/10/2020		Infrastructure	NSW Storms and Floods January 2020 - Local Road - Ralfes Creek Culvert	Emergen cy Work & Immediate Reconstruction Work	Transport for NSW	\$ 214,076.00	\$ -	\$	214,076.00	State	Yes	7
1/09/2020	30/10/2020		Infrastructure	NSW Bushfires 31 August 2019 onwards	Emergency Work & Immediate Reconstruction Work	Transport for NSW	\$ 387,804.00	\$ 29,000.00	\$	387,804.00	State	Yes	7
1/09/2020	30/10/2020		Infrastructure	1. NSW Bushfires August 2019 - Doyles River Road - Kapearrow Bridge	Emergency Work & Immediate Reconstruction Work	Transport for NSW	\$ 472,247.00	\$ -	\$	472,247.00	State	Yes	7

	Date \$ Advised	Acquittal (Project completed)	Division Applying	Project Title	Grant Program	Organisation Offering the Grant	Grant amount applied for		Amo	unted granted	Funding Type (Local, State, Federal)	Grant Successful?	Estimated preparation time (hours)
1/09/2020	30/10/2020		Infrastructure	2. NSW Bushfires August 2019 - Pappinbarra Right Arm Bridge	Emergency Work & Immediate Reconstruction Work	Transport for NSW	\$ 7,423,100.00	\$ -	\$	7,423,100.00	State	Yes	7
9/10/2020			Infrastructure	1 Logans Crossing Bridge	Fixing Country Bridges	Transport for NSW	\$ 2,270,000.00	\$ 500,000.00		ТВА	State	ТВА	10
9/10/2020			Infrastructure	2 Donkins Flat Bridge	Fixing Country Bridges	Transport for NSW	\$ 315,000.00	ş -		ТВА	State	TBA	8
9/10/2020			Infrastructure	3 Bridge on Bril Bril Rd (Bottlebrush No.1)	Fixing Country Bridges	Transport for NSW	\$ 2,930,000.00	\$ -		ТВА	State	TBA	10
9/10/2020			Infrastructure	4 Crowe Roods Bridge	Fixing Country Bridges	Transport for NSW	\$ 680,000.00	\$-		ТВА	State	TBA	8
9/10/2020			Infrastructure	5 King Creek Bridge	Fixing Country Bridges	Transport for NSW	\$ 3,620,000.00	\$ -		ТВА	State	TBA	10
9/10/2020			Infrastructure	6 Bridge on Mundays Lane (B179)	Fixing Country Bridges	Transport for NSW	\$ 440,000.00	\$ -		TBA	State	TBA	8
9/10/2020			Infrastructure		Fixing Country Bridges	Transport for NSW	\$ 440,000.00	\$ -		ТВА	State	TBA	8
9/10/2020			Infrastructure	8 Bridge on Mundays Lane (B181)	Fixing Country Bridges	Transport for NSW	\$ 510,000.00	\$ -		ТВА	State	ТВА	8
9/10/2020			Infrastructure	9 Old School Road Bridge	Fixing Country Bridges	Transport for NSW	\$ 410,000.00	ş -		ТВА	State	TBA	8
9/10/2020			Infrastructure	10 Little Mortons Creek Bridge	Fixing Country Bridges	Transport for NSW	\$ 2,600,000.00	\$ -		ТВА	State	TBA	8
9/10/2020			Infrastructure	11 Cowal Creek Bridge	Fixing Country Bridges	Transport for NSW	\$ 340,000.00	\$-		ТВА	State	ТВА	8
9/10/2020			Infrastructure	12 Bridge on Thone River Road	Fixing Country Bridges	Transport for NSW	\$ 340,000.00	\$ -		ТВА	State	TBA	8
9/10/2020			Infrastructure	13 Tower Road Bridge	Fixing Country Bridges	Transport for NSW	\$ 940,000.00	\$ -		TBA	State	TBA	8
9/10/2020			Infrastructure	14 Bridge on Farrawells Road	Fixing Country Bridges	Transport for NSW	\$ 370,000.00	\$ -		ТВА	State	TBA	8
9/10/2020			Infrastructure	15 Cutty Creek Bridge	Fixing Country Bridges	Transport for NSW	\$ 770,000.00	ş -		ТВА	State	TBA	8
9/10/2020			Infrastructure	16 Joes Bridge	Fixing Country Bridges	Transport for NSW	\$ 770,000.00	\$-		TBA	State	ТВА	8
9/10/2020			Infrastructure	17 Langdons Bridge (Bottlebrush No.2)	Fixing Country Bridges	Transport for NSW	\$ 1,710,000.00	\$ -		TBA	State	TBA	10
9/10/2020	20/10/2020		Strategy & Growth	Australia Day 2021	COVID Safe Event Delivery	National Australia Day Council	\$ 20,000.00	\$-	\$	20,000.00	State	Yes	2
14/10/2020			Development & Environment	Laurieton Fish Cleaning Table	Recreational Fishing Trust	NSW Dept of Primary Industries	\$ 19,255.00	\$ -		TBA	State	TBA	3
20/10/2020			Infrastructure	Rollands Plains Road near Red Hill Road	NSW Safer Roads Program & Australian Government Black Spot	Transport for NSW	\$ 235,000.00	\$ -		ТВА	State/Federal	ТВА	10
20/10/2020			Infrastructure	Beechwood Road at Bellangry Road	NSW Safer Roads Program & Australian Government Black Spot	Transport for NSW	\$ 180,000.00	\$ -		ТВА	State/Federal	ТВА	10
20/10/2020			Infrastructure	Stewart and Lord Streets intersection	NSW Safer Roads Program & Australian Government Black Spot	Transport for NSW	\$ 420,000.00	\$ -		ТВА	State/Federal	TBA	10

Item 12.01 Attachment 1

	Date \$ Advised	Acquittal (Project completed)	Division Applying	Project Title	Grant Program	Organisation Offering the Grant	Grant amount applied for		Council's ontribution	Amount	ted granted	Funding Type (Local, State, Federal)	Grant Successful?	Estimated preparation time (hours
2/11/2020	27/11/2020		Strategy & Growth	PMHC Community Recovery and Resilience Program	Local Council Phase 2 Stream 1 Bushfrie Community Recovery and Resilience Fund	Resilience NSW	\$ 250,000.00	\$	-	\$	250,000.00	State	Yes	8
3/11/2020	11/11/2020		Strategy & Growth	Australia Day 2021 - Branding	New Branding	National Australia Day Council	\$ 1,000.00	\$	-	\$	1,000.00	State	Yes	1
11/11/2020	11/11/2020		Infrastructure	The Hatch Road Upgrade	2020 Federal Election Funding Commitment	Transport for NSW	\$ 1,509,290.00	\$	-	\$ 1,	509,290.00	Federal	Yes	2
11/11/2020	11/11/2020		Infrastructure	Lorne Road Upgrade - Kew to Comboyne	2020 Federal Election Funding Commitment	Transport for NSW	\$ 160,000.00	\$	-	\$	160,000.00	Federal	Yes	2
11/11/2020	18/11/2020		Development & Environment	Bicentennial Walkway Project AWAITING FUNDING AGREEMENT	Mr Pat Conaghan / Deputy Prime Minister, Australian Govt Announcement	Bushfire Local Economic Recovery Fund	\$ 3,050,000.00	\$	-	\$3,	050,000.00	Federal	Yes	7
11/12/2020			Infrastructure	1. Kennedy Drive Port Macquarie	Fixing Local Roads Round	Transport for NSW	\$ 1,158,045.00	\$	724,955.00		ГВА	State	TBA	7
11/12/2020			Infrastructure	2. Rollands Plains Road Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 1,483,636.00	\$	-	-	ГВА	State	TBA	7
11/12/2020			Infrastructure	3. Pacific Drive Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 520,000.00	\$	-		rba	State	TBA	6
11/12/2020			Infrastructure	4. Hollingworth and Ackroyd Street Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 287,000.00	\$	287,000.00	-	rba	State	TBA	6
11/12/2020			Infrastructure	5. Short Street Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 72,991.00	\$	-	-	ГВА	State	ТВА	6
11/12/2020			Infrastructure	6. Pembrooke Road Renewal	Fixing Local Roads Round 2	Transport for NSW	\$ 3,291,200.00	\$	-	-	rba	State	TBA	7
11/12/2020			Infrastructure	7. Bago Road/Cameron Street Extension - Timbertops Close to Azalea Street	Fixing Local Roads Round 2	Transport for NSW	\$ 785,000.00	\$	-		ГВА	State	TBA	6
11/12/2020			Infrastructure	8. Wauchope Industrial Areas Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 611,116.00	\$	-		ГВА	State	ТВА	6
11/12/2020			Infrastructure	9. Blackbutt Road Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 294,525.00	\$	98,175.00	-	ГВА	State	TBA	6
11/12/2020			Infrastructure	10. Acacia Avenue Rehabilitation	Fixing Local Roads Round 2	Transport for NSW	\$ 629,887.50	\$	209,962.50		TBA	State	TBA	6
11/12/2020			Infrastructure	11. Lorne Road Kendall Pavement Rehabilitation Works	Fixing Local Roads Round 2	Transport for NSW	\$ 1,631,444.00	\$	407,861.00		ГВА	State	TBA	7
17/12/2020			Strategy & Growth	Port Macquarie Sunset Sessions (Bicentenary)	Regional Tourism Bushfire Grant	Austrade - Tourism Programs	\$ 5,000.00	\$	-	-	ГВА	Federal	TBA	3
						Total grants application	\$ 51.241.958.50	s	9,780,142,50	\$ 17.	138,990.00			376

if awarded grant

Item 12.01 Attachment 1

Number	Project		Funding	Progress Report	On track
1	Tourism product & trade market development Stage 2		80,000.00	On target. Google Destination Management Organisation Workshops delivered late November 2020 and Tourism Marketing Academy online resources launched early December 2020. Trade development meetings held late November and early December 2020 with ongoing support, Uber Media dashboard went live late in late November 2020 and the Google Operator Audit of local tourism attractions and business is completed.	Yes
2	Additional Investment in tourism PR and Marketing	\$	140,000.00	Campaign activity successfully delivered and concluded at the end of November 2020. campaign was regularly updated to respond to the changing travel restrictions.	Complete
3	Communication - to community - use of funding / that projects have been added to OP	\$	10,000.00	On target. Bespoke website page with video stories in progress with completion scheduled April 2021.	Yes
4	Tourism - Visiting Friends & Relatives Program development	\$	25,000.00	Project planning has commenced and implementation and delivery scheduled for mid-2021.	Yes
5	Website Food & Wine Trail Development	\$	30,000.00	Expressions Of Interests released to market late November 2020. Website structure changes currently under development and engagement with individual operators commenced. To be launched April 2021.	Yes
6	PMH Cares	\$	7,870.00	Six community volunteers underway, and planning has commenced for a Volunteer drive early in 2021.	Yes
7	Reboot, Refresh, Restart COVID Careers Pop-ups	Ş	15,000.00	Reboot, Refresh Restart calendar delivered over October/November 2020, including keynote webinar, pop-up, and a range of collaborative efforts with local service providers. Planning delivery of further initiatives from early 2021.	Yes
8	Grant writing workshops	\$	15,000.00	On target. Planning underway to program grant writing workshops in the first half of 2021. "PMHC Grant Finder" was launched on 1 December 2020. This is a bespoke grants search engine and PMHC partnered with Grant Guru to deliver the grant finder portal. Business, community groups, sporting clubs and event organisers can use this powerful search engine to search for grants. This is a useful tool for our community and staff.	Yes
9	Arts, Culture & Creative Industries content development and marketing	\$	80,000.00	Strategy and concept development work completed. Digital and print campaign activity scheduled from February 2021. Photography briefed and booked and the design toolkit has been prepared.	Yes
10	Cultural industries - Networking and mentoring	\$	50,000.00	Data secured from the Cultural Economy Project has been reviewed to identify skills development needs and initial discussions have taken place with appropriate training and development professionals.	Yes
11	Creative and Arts Trails development	\$	45,000.00	Expressions Of Interests released to market late November 2020. Website structure changes currently under development and engagement with individual operators commenced. This project will be delivered in partnership with the food and wine trails and to be launched in April 2021.	Yes

lumber	Project		Funding	Progress Report	On track
12	Program to encourage use of vacant commercial spaces	\$	80,000.00	Exploring options with property managers and local Chambers of Commerce. Micro trial of spaces occurred during ArtWalk 2020. Planning underway, including engagement and research into other regional vacant shopfront activation programs.	Yes
13	Contribution to Creek to Creek Trail Development	\$	60,000.00	Project planning commenced and discussions with Creek to Creek Working Group completed. Construction due to commence in June 2021.	Yes
14A	Artwalk delivery 2020	\$	20,000.00	Achieved. ArtWalk was successfully delivered as a COVID-safe event from 1 - 8 October 2020.	Complete
14B	Artwalk delivery 2021	\$	20,000.00	Planning to commence following the February 2021 discussion with the Cultural Steering Group.	Yes
15	CBD Wifi (Wauchope, Laurieton)	\$	40,000.00	Working through vendor engagement and planning. Identified proposed covered area completed and proceeding to request for quotes.	Yes
16	Tourism & Cultural Development Project Officer (temporary)	\$	100,000.00	Achieved. Recruitment completed in October 2020 and projects allocated.	Complete
17	Public Spaces Interpretation Strategy and Guidelines	\$	60,000.00	Project planning has commenced and Request for Quote progressing.	Yes
18	Renew the maps "Comboyne Plateau" outside Udder Cow Café and in Pioneer Park	Ş	10,000.00	Monitoring required. Working with the Community Council Action Team to determine the project and the community expectations. This project is planned for the second half of the financial year. The extent of the projects is still to be determined.	No -being monitored
19	Develop a Laurieton Main Street Master Plan	\$	100,000.00	On target. Enquiry by Design engagement with Camden Haven Chamber of Commerce and other local stakeholders is complete. Quotes have been sourced for a consultant to support the masterplan development.	Yes
20	Work with Pappinbarra residents and the RFS to develop and implement a community fire-safety plan.	\$	25,000.00	Work and engagement has commenced with the community and the Wauchope RFS to develop this community plan. It is on target for completion by June 2021.	Yes
21	Install signage on Pappinbarra Road for speed reduction to help protect wildlife and to improve road safety	\$	10,000.00	Project has commenced with a draft charter developed in this quarter. Works are expected to commence in 2021.	Yes
22	Wauchope Rotary Youth Hall external repaint western side	\$	40,000.00	Works are programmed to be completed by end of March 2021 or earlier depending on contractor availability.	Yes
23	Stuarts Park Building beautification	Ş	20,000.00	Works are programmed to be completed by end of March 2021 or earlier depending on contractor availability.	Yes
24	Kendall Bridge rehabilitation	\$	40,000.00	Kendall Bridge Joint Rehabilitation delivery on track with detailed project planning, procurement activities and approvals in progress, following approval of Project in Ordinary Council Meeting in August 2020.	Yes
25	Towns Gateway entrance strategy	\$	50,000.00	Project planning to commence in early 2021.	Yes
26	CSU-Googik Connection Consultancies	\$	150,000.00	Preliminary investigations and concept design review has been completed.	Yes
27	Port Macquarie Lumiere night time installation	\$	55,000.00	review has been completed. Contractor agreement issued and project progressing as per project plan. Installation to be launched at the April Bicentenary event.	Yes
28	Laurieton Sports Complex - installation of multi-purpose court (part funding) Total Funds Available	\$ \$	115,000.00	Project planning commenced. Target to complete works in June 2021.	Yes
	Total Funds Available	Ş	1,492,870.00		

Number	Project		Funding	Progress Report	On track
1	Lake Cathie Foreshore Reserve Master Plan - Stage 2 works	\$	280,000.00	Project Planning completed. Procurement 60% complete. Construction commencing April	Yes
2	Footpath -Camden Haven - The Parade: Ocean St to Surf Club car park (NW side); 260m	\$	100,000.00	2021. Project Planning completed. Land tenure being discussed with Crown Land as a pre-requisite to construction. Expected completion April 2021.	Yes
3	Footpath -Laurieton- Lake Street: Tunis St to Seymour St (W side); missing links; 120m	\$	60,000.00	Project Planning completed. Construction commenced in February 2021.	Yes
4	Footpath -Kendall - Comboyne St to Graham St connection at Kendall Services Club	\$	80,000.00	Project Planning completed. Survey and Concept Design in progress.	Yes
5	Footpath -Comboyne - Hill Street: Pioneer Park to Main Street (W side); 180m	\$	90,000.00	Project Planning completed. Works scheduled for construction commencement in February to March 2021.	Yes
6	Footpath -Wauchope - Parker Street: Wauchope High School to Bain Street (W side); 160m	\$	70,000.00	Construction commenced in January 2021 and scheduled for completion end of February 2021.	Yes
7	Footpath -Port Macquarie -Rushcutter Way: Moondara Tce to Bangalay Dr (SE side); 200m	\$	100,000.00	Project Planning completed. Construction scheduled for April 2021.	Yes
8	Footpath -Major Innes Road: Braeroy Dr to The Ruins Way (E side); 320m	\$	130,000.00	Construction commenced in January 2021. Works 60% delivered with completion at end of February 2021.	Yes
9	Footpath -Watonga Street: Connection to Matthew Flinders Dr; 35m	\$	50,000.00	Project Planning completed. Survey and Concept Design in progress with construction scheduled for April 2021.	Yes
10	Solar PV installed on roof at Port Macquarie Airport	Ş	140,000.00	Procurement commenced with installation scheduled for March 2021.	Yes
11	Wauchope Stadium Cladding Replacement	\$	20,000.00	Works to commence March 2021 and completion in April 2021.	Yes
12	Rural Road Safety Improvements - linemarking, signs.	\$	100,000.00	50% complete. Linemarking completed on Reids Road, Rosewood Road, Quarry Road, Redbank Road and Logans Crossing Road.	Yes
13	Install seating beside Anzac Memorial in Comboyne	\$	10,000.00	Project Planning and procurement completed. Installation scheduled for March 2021.	Yes
14	Install a sheltered seating area, picnic table and rubbish bins at Kendall Park	\$	25,000.00	Project set to start construction early March 2021.	Yes
15	Increased seating and shade at Charlie Watt Reserve Telegraph Point	\$	26,618.00	Project Planning underway with construction scheduled for March 2021.	Yes
16	Port Macquarie Lumiere Night time installation - infrastructure component	\$	65,000.00	Project Planning completed. Procurement commenced and completion expected April 2021.	Yes
17	Jubilee Hall Dunbogan - external repaint	\$	20,000.00	All works completed with Hall re-painted.	Complete
18	North Shore Fish Cleaning table	\$	30,000.00	Project Planning commenced. Scheduled installation May 2021.	Yes
19	New bus shelters (3)	\$	45,000.00	Planning commenced to install three new bus shelters at: 69 Pacific Drive, Port Macquarie. 180 Lake Road, Port Macquarie. 1459 Ocean Drive, Lake Cathie.	Yes
20	Hay Street Resurfacing - Port Macquarie	\$	280,000.00	Project Planning commenced with works scheduled between March to May 2021	Yes
21	Laurieton Sports Complex - installation of multi-purpose court (part funding)	\$	105,000.00	Council co-contribution of \$115k. Project Planning commenced. Works Scheduled May to June 2021.	Yes
	Total Funds Available	\$	1,826,618.00		



Authorised by: Council Authorised date: 21/11/2018 Effective date: 22/11/2018 Next review date: 20/11/2020 File Number: D2018/281959

Council Policy MARKETS POLICY

1. INTRODUCTION

Port Macquarie-Hastings Council supports quality markets acknowledging that they contribute to the community by providing spaces to gather and socialise, and help activate our public spaces. Markets can also complement the offerings of local businesses and provide opportunities for emerging enterprises.

Council receives regular requests from commercial enterprises, community groups, not-for-profit organisations and the general public to establish new, one-off or regular markets.

The purpose of this policy is to establish Council's approach to the approval of markets and the level of commitment it requires from market operators to achieve quality market operations. It aims to facilitate well managed markets that help to support and contribute to local communities, complementing the offerings of local businesses.

2. POLICY STATEMENT AND SCOPE

This Policy covers markets on Council owned and managed land, Crown Reserves and Crown Land (where Council is the trust manager) throughout the Port Macquarie-Hastings area. This policy applies to new markets or where an existing market is undergoing major change or seeking an extension to an existing approval.

It does not apply to markets that are held on private land (which may require a Development Application), or markets which are occasional, or may be part of a larger event and are considered under the broader event application.

Council aims to support markets that sell high quality goods and services, relative to the market location.

Markets proposed at the following locations in the Port Macquarie central business district may be impacted by other Council policies or guidelines:

- Town Square (Port Macquarie Town Square Protocol)
- Town Green (Port Macquarie Entertainment Precinct Event Use Policy)
- Hay Street Forecourt (Port Macquarie Entertainment Precinct Event Use Policy)

As a general guideline, in each of the Port Macquarie, Wauchope or Laurieton CBDs (see maps at Appendix A) in any week only one 'regular' market will be permitted from Monday to Friday, and one 'regular' market on the weekend (Saturday and Sunday inclusive). Competing applications will be considered on merit with pre-approved markets taking precedence. Regular markets involve four or more markets in one calendar year.

Markets Policy

UNCONTROLLED IF PRINTED

Page 1 of 6

ATTACHMENT

All market proposals will be subject to a Market Suitability analysis (see Appendix B). This will include an evaluation of:

- 1. Capacity and Conditions
- 2. Utilities and Infrastructure
- 3. Accessibility and Transportation
- Impacts
- 5. Policy Implications
- 6. Other

Approval Process

Applicants for markets in the Port Macquarie CBD should be familiar with the policies listed in Section 4 of this policy.

The Temporary Licence Panel, a cross-functional group established to approve commercial activities on Council-managed land, will undertake the Site Suitability analysis based on the information provided by the proponent and make a recommendation to the Director Strategy and Growth with regard to the application.

Further approval may be required if the market site is deemed suitable following the Site Assessment process as follows:

Council owned and managed land – Approval is required under Section 68 Local Government Act 1993 or Section 138/Section 139a Roads Act 1993, if a road reserve, to operate a market on Council owned and managed land.

Crown Reserves and Crown Land – Approval via a licence is required from the Reserve Trust or NSW Crown Lands to operate a market on a Crown Reserve or Crown Land.

A market approval must be operational or in use as per the approval otherwise it may be revoked.

In summary, the market approval process under the Market Policy looks like this:

Market Application via Section 68, 138/139a Market Suitability Analysis (Temporary Licence Panel)

Assessment by relevant Council Authority

Market applications should include a Market Suitability Analysis (Attachment B) including any relevant supporting documentation.

Development consent is required for markets on private land unless they meet the temporary events criteria in State Environmental Planning Policy (Exempt and Complying Development) 2008 or are operating under a blanket DA approval.

Council has the right to revoke a market approval should any conditions of the approval be breached or the site and/or activities on the site be deemed unsuitable based on the Site Suitability criteria.

A market approval must be operational or in use as per the approval otherwise it may be revoked.

An applicant may request a review of a decision by making a request in writing to the General Manager within 7 days of being notified of a decision.

Markets Policy

UNCONTROLLED IF PRINTED

Page 2 of 6

3. RESPONSIBILITIES AND AUTHORITIES

The Director Strategy and Growth responsible and accountable for the implementation of this policy.

The Group Manager Regulatory Services is responsible for ensuring compliance with this Policy.

An owner of a marker which operates in the Port Macquarie-Hastings local government area is required to comply with this Policy.

4. REFERENCES

Port Macquarie Town Square Protocol – encourages activations with the Town Square and outlines the process and high level requirements for staging events within the space.

Port Macquarie Entertainment Precinct Event Use Policy – ensures that events conducted in the entertainment precinct are safe, well run, held in suitable locations and do not unduly impact on residents, businesses or the environment.

Local Approvals Policy - Mobile Food Vending Vehicles and Temporary Food Stalls in a Public Place. Establishes the criteria that are used in considering applications to operate mobile food vending vehicles and temporary food stalls.

5. DEFINITIONS

Market - an open-air area, or an existing building, that is used for the purpose of selling, exposing or offering goods, merchandise or materials for sale by independent stall holders and includes temporary structures and existing permanent structures used for that purpose on an intermittent or occasional basis. (Port Macquarie-Hastings Local Environmental Plan)

Occasional Market – a one-off, annual or irregular market generally involving less than four (4) markets in any calendar year.

Private Land - land owned by non-government entities.

Regular Market – a market held on a regular basis or more than four (4) markets in any calendar year. Section 68 Local Government Act 1993 – governs activities on community land including engaging in a trade or business.

Section 138 Roads Act 1993 - governs works within a road reserve.

Section 139a Roads Act 1993 - governs street vending consents.

Crown Reserves and Crown Land – land set aside on behalf of the community for a wide range of public purposes.

Council officer: A member of Council staff.

Director: A 1st tier management position and titled as such.

Group Manager: A 2nd tier management position and titled as such.

6. PROCESS OWNERS

Director Infrastructure and Director Development and Environment

7. AMENDMENTS

Nil.

Markets Policy

UNCONTROLLED IF PRINTED

Page 3 of 6

APPENDIX A

Port Macquarie CBD and surrounds



Markets Policy

UNCONTROLLED IF PRINTED

Page 4 of 6

Wauchope



Laurieton



Markets Policy

UNCONTROLLED IF PRINTED

Page 5 of 6

APPENDIX B

Market Suitability Analysis

Criteria	Criteria Performance Measure	Essential Criteria	Meets Criteria YES/NO
1. Capacity and Conditions			
Location	High visibility.		
Landmark	Well known location, easy to find.		
Slope	Appropriate gradient for stalls, stages and visitors.		
Surface	Potential to minimise surface damage through hardstand	\checkmark	
	areas, all weather surfaces etc.		
Patron and Stallholder Capacity	Ample capacity for patrons and stallholders.		
Seating and Community Space	Adequate seating and gathering areas.		
Entertainment Spaces	Suitable spaces for locating entertainment (if applicable).		
Potential to Expand	Capacity to grow.		
Safety	Ability to ensure a safe space for patrons, public and stallholders.	✓	
2. Utilities and Infrastructure	•		
Water and Power	Adequate access to power and running water.		
Toilets	Accessible toilets with ample capacity for patrons.	 ✓ 	
Overhead Cover	Undercover protection for patrons and stallholders.	· ·	
Storage	On-site storage capacity.		
Sound Amplification	Permanent or portable PA system (if applicable).		
3. Accessibility and Transpo	I rtation		
Parking Capacity	Short-term and long-term parking to meet demand.		
Public Transport	Adjacent transport connections.	•	
Active Transport	Ease of movement around the site.		
Loading Zones & Emergency Access	Provision for loading and unloading of vehicles.	✓	
Equitable Access	Access for all.		
4. Impacts			
Cite immed	Na laustaun insessan dia 24-		
Site impact	No long term impact on the site.	✓	
Site rehabilitation and maintenance	Allows for scheduled works or rehabilitation between events.		
Local Impact	No impact on existing users in the immediate area.		
Distance to Existing Markets	Close proximity to another market site.		
Proximity to Retail Precincts	Duplication of goods or services.		
			1
Stallholders impact on existing	No detrimental effect on existing businesses of a similar		
Stallholders impact on existing businesses			
Stallholders impact on existing businesses Scheduling	No detrimental effect on existing businesses of a similar nature.		
Stallholders impact on existing businesses	No detrimental effect on existing businesses of a similar nature. Clashes with other events including markets on both private		
Stallholders impact on existing businesses Scheduling	No detrimental effect on existing businesses of a similar nature. Clashes with other events including markets on both private and public land.		
Stallholders impact on existing businesses Scheduling	No detrimental effect on existing businesses of a similar nature. Clashes with other events including markets on both private		
Stallholders impact on existing businesses Scheduling 5. Policy Implications	No detrimental effect on existing businesses of a similar nature. Clashes with other events including markets on both private and public land.		
Stallholders impact on existing businesses Scheduling 5. Policy Implications Relevant policies 6. Other	No detrimental effect on existing businesses of a similar nature. Clashes with other events including markets on both private and public land. Compliance or non-compliance with relevant policies.		
Stallholders impact on existing businesses Scheduling 5. Policy Implications Relevant policies	No detrimental effect on existing businesses of a similar nature. Clashes with other events including markets on both private and public land.		

As a guideline applications should at least meet the essential criteria.

Other considerations:

Attach maps or supporting documents. Site deemed suitable: YES Date Assessed by Temporary Licence Panel: Approved by:

NO

Director Strategy & Growth

Markets Policy

UNCONTROLLED IF PRINTED

Page 6 of 6

4 Your Natural and Built Environment

What we are trying to achieve

A connected, sustainable, accessible community and environment that is protected now and into the future.

What the result will be

We will have:

- Effective management and maintenance of essential water, waste and sewer infrastructure
- A community that is prepared for natural events and climate change
- Sustainable and environmentally sensitive development outcomes that consider the impact on the natural environment
- Accessible transport network for our communities
- Infrastructure provision and maintenance that meets community expectations and needs
- Well planned communities that are linked to encourage and manage growth
- Accessible and protected waterways, foreshores, beaches and bushlands
- An environment that is protected and conserved for future generations
- Renewable energy options that are understood and accessible by the community

How we will get there

- 4.1 Provide (appropriate) infrastructure and services including water cycle management, waste management, and sewer management
- 4.2 Aim to minimise the impact of natural events and climate change, for example, floods, bushfires and coastal erosion
- 4.3 Facilitate development that is compatible with the natural and built environment
- 4.4 Plan for integrated transport systems that help people get around and link our communities
- 4.5 Plan for integrated and connected communities across the Port Macquarie-Hastings area
- 4.6 Restore and protect natural areas
- 4.7 Provide leadership in the development of renewable energy opportunities
- 4.8 Increase awareness of issues affecting our environment, including the preservation of flora and fauna





PORT MACQUARIE TRANSPORT NETWORK COMMUNITY CONSULTATIVE COMMITTEE CHARTER

Adopted: Ordinary Council 2020 04 15

1.0 PURPOSE OF THE COMMITTEE

The purpose of the Port Macquarie Transport Network Community Consultative Committee is to provide a forum for discussion between Council and the community on issues directly relating to the investigation of proposed Orbital Road options, planned traffic network improvements and upgrades to the existing Port Macquarie road network, through the development of a Strategic Business Case.

At the 19 June 2019 Council meeting it was resolved:

7. Request the General Manager to establish a Proposed Orbital Road Community Consultative Committee that will be guided by a Council-adopted Charter (yet to be determined), with membership of the Committee to be determined via a formal Expression of Interest process, ensuring that a broad cross-section of interests and expertise are represented on the Committee.

2.0 KEY FUNCTIONS

The Committee will:

- Assist Council in meeting its commitment to address the proposed Orbital Road options and broader Port Macquarie road network improvements & upgrades.
- Promote information sharing between Council, local community members and other key stakeholders, on the proposed Orbital Road options and broader Port Macquarie road network improvements & upgrades.
- Work collaboratively with Council and provide feedback on the proposed Orbital Road options, Strategic Business Case studies or reports and broader Port Macquarie road network improvements & upgrades.
- Provide a forum for the community members and other stakeholders to share / seek information on and provide feedback to Council on the development of the Strategic Business Case for the proposed Orbital Road, including planned traffic network improvements and upgrades to the existing Port Macquarie road network,

3.0 MEMBERSHIP

Membership of the Committee will comprise eleven (11) members including:

- 1. One independent Chair
- 2. Two Councillor representatives
- 3. Up to six community and stakeholder representatives (including no more than 2 representatives from any one representative group)
- 4. Two Council staff representatives (Director and Project Manager)

If and when decision-making is required, this will be by consensus.

It is anticipated other Council staff may be present on an as needs basis in support of the project to present information and listen to discussion.

3.1 Independent Chair

The Independent Chair must be:

- A convenor, facilitator, mediator and advisor for the Committee
- Independent and impartial
- The key contact between the Committee and Council

The Chair will be chosen through an Expression of Interest (EOI) process and must be able to demonstrate detailed experience in community relations, facilitation, mediation and / or public advocacy.

The appointment of the Chair to the Committee will be for a period of 12 months at which time the Committee membership will be reviewed; with the option to extend the Independent Chair's tenure for another twelve-month period via a resolution of the Council, without the need to go through a formal EOI process.

The Chair will be responsible for:

- Convening and running the meetings in a fair and independent way
- Ensuring members comply with the Code of Conduct
- Resolving disputes between members
- · Liaising with Council staff on minutes, agendas and reports

3.2 Community and Stakeholder representatives

Community and stakeholder representatives will represent a broad cross section of the community in age and gender and will be chosen through an EOI process.

Local community representative's must:

- Be a current resident or landowner in the Port Macquarie-Hastings Local Government Area
- Be able to demonstrate active involvement in local community groups or activities
- Have awareness and knowledge about the projects on which the Committee will be focussed
- · Be able to represent and communicate the interests of the community
- Be willing to adhere to the Council's Code of Conduct at all times, including the need for confidentiality at times.

Representatives of stakeholder groups must:

- Be a member of a stakeholder group with an interest in the projects on which the Committee will be focussed
- Have awareness and knowledge about the projects on which the Committee will be focussed
- Be able to represent and communicate the interests of their group and share information with their respective groups
- Be willing to adhere to the Council's Code of Conduct at all times, including the need for confidentiality at times.

Appointment to the Committee will be for a period of twelve months, at which time a review of the membership of the Committee will take place; with the option to extend the existing Committee for another twelve-month period via a resolution of the Council, without the need to go through a formal EOI process.

3.3 Obligations of Members

- As per Section 226 (c) of the NSW Local Government Act 1993, the Mayor is the principal spokesperson for the governing body and Councillors that are members of the Committee are to obtain the Mayors agreement to make media and other statements on behalf of Council. Further, only the Mayor, or a Councillor with the Mayor's agreement and otherwise in accordance with Council policies and procedures, may release Council information through media statements or otherwise, and the release of such information must be lawful under the Council adopted Code of Conduct. Council officers that are members of the Committee are bound by the existing operational delegations in relation to speaking to the media.
- A Councillor as a member of the Committee or the Committee itself has no delegation or authority to make decisions on behalf of Council, nor to direct the business of Council. The only decision-making power rests with Councillors, through formal resolutions of Council.
- The Committee may make recommendations to Director of Infrastructure or General Manager who will have the discretion to prepare a report, for consideration by Councillors through a formal meeting of Council. Council will consider recommendations that come from the Committee, however is under no obligation to resolve in favour of such recommendations.
- A Councillor as a member of the Committee or the Committee itself cannot direct staff and must abide by the decisions of Council and the policies of Council.

Confidentiality and Conflict Of Interest:

- Councillors, Council staff and members of this Committee must comply with the applicable
 provisions of Council's Code of Conduct in carrying out the functions as Council officials. It is
 the personal responsibility of Council officials to comply with the standards in the Code of
 Conduct and regularly review their personal circumstances with this in mind.
- Committee members must declare any conflict of interests at the start of each meeting or before discussion of a relevant item or topic. Details of any conflicts of interest should be appropriately minuted.
- Where members or invitees at Committee meetings are deemed to have a real or perceived conflict of interest, it may be appropriate they be excused from Committee deliberations on the issue where the conflict of interest may exist. This does not relate to where a Committee member resides.
- All members of the Committee will be required to complete a confidentiality agreement that will cover the period of their membership of the Committee.

3.4 Appointment of Members

Council will seek Expressions of Interest for the independent chair and community /stakeholder representatives for an appointment of 12 months by the following means:

- Advertising in the local paper
- Social media
- Council Website.

The EOI will be open for no less than 28 days. The EOI submissions will be reviewed and assessed against appropriate selection criteria.

A report will then be prepared for a future Council meeting in relation to the appointment of members to the Committee.

The Committee will be established for the life of the development of the Strategic Business Case.

4.0 TIMETABLE OF MEETINGS

Meetings of the Committee shall be held on a quarterly basis as a minimum, with no more than six meetings in a 12-month period.

5.0 MEETING PRACTICES

5.1 Quorum

A meeting of the Committee shall not proceed unless a quorum of at least one (1) more than half the number of members are present.

5.2 Chairperson

- The Chairperson shall be the Independent Chair.
- If the Chair is not available, the most senior staff member at the meeting will act as Chair.

5.3 Secretariat

A Council Staff representative is to be responsible for ensuring that the Committee has adequate secretariat support. The secretariat will ensure that the business paper and supporting papers are circulated as early as possible but at least three (3) days prior to each meeting.

6.0 ATTENDANCE BY NON-COMMITTEE MEMBERS

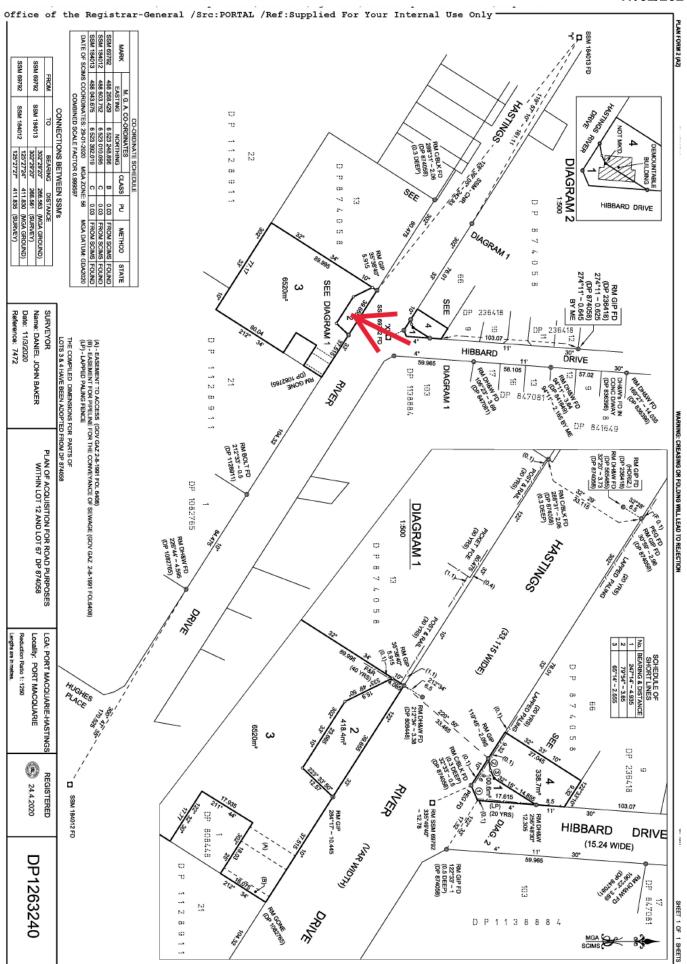
There may be occasions where other attendees are required at Committee meetings, for example; funding partners, other levels of Government, project managers (if applicable), stakeholder engagement specialists and other Council staff. Invitations to Committee meetings will be on an as needs basis and upon the formal request of the Chairperson.

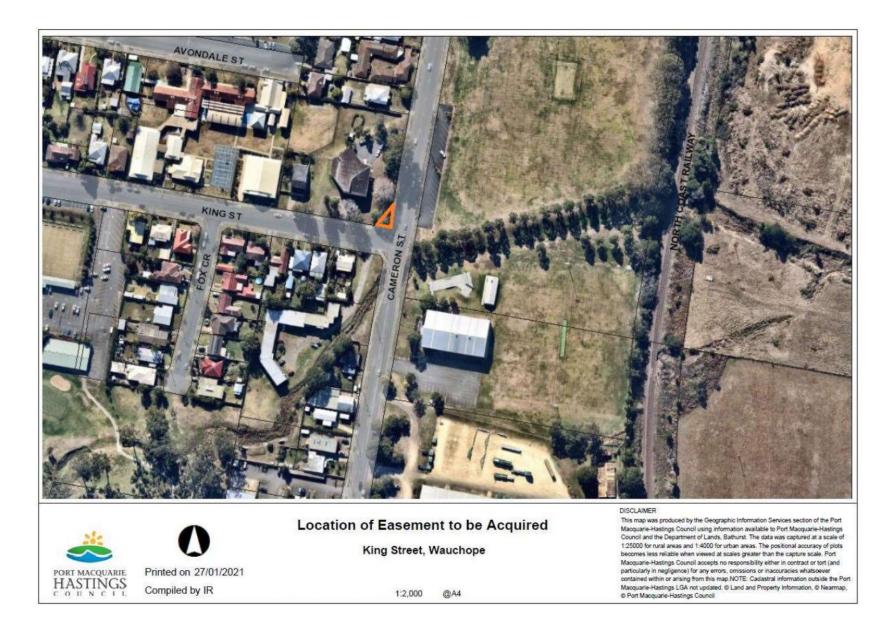
7.0 COMMITTEE INDUCTION

The Independent Chair will ensure that members are given a suitable induction training to equip them for their role in the Committee, in accordance with Council's Code of Conduct and the Council adopted Code of Meeting Practice.

ATTACHMENT

ORDINARY COUNCIL 17/02/2021

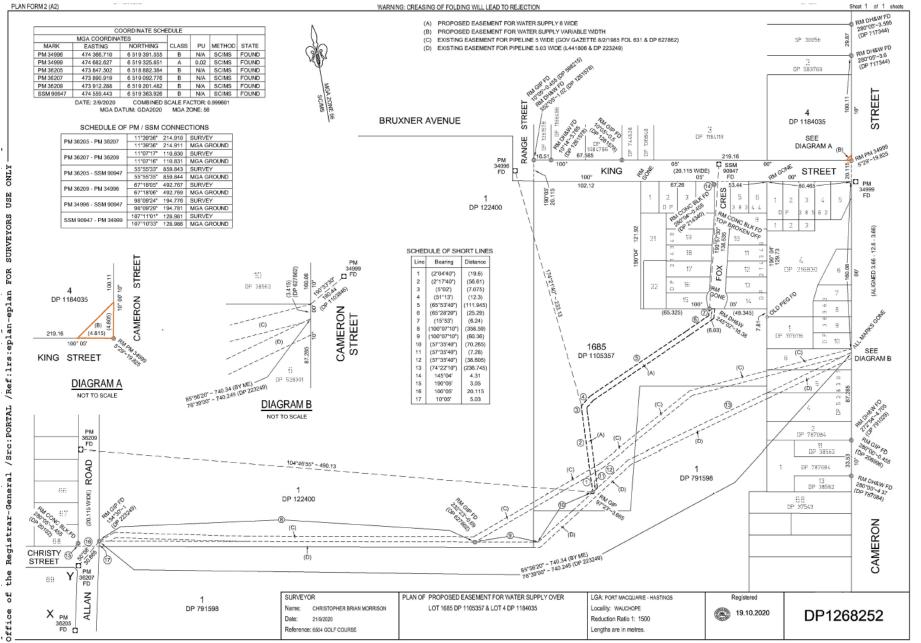




Item 13.07 Attachment 1

ATTACHMENT

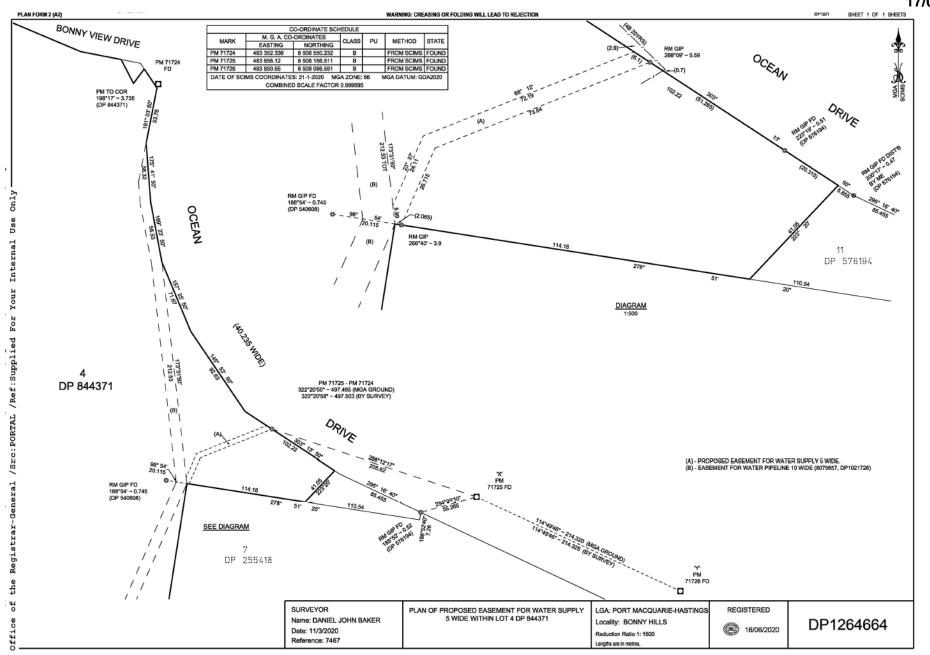
ORDINARY COUNCIL 17/02/2021



Item 13.07 Attachment 2

ATTACHMENT

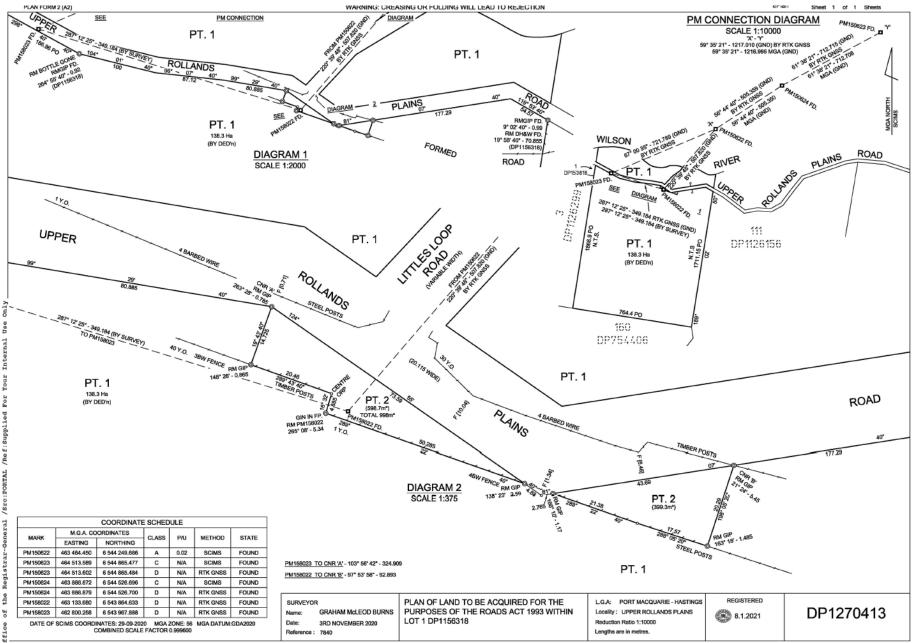
ORDINARY COUNCIL 17/02/2021



Item 13.08 Attachment 1

ATTACHMENT

ORDINARY COUNCIL 17/02/2021



Item 13.09 Attachment 1



DEVELOPMENT ASSESSMENT PANEL SUB COMMITTEE CHARTER

Adopted: Ordinary Council 2020 10 21

1.0 OBJECTIVES

To assist in managing Council's development assessment function by providing independent, transparent and expert determinations of development applications that fall outside of staff delegations.

2.0 KEY FUNCTIONS

- To review development application reports and conditions. The focus of the Panel's review is to be on those issues raised in submissions received following exhibition of development applications;
- To determine development applications where there are 3 or more unique submissions or where an
 application is outside of staff delegations;
- To refer development applications to Council for determination where necessary;
- To provide a forum for objectors and applicants to make submissions on applications before the Development Assessment Panel (DAP);
- To maintain transparency in the determination of development applications.

Delegated Authority of Panel

Pursuant to Section 377 of the Local Government Act, 1993 delegation to:

- Determine development applications under Part 4 of the Environmental Planning and Assessment Act 1979 having regard to the relevant environmental planning instruments, development control plans and Council policies.
- Vary, modify or release restrictions as to use and/or covenants created by Section 88B instruments under the Conveyancing Act 1919 in relation to development applications for subdivisions being considered by the panel.
- Determine Koala Plans of Management under State Environmental Planning Policy 44 Koala Habitat Protection associated with development applications being considered by the Panel.

Noting the trigger to escalate decision making to Council as highlighted in section 5.2.

3.0 MEMBERSHIP

3.1 Voting Members

- Three (3) independent external members will be selected for each scheduled DAP meeting from an appointed pool of members. One of the independent external members to be the Chairperson. Independent members will be rostered onto meeting on a rotational basis where possible.
- Group Manager Development Assessment (alternate Director Development and Environment or Development Assessment Planning Coordinator).

The independent external members shall have expertise in one or more of the following areas: planning, architecture, heritage, the environment, urban design, economics, traffic and transport, law, engineering, government and public administration.

3.2 Non-Voting Members

Not applicable.

3.3 Obligations of members

- Members must act faithfully and diligently and in accordance with this Charter.
- Members must comply with Council's Code of Conduct.
- Except as required to properly perform their duties, DAP members must not disclose any confidential information (as advised by Council) obtained in connection with the DAP functions.
- Members will have read and be familiar with the documents and information provided by Council prior to attending a DAP meeting.
- Members must act in accordance with Council's Workplace Health and Safety Policies and Procedures.
- External members of the Panel are not authorised to speak to the media on behalf of Council. Council officers that are members of the Committee are bound by the existing operational delegations in relation to speaking to the media.

3.4 Member Tenure

The independent external members will be appointed for the term of Four (4) years or until such time as an expression of interest process to source Panel members is completed for the proceeding four (4) year term.

3.5 Appointment of members

- A pool of independent external members (including the Chair) shall be appointed by the Chief Executive Officer following an external Expression of Interest process. Previous Panel members are eligible to be reappointed on the Panel following this expression of interest process.
- Independent members will be rostered on to Panel meetings on a rotational basis where possible to suit Panel member availability and Panel operational needs.
- Staff members on the Panel shall be appointed by the Chief Executive Officer.

4.0 TIMETABLE OF MEETINGS

- The Development Assessment Panel will generally meet on the 1st and 3rd Thursday each month at 2.00pm at the Port Macquarie offices of Council.
- Special Meetings of the Panel may be convened by the Director Development and Environment with three (3) days' notice.

5.0 MEETING PRACTICES

5.1 Meeting Format

- At all meetings of the Panel the Chairperson shall occupy the Chair and preside. The Chair will be responsible for keeping of order at meetings.
- Meetings shall be open to the public.
- The Panel will hear from an applicant and objectors or their representatives. Speakers are required to register to speak by close of business on the day prior to the Panel meeting.
- The Panel shall have the discretion to ask the applicant and objectors questions relating to the proposal and their submission. There is no 'right of reply' for an objector or applicant.
- Where there are a large number of persons making submissions with common interests, the Panel shall have the discretion to hear a representative of those persons rather than multiple persons with the same interest.
- Council assessment staff will be available at Panel meetings to provide technical assessment advice

Development Assessment Panel Charter Page 2 of 4 and assistance to the Panel.

Where considered necessary, the Panel will conduct site inspections prior to the meeting.

5.2 Decision Making

- Decisions are to be made by consensus. Where consensus is not possible on any item, that item is to be referred to Council for adecision.
- All development applications involving a proposed variation to a development standard greater than 10% under Clause 4.6 of the Local Environmental Plan will be considered by the Panel and recommendation made to the Council for a decision.

5.3 Quorum

Three (3) members must be present at a meeting to form a quorum.

5.4 Chairperson and Deputy Chairperson

Independent Chair (alternate - independent member).

5.5 Secretariat

- The Director Development and Environment is to be responsible for ensuring that the Panel has adequate secretariat support. The secretariat will ensure that the business paper and supporting papers are circulated at least three (3) days prior to each meeting. Minutes shall be appropriately approved and circulated to each member within three (3) weeks of a meeting being held.
- The format of and the preparation and publishing of the Business Paper and Minutes shall be similar to the format for Ordinary Council Meetings.

5.6 Recording of decisions

Minutes will be limited to the recording of decisions only and how each member votes for each item before the Panel.

6.0 CONVENING OF "OUTCOME SPECIFIC" WORKING GROUPS

Not applicable.

7.0 CONFIDENTIALITY AND CONFLICT OF INTEREST

- Members of the Panel must comply with the applicable provisions of Council's Code of Conduct. It is the personal responsibility of members to comply with the standards in the Code of Conduct and regularly review their personal circumstances with this in mind.
- Panel members must declare any conflict of interest at the start of each meeting or before discussion of a relevant item or topic. Details of any conflicts of interest are to be appropriately minuted. Where members are deemed to have a real or perceived conflict of interest, it may be appropriate they be excused from deliberations on the issue where the conflict of interest may exist. A Panel meeting may be postponed where there is no quorum.

8.0 LOBBYING

All members and applicants are to adhere to Council's Lobbying policy. Outside of scheduled Development Assessment Panel meetings, applicants, their representatives, Councillors, Council staff and the general public are not to lobby Panel members via meetings, telephone conversations, correspondence and the like. Adequate opportunity will be provided at Panel inspections or meetings for applicants, their representatives and the general public to make verbal submissions in relation to Business Paperitems.

9.0 CONDUCT AT MEETINGS

All parties in attendance at a DAP meeting shall conduct themselves respectfully ie. not disrupt the conduct of the meeting, not interject, act courteously and with compassion and empathy and sensitivity and will not insult, denigrate or make defamatory or personal reflections on or impute improper motives to the DAP, Council staff or other members of the public.



Kooloonbung Creek Flying-fox Camp Management Plan Final Adopted by Council June 2019

PORT MACQUARIE-HASTINGS COUNCIL



ecology / vegetation / wildlife / aquatic ecology / GIS

😂 ecosure

Acknowledgements

Port Macquarie-Hastings Council would like to thank everyone who participated in community consultation, with all comments considered in the development of this plan and incorporated where possible. Council acknowledges input by the New South Wales Office of Environment and Heritage to the Plan in developing the template upon which this Camp Management Plan is based, and Dr Peggy Eby who provided advice which was included in the template.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | i

😂 ecosure

Acronyms and abbreviations

ABLV	Australian bat lyssavirus
BAM	Biodiversity Assessment Method
BC Act	Biodiversity Conservation Act 2016 (NSW)
BDAR	Biodiversity Development Assessment Report
BFF	Black flying-fox (<i>Pteropus alecto</i>)
the camp	Kooloonbung Creek flying-fox camp
CE	Critically endangered
Council	Port Macquarie-Hastings Council
DoEE	Department of the Environment and Energy (Commonwealth)
DPI	Department of Primary Industries (NSW)
E	Endangered
EEC	Endangered Ecological Communities
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
FKCNP	Friends of Kooloonbung Creek Nature Park
GHFF	Grey-headed flying-fox (Pteropus poliocephalus)
the Guideline	Referral guideline for management actions in grey-headed and spectacled flying-fox camps 2015 (Commonwealth)
HeV	Hendra virus
КСРоМ	Kooloonbung Creek Plan of Management 2012
LEP	Local Environmental Plan
LGA	Local Government Area
LGNSW	Local Government of New South Wales
LRFF	Little red flying-fox (Pteropus scapulatus)
MNES	Matters of national environmental significance
NFFMP	National flying-fox monitoring program

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | ii

ATTACHMENT

🖨 ecosure

NPW Act	National Parks and Wildlife Act 1974 (NSW)
NPWS	National Parks and Wildlife Service (NSW)
OEH	Office of Environment and Heritage (NSW)
the Park	Kooloonbung Creek Nature Park
the Plan	this Camp Management Plan
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
the Policy	Flying-fox Camp Management Policy 2015 (NSW)
SEPPs	State Environmental Planning Policies
SIS	Species impact statement
TEC	Threatened ecological community
V	Vulnerable

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | iii

🚔 ecosure

Contents

Ack	nowle	edge	ements		i
Acro	onym	s an	d abbreviations		ii
List	of fig	jures	3		. v
List	of ta	bles			vii
1	Intro	duct	tion		. 1
1.	.1	Flyi	ng-foxes in urban areas		. 1
1.	.2	Plar	n objectives		. 2
2	Con	text			. 5
2.	.1	Can	np description		. 5
2.	.2	Ten	ure		11
2.	.3	Oth	er ecological values		11
2.	.4	Hist	ory of the camp		15
2.	.5	Sen	sitive receptors		16
2.	.6	Mar	nagement to date		18
3	Con	nmur	nity engagement		22
3.	.1	Stal	keholders		22
3.	.2	Eng	agement methods and results		23
	3.2.	1	Community consultation meeting		23
	3.2.2	2	Survey responses		25
	3.2.3	3	Public submissions on draft Plan		26
4	Can	np m	anagement options		28
4.	.1	Lev	el 1 actions: routine camp management		28
	4.1.	1	Education and awareness programs		28
	4.1.2	2	Property modification without subsidies		29
	4.1.3	3	Property modification subsidies		30
	4.1.4	4	Service subsidies		30
	4.1.	5	Routine camp maintenance and operational activities		30
	4.1.6	6	Revegetation and land management to create alternative hab	itat	31
	4.1.7	7	Provision of artificial roosting habitat		32
	4.1.8	В	Protocols to manage incidents		32
	4.1.9	9	Participation in research		32
	4.1.	10	Appropriate land-use planning		32
	4.1.	11	Property acquisition		32
	4.1.	12	Do nothing		32
4.	.2	Lev	el 2 actions: in-situ management		33
	4.2.	1	Buffers		33
	4.2.2	2	Noise attenuation fencing		34
4.	.3	Lev	el 3 actions: disturbance or dispersal		35
	4.3.	1	Nudging		35
PR3	995 Ko	ooloo	nbung Creek Camp Management Plan	ecosure.com.au	iv

🖨 ecosure

4.3.	.2	Dispersal	35
4.4	Unla	wful activities	37
4.4	.1	Culling	37
4.5	Cam	p management options analysis	38
5 Pla	nned	management approach	44
5.1	Leve	el 1 management	44
5.2	Leve	l 2 management	45
5.2	.1	Canopy-mounted sprinklers	45
5.2	.1.1	Installation and operational considerations	46
5.3	Leve	el 3 management	47
6 Eva	aluatio	n and review	52
7 Pla	n adm	ninistration	53
7.1	Mon	itoring of the camp	53
7.2	Res	ponsibilities	53
7.3	Fund	ling commitment	53
Referen	ices a	nd further resources	54
Append	ix 1 L	egislation	61
Appendi	ix 2 F	lying-fox ecology & behaviour	66
Append	ix 3 P	rotected Matters	72
Appendi	ix 4 H	uman and animal health	83
Appendi	ix 5 S	urvey results	86
Appendi	ix 6 S	tandard measures to avoid impacts to flying-foxes	98
Appendi	ix 7 C	ommunity feedback	102

List of figures

Figure 1 Camp locations in Port-Macquarie-Hastings Council	4
Figure 2 Kooloonbung Creek	5
Figure 3 Mown areas between the camp and residents	5
Figure 4 Boardwalk through mangroves	5
Figure 5 Vegetation communities in Kooloonbung Creek camp	6
Figure 6 Friends of Kooloonbung interpretive signage	7
Figure 7 Council sign	7
Figure 8 GHFF resting in camp	7
Figure 9 Vegetation overhanging property boundaries	8
Figure 10 Hollingworth street acts as a buffer from roosting flying-foxes in the	ne Park8
Figure 11 Maximum camp extent	9
Figure 12 Total seasonal occupation 2015-18	
Figure 13 Ecological values: threatened species	13
PR3995 Kooloonbung Creek Camp Management Plan	ecosure.com.au v

😂 ecosure

Figure 14 Ecological values: endangered ecological communities	. 14
Figure 15 Numbers of flying-foxes at Kooloonbung Creek camp (Source: OEH 2017; PMH	IC
2018). Count methods are consistent with those described in Westcott et al. 2011	. 15
Figure 16 Sensitive receptors surrounding the camp	. 17
Figure 17 Bush restoration works in the understory of the Park	. 21
Figure 18 Vegetation mapped as EEC overhanging behind Glebe Close properties	. 21
Figure 19 Asset protection zone behind properties in Glebe Close	. 21
Figure 20 Impact areas indicated by community	. 27
Figure 21 Possible components of an education program	. 29
Figure 22 Proposed management areas	. 51
Figure 23 Black flying-fox indicative species distribution, adapted from OEH 2015a	. 67
Figure 24 Grey-headed flying-fox indicative species distribution, adapted from OEH 2015a	a68
Figure 25 Little red flying-fox indicative species distribution, adapted from OEH 2015a	. 69
Figure 26 Indicative flying-fox reproductive cycle	. 70
Figure 27 Responses regarding participation in the development of 'Kooloonbung Creek	
Figure 27 Responses regarding participation in the development of 'Kooloonbung Creek Nature Park Plan of Management' in 2012	. 86
Nature Park Plan of Management' in 2012	. 86
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp	. 86 . 87
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes	. 86 . 87 . 87
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes	. 86 . 87 . 87 . 88
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes Figure 31 Protection of flying-foxes	. 86 . 87 . 87 . 88 . 88
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes Figure 31 Protection of flying-foxes Figure 32 Experience with flying-foxes	. 86 . 87 . 87 . 88 . 88 . 88
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes Figure 31 Protection of flying-foxes Figure 32 Experience with flying-foxes Figure 33 Main concerns about flying-foxes	. 86 . 87 . 87 . 88 . 88 . 89 . 89
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes Figure 31 Protection of flying-foxes Figure 32 Experience with flying-foxes Figure 33 Main concerns about flying-foxes Figure 34 Financial impacts to ratepayers	. 86 . 87 . 88 . 88 . 88 . 89 . 89 . 90
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes Figure 31 Protection of flying-foxes Figure 32 Experience with flying-foxes Figure 33 Main concerns about flying-foxes Figure 34 Financial impacts to ratepayers Figure 35 Educational options.	. 86 . 87 . 88 . 88 . 89 . 89 . 90 . 91
Nature Park Plan of Management' in 2012 Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp Figure 29 Knowledge of the status of flying-foxes Figure 30 Disease from flying-foxes Figure 31 Protection of flying-foxes Figure 32 Experience with flying-foxes Figure 33 Main concerns about flying-foxes Figure 34 Financial impacts to ratepayers Figure 35 Educational options Figure 36 Management options to assist	. 86 . 87 . 87 . 88 . 88 . 89 . 89 . 90 . 91 . 92

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | vi

🖨 ecosure

List of tables

Table 1 Properties comprising the maximum camp extent. Lot and plans are mapp	ed in
Section 2.1	
Table 2 Other ecological values known to occur or recorded within 1km of the cam	p 12
Table 3 Sensitive receptors surrounding the camp	
Table 4 Progress of 2012 actions for flying-fox issues. Adapted from Table 2 and A	ppendix A
КСРоМ (РМНС 2012)	
Table 5 Stakeholders of Kooloonbung Creek camp	
Table 6 Community engagement methods	
Table 7 Camp management options analysis	
Table 8 Staged approach to management at Kooloonbung Creek flying-fox camp. I	Note all
actions must be done in accordance with measures in Appendix 6. Authorisation	for Level
2 and 3 actions is required, and additional approvals may be required under othe	r
legislation (see Appendix 1)	
Table 9 Responses to question; Do any of the proposed management options not a	appeal to
you? And if so which ones and for what reason?	
Table 10 Further comments to survey from participants	
Table 11 Planned action for potential impacts during any works under or near the c	amp. A
person with experience in flying-fox behaviour (as per Appendix 6) will monitor for	welfare
triggers and direct works in accordance with the criteria below.	101
Table 12 Community feedback from consultative meeting 2	102

ecosure.com.au | vii

ecosure 😂

1 Introduction

The Kooloonbung Creek Camp Management Plan (the Plan) provides Port Macquarie-Hastings Council (Council) with a framework for managing community impacts associated with flying-foxes roosting along Kooloonbung Creek, whilst ensuring flying-foxes and their ecological services are conserved.

Three species of flying-foxes occur in New South Wales (NSW):

- grey-headed flying-fox (Pteropus poliocephalus) (GHFF)
- black flying-fox (P. alecto) (BFF)
- little red flying-fox (*P. scapulatus*) (LRFF).

Kooloonbung Creek flying-fox camp (the camp) is mainly occupied by GHFF, and at times by BFF and the highly transient LRFF. All three species of flying-foxes, and their habitats, are protected under NSW legislation. The GHFF is also listed as Vulnerable under Commonwealth legislation, affording it additional protection.

Detail of relevant legislation and policy related to flying-foxes is provided in Appendix 1. Flying-fox ecology, species profiles and roost characteristics are provided in Appendix 2.

The Kooloonbung Creek camp is one of eight flying-fox camps in the Port Macquarie-Hastings local government area (LGA), monitored as part of the National Flying-fox Monitoring Program (NFFMP) (Figure 1).

1.1 Flying-foxes in urban areas

Flying-foxes are highly nomadic, moving across their range between a network of camps. Camps may be permanently occupied, seasonal, temporary or sporadic, and numbers can fluctuate significantly on a daily/seasonal basis. Flying-foxes may travel up to 100 km a night in search of food resources (nectar, pollen and fruit), and their occurrence within the region is tightly linked to flowering and fruiting of foraging trees. Typically, the abundance of resources within a 20–50 km radius of a camp site will be a key determinant of the size of a camp (SEQ Catchments 2012). However, understanding the availability of foraging resources is difficult because flowering and fruiting are not reliable every year and vary between locations (SEQ Catchments 2012). This highlights the need for a multi-faceted approach to management that is continually adapted as situations change or further research improves our understanding of flying-foxes and their management.

Living near a flying-fox camp can be challenging for communities, with impacts associated with noise, odour, faecal drop, damage to vegetation and concern about potential health risks. There are also challenges associated with management. State approval is required under legislation to manage a camp, and actions which may affect the GHFF must also adhere to federal policy. Attempts to relocate flying-foxes are extremely costly, and often splinter a camp to multiple undesirable locations that are difficult to predict. Flying-foxes will also regularly

ecosure.com.au | 1

🖨 ecosure

attempt to recolonise their preferred camp site when resources are available, and it is not appropriate or possible to remove all of the flowering and fruiting trees that attract them to the region.

Flying-foxes appear to be roosting and foraging in urban areas more frequently. During a study of national flying-fox camp occupation, almost three quarters of the 310 active GHFF camps (72%) were located in urban areas, 22% on agricultural land and only 4% in protected areas (Timmiss 2017). Furthermore, the number of camps increased with increasing human population densities (up to ~4000 people per km²) (Timmiss 2017).

There are many possible drivers for this urbanising trend, as summarised by Tait et al. (2014):

- · loss of native habitat and urban expansion
- opportunities presented by year-round food availability from native and exotic species found in expanding urban areas
- disturbance events such as drought, fires, cyclones
- human disturbance or culling at non-urban camps or orchards
- · urban effects on local climate
- refuge from predation
- movement advantages, e.g. ease of manoeuvring in flight due to the open nature of the habitat or ease of navigation due to landmarks and lighting.

These drivers mean that flying-foxes are likely to continuing occupying the camp into the future. Favourable habitat and food resources within the local government area (LGA) mean that camps may also establish in new locations.

Regular stakeholder engagement during the development of this plan aims to ensure the values of the Port Macquarie community are considered, and concerns of residents who have been directly impacted are addressed.

1.2 Plan objectives

The Plan has been prepared in accordance with the NSW Flying-fox Camp Management Policy (2015) framework, administered by the Office of Environment and Heritage (OEH).

The objectives of this Plan are to:

- manage community impacts and concerns associated with the camp, whilst conserving flying-foxes and their habitat
- improve community understanding and appreciation of flying-foxes, including their critical ecological role
- enable land managers and other stakeholders to use a range of suitable management responses to sustainably manage flying-foxes

ecosure.com.au | 2

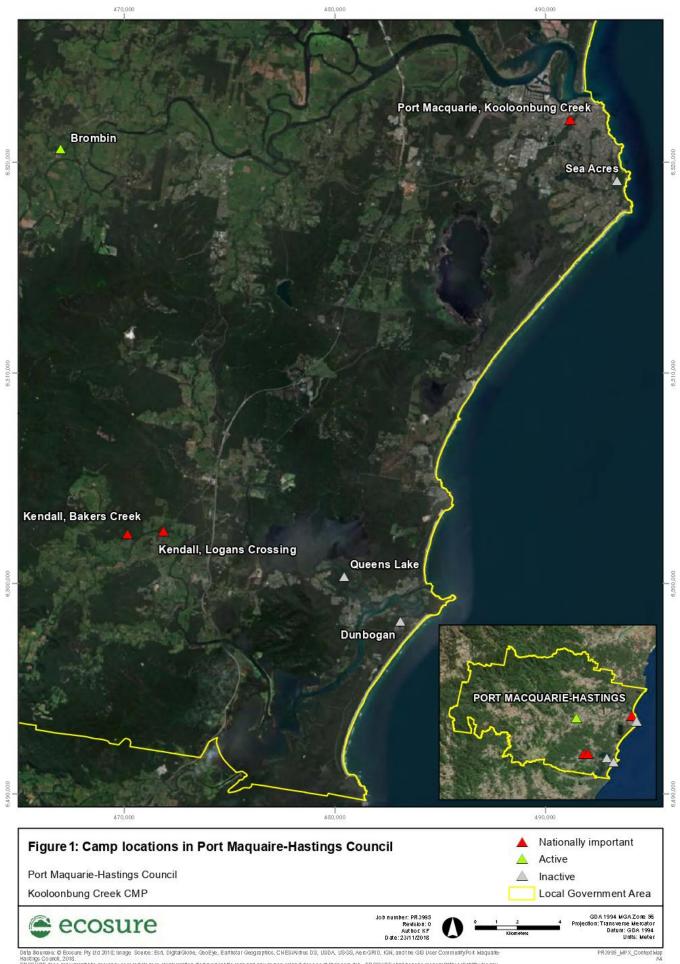
🖨 ecosure

- effectively communicate with stakeholders during planning and implementation of management activities
- clearly outline the camp management actions that have been approved and will be utilised at the camp
- ensure camp management does not contribute to loss of biodiversity or increase threats to threatened species/communities
- · ensure management actions are consistent with legislative responsibilities
- · ensure flying-fox welfare is a priority during works
- ensure long-term conservation of flying-foxes in appropriate locations.

ecosure.com.au | 3

ATTACHMENT

ORDINARY COUNCIL 17/02/2021



Takange Cubuld, 2001 des mot warrant the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in this map and any person using it does not when one in the accuracy or completeness of information displayed in the accuracy or completeness or completenee

🚔 ecosure

2 Context

2.1 Camp description

The camp is located within Kooloonbung Creek Nature Park (the Park) in Port Macquarie, along an estuarine waterway that includes Wrights Creek. The camp is bordered by residential areas to the east, west and south, a historical cemetery and recreational area adjoin the Park in the north.

Kooloonbung Creek camp meets the criteria for a Nationally Important camp under the Referral Guidelines for Management Actions in GHFF and SFF camps (DoE 2015) as it has contained over 10,000 GHFF for two consecutive years and 2,500 permanently or seasonally every year for the last 10 years (OEH 2017).

Vegetation within the camp mainly consists of:

 Broad-leaved Paperbark Swamp Woodland/Forest

•



Grey Mangrove Woodland/Forest.

Figure 2 Kooloonbung Creek

Vegetation throughout the Park also consists of Broad-leaved Paperbark – Mixed Eucalypt Swamp Forest; Sand couch Saltmarsh Grassland and Swamp Oak Coastal Floodplain Wetland Forest (Figure 5). There are also a number of mown areas between residences and the Park (Figure 3).

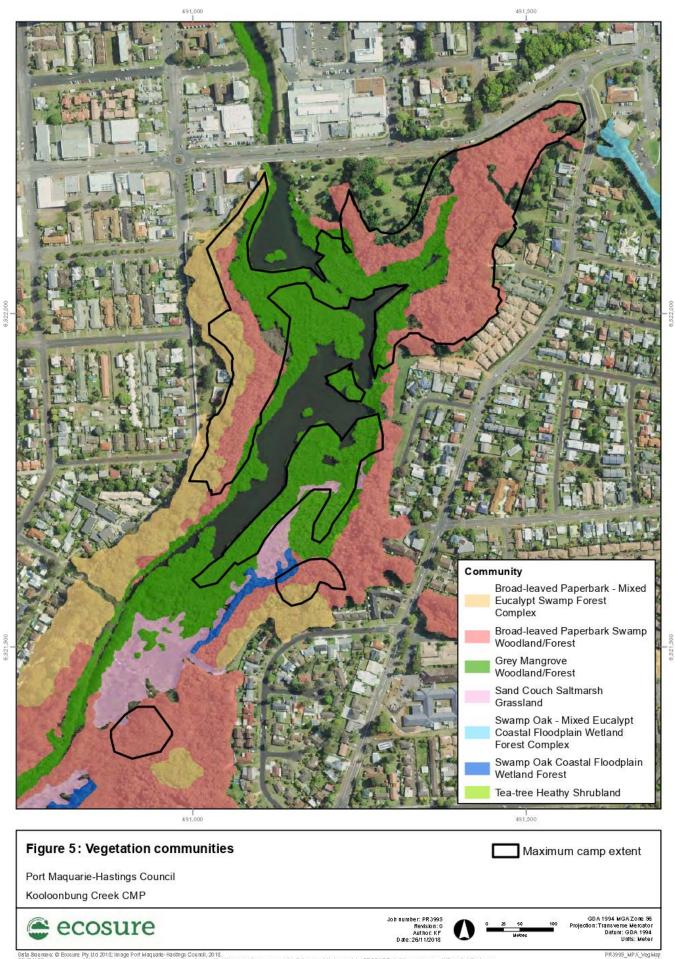


Figure 3 Mown areas between the camp and residents

Figure 4 Boardwalk through mangroves

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 5



Data Bourneas: © Ecosure Ry Ud 2018; Image Port Maquade-Haelings Council, 2018; ECOS URE does not kerrain the accuracy or completeness of information displayed in this map and any person using it doess o at their own risk. ECOSURE shall be a no responsibility or itability for any errors, faults, detexts, or onliable in the Information.

🚔 ecosure

In 1985, volunteer group Friends of Kooloonbung Creek Nature Park (FKCNP) formed with a goal to regenerate the natural bushland and make the Park accessible to the public. FKCNP in conjunction with Council have continued with ongoing bush regeneration and park maintenance as well as establishing facilities such as seats and interpretive signage. A public footpath and extensive boardwalk network (Figure 4) extend throughout the Park offering educational and recreational opportunities for cycling, walking or bird watching. Various interpretive signage exists through the Park (Figure 6), however the only flying-fox related messaging is "Flying Foxes at rest – please do not disturb" (Figure 7).



Figure 6 Friends of Kooloonbung interpretive signage

Figure 7 Council sign



Figure 8 GHFF resting in camp

A large number of pups on mothers was observed during the November site assessment by Ecosure (Figure 8). The area occupied by flyingfoxes during the November site assessment was 2.9 ha. The maximum known camp extent is 77.01 ha (PMHC 2018). Both are shown in Figure 11.

Whilst Figure 11 illustrates the maximum camp extent, and Figure 12 shows the changes in the area occupied seasonally by flying-foxes between the years 2015 and 2018.

Some properties on Glebe Close side of the camp have 5m of cleared vegetation in the asset protection zone, although a few properties still have vegetation from the reserve close to or overhanging boundaries (Figure 9). Hollingworth road side of the camp (Figure 10) provides a 15m road buffer plus a 15m vegetative buffer between homes and the maximum known camp extent on the western side of the Park.

ecosure.com.au | 7

😂 ecosure



Figure 9 Vegetation overhanging property boundaries Figure 10 Hollingworth street acts as a buffer from roosting flying-foxes in the Park.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 8

Item 13.11 Attachment 1 Page 397



Hastings Council. 2016. ECCG/URE does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own lisk. ECCG/URE shall be ar no responsibility or lability for any amount funde detable countration in the information

Item 13.11 Attachment 1 Page 398

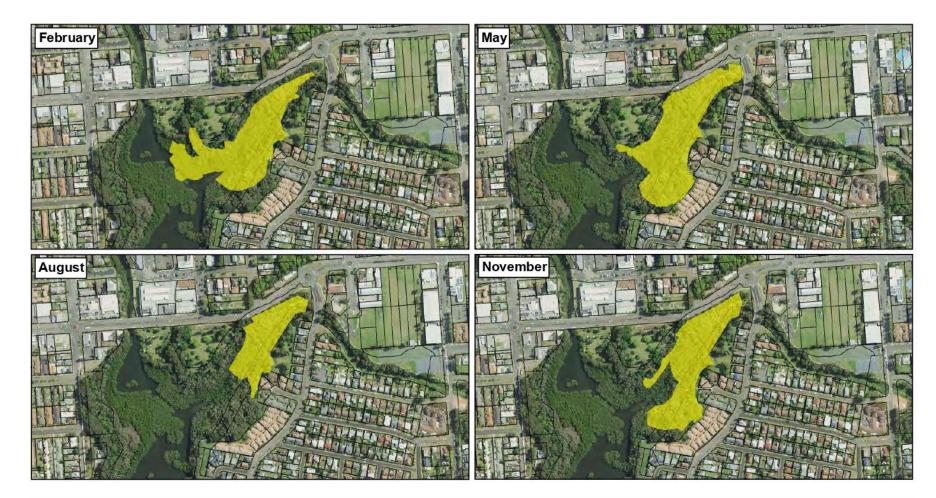


Figure 12: Seasonal camp extents 2015-2018 Port Maquarie-Hastings Council Kooloonbung Creek CMP						Camp extent Property boundary
ecosure 🦉	Job number: PR3995 Revision: 0 Author: KF Date: 26/11/2018	0	0	125	290 Metres	GDA 1994 MGA Zone 36 900 Pojecton: Transverse Mercator Datum: GDA 1994 Units: Meter
Dafa Seurosa: Ecosure Ry Ltd, 2018; Image W/ISURE does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own rish. W/ISURE shall bear no responsibility or lability for any errors, faults, def	fects, or omissions in the infor	mation.				PR3995_MPX_Seasons A4

AVISURE does not warrank the accuracy or country end on the set of information displayed in this map and any person using it does so at their own fish. AVISURE shall bear no responsibility of lability for any errors, faults, detects, or onlissions in the information.

2.2 Tenure

The camp is located on multiple land parcels including freehold, Council land and Crown land for which Council is appointed Trustee. Table 1 provides a list of properties that comprise the maximum camp extent. This will assist in identifying the location/s for potential management actions.

Table 1 Properties comprising	the maximum camp	ovtont Lot and plans	are manned in Section 2.1
Table T Properties comprising	une maximum camp	extent. Lot and plans	are mapped in Section 2.1.

'	1 5				
Lot and DP	Tenure	Zoning			
7300/DP1154392	Council	RE1 Public recreation (Historical cemetery)			
7301/DP1154392	Council	E2 Environmental conservation			
7302/DP1154392	Council	E2 Environmental conservation			
7303/DP1154392	Council	E2 Environmental conservation			
7304/DP1154392	Crown	E2 Environmental Conservation (Kooloonbung Creek Nature Park)			
9/DP243243	Freehold	R2 Low Density Residential			
21/DP249270	Freehold	R1 General residential			
23/DP249270	Freehold	R1 General residential			
26/DP249270	Council	RE1 Public recreation			
7011/DP1024184	Council	E2 Environmental conservation (behind girl guides)			
14/DP223700	Council	E2 Environmental conservation			
12/DP246438	Freehold	E2 Environmental conservation			
355/DP754434	Crown	E2 Environmental conservation			
596/DP754434	Crown	E2 Environmental conservation			
2/DP575680	Freehold	B2 Local centre			
SP70635	Strata Freehold	R1 General residential			
SP73183	Strata Freehold	R1 General residential			
2/DP1038008	Freehold	R1 General residential			

2.3 Other ecological values

Thirty-three threatened species are known to occur or have been recorded within 1 km of Kooloonbung Creek camp (Table 2) (Figure 13). Migratory and marine species found within the area have been excluded from this list but are provided in Appendix 3. The Park also contains five threatened plant communities; subtropical coastal floodplain forest (Endangered Ecological Community {EEC}), freshwater wetlands on coastal floodplains (EEC), coastal saltmarsh (EEC), swamp oak floodplain forest (EEC) and coastal upland swamp (EEC) (PMHC 2012) (Figure 14).

🖨 ecosure

Protection level	Source	Category	Values/significance	Details
Federal	NFFMP (DoEE 2018)	Nationally important camp	See definition Appendix 1.	Site meets criteria.
	Protected Matters Search Tool (DoEE 2018) Atlas of Living Australia 2019	Threatened species^	Regent Honeyeater (<i>Anthochaera phrygia</i>) (CE) Australasian Bittern (<i>Botaurus poiciloptilus</i>) (E) Red Knot (<i>Calidris canutus</i>) (E) Curlew Sandpiper (<i>Calidris ferruginea</i>) (CE) Lesser Sand Plover (<i>Charadrius mongolus</i>) (E) Eastern Curlew (<i>Numenius madagascariensis</i>) (CE) Fairy Prion (<i>Pachyptila turtur subantarctica</i>) (V) Spot-tailed Quoll (<i>Dasyurus maculatus maculatus</i>) (E) Koala (<i>Phascolarctos cinereus</i>) (V) <i>Allocasuarina thalassoscopica</i> (E)	10 species (2 mammals, 7 birds and 1 plant) known to occur within the area (SPRAT data not mapped)
State	Bionet (OEH 2018) Atlas of Living Australia 2019	Threatened species	Magpie Goose (Anseranas semipalmata) (V) Bush Stone-Curlew (Burhinus grallarius) (E) Glossy Black Cockatoo (Calyptorhychus lathami) (V) White-eared Monarch (Carterornis leucotis) (V) Spotted Harrier (Cicus assimilis) (V) Barred Cuckoo-shrike (Coracina lineata) (V) Varied Sittella (Daphoenositta chrysoptera) (V) Black-necked Stork (Ephippiorhychus asiaticus) (E) Black Falcon (Falco subniger) (V) Pied Oystercatcher (Haemtopus longirostris) (V) Swift Parrot (Lathamus discolour) (E) Square-tailed Kite (Lophoictinia isura) (V) Eastern Curlew (Numenius madagascariensis) (CE) Eastern Osprey (Pandion cristatus) (V) Little Lorikeet (Parvipsitta pusilla) (V) Koala (Phascolarctos cinereus) (V)	15 species (13 birds, 1 mammal and 1 plant) have been recorded within 1 km of camp
Local	KCPoM (2012)	Threatened species identified in the reserve	Black-necked Stork (<i>Ephippiorhynchus asiaticus</i>) (E) Black Bittern (<i>Ixobrychus flavicollis</i>) (V) Freckled Duck (<i>Stictonetta naevosa</i>) (V) Eastern Osprey (<i>Pandion cristatus</i>) (V) Little Bent-wing Bat (<i>Miniopterus australis</i>) (V) Eastern Bent-wing Bat (<i>Miniopterus schreibersii</i> <i>oceanensis</i>) (V) Eastern Freetail-bat (<i>Mormopterus norfolkensis</i>) (V) Southern Myotis (<i>Myotis macropus</i>) (V) Greater Broad-nosed Bat (<i>Scoteanax rueppellii</i>) (V) Biconvex paperbark (<i>Melalueca biconvexa</i>) (V)	10 species identified in the park (not recorded in database searches)

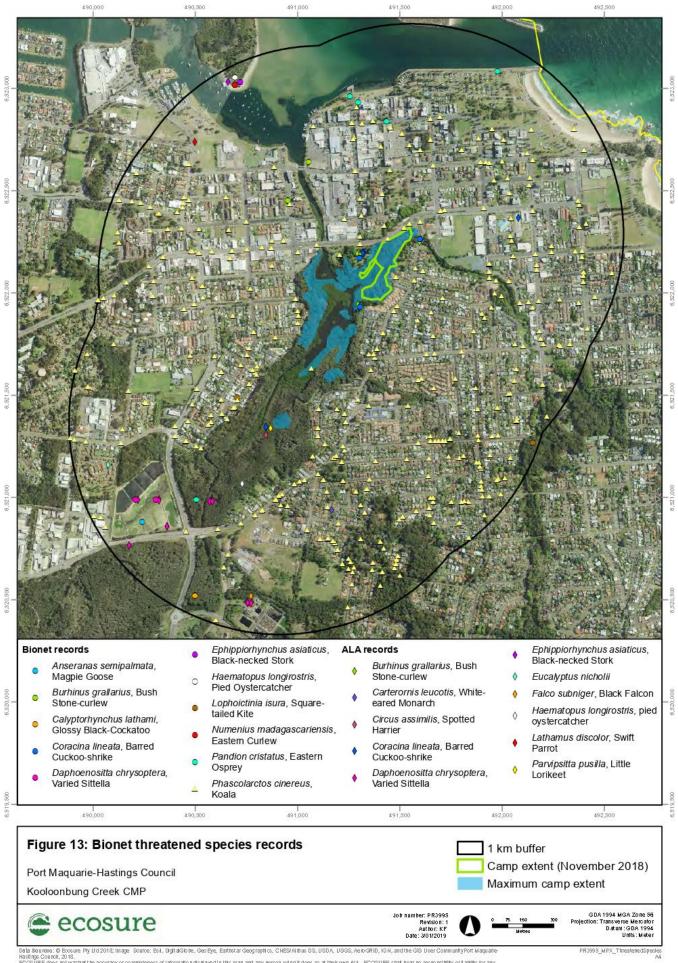
Table 2 Other ecological values known to occur or recorded within 1km of the camp

^ listing status: CE - Critically Endangered, EN - Endangered, VU - Vulnerable

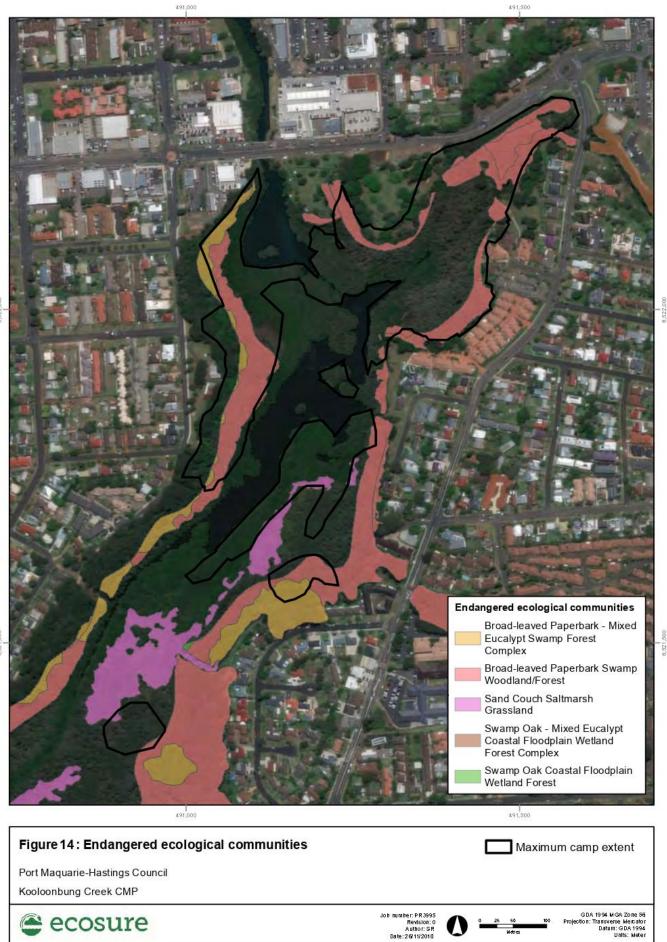
PR3995 Kooloonbung Creek Camp Management Plan

ATTACHMENT

ORDINARY COUNCIL 17/02/2021



navourge voluncial, zo ro. ECOS URE does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own lisk. ECOSURE shall be an or responsibility or lability for any amount study does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own lisk. ECOSURE shall be an or responsibility or lability for any amount study does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own lisk. ECOSURE shall be an or responsibility or lability for any amount study does not warrant the accuracy or completeness of information.



Data Sources: & Ecosure Pty Ltd 2018; Image Source: Esrl, DigitalGlobe, GeoEye, Earthstar Geographics, CNESIAIntrus DS; USDA, USGS, AeroGRID, IGN, and the GIS User CommunityPort Maquan Hashings Council, 2018. merce sill receive by the matching of the second of the se

> Item 13.11 Attachment 1 Page 403

PR3995_MPX_EEC

2.4 History of the camp

Flying-foxes arrived at the Kooloonbung Creek camp in the 1990s (PMHC 2012). Prior to this, flying-foxes had occupied Sea Acres Nature Reserve, approximately 3.5 km to the south east (Figure 1). The camp has recorded a maximum of 173,000 flying-foxes in January 2014 since quarterly monitoring began in 2012 as part of the NFFMP (OEH 2017). This influx mainly comprised the highly nomadic LRFF. Camp numbers are usually below 20,000 with some influxes over 100,000 flying-foxes in 2014 and 2016. As this site is a maternity camp, it is likely that some individuals have a strong site fidelity, returning year after year as part of seasonal migrations.

The GHFF population will generally move south within their range (see Appendix 2) in spring and summer, then return to the coastal forests of north-east NSW and south-east Queensland in winter (Ratcliffe 1932; Eby 1991; Parry-Jones & Augee 1992; Roberts et al. 2012). In autumn they occupy primarily coastal lowland camps. LRFF travel south within their range (see Appendix 2) to visit the coastal areas of south-east Queensland and NSW during the summer months.

The LRFF has the most nomadic distribution, strongly influenced by availability of food resources (predominantly the flowering of eucalypt species) (Churchill 2008), which means the duration of their stay in any one place is generally very short. LRFF travel south to visit the coastal areas of south-east Queensland and NSW during the summer months. Flying-foxes also occupy Brombin camp and two camps in Kendall: Bakers Creek and Logans crossing.

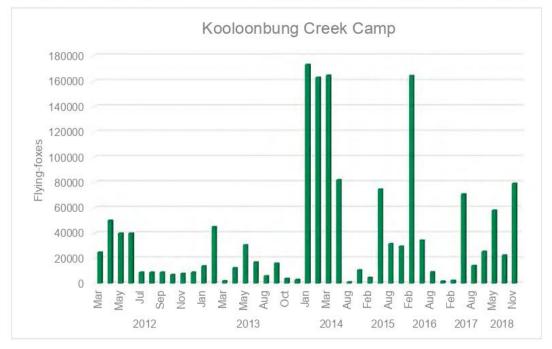


Figure 15 Numbers of flying-foxes at Kooloonbung Creek camp (Source: OEH 2017; PMHC 2018). Count methods are consistent with those described in Westcott et al. 2011.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 15

Item 13.11 Attachment 1 Page 404

2.5 Sensitive receptors

Sensitive receptors are those locations that host vulnerable people where risks need to be managed. Sensitive receptors (i.e. schools, hospitals with helipads, airports, equine facilities) within 2 km of the maximum camp extent and within 13 km for aerodromes are provided in Table 3 and Figure 16. Identifying sensitive receptors is necessary with regards to any management actions that could inadvertently cause the camp to splinter to undesirable or sensitive locations surrounding the camp.

i.

Sensitive receptor	Distance from maximum camp extent (m)
Port Macquarie community preschool	54
Hastings family day care	282
Port Macquarie public school	487
St Agnes primary school	660
Hastings Secondary College	869
Hastings preschool and long day care	1030
Hastings Secondary College Westport campus	1049
Portside preschool and long day care	1057
St Josephs primary school	1127
Westport public school	1342
MacKillop College	1420
St Peters primary school	1588
Hastings public school	1728
Port Macquarie race club	2332
Port Macquarie airport	3530

Table 3 Sensitive receptors surrounding the camp

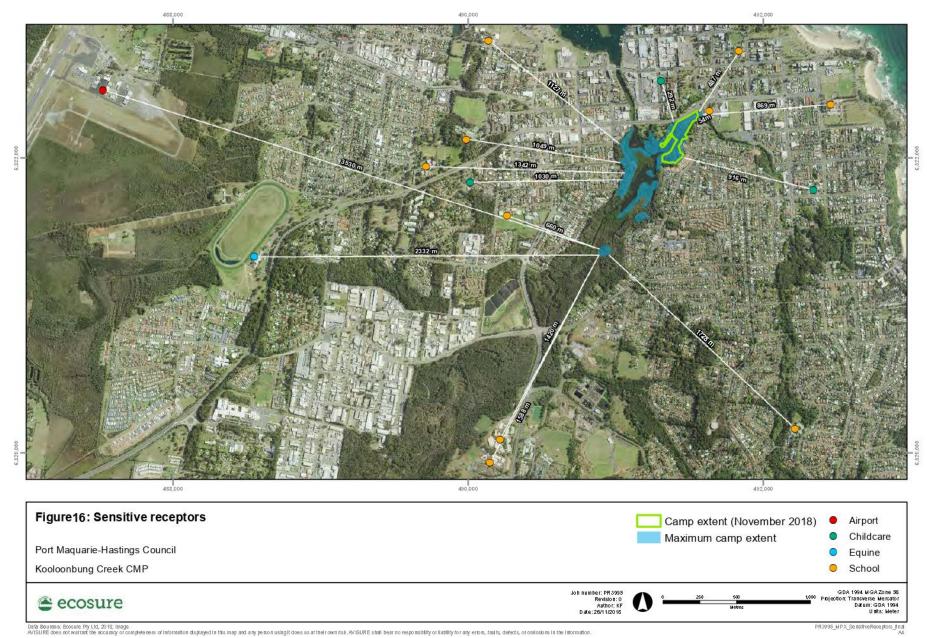
PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 16

Item 13.11 Attachment 1 Page 405

ATTACHMENT

ORDINARY COUNCIL 17/02/2021



Item 13.11 Attachment 1

2.6 Management to date

A number of plans have been developed for the park:

- Catchment Management Plan 1992
- Reserve Management Plan 1996
- Kooloonbung Creek Nature Park Plan of Management (KCPoM) (Port-Macquarie-Hastings Council 2012).

During the development of the 2012 KCPoM, Dr Peggy Eby provided a presentation on bat ecology to residents at a community forum. Council also provided an on-line survey and subsequent issues paper (PVHC 2012). The KCPoM produced a number of management actions to address flying-fox issues. Table 4 provides a review on the progress of actions outlined in the KCPoM for consideration within this Plan.

Bush fire management and weed removal also have consequences for roost occupation patterns, and vegetation removal may exacerbate the effects of Heat Stress Events (HSE). Friends of Kooloonbung (FOK) have been undertaking bush regeneration (Figure 17) in the Park since 1985, improving public access, facilities and providing interpretational signage. Although FOK signage includes a flying-fox logo/illustration, no signs with flying-fox ecology information were observed in the Park.

The Inaugural Committee Meeting for the Flying-fox Camp Management Plan was held on Tuesday 4th September 2018 opened by Mayor Peta Pinson, with attendance by the Community Consultative Committee and Ecosure. Residents were provided legislative background on flying-fox management and information regarding the ecological importance and behaviour of flying-foxes.

When Council commissioned the development of this Plan, two further community consultative meetings were scheduled. Outcomes of these meetings held on Wednesday 14 November 2018 and 12 December 2018 are provided in Section 3 Community Engagement.



Table 4 Progress of 2012 actions for flying-fox issues. Adapted from Table 2 and Appendix A KCPoM (PMHC 2012)

Management action	Actions to be taken	Progress	Ecosure review
Undertake monthly flying-fox habitat mapping and broad population size estimations	Fluctuations in population and roosting area monitored; roost boundaries adjacent to residents identified. Mapping uploaded to Council Website for Community access	Commenced: Council undertakes quarterly monitoring of camp and produces. The public is able to access this information on the interactive flying fox mapping tool on the Department of Environment and Energy's website. http://www.environment.gov.au/webgis- framework/apps/ffc-wide/ffc-wide.jsf	Highly informative and a beneficial action to continue. Enables temporal and spatial analysis for this Plan and future management.
Community Health Risk	Annual inspection of advisory signage. Annual check on recorded Lyssavirus. Hendra Virus, Menangle Virus and Leptospirosis infections	These actions have not been initiated	Educational messaging including prevention of risk is better than the collation of incident data alone. Residents should be informed that disease transmission is extremely low and vaccines are available for post exposure.
Community and Council monitoring of the Flying- fox population	Develop a web based community monitoring system and movements of flying foxes in the Park and to record complaints.	Commenced: Council undertake the census which records movements of the camp. Council website has not been updated with this information.	Update Council's webpage with quarterly monitoring of camp extent. Recording and promoting positive stories of rehabilitation, educational visits and tours or observations of fly outs (not just complaints).
Community education	Install signage on bats to inform park users to avoid contact and to not disturb them. Provide NSW Dept. of Health fact sheets for all Flying Fox diseases to adjacent residents.	Commenced: Some basic warning signage installed Facts sheets produced in 2013	Avoidance messaging on its own is inadequate and promotes negative attitudes and fear towards flying-foxes. Educational signage could be interwoven with indigenous values for flying-foxes. The bat logo/ illustration on Friends of Kooloonbung signage should be continued on future signage.

PR3995 Kooloonbung Creek Camp Management Plan



Management action	Actions to be taken	Progress	Ecosure review
Vegetation removal	Glebe Close (1st priority) Removal of vegetation within 10m of the Glebe Close properties. Hollingworth Street. (2nd Priority) Vegetation removal within the Hollingworth Street road reserve between Table Street and Koorong Avenue intersections (equates to a 25 - 30m buffer from residential properties). Vegetation removal within the Hollingworth Street Road Reserve between Ackroyd and Table Street intersections to the change of grade on roadside batter (equates to a 15m wide buffer from residential boundaries). Fischer Street (3rd Priority) Removal of overhanging branches back the trunk of trees that are within 10m of the Fischer Street property boundary.	Completed: 1st Priority in Glebe Close (figure 18) 2nd Priority Hollingworth Street	Trees overhanging properties in Glebe are mapped EECs (figure 17). The previously proposed buffer distances are considered adequate to provide relief from issues such as faecal drop to improve amenity. However, canopy area inside Kooloonbung Park must be considered with regards for the available roosting area for maximum number of bats. Noise and odour may need to be addressed using other management options such as improving building insulation and using air deodorisers. Important for residents to acknowledge the mobility of camp and the temporary nature of impacts in order to build resilience within community
Desk top assessment	Additional roosting site for the flying foxes	Not yet initiated	Whilst assessing suitable nearby vegetation may be beneficial for identifying potential habitat, it can not be guaranteed that flying-fox will take up alternative sites either temporarily or permanently.
Bush regeneration/ weed control	Proposed bush regeneration works zones	Ongoing	Any habitat improvement will benefit the flying-foxes however the timing of work zones ought to consider areas occupied by bats especially during breeding and summer months.
			Need to coordinate with Council mapping that shows seasonally occupied roost space.
			Do volunteers know what to do if they see a sick or injured bat?

PR3995 Kooloonbung Creek Camp Management Plan

😂 ecosure



Figure 17 Bush restoration works in the understory of the Park



Figure 19 Asset protection zone behind properties in Glebe Close



Figure 18 Vegetation mapped as EEC overhanging behind Glebe Close properties

ecosure.com.au | 21

Item 13.11 Attachment 1 Page 410

3 Community engagement

3.1 Stakeholders

There are a range of stakeholders directly or indirectly affected by flying-foxes, or who are interested in management of the camp. Stakeholders include those shown in Table 5.

Stakeholder group	Stakeholder	Interest/reported impacts		
Community	Residents and business owners	The location of the camp within a residential area means there are many residents affected by amenity issues (e.g. noise, smell, faecal drop), including residents of:		
		Glebe Close		
		Gordon Street		
		Hollingworth St		
		Lake Road		
		Anita Crescent		
		Lake Road		
	Conservation groups	Friends of Kooloonbung have been undertaking bush regeneration in the Park since 1985		
	Indigenous community	Traditional owners have a general interest in flying-foxes including the ecological services they provide and the potential for sustainable harvesting for food or medicina purposes.		
Industry	Horse owners and managers	Horse owners, equine facility managers and local vets should be aware that Hendra virus risk is associated with foraging flying-foxes (e.g. risk is present across the entire flying-fox range), and appropriate mitigation measures.		
	Orchardists and fruit growers	Fruit growers may be impacted by flying-foxes raiding orchards and should have access to wildlife friendly netting information.		
	Port Macquarie Airport	Airport managers have a responsibility to reduce the risk of wildlife-aircraft strike. Port Macquarie Airport is located 3.5 km to the west of Kooloonbung camp and should be consulted regarding any management that may influence flying-fox movements or behaviour.		
Government	Port Macquarie-Hastings Council	Council is responsible for administering local laws, plans and policies, and appropriately managing assets (including land) for which it is responsible.		
	OEH	OEH is responsible for administering state legislation relating to (among other matters) the conservation and management of native plants and animals, including threatened species and ecological communities.		
	Commonwealth Department of the Environment and Energy (DoEE)	DoEE is responsible for administering federal legislatior relating to matters of national environmental significance such as the grey-headed flying-fox which roosts a Kooloonbung Creek camp.		
	Local Government NSW (LGNSW)	LGNSW is an industry association that represents the interests of councils in NSW. LGNSW also administered funds under the NSW Flying-fox Grants Program.		
Non- government organisations	Wildlife carers and conservation organisations	Wildlife carers and conservation organisations have ar interest in flying-fox welfare and conservation of flying foxes and their habitat.		
	Researchers/universities/CSIRO	Researchers have an interest in flying-fox behaviour biology and conservation.		

Table 5 Stakeholders of Kooloonbung Creek camp

PR3995 Kooloonbung Creek Camp Management Plan



3.2 Engagement methods and results

Extensive effort has been made to engage with the community in the development of this plan. The aim of the engagement was to:

- seek feedback from the community concerning the impact of flying-foxes and advice on potential mitigation options
- understand the impacts, positive and negative, directly and indirectly affecting the community
- · share information and seek ideas about possible future management options
- correct misinformation and alleviate fears regarding health risks to people and domestic animals (see Appendix 4 for information about human and animal health)
- raise awareness about the ecological importance of flying-foxes.

During development of the Plan, three methods will be used to engage with the Port Macquarie community; an online survey, community consultation meetings and public exhibition of the draft Plan (Table 6).

Engagement method	Key dates	Outcomes
Inaugural Committee Meeting	4 September 2018	21 attendees. Minutes of Flying-fox Camp Management Plan 2018 Inaugural Committee Meeting available from Council.
Community consultation meeting #2	14 November 2018	23 attendees provided feedback to Ecosure on their preferred management options for inclusion in the Plan.
Online survey	20-30 November 2018	Online survey results will be included in section 3.2.2
Community consultation meeting #3	12 December 2018	Outcomes of meeting included in section 3.2.1
Public exhibition of draft Plan	5 December 2018 – 11 February	Submissions received by Council on the draft Plan incorporated into the final plan
Community consultation meeting #4	27 February 2018	ТВА

Table 6 Community engagement methods

3.2.1 Community consultation meeting

Concerns reported by the Port Macquarie-Hastings community include:

- · fear of disease transfer to humans and domestic animals
- excessive noise, particularly depriving sleep and contributing to other health issues, and reduced amenity
- · odour entering homes and reduced lifestyle amenity
- · faecal drop on vehicles and outdoor areas
- damage to vegetation.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 23

Item 13.11 Attachment 1 Page 412

😂 ecosure

Impacts reported by residents are confined to the northern extent of Kooloonbung Creek Nature Park, particularly behind properties on Glebe Close, the Glebe Terraces Villas and Grove Terraces and the northern most end of Lake Road (Figure 20).

Attendees at the consultation meeting on November 14, 2018 provided feedback to Ecosure on which camp management actions (Section 4) to prioritise or disregard. Attendees were also invited to suggest how or where best to implement those actions. Comments in 'Actions to Priortise', Actions to Disregard' and 'How and Where to Implement' have come directly from the consultation committee (Appendix 7). Actions were attributed to a corresponding level of management outlined in Section 4.

Meeting 2 revealed that the committee preferred, or were interested in learning more about, the following management actions:

- · education and awareness programs specifically:
 - removal of non-natives
 - information on flying-fox diseases
 - advice on tree trimming
 - banning barbed wire in residential areas
 - promoting wildlife friendly netting.
- property acquisition
- · creating alternative habitat or roost site
- · subsidies for water and power use
- · buffers through tree trimming or removal
- canopy-mounted sprinklers.

Concerns regarding flying-fox disease need to be addressed as part of an educational strategy. One resident at the meeting enquired about bat dander. Dander is an airborne allergen associated with the shedding of fur, hair or feathers (ALA 2017). The two flying-fox diseases; Australian Bat Lyssavirus and Hendra Virus (Appendix 4) cannot be transmitted through air-borne particles. Suspected allergies to flying-fox dander should be treated the same way as reactions to other general allergens such as dust and pollen. It is also possible that allergies perceived to be associated with flying-foxes may be due to coinciding increases in flowering (and pollen) that attracted an increased number of flying-foxes.

Although some committee members indicated that signage had already been installed and was an action that could be disregarded, the current signage only states, 'do not disturb' and does not improve knowledge or awareness of flying-fox ecology or conservation.

Some attendees had concern for removal of vegetation and making sure that the Park's other values such as koala movement was not impeded through actions such as noise attenuation fencing. Endangered ecological communities mapped to the border of some property boundaries exclude the option of tree removal within asset protection zones according the

Council Development Control Plan (Appendix 1).

The committee is in favour of subsidies to assist with the costs associated with water for cleaning and high electricity use from air-conditioners due to not being able to open windows when the camp is emitting odour. A distance-based subsidy program could be created for residents to apply for financial assistance or professional advice regarding building insulation or double-glazed windows.

The third community consultative meeting discussed a dispersal scenario for the camp with reference to other Councils' dispersal results between 1990-2013 (Roberts and Eby 2013). Matters for consideration included financial cost, duration and resources required, likelihood of long-term success and, consequences of moving the camp to unknown or more problematic locations.

In 2013, Roberts and Eby summarised dispersals between 1990 and 2013:

- In all cases, dispersed animals did not abandon the local area.
- In 16 of the 17 cases, dispersals did not reduce the number of flying-foxes in the local area.
- Dispersed animals did not move far (63% of the time within 600m).
- In 85% of cases, new camps established nearby.
- In all cases it was not possible to predict where replacement camps would form.
- Conflict was often not resolved. In 71% of cases conflict still being reported either at the original site or within the local area years after the initial dispersal actions.
- Repeat dispersal was always required except where extensive vegetation removal occurred.

3.2.2 Survey responses

The community was invited to participate in an online survey linked to Council's website. The survey period was open for two weeks and contained 21 questions that comprised:

- flying-fox awareness (7 questions)
- flying-fox interaction (3 questions)
- flying-fox management (8 questions)
- respondent demographic (2 questions)
- open comment (1).

Results from the community survey are provided in Appendix 5.

A total of 43 survey respondents answered all or some of the questions. Some questions were optional while others requested more details depending upon the response, e.g. if a respondent answered 'no' to 'is the protection of flying-foxes important to you as a community member?' they were then prompted to respond to questions about why they had responded



in this way i.e. why they did not consider the protection of flying-foxes important. There were also opportunities for respondents to provide additional information if their points of view were not included in the available options.

3.2.3 Public submissions on draft Plan

The public submission period for the draft Plan is 5 December 2018 – 11 February 2019.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 26

Item 13.11 Attachment 1 Page 415



Data Sour ure Pty Ltd 20 arrant the accu

mage Port klaqua (e-Hastings Council, 2018. or o completeness of information displayed in this map and any person using it does so at their own (s). ECOSUREs hall be an or responsibility or faithly for any information COGURE to is, fault

> Item 13.11 Attachment 1 Page 416

PR3995_MPX_Comunity Feed Back

1

ecosure



4 Camp management options

Below is an overview of management options commonly used throughout NSW and Australia which were considered in the development of the Plan. These are categorised as Level 1, 2 or 3 in accordance with the Policy.

4.1 Level 1 actions: routine camp management

4.1.1 Education and awareness programs

This management option involves undertaking a comprehensive and targeted flying-fox education and awareness program to provide accurate information to the local community about flying-foxes.

Such a program would include information about managing risk and alleviating concern about health and safety issues associated with flying-foxes, options available to reduce impacts from roosting and foraging flying-foxes, an up-to-date program of works being undertaken at the camp, and information about flying-fox numbers and flying-fox behaviour at the camp.

Residents should also be made aware that faecal drop and noise at night is mainly associated with plants that provide food, independent of camp location. Staged removal of foraging species such as fruit trees and palms from residential yards, or management of fruit (e.g. bagging, pruning) will greatly assist in mitigating this issue.

Collecting and providing information should always be the first response to community concerns in an attempt to alleviate issues without the need to actively manage flying-foxes or their habitat. Where it is determined that management is required, education should similarly be a key component of any approach.

The likelihood of improving community understanding of flying-fox issues is high. However, the extent to which that understanding will help alleviate conflict issues is probably less so. Extensive education for decision-makers, the media and the broader community may be required to overcome negative attitudes towards flying-foxes.

It should be stressed that a long-term solution to the issue resides with better understanding flying-fox ecology and applying that understanding to careful urban planning and development.

An education program may include components shown in Figure 21.



Figure 21 Possible components of an education program

4.1.2 Property modification without subsidies

The managers of land on which a flying-fox camp is located would promote or encourage the adoption of certain actions on properties adjacent to or near the camp to minimise impacts from roosting and foraging flying-foxes:

- Create visual/sound/smell barriers with fencing or hedges. To avoid attracting flyingfoxes, species selected for hedging should not produce edible fruit or nectar-exuding flowers, should grow in dense formation between two and five metres (Roberts 2006) (or be maintained at less than 5 metres). Vegetation that produces fragrant flowers can assist in masking camp odour where this is of concern.
- Manage foraging trees (i.e. plants that produce fruit/nectar-exuding flowers) within
 properties through pruning/covering with bags or wildlife friendly netting, early
 removal of fruit, or tree replacement.
- Cover vehicles, structures and clothes lines where faecal contamination is an issue, or remove washing from the line before dawn/dusk.
- Move or cover eating areas (e.g. BBQs and tables) within close proximity to a camp or foraging tree to avoid contamination by flying-foxes.

- Install double-glazed windows, insulation and use air-conditioners when needed to reduce noise disturbance and smell associated with a nearby camp.
- Follow horse husbandry and property management guidelines provided at the NSW Department of Primary Industries Hendra virus web page (DPI 2015a).
- Include suitable buffers and other provisions (e.g. covered car parks) in planning of new developments.
- Turn off lighting at night which may assist flying-fox navigation and increase fly-over impacts.
- Consider removable covers for swimming pools and ensure working filter and regular chlorine treatment.
- Appropriately manage rainwater tanks, including installing first-flush systems.
- Avoid disturbing flying-foxes during the day as this will increase camp noise.

The cost would be borne by the person or organisation who modifies the property; however, opportunities for funding assistance (e.g. environment grants) may be available for management activities that reduce the need to actively manage a camp.

4.1.3 Property modification subsidies

Fully funding or providing subsidies to property owners for property modifications may be considered to manage the impacts of the flying-foxes. Providing subsidies to install infrastructure may improve the value of the property, which may also offset concerns regarding perceived or actual property value or rental return losses.

The level and type of subsidy would need to be agreed to by the entity responsible for managing the flying-fox camp.

4.1.4 Service subsidies

This management option involves providing property owners with a subsidy to help manage impacts on the property and lifestyle of residents. The types of services that could be subsidised include clothes washing, cleaning outside areas and property, car washing or power bills. Rate reductions could also be considered.

Critical thresholds of flying-fox numbers at a camp and distance to a camp may be used to determine when subsidies would apply.

4.1.5 Routine camp maintenance and operational activities

Examples of routine camp management actions (permissible subject to animal welfare measures listed in Appendix 6) are provided in the Policy. These include:

 removal of tree limbs or whole trees that pose a genuine health and safety risk, as determined by a qualified arborist

- weed removal, including removal of noxious weeds under the *Noxious Weeds Act 1993*, or species listed as undesirable by a council
- · trimming of understorey vegetation
- · the planting of vegetation
- · minor habitat augmentation for the benefit of the roosting animals
- mowing of grass and similar grounds-keeping actions that will not create a major disturbance to roosting flying-foxes
- application of mulch or
- · removal of leaf litter or other material on the ground.

Protocols should be developed for carrying out operations that may disturb flying-foxes, which can result in excess camp noise. Such protocols could include limiting the use of disturbing activities to certain days or certain times of day in the areas adjacent to the camp and advising adjacent residents of activity days. Such activities could include lawn-mowing, using chainsaws, whipper-snippers, using generators and testing alarms or sirens.

4.1.6 Revegetation and land management to create alternative habitat

This management option involves revegetating and managing land to create alternative flyingfox roosting habitat through improving and extending existing low-conflict camps or developing new roosting habitat in areas away from human settlement.

Selecting new sites and attempting to attract flying-foxes to them has had limited success in the past, and ideally habitat at known camp sites would be dedicated as a flying-fox reserve. However, if a staged and long-term approach is used to make unsuitable current camps less attractive, whilst concurrently improving appropriate sites, it is a viable option (particularly for the transient and less selective LRFF). Supporting further research into flying-fox camp preferences may improve the potential to create new flying-fox habitat.

When improving a site for a designated flying-fox camp, preferred habitat characteristics detailed in Appendix 3 Alternative camp site investigation report Section 1.3 Roosting preferences should be considered.

Foraging trees planted amongst and surrounding roost trees (excluding in/near horse paddocks) may help to attract flying-foxes to a desired site. They will also assist with reducing foraging impacts in residential areas. Consideration should be given to tree species that will provide year-round food, increasing the attractiveness of the designated site. Depending on the site, the potential negative impacts to a natural area will need to be considered if introducing non-indigenous plant species.

The presence of a water source is likely to increase the attractiveness of an alternative camp location. Supply of an artificial water source should be considered if unavailable naturally, however this may be cost-prohibitive.

Potential habitat mapping using camp preferences and suitable land tenure can assist in initial

alternative site selection. A feasibility study would then be required prior to site designation to assess likelihood of success and determine the warranted level of resource allocated to habitat improvement.

4.1.7 Provision of artificial roosting habitat

This management option involves constructing artificial structures to augment roosting habitat in current camp sites or to provide new roosting habitat. Trials using suspended ropes have been of limited success as flying-foxes only used the structures that were very close to the available natural roosting habitat. It is thought that the structure of the vegetation below and around the ropes is important.

4.1.8 Protocols to manage incidents

This management option involves implementing protocols for managing incidents or situations specific to particular camps. Such protocols may include monitoring at sites within the vicinity of aged care or child care facilities, management of compatible uses such as dog walking or sites susceptible to heat stress incidents (when the camp is subjected to extremely high temperatures leading to flying-foxes changing their behaviour and/or dying).

4.1.9 Participation in research

This management option involves participating in research to improve knowledge of flying-fox ecology to address the large gaps in our knowledge about flying-fox habits and behaviours and why they choose certain sites for roosting. Further research and knowledge sharing at local, regional and national levels will enhance our understanding and management of flying-fox camps.

4.1.10 Appropriate land-use planning

Land-use planning instruments may be able to be used to ensure adequate distances are maintained between future residential developments and existing or historical flying-fox camps. While this management option will not assist in the resolution of existing land-use conflict, it may prevent issues for future residents.

4.1.11 Property acquisition

Property acquisition may be considered if negative impacts cannot be sufficiently mitigated using other measures. This option will clearly be extremely expensive, however is likely to be more effective than dispersal and in the long-term may be less costly.

4.1.12 Do nothing

The management option to 'do nothing' involves not undertaking any management actions in relation to the flying-fox camp and leaving the situation and site in its current state.

4.2 Level 2 actions: in-situ management

4.2.1 Buffers

Buffers can be created through vegetation removal and/or the installation of permanent/semipermanent deterrents.

Creating buffers may involve planting low-growing or spiky plants between residents or other conflict areas and the flying-fox camp. Such plantings can create a visual buffer between the camp and residences or make areas of the camp inaccessible to humans.

The Kooloonbung Creek camp exists in relatively narrow strips of vegetation around a treeless wetland and therefore it is necessary to devise a suitable buffer distance that provides relief for residents and avoids forcing flying-foxes into backyards or splintering the camp to other problematic locations, and maintains the ecological and amenity values of the vegetation. This requires consideration of the approximate total area of the camp, the area that would need to be modified/removed to create a suitable buffer, and whether there is an equivalent replacement area available in an appropriate location for the displaced flying-foxes.

Previous studies have recommended that vegetation buffers consisting of habitat not used by flying-foxes, should be 300 m or as wide as the site allows to mitigate amenity impacts for a community (SEQ Catchments 2012). Buffers need to take into consideration the variability of use of a camp site by flying-foxes within and across years, including large, seasonal influxes of flying-foxes. The usefulness of a buffer declines if the flying-fox camp is within 50 m of human habitation (section 4.2.1).

Buffers through vegetation removal

Vegetation removal aims to alter the area of the buffer habitat sufficiently so that it is no longer suitable as a camp. The amount required to be removed varies between sites and camps, ranging from some weed removal to removal of most of the canopy vegetation.

Any vegetation removal should be done using a staged approach, with the aim of removing as little native vegetation as possible. This is of particular importance at sites with other values (e.g. ecological or amenity), and in some instances the removal of any native vegetation will not be appropriate. Thorough site assessment will inform whether vegetation management is suitable (e.g. can impacts to other wildlife and/or the community be avoided?).

Removing vegetation can also increase visibility into the camp and noise issues for neighbouring residents which may create further conflict.

Suitable experts should be consulted to assist selective vegetation trimming/removal to minimise vegetation loss and associated impacts.

The importance of under- and mid-storey vegetation in the buffer area for flying-foxes during heat stress events also requires consideration.

Buffers without vegetation removal

Permanent or semi-permanent deterrents can be used to make buffer areas unattractive to flying-foxes for roosting, without the need for vegetation removal. This is often an attractive option where vegetation has high ecological or amenity value.

While many deterrents have been trialled in the past with limited success, there are some options worthy of further investigation:

Visual deterrents – Visual deterrents such as plastic bags, fluoro vests (GeoLINK 2012) and balloons (Ecosure, pers. comm.) in roost trees have shown to have localised effects, with flying-foxes deterred from roosting within 1–10 metres of the deterrents. The type and placement of visual deterrents would need to be varied regularly to avoid habituation. Potential for litter pollution should be considered and managed when selecting the type and placement of visual deterrents. In the absence of effective maintenance, this option could potentially lead to an increase in rubbish in the natural environment.

- Noise emitters on timers Noise needs to be random, varied and unexpected to avoid flying-foxes habituating. As such these emitters would need to be portable, on varying timers and a diverse array of noises would be required. It is likely to require some level of additional disturbance to maintain its effectiveness, and ways to avoid disturbing flying-foxes from desirable areas would need to be identified. This is also likely to be disruptive to nearby residents.
- Smell deterrents For example, bagged python excrement hung in trees has
 previously had a localised effect (GeoLINK 2012). The smell of certain deterrents
 may also impact nearby residents, and there is potential for flying-foxes to habituate.
- Canopy-mounted water sprinklers This method has been effective in deterring flying-foxes during dispersals (Ecosure personal experience), and current trials in Queensland are showing promise for keeping flying-foxes out of designated buffer zones. This option can be logistically difficult (installation and water sourcing) and may be cost-prohibitive. Design and use of sprinklers need to be considerate of animal welfare and features of the site. For example, misting may increase humidity and exacerbate heat stress events, and overuse may impact other environmental values of the site.

Note that any deterrent with a high risk of causing inadvertent dispersal may be considered a Level 3 action.

4.2.2 Noise attenuation fencing

Noise attenuation fencing could be installed in areas where the camp is particularly close to residents. This may also assist with odour reduction, and perspex fencing could be investigated to assist fence amenity. Although expensive to install, this option could negate the need for habitat modification, maintaining the ecological values of the site, and may be more cost-effective than ongoing management.

4.3 Level 3 actions: disturbance or dispersal

4.3.1 Nudging

Noise and other low intensity active disturbance restricted to certain areas of the camp can be used to encourage flying-foxes away from high conflict areas. This technique aims to actively 'nudge' flying-foxes from one area to another, while allowing them to remain at the camp site.

Unless the area of the camp is very large, nudging should not be done early in the morning as this may lead to inadvertent dispersal of flying-foxes from the entire camp site. Disturbance during the day should be limited in frequency and duration (e.g. up to four times per day for up to 10 minutes each) to avoid welfare impacts. As with dispersal, it is also critical to avoid periods when dependent young are present (as identified by a flying-fox expert).

4.3.2 Dispersal

Dispersal aims to encourage a camp to move to another location, through either disturbance or habitat modification.

There is a range of potential risks, costs and legal implications that are greatly increased with dispersal (compared with in-situ management as above). See Appendix 6 for more details. These include:

- impact on animal welfare and flying-fox conservation
- · splintering the camp into other locations that are equally or more problematic
- · shifting the issue to another area
- impact on habitat value
- effects on the flying-fox population, including disease status and associated public health risk
- impacts to nearby residents associated with ongoing dispersal attempts
- · excessive initial and/or ongoing capacity and financial investment
- negative public perception and backlash
- · increased aircraft strike risk associated with changed flying-fox movement patterns
- unsuccessful management requiring multiple attempts, which may exacerbate all of the above.

Despite these risks, there are some situations where camp dispersal may be considered. Dispersal can broadly be categorised as 'passive' or 'active' as detailed below.

Passive dispersal

Removing vegetation in a staged manner can be used to passively disperse a camp, by gradually making the habitat unattractive so that flying-foxes will disperse of their own accord over time with little stress (rather than being more forcefully moved with noise, smoke, etc.).

🖨 ecosure

This is less stressful to flying-foxes, and greatly reduces the risk of splinter colonies forming in other locations (as flying-foxes are more likely to move to other known sites within their camp network when not being forced to move immediately, as in active dispersal).

Generally, a significant proportion of vegetation needs to be removed in order to achieve dispersal of flying-foxes from a camp or to prevent camp re-establishment. For example, flying-foxes abandoned a camp in Bundall, Queensland once 70% of the canopy/mid-storey and 90% of the understorey had been removed (Ecosure 2011). Ongoing maintenance of the site is required to prevent vegetation structure returning to levels favourable for colonisation by flying-foxes. Importantly, at nationally important camps (Appendix 1) sufficient vegetation must be retained to accommodate the maximum number of flying-foxes recorded at the site.

This option may be preferable in situations where the vegetation is of relatively low ecological and amenity value, and alternative known permanent camps are located nearby with capacity to absorb the additional flying-foxes. While the likelihood of splinter colonies forming is lower than with active dispersal, if they do form following vegetation modification there will no longer be an option to encourage flying-foxes back to the original site. This must be carefully considered before modifying habitat.

There is also potential to make a camp site unattractive by removing access to water sources. However, at the time of writing this method had not been trialled so the likelihood of this causing a camp to be abandoned is unknown. It would also likely only be effective where there are no alternative water sources in the vicinity of the camp.

Active dispersal through disturbance

Dispersal is more effective when a wide range of tools are used on a randomised schedule with animals less likely to habituate (Ecosure pers. obs. 1997–2015). Each dispersal team member should have at least one visual and one aural tool that can be used at different locations on different days (and preferably swapped regularly for alternate tools). Exact location of these and positioning of personnel will need to be determined on a daily basis in response to flying-fox movement and behaviour, as well as prevailing weather conditions (e.g. wind direction for smoke drums).

Active dispersal will be disruptive for nearby residents given the timing and nature of activities, and this needs to be considered during planning and community consultation.

This method does not explicitly use habitat modification as a means to disperse the camp, however if dispersal is successful, some level of habitat modification should be considered. This will reduce the likelihood of flying-foxes attempting to re-establish the camp and the need for follow-up dispersal as a result. Ecological and aesthetic values will need to be considered for the site, with options for modifying habitat the same as those detailed for buffers above.

Early dispersal before a camp is established at a new location

This management option involves monitoring local vegetation for signs of flying-foxes roosting in the daylight hours and then undertaking active or passive dispersal options to discourage the animals from establishing a new camp. Even though there may only be a few animals

🖨 ecosure

initially using the site, this option is still treated as a dispersal activity, however it may be simpler to achieve dispersal at these new sites than it would in an established camp. It may also avoid considerable issues and management effort required should the camp be allowed to establish in an inappropriate location.

It is important that flying-foxes feeding overnight in vegetation are not mistaken for animals establishing a camp.

Maintenance dispersal

Maintenance dispersal refers to active disturbance following a successful dispersal to prevent the camp from re-establishing. It differs from initial dispersal by aiming to discourage occasional over-flying individuals from returning, rather than attempting to actively disperse animals that have been recently roosting at the site. As such, maintenance dispersal may have fewer timing restrictions than initial dispersal, provided that appropriate mitigation measures are in place.

4.4 Unlawful activities

4.4.1 Culling

Culling is addressed here as it is often raised by community members as a preferred management method; however, culling is contrary to the object of the *Biodiversity Conservation Act* and will not be permitted as a method to manage flying-fox camps.

Culling was used in the early 1800's and into the 1920s.



4.5 Camp management options analysis

Table 7 provides an analysis of the camp management options described in Section 4 and their suitability for implementation at Kooloonbung Creek Camp. An appraisal is provided for the options to be either adopted, investigated further or disregarded within this plan.

Management options	Relevant impacts	Cost \$-\$\$\$ Low-high	Advantages	Disadvantages	Suitability for site
Level 1 options					·
Education and awareness programs	Fear of disease Noise Smell Faecal drop	\$		mitigate all issues, and on its own would not be acceptable to the	There appears to be some fears and concerns regarding disease risk that needs addressing. Ongoing education is a good way to manage expectations around achievable flying-fox management actions
Property modification / service subsidies	Noise Smell Faecal drop Health/wellbeing Property devaluation Lost rental return	\$-\$\$		landholders, however subsidies would assist.	Appraisal: Adopt Property modification can assist in reducing all amenity concerns, although may be cost prohibitive for residents – subsidies would assist. Appraisal: Adopt distance-based subsidies program.

Table 7 Camp management options analysis

PR3995 Kooloonbung Creek Camp Management Plan



Management options	Relevant impacts	Cost \$-\$\$\$ Low-high	Advantages	Disadvantages	Suitability for site
			Council could provide car covers, clothesline covers, free hire of pressure cleaners or consider rate reductions to assist with faecal drop impacts.		
Odour reducing / masking plants	Noise Smell Health/wellbeing Property devaluation	\$		the desired effect. May not work effectively for residents located immediately next to the camp but	Residents could be encouraged to modify properties by planting dense screens and fragrant plants. If paired in conjunction with cleared buffers, could replace gaps with low shrubs to mitigate visual or odour impacts from camp. Appraisal: Adopt
Routine camp management	Health/well-being	\$	Weed removal has the potential to reduce roost availability and reduce numbers of roosting FFs.		Friends of Kooloonbung and Council regularly undertake bush regeneration and maintenance in the Park Appraisal: Adopt (ongoing)
Alternative habitat creation	Noise Smell Faecal drop Health/wellbeing Property devaluation Lost rental return	\$\$-\$\$\$	low conflict areas will mitigate all impacts	approach so cannot be undertaken quickly, previous attempts to attract FFs to a new site have not been known to succeed.	Undertake a desktop investigation into nearby suitable flying-fox habitat and potential alternative camp sites. A risk assessment of the alternative sites against the current site would help in determining feasibility of moving the camp. Appraisal: Adopt

PR3995 Kooloonbung Creek Camp Management Plan



Management options	Relevant impacts	Cost \$-\$\$\$ Low-high	Advantages	Disadvantages	Suitability for site
Provision of artificial roosting habitat	Noise Smell Faecal drop Health/wellbeing Property devaluation Lost rental return	\$-\$\$		would use artificial habitat, but	Not enough evidence to explore this as a viable option to support habitat restoration. Appraisal: Disregard
Protocols to manage incidents	Health/wellbeing Fear of disease	\$	Low cost, will reduce actual risk of negative human/pet-FF interactions, promotes conservation of FFs, can be undertaken quickly.	but will reduce fear of disease.	Previous management actions (Table 4) recommended annual check on recorded Lyssavirus. Hendra Virus, Menangle Virus and Leptospirosis infections. Need to develop understanding of records or incidents and whether protocols are needed to reduce exposure to risk such as for staff, subcontractors or volunteers working in the Park.
Research	Noise Smell Faecal drop Health/wellbeing Property devaluation Lost rental return	\$			Appraisal: Investigate further Not considered an urgent action at this site. Council will endeavour to stay up to date with contemporary research as it arises. Appraisal: Investigate further

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 40

Item 13.11 Attachment 1



Management options	Relevant impacts	Cost \$-\$\$\$ Low-high	Advantages	Disadvantages	Suitability for site
Appropriate land- use planning	Noise Smell Faecal drop Health/wellbeing Property devaluation Lost rental return	\$	Suitable planning for future development will reduce potential for future conflict. Identification of degraded sites that may be suitable for long-term rehabilitation for FFs could reduce impacts.	impacts.	Council may consider including additional management buffer zones within their codes in future planning scheme updates where properly documented and justified. Appraisal: Investigate further
Property acquisition	All for specific property owners Nil for broader community	\$\$\$	Option to lease properties back to community	Extremely expensive	Some consultation committee members wanted this option considered. Appraisal: Investigate further
Do nothing	Nil	Nil	No resource expenditure.	Will not mitigate impacts and would not be considered acceptable by impacted members of the community.	Not appropriate. Appraisal: Disregard

Level 2 options

Buffers through vegetation removal	Noise Smell Health/wellbeing	\$-\$\$	using a staged approach, with the aim of removing as little native vegetation as possible and only in vegetation directly affecting residents subject to a Vegetation Management Plan.	increase visibility into the camp and noise issues for neighbouring residents which may create further conflict. No certainty that removal of vegetation will improve condition for impacted residents. Vegetation removed too quickly could cause	Development Assessment Report in accordance with a Biodiversity Assessment Method. Further assessment
Buffers without vegetation removal – canopy-mounted	Noise Smell Health/wellbeing	\$\$	method has been effective in deterring flying-foxes from designated buffer zones	difficult regarding installation and	Appraisal: Investigate further Some residents were in favour of this technique. TS licence require on private property or assessed under Part 5 EP&A Act on public land

PR3995 Kooloonbung Creek Camp Management Plan



Management options	Relevant impacts	Cost \$-\$\$\$ Low-high	Advantages	Disadvantages	Suitability for site	
sprinklers	Damage to vegetation or habitat			require guidelines regarding frequency and duration of use to mitigate exacerbating HSE effects.	Appraisal: Investigate further for boundary between Lot 26/DP249270 and 3/SP70635 and 3/SP73183	
Noise attenuation fencing	Noise Smell Health/wellbeing Property devaluation Lost rental return/income	\$\$	Standard noise attenuation fencing is intended to alleviate amenity issues for residents. Advice from an acoustic consultant may provide site-specific alternatives (see Section 9).	and can be considered unsightly for property fencing.		
Level 3 options						
Nudging	All	\$\$\$\$\$	Can encourage flying-foxes to shift away from high conflict areas next to residential areas.		Level 2 management actions that have been proposed will serve to nudge flying- foxes away from high impact areas. Active nudging will only be considered if Level 2 actions are deemed to have been unsuccessful for the community.	
					Appraisal: Investigate further	
Active dispersal	All at that site but not generally appropriate for amenity impacts only	\$\$\$	If successful can mitigate all impacts at that site.		This option is not considered appropriate at this site. Appraisal: Disregard	

PR3995 Kooloonbung Creek Camp Management Plan



Man opti	nagement ons	Relevant impacts	Cost \$-\$\$\$ Low-high	Advantages	Disadvantages	Suitability for site
					permanently splintered to numerous sites as a result of dispersal in Maclean, including remaining at the original site).	

If flying-foxes are being unlawfully and intentionally disturbed, this should be reported to NSW Office of Environment and Heritage's Environment Line by calling 131 555. Native animals are protected under the BC Act 2016 and EPBC Act and there are penalties for people found guilty of an offence. Offences are dealt with before the Local Court or before the Land and Environment Court. The RSPCA (NSW) is legally able to prosecute infringements that directly contradict the *Prevention to Cruelty Act 1979*.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 43

Item 13.11 Attachment 1

5 Planned management approach

Council will take a risk-based approach to management based on:

- · potential health, safety, wellbeing and economic implications for the community
- likelihood of management success
- · potential flying-fox welfare and conservation impacts
- cost of management, and who would contribute to these costs
- risk of splintering the camp to other locations that are equally or more problematic.

Management options provided herein are intended primarily to provide relief for residents living in close proximity to the camp. Management options have been staged to prevent exacerbating issues associated with the camp whilst ensuring the welfare of flying-foxes.

Management options for adoption or further investigation are outlined in Actions in Table 8 contingent on securing funds and staff resourcing levels. Funds for actions will be sourced via grants and Council commitments.

Table 8 along with proposed timing: short-term (within 12 months), medium-term (within 2 years) or long-term (within 3-5 years). Note also that all management, and routine maintenance, must be done in accordance with mitigation measures detailed in Appendix 6.

The proposed management approach considers feedback received during community engagement, with the community indicating a preference for those below.

N.B. All management must be consistent with legislation detailed in Appendix 1, and any other applicable legislation.

5.1 Level 1 management

Level 1 management actions include:

- education and awareness programs specifically:
 - options for property modification such as removal of non-native foraging vegetation
 - information on flying-fox diseases
 - wearing a hat when walking through the park to reduce contact with faecal drop
 - advice on tree trimming or odour masking plants on private properties
 - banning barbed wire in residential areas
 - promoting wildlife friendly netting.
- property acquisition
- · creating alternative habitat or camp site

PR3995 Kooloonbung Creek Camp Management Plan

• subsidies for water and power use.

Misconceptions that flying-foxes are not threatened, are pests and about health risks can be reduced by adopting an education and awareness program to reduce misconceptions and appease fears. Residents are in favour of upgrading of the boardwalk to improve their enjoyment of and ability to use the park safely. This work will be undertaken as a separate item to this Plan.

A distance based subsidy program will be investigated to assist with cost associated cleaning and using air-conditioning. For instance, power rebates for residents living within 50m (Figure 22) and then within 100m. The community survey indicated a preference for driveway and roof cleaning.

Finding an alternative camp site for the flying-foxes to inhabit could be beneficial to residents living around Kooloongbung Creek. A desktop investigation of alternative flying-fox camp sites will be undertaken by Council along with a comparable risk assessment of alternative sites against Kooloonbung camp.

5.2 Level 2 management

Level 2 management actions include:

- buffers through tree trimming or removal
- · canopy-mounted sprinklers.

Level 2 buffers may consist of a combination of vegetation removal and sprinklers where tree removal is not preferred or constrained by the presence of EECs (Figure 22). Level 2 actions require OEH authorisation prior to commencing (Appendix 1). Additional approvals may also be required under other legislation (Appendix 1). An arborist should be engaged to investigate which trees are suitable for trimming or removal in line with the aforementioned provisions.

The Code of Practice Authorising Flying-fox Camp Management Actions 2018 under the Biodiversity Conservation Regulation does not exempt Council from meeting its responsibilities under the *Biodiversity Conservation Act 2016* and *Environmental Planning and Assessment Act 1979*.

Due to the presence of EECs behind the villas in Lake Road, the installation of canopymounted sprinklers in this area may trigger the need for a threatened species 'test of significance' under the *Biodiversity Conservation Act 2016*. Alternative or innovative designs for the sprinkler installation may include using poles instead of attaching to sprinklers to trees, and locating the poles on the border of Council and private property to avoid impacts to the EEC.

5.2.1 Canopy-mounted sprinklers

Canopy sprinklers have been used successfully elsewhere to deter flying-foxes from areas of

conflict. It is not the intention to disperse flying-foxes away from the camp, but maintain a buffer between residents and the flying-fox camp.

Canopy sprinklers have been effectively used at several camps in south-east Queensland, with adjacent residents given the option to activate sprinklers for short periods during the day if flying-foxes enter the buffer zone. By limiting flying-foxes in the buffer zones (the high conflict areas), there was also less disturbance of the camp, which provided the secondary benefit of reduced noise, smell, daytime fly-overs and faecal drop. Residents report a sense of regained control, which combined with the increased distance to roosting flying-foxes achieved with the sprinklers, has greatly assisted in reducing conflict with the camp. It is recommended residents near the Kooloonbung Creek camp should be able to activate sprinklers when necessary (with consideration to guidelines below).

Provided that adequate water pressure can be achieved (with a pump station), each sprinkler should have approximately a 13-15 m reach (radius). Figure 22 shows approximate locations where four sprinklers are planned for installation as soon as practicable to minimise current conflict.

Note that consultation is still required with irrigation/sprinkler specialists to confirm feasibility at this site, however based on previous Ecosure experience this option should be achievable.

Installation costs for similar programs elsewhere, including all infrastructure and eight sprinklers, were approximately \$30,000. The majority of this cost is in infrastructure (pump shed, control board, plumbing, etc.) with individual sprinklers costing less than \$1,000. As such the installation of four sprinklers, and associated infrastructure (pump, control board, etc.) will cost an estimated \$20,000 (plus maintenance and operation costs, including ~100 L water/week/sprinkler).

5.2.1.1 Installation and operational considerations

Placement - Exact placement will be dependent on finding suitable location to install poles These will be designed to withstand high wind and vegetation debris fall, and will be highly visible to flying-foxes to avoid collisions.

Water pressure – Water pressure must be firm so it is sufficient to deter flying-foxes, however must not risk injuring flying-foxes (or other fauna) or knocking an animal from the tree. Water misting should be minimised as this is unlikely to deter flying-foxes.

Noise – Sprinklers should release a jet of air prior to water, as an additional deterrent and to cue animals to move prior to water being released. The intention of the sprinklers is to make the buffer unattractive, and effectively 'train' individuals to stay out of the buffer area.

Potential for additional sprinklers – Infrastructure should accommodate additional sprinklers if possible should they be required in the future.

Residents involved in a similar approved trial elsewhere also reported noise impacts associated with the water hammer.

Access for maintenance/adjustments – Sprinklers should be designed and attached in a way that allows the easiest possible access for future maintenance, replacement and sprinkler head adjustments.

Sprinkler control – The system control station should allow independent programming of each individual sprinkler. The number of times per day each sprinkler is activated, duration of each activation and sequence of sprinkler activation needs to be fully adjustable (minutes and seconds programming required). The operational time of day also needs to be adjustable. Ideally water pressure to individual sprinklers could also be adjusted.

Sprinklers will operate on a random schedule, and in a staggered manner (i.e. not all sprinklers operating at the same time, to avoid excessive disturbance). Each activation will be for approximately 20 seconds per sprinkler. It is anticipated each sprinkler will be activated up to four times per hour between 0600 and 1700, totalling approximately 15 minutes run time per sprinkler per day. Sprinklers will not operate during fly-in or fly-out periods to avoid inadvertent dispersal.

Sprinkler settings will need to be changed regularly to avoid flying-foxes habituating, and to account for seasonal changes (e.g. not in the heat of the day during summer when they may be an attractant). Individual sprinklers may also need to be temporarily turned off depending on location of creching young, or if it appears likely that animals will be displaced to undesirable locations.

Flying-fox heat stroke generally occurs when the temperature reaches 42°C, however can occur at lower temperatures in more humid conditions (Bishop 2015). Given that humidity is most likely to be increased with water mist, if sprinkler design cannot limit mist, sprinklers may need to be turned off in higher temperatures (e.g. >30°C) to avoid exacerbating heat stress.

5.3 Level 3 management

Some people have an expectation that flying-foxes can be moved or controlled. Level 3 dispersal actions are extremely expensive, resource intense and very rarely successful in the long term due to flying-foxes returning year after year. Dispersal should only be considered once Level 1 and Level 2 management methods have been implemented and impacts have not been mitigated. OEH approval would be required.

Actions in Table 8 contingent on securing funds and staff resourcing levels. Funds for actions will be sourced via grants and Council commitments.

Table 8 Staged approach to management at Kooloonbung Creek flying-fox camp. Note all actions must be done in accordance with measures in Appendix 6. Authorisation for Level 2 and 3 actions is required, and additional approvals may be required under other legislation (see Appendix 1).

Management option	Management level	Appraisal	Action(s)	Timing	Estimated cost
Education and	Level 1	Adopt	Increase community understanding and improve perceptions of flying-foxes.	Short term	\$4,000
awareness programs			 mail out flyers; disease risk; removal of non-natives in gardens (i.e. Cocos palms), removal of barbed wire fencing, using wildlife friendly netting 	(within 12 months)	\$2,000
			produce webpage on Council's website summarising Council's approach to flying-fox management (or refer to sites such as http://littleaussiebat.com.au/health/)		\$10,000
			design and install signage promoting flying-fox ecology and conservation		\$2,000
			train staff on positive flying-fox messaging		\$18,000
			Continue to consult with affected community members.		
Property modification / service subsidies	Level 1	Adopt	Investigate a subsidy program to assist with property modification for PMHC residents. The subsidy program will identify an eligibility matrix for subsidies based on the following parametres	Short term (within 12 months)	
			location of flying-fox camp		
			proximity to residential areas		\$20,000
			 level of likely impacts from noise, odour, visibility 		
			Rebates/subsidies will be offered for		\$5,000
			water or electricity bills		
			double glazed windows		\$25,000
			 cleaning services 		
			· car covers		
Routine camp management	Level 1	Adopt (ongoing)	Friends of Kooloonbung have been undertaking bush regeneration in the Park since 1985.	(ongoing)	Friends of Kooloonbung in kind
Alternative habitat creation	Level 1	Adopt	Stage 1 - Undertake an investigation of nearby alternative flying-fox camp sites to determine feasibility of identified sites. This will include a risk	Short term	\$10,000 (assumes up to three sites, additional

PR3995 Kooloonbung Creek Camp Management Plan



Management option	Management level	Appraisal	Action(s)	Timing	Estimated cost
			assessment to determine sensitive receptor areas, zoning conflicts and potential current and future use conflicts, assessment of current vegetation condition to determine what resource investment would be required to improve the sites suitability. Stage 2 – Select feasible sites for investment. Write plan of management / rehabilitation plans for selected sites. Stage 3 – Implementation of plans of management.		\$5,000 per additional site)
Canopy-mounted sprinklers	Level 2	Investigate further	Liaise with landholders and an irrigation specialist regarding feasibility and costs associated with installing canopy-mounted sprinklers in the buffer zone between Lot 26/DP249270 and 3/SP70635 and 3/SP73183 Design and frequency/ duration of use must also be considerate of animal welfare and other ecological values of the site. Level 2 action and so licence from OEH required prior to installing. Action may trigger a test of significance.	Medium term (within 2-3 years)	~ \$10,000 for each sprinkler including installation.
Buffers through vegetation trimming and removal	Level 2	Investigate further	Improve buffers for residents in high impact areas in Lots 3/SP70635 and 3/SP73183. An arborist should be engaged to investigate which trees are suitable for trimming or removal in line with Council's Planning Provisions. Level 2 action and authorisation from OEH required prior to commencing.	Long term (4-5 years after sprinklers deemed ineffective)	\$50,000 Estimate based on previous vegetation works
Protocols to manage incidents	Level 1	Investigate further	Previous management actions (Table 4) recommended annual check on recorded Lyssavirus. Hendra Virus, Menangle Virus and Leptospirosis infections. Develop understanding of records or incidents and whether protocols are needed to reduce exposure to risk such as for staff, subcontractors or volunteers working in the Park. Gather data during heat stress events and provide to researchers via https://www.animalecologylab.org/heat-stress-data-form.html	Short term (1-2 years)	Council in kind
Research	Level 1	Investigate further	Support research through continued flying-fox census data collection. Develop understanding of native flowering events in area.	Long term (ongoing)	Council in kind
Appropriate land-use planning	Level 1	Investigate further	Identification of zoning for FFs to mitigate impacts to residents.	Long term (within 3 years)	Council in kind

PR3995 Kooloonbung Creek Camp Management Plan



Management option	Management level	Appraisal	Action(s)	Timing	Estimated cost
0			Measures to avoid future impacts will be considered when assessing development applications.		

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 50

Item 13.11 Attachment 1

Page 439



Data Sour mage Port Naquale-Hastings Counci, 2018. or completeness of information displayed in this map and any person using it does so at their own (s). ECOSURE shall be an no responsibility or latility for any accounted. COGURE to is, fault



6 Evaluation and review

This Plan will be in operation for five years (2019-2023) with annual review of management actions set out in Section 5.

The following will trigger a reactive internal review of the Plan:

- · completion of a management activity
- · progression to a higher level of management
- · changes to relevant policy/legislation
- new management techniques becoming available
- · outcomes of research that may influence the Plan
- · incidents associated with the camp.

Monitoring and reporting requirements are detailed in Section 7.

If the Plan is to remain current, a full review including stakeholder consultation and expert input will be undertaken in the final year of the Plan prior to being re-submitted to OEH.

7 Plan administration

7.1 Monitoring of the camp

Reports for Level 1 actions that comply with this Plan are not required to be submitted to OEH. It is recommended that Council keep internal records to allow the effectiveness of each management action to be evaluated.

Reports for Level 2 actions will be submitted to OEH one month after commencement of works and then quarterly in periods where works have occurred. Each report is to include:

- results of pre- and post-work population monitoring
- any information on new camps that have formed in the area
- further management actions planned to include a schedule of works
- an assessment of how the community responded to the works, including details on the number and nature of complaints before and after the works
- · detail on any compensatory planting
- · expenditure and contributors
- outcomes from evaluation and review (Section 6).

7.2 Responsibilities

Council is responsible for implementation of the Plan once it has been endorsed by OEH, licences have been obtained for Level 2 actions and resources have been allocated for implementation. Council will seek advice from OEH and other flying-fox experts as required during implementation.

Administration may also include determining residents' eligibility for subsidies for services such as arborist advice, vegetation trimming/removal and green waste removal or providing details of suppliers for canopy-mounted sprinklers.

All Council personnel, contractors and volunteers working in Kooloonbung Creek are responsible for complying with mitigation measures detailed in Appendix 6. Council will ensure non-Council staff and volunteers are aware of this responsibility and will provide assistance if required. All on-ground works towards implementation of this Plan, will be performed in accordance with a Safe Work Method Statement that includes risks and mitigation measures for working in a flying-fox camp.

7.3 Funding commitment

Council will commit available funds on an annual basis over the life of the five year Plan to implement actions in Table 8. Allocation of Council funding will be dependent on resources available and annual priorities. Council will also seek opportunities for funding through relevant grant programs, such as the NSW Flying-fox Grants Program.

References and further resources

Aich, P, Potter, AA and Griebel, PJ 2009, 'Modern approaches to understanding stress and disease susceptibility: A review with special emphasis on respiratory disease', *International Journal of General Medicine*, vol. 2, pp. 19–32.

AIHW 2012, Risk factors contributing to chronic disease, Cat no. PHE 157, Australian InstituteofHealthandWelfare,viewed12January2016,www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737421546.

ALA 2017, Pet Dander, American Lung Association, available: https://www.lung.org/ourinitiatives/healthy-air/indoor/indoor-air-pollutants/pet-dander.html

Atlas of Living Australia 2015, viewed 12 January 2016, www.ala.org.au.

Australasian Bat Society 2013, viewed 12 January 2016, ausbats.org.au/.

Australian Museum 2010, *Little Red Flying-fox*, viewed 12 January 2016, australianmuseum.net.au/little-red-flying-fox.

AVA 2015, *Hendra virus*, Australian Veterinary Association, viewed 12 January 2016, www.ava.com.au/hendra-virus.

Birt, P 2000, 'Summary information on the status of the Grey-headed (Pteropus poliocephalus) and Black (*P. alecto*) Flying-Fox in New South Wales,' Proceedings of workshop to assess the status of the grey-headed flying-fox in New South Wales. University of Sydney, Sydney, New South Wales, Australia, pp. 78-86.

Bishop T, 2015, The Management, Treatment and Physiology of Heat Stroke in Flying-foxes, presentation

CDC 2014, *Hendra virus disease (HeV): Transmission,* Centers for Disease Control and Prevention, updated 17 March 2014, viewed 12 January 2016, www.cdc.gov/vhf/hendra/transmission/index.html.

Churchill, S 2008, Australian Bats, Allen & Unwin, Crows Nest, NSW.

DECC 2007, *Threatened species assessment guidelines: the assessment of significance*, Department of Environment and Climate Change NSW, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf.

DECC 2008, Best practice guidelines for the grey-headed flying-fox, Department of Environment and Climate Change NSW, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/threatenedspecies/08540tsdsflyingfoxbpg.pdf.

DECCW 2009, Draft National Recovery Plan for the Grey-headed Flying-fox Pteropus poliocephalus, prepared by Dr Peggy Eby for Department of Environment, Climate Change and Water NSW, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/threatenedspecies/08214dnrpflyingfox.pdf.

PR3995 Kooloonbung Creek Camp Management Plan

DoE 2013, *Matters of National Environmental Significance: Significant Impact Guidelines 1.1*, Environment Protection and Biodiversity Conservation Act 1999, Australian Government Department of the Environment, www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf.

DoE 2014, *How can flying-foxes be managed in accordance with national environmental law*? Australian Government Department of the Environment, Canberra, viewed 12 January 2016, www.environment.gov.au/biodiversity/threatened/species/flying-fox-law.

DoE 2015, Referral guideline for management actions in grey-headed and spectacled flyingfox camps, Australian Government Department of the Environment, Canberra, viewed 12 January 2016, www.environment.gov.au/system/files/resources/6d4f8ebc-f6a0-49e6-a6b6-82e9c8d55768/files/referral-guideline-flying-fox-camps.pdf.

DoE 2016a, *Pteropus poliocephalus in Species Profile and Threats Database*, Australian Government Department of the Environment, Canberra, viewed 12 January 2016, www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=186.

DoE 2016b, Monitoring Flying-fox Populations, Australian Government Department of theEnvironment,Canberra,viewed12January,www.environment.gov.au/biodiversity/threatened/species/flying-fox-monitoring.

DPI 2013, Australian bat lyssavirus, June 2013 Primefact 1291 2nd edition, Department ofPrimaryIndustries,NSW,viewed12January2016,www.dpi.nsw.gov.au/_data/assets/pdf_file/0011/461873/Australian-Bat-lyssavirus.pdf.

DPI 2014, Hendra virus, June 2014 Primefact 970 9th edition, Department of PrimaryIndustries,NSW,viewed12January2016,www.dpi.nsw.gov.au/__data/assets/pdf_file/0019/310492/hendra_virus_primefact_970.pdf.

DPI 2015a, *Hendra virus*, Department of Primary Industries, NSW, viewed 12 January 2016, www.dpi.nsw.gov.au/agriculture/livestock/horses/health/general/hendra-virus.

DPI 2015b, *Lyssavirus and other bat health risks*, Department of Primary Industries, Primary Industry Biosecurity, NSW, viewed 12 January 2016, www.dpi.nsw.gov.au/biosecurity/animal/humans/bat-health-risks.

DSDIP 2014, *Queensland State Planning Policy July 2014*, Department of State Development, Infrastructure and Planning, Brisbane.

Eby, P 1991, 'Seasonal movements of Grey-headed Flying-foxes, *Pteropus poliocephalus* (Chiroptera: Pteropodidae) from two maternity roosts in northern New South Wales', *Wildlife Research*, vol. 18, pp. 547–59.

Eby, P 1995, *The biology and management of flying-foxes in NSW*, Species management report number 18, Llewellyn, L. (ed.), National Parks and Wildlife Service, Hurstville.

Eby, P 2000, 'The results of four synchronous assessments of relative distribution and abundance of Grey-headed Flying-fox *Pteropus poliocephalus*', Proceedings from workshop to assess the status of the Grey-headed Flying-fox in New South Wales, pp. 66–77.

PR3995 Kooloonbung Creek Camp Management Plan

Eby, P 2006, 'Site Management Plan for the Grey-headed Flying-fox camp at the Sydney Desalination Plant Site', report to Sydney Water Corporation, Sydney.

Eby, P and Lunney, D 2002, *Managing the Grey-headed Flying–fox as a threatened species in NSW*, Royal Society of New South Wales, Darlington, NSW.

Ecosure 2011, 'Hendra Virus Risk Assessment for the Gold Coast Equine Precinct: Residual Risk Report', unpublished report to City of Gold Coast.

Edson, D, Field, H, McMichael, L, Jordan, D, Kung, N, Mayer, D and Smith, C 2015, 'Flyingfox Roost Disturbance and Hendra Virus Spillover Risk', *PLoS ONE*, vol. 10, no. 5, viewed 12 January 2016, www.ncbi.nlm.nih.gov/pmc/articles/PMC4446312/pdf/pone.0125881.pdf.

EHP 2012, *Living with Wildlife – Flying-foxes*, Department of Environment and Heritage Protection, Queensland, updated 14 May 2012, viewed 12 January 2016, www.ehp.qld.gov.au/wildlife/livingwith/flyingfoxes/importance.html.

EHP 2013a, Code of Practice – Ecologically sustainable management of flying-fox roosts, Department of Environment and Heritage Protection, Queensland, viewed 12 January 2016, www.ehp.qld.gov.au/wildlife/livingwith/flyingfoxes/roost-management.html.

EHP 2013b, Code of Practice – Low impact activities affecting flying-fox roosts, Department of Environment and Heritage Protection, Queensland, viewed 12 January 2016, www.ehp.qld.gov.au/wildlife/livingwith/flyingfoxes/roost-management.html.

EHP 2013c, *Flying-fox roost management guideline*, Department of Environment and Heritage Protection, Queensland, viewed 12 January 2016, www.ehp.qld.gov.au/wildlife/livingwith/flyingfoxes/roost-management.html.

ELW&P 2015, *Flying-foxes*, Department of Environment, Land, Water and Planning, State of Victoria.

EPA 2013, Noise Guide for Local Government, Environment Protection Authority, Sydney.

Fujita, MS 1991, 'Flying-fox (*Chiroptera: Pteropodidae*) pollination, seed dispersal, and economic importance: a tabular summary of current knowledge', *Resource Publication No. 2*, Bat Conservation International.

GeoLINK 2010, *Maclean Flying-fox Management Strategy*, report prepared for Clarence Valley Council on behalf of the Maclean Flying-Fox Working Group.

GeoLINK 2012, Lorn Flying-fox management strategy, report prepared for Maitland City Council.

Hall, L and Richards, G 2000, *Flying foxes: fruit and blossom bats of Australia*, UNSW Press, Sydney.

Henry, JP and Stephens-Larson, P 1985, 'Specific effects of stress on disease processes' in Moberg, GP (ed.), *Animal Stress*, American Physiological Society, pp.161–175.

IUCN 2015, *Little red flying-fox*, International Union for the Conservation of Nature, www.iucnredlist.org.

Ku-ring-gai Council 2013, *Ku-ring-gai Flying-fox Reserve Management Plan*, Ku-ring-gai Council, Gordon, NSW.

Markus, N 2002, 'Behaviour of the Black Flying-fox *Pteropus alecto*: 2. Territoriality and courtship', *Acta Chiropterologica*, vol. 4, no. 2, pp.153–166.

Markus, N and Blackshaw, JK 2002, 'Behaviour of the Black Flying-fox *Pteropus alecto*: 1. An ethogram of behaviour, and preliminary characterisation of mother-infant interactions', *Acta Chiropterologica*, vol. 4, no. 2, pp. 137–152.

Markus, N and Hall, L 2004, 'Foraging behaviour of the black flying-fox (*Pteropus alecto*) in the urban landscape of Brisbane, Queensland', *Wildlife Research*, vol. 31, no. 3, pp. 345-355.

McCall, BJ, Field, H, Smith, GA, Storie, GJ and Harrower, BJ 2005, 'Defining the risk of human exposure to Australian bat lyssavirus through potential non-bat animal infection', *CDI*, vol. 29, no. 2, pp. 200–203, www.health.gov.au/internet/main/publishing.nsf/content/cda-cdi2902-pdf-cnt.htm/\$FILE/cdi2902k.pdf.

McConkey, KR, Prasad, S, Corlett, RT, Campos-Arceiz, A, Brodie, JF, Rogers, H and Santamaria, L 2012, 'Seed dispersal in changing landscapes', *Biological Conservation*, vol. 146, pp. 1–13, doi:10.1016/j.biocon.2011.09.018.

McGuckin, MA and Blackshaw, AW 1991, 'Seasonal changes in testicular size, plasma testosterone concentration and body weight in captive flying-foxes (*Pteropus poliocephalus* and *P. scapulatus*)', *Journal of Reproduction and Fertility*, vol. 92, pp. 339–346.

McIlwee, AP and Martin, IL 2002, 'On the intrinsic capacity for increase of Australian flyingfoxes', *Australian Zoologist*, vol. 32, no. 1.

Milne, DJ and Pavey, CR 2011, 'The status and conservation of bats in the Northern Territory', in Law, B, Eby, P, Lunney, D and Lumsden, L (eds), *The Biology and Conservation of Australasian Bats*, Royal Zoological Society of NSW, Mosman, NSW, pp. 208–225.

NFFMP 2018, National Flying-fox Monitoring Program, Department of Environment and Energy, Australian Government, available: http://www.environment.gov.au/biodiversity/threatened/species/flying-fox-monitoring viewed 12 February 2018.

NSW Health 2012, *Flying foxes and health*, NSW Health, North Sydney, viewed 12 January 2016, www.health.nsw.gov.au/environment/factsheets/Pages/flying-foxes.aspx.

NSW Health 2013, *Rabies and Australian Bat Lyssavirus Infection*, NSW Health, North Sydney, viewed 12 January 2016, www.health.nsw.gov.au/Infectious/factsheets/Pages/Rabies-Australian-Bat-Lyssavirus-Infection.aspx.

OEH 2011a, Grey-headed Flying-fox vulnerable species listing: NSW Scientific Committee

PR3995 Kooloonbung Creek Camp Management Plan

final determination, Office of Environment and Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/determinations/GreyheadedFlyingFoxVulSpListing.htm.

OEH 2011b, *NSW Code of Practice for Injured, Sick and Orphaned Protected Fauna*, Office of Environment and Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/wildlifelicences/110004FaunaRehab.pdf.

OEH 2012, *NSW Code of Practice for Injured, Sick and Orphaned Flying-foxes*, Office of Environment and Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/wildlifelicences/120026flyingfoxcode.pdf.

OEH 2014, BioBanking Assessment Methodology 2014, Office of Environment and Heritage,Sydney,viewed12January2016,www.environment.nsw.gov.au/resources/biobanking/140661BBAM.pdf.

OEH 2015a, *Flying-foxes* (including fact sheets), Office of Environment and Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/animals/flyingfoxes.htm.

OEH 2015b, *Flying-fox Camp Management Policy 2015*, Office of Environment and Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/threatenedspecies/150070-flyingfoxcamppolicy.pdf.

OEH 2015c, Flying-fox Camp Management Plan Template 2015, Office of Environment & Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/threatenedspecies/150102-flyingfoxcamp-template.pdf.

 OEH 2015d, GHFF threatened species profile, Office of Environment and Heritage, Sydney,

 viewed
 12
 January
 2016,

 www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10697

OEH 2015e, *Policy and procedural guidelines for the mitigation of commercial crop damage by flying-foxes*, Office of Environment and Heritage, Sydney, viewed 12 January 2016, www.environment.nsw.gov.au/resources/wildlifelicences/140480FlyfoxPol.pdf

OEH 2018, Master Data – NSW NFFMP to Nov 2017 unpublished data.

Parry-Jones, KA and Augee, ML 1992, 'Movements of the Grey-headed Flying Foxes (*Pteropus poliocephalus*) to and from a colony site on the central coast of New South Wales', *Wildlife Research*, vol. 19, pp. 331–40.

Parry-Jones, K and Augee, M 2001 'Factors affecting the occupation of a colony site in Sydney, New South Wales by the Grey-headed Flying-fox *Pteropus poliocephalus* (Pteropodidae)', *Austral Ecology*, vol. 26, pp. 47–55.

Pierson, ED and Rainey, WE 1992, 'The biology of flying foxes of the genus Pteropus: A Review', in: Wilson, DE and GL Graham (eds), *Pacific Island Flying Foxes*: *Proceedings of an International Conservation Conference*, US Department of the Interior – Biological Report no. 90, pp. 1–17.

PR3995 Kooloonbung Creek Camp Management Plan

PMHC 2012, Kooloonbung Creek Nature Park Plan of Management, Port Macquarie Hastings Council

Qld Health 2016, *Bats and Human Health*, Queensland Health, viewed 12 January 2016, www.health.qld.gov.au/communicablediseases/hendra.asp

Ratcliffe, F 1932, 'Notes on the Fruit Bats (Pteropus spp.) of Australia', *Journal of Animal Ecology*, vol. 1, no. 1, pp. 32–57.

Roberts, B 2005, 'Habitat characteristics of flying-fox camps in south-east Queensland', BSc. Honours Thesis, Griffith University, Brisbane.

Roberts, BJ 2006, *Management of Urban Flying-fox Roosts: Issues of Relevance to Roosts in the Lower Clarence, NSW*, Valley Watch Inc, Maclean.

Roberts, B and Eby, P 2013, Review of past flying-fox dispersal actions between 1990–2013,publisherunknown,viewed12January2016,www.environment.nsw.gov.au/resources/animals/flying-fox-2014-subs/flyingfoxsub-jenny-beatson-part2.pdf.

Roberts, BJ, Catterall, CP, Eby, P and Kanowski, J 2012, 'Long-Distance and Frequent Movements of the Flying-Fox *Pteropus poliocephalus*: Implications for Management', *PLoS ONE*, vol. 7, no. 8, e42532.

Roberts, BJ, Eby, P, Catterall, CP, Kanowski, J and Bennett, G 2011, 'The outcomes and costs of relocating flying-fox camps: insights from the case of Maclean, Australia', in Law, B, Eby, P, Lunney, D and Lumsden, L (eds), *The Biology and Conservation of Australasian Bats*, Royal Zoological Society of NSW, Mosman, NSW, viewed 12 January 2016, www.griffith.edu.au/__data/assets/pdf_file/0006/358440/Roberts-et-al.pdf.

Roberts, B, Kanowski, J and Catterall, C 2006, *Ecology and Management of Flying-fox Camps in an Urbanising Region*, Rainforest CRC Tropical Forest Landscapes, Issue 5, viewed 12 January 2016, www.rainforest-crc.jcu.edu.au/issues/ITFL_flyingfox.pdf.

SEQ Catchments 2012, Management and Restoration of flying-fox Roosts: Guidelines and Recommendations, SEQ Catchments Ltd funded by the Australian Government's Caring for Our Country, viewed 12 January 2016, www.environment.nsw.gov.au/resources/animals/flying-fox-2014-subs/flyingfoxsub-jenny-beatson-part3.pdf.

Shinwari, MW, Annand, EJ, Driver, L, Warrilow, D, Harrower, B, Allcock, RJN, Pukallus, D, Harper J, Bingham, J, Kung, N and Diallo, IS 2014, 'Australian bat lyssavirus infection in two horses', *Veterinary Microbiology*, vol. 173, pp. 224–231.

Snoyman S, Jasmina M & Brown C 2012, 'Nursing females are more prone to heat stress: Demography matters when managing flying-foxes for climate change', Applied Animal Behaviour Science, vol 142, pp. 90-97.

Southerton, SG, Birt, P, Porter, J and Ford, HA 2004, 'Review of gene movement by bats and birds and its potential significance for eucalypt plantation forestry', *Australian Forestry*, vol. 67,

PR3995 Kooloonbung Creek Camp Management Plan

ecosure 😂

no. 1, pp. 45–54.

Stanvic, S, McDonald, V and Collins, L 2013, *Managing heat stress in flying-foxes colonies*, viewed 12 January 2016, www.fourthcrossingwildlife.com/HeatStress-StanvicMcDonaldCollins.pdf.

Tait, J, Perotto-Baldivieso, HL, McKeown, A and Westcott, DA 2014, 'Are Flying-Foxes Coming to Town? Urbanisation of the Spectacled Flying-Fox (*Pteropus conspicillatus*) in Australia', *PLoS ONE*, vol. 9, no. 10, e109810, doi:10.1371/journal.pone.0109810.

Tidemann, C, Eby, P, Parry-Jones, K and Vardon, M 1999, *The Action Plan for Australian Bats: Grey-headed Flying-fox*, Environment Australia, www.environment.gov.au/node/14622.

Tolga Bat Hospital, *Wildlife Friendly Fencing Project*, Tolga Bat Hospital partly funded by grants from WWF and Australian Government Caring for Our Country, viewed 12 January, 2016, www.wildlifefriendlyfencing.com/WFF/Home.html.

Vardon, MJ and Tidemann, CR 1999, 'Flying-foxes (*Pteropus alecto* and *P. scapulatus*) in the Darwin region, north Australia: patterns in camp size and structure', *Australian Journal of Zoology*, vol. 47, pp. 411–423.

Vardon, MJ, Brocklehurst, PS, Woinarski, JCZ, Cunningham, RB, Donnelly, CF and Tidemann, CR 2001, 'Seasonal habitat use by flying-foxes, *Pteropus alecto* and *P. Scapulatus* (Megachiroptera), in monsoonal Australia', *Journal of Zoology* London, vol. 253, pp. 523–535.

Webb, N and Tidemann, C 1995, 'Hybridisation between black (*Pteropus alecto*) and greyheaded (*P. poliocephalus*) flying-foxes (Megachiroptera: Pteropodidae)', *Australian Mammalogy*, vol. 18, pp. 19–26.

Webb, NJ and Tidemann, CR 1996, 'Mobility of Australian flying-foxes, *Pteropus* spp. (Megachiroptera): evidence from genetic variation', *Proceedings of the Royal Society London Series B*, vol. 263, pp. 497–502.

Welbergen, JA 2014, 'Canaries in the coalmine: flying-foxes and extreme heat events in a warming climate', presentation at the Griffith Climate Change Seminar, July 2014, www.griffith.edu.au/research/research-excellence/griffith-climate-change-response-program/program/?a=628188.

Welbergen, JA, Klose, SM, Markus, N and Eby, P 2008, 'Climate change and the effects of temperature extremes on Australian flying-foxes', *Proceedings of the Royal Society of London B: Biological Sciences*, vol. 275, no. 1633, pp.419–425, viewed 12 January 2016, rspb.royalsocietypublishing.org/content/275/1633/419.short.

Westcott, DA, Dennis, AJ, Bradford, MG, McKeown, A and Harrington, GN 2008, 'Seed dispersal processes in Australia's Wet Tropics rainforests', in Stork, N and Turton, S, *Living in a dynamic tropical forest landscape*, Blackwells Publishing, Malden, pp. 210–223.

Westcott, DA, McKeown, A, Murphy, HT and Fletcher, CS 2011, *A monitoring method for the Grey-headed Flying-fox,* Pteropus poliocephalus, CSIRO, Queensland, viewed 12 January 2016, www.environment.gov.au/biodiversity/threatened/species/pubs/310112-monitoring-methodology.pdf.

Zurbuchen, A, Landert, L, Klaiber, J, Muller, A, Hein, S and Dorn, S 2010, 'Maximum foraging ranges in solitary bees: only few individuals have the capability to cover long-foraging distances', *Biological Conservation*, vol. 142, no. 3, pp. 669–676.

PR3995 Kooloonbung Creek Camp Management Plan

Appendix 1 Legislation

Local

Port Macquarie-Hastings Council Local Environmental Plan 2011

The Park is zoned E2 (Environmental Conservation). The objectives of this zone are to:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.
- To protect coastal wetlands and littoral rainforests.
- To protect land affected by coastal processes and environmentally sensitive land.
- To prevent development that adversely affects, or would be adversely affected by, coastal processes.
- To enable development of public works and environmental facilities where such development would not have an overall detrimental impact on ecological, scientific, cultural or aesthetic values.

Port Macquarie-Hastings Development Control Plan 2013

For actions relating to trees and vegetations, the Tree Management Provisions in Port Macquarie-Hastings Council Development Control Plan 2013 apply to the reserve and any development in the Park by regulating the removal of trees requiring consent where exemptions do not apply.

Environmental Management Areas and Buffers must be considered in relation to potential vegetation works around the camp.

Development Provisions

a) For coastal floodplain endangered ecological communities a minimum, fully vegetated buffer of 35m must be provided.

b) For Freshwater Wetland on Coastal Floodplain endangered ecological community a fully vegetated buffer of 100m is to be provided.

c) For all other endangered ecological communities, a fully vegetated buffer of 50m must be provided.

e) Fully vegetated buffers cannot contain road infrastructure or an asset protection zone.

ecosure 😂

State

Flying-fox Camp Management Policy 2015

The Flying-fox Camp Management Policy 2015 (the Policy) has been developed to empower land managers, primarily local councils, to work with their communities to manage flying-fox camps effectively. It provides the framework within which OEH will make regulatory decisions. In particular, the Policy strongly encourages local councils and other land managers to prepare Camp Management Plans for sites where the local community is affected.

Flying-fox Camp Management 2018

OEH has prepared a Code of Practice under the *Biodiversity Conservation Regulation 2017* authorising camp management actions on public land. The code defines standards for effective and humane management of flying-fox camps.

Camp management actions can only be implemented under the Code in accordance with a camp management plan endorsed by the Environment Agency Head (i.e. OEH).

The objective of the code is to enable camp managers to act quickly if flying-fox camps are causing a concern on public land. If camp management actions are consistent with the code, a Biodiversity Conservation licence will not be required.

Biodiversity Conservation Act 2016

The purpose of the *Biodiversity Conservation Act 2016* (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development including conserving biodiversity, maintaining the diversity and quality of ecosystems, regulating human interactions with wildlife, and supporting conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature.

The Grey-headed Flying-fox is listed as a threatened species under the BC Act.

Part 2 Division 3 of the BC Act provides for the issuing of Biodiversity Conservation Licences to authorise the doing of an act likely to result in one or more of the following:

- a. harm or attempted harm to any animal that is of a threatened species or is part of threatened ecological community
- b. harm or attempted harm, dealing in, or liberating a protected animal
- c. the picking of any plant that is of a threatened species or is part of threatened ecological community
- d. picking or dealing in protected plants
- e. damage to declared areas of outstanding biodiversity value
- f. damage to any habitat of a threatened species or threatened ecological community.

Part 7 of the BC Act provides for the biodiversity assessment and approvals required under the *Environmental Planning and Assessment Act 1979* for development other than complying

development, activities and state significant development and infrastructure.

An assessment of impacts is required for any threatened species or threatened ecological community, or their habitats, that are likely to be harmed by the doing of an act proposed in the Plan.

Note: that the definition of 'harm' includes kill, injure or capture the animal, but does not include harm by changing the habitat of the animal, and attempt to harm an animal includes hunting or pursuing, or using anything, for the purpose of harming the animal. The definition of 'pick' includes to gather, take, cut, remove from the ground, destroy, poison, crush or injure the plant or any part of the plant. The definition of habitat includes an area periodically or occasionally occupied by a species or ecological community and the biotic and abiotic components of an area.

Local Government Act 1993

The primary purpose of this Act is to provide the legal framework for an effective, efficient and environmentally responsible, open system of local government. Most relevant to flying-fox management is that it also provides encouragement for the effective participation of local communities in the affairs of local government and sets out guidance on the use and management of community land which may be applicable to land which requires management of flying-foxes.

National Parks and Wildlife Act 1974

The National Parks and Wildlife Act 1974 (NPW Act) provides for the conservation of nature, objects, places or features of cultural value and the management of land reserved under this Act. The Act protects Aboriginal objects and declared Aboriginal Places. An Aboriginal Heritage Impact Permit may be required under this Act to authorise camp management actions that may harm Aboriginal objects a declared Aboriginal Places.

Prevention of Cruelty to Animals Act 1979

It may be an offence under this Act if there is evidence of unreasonable/unnecessary torment associated with management activities. Adhering to welfare and conservation measures provided in Section 10.3 will ensure compliance with this Act.

Environmental Planning and Assessment Act 1979

The objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act) are to encourage proper management, development and conservation of resources, for the purposes of the social and economic welfare of the community and a better environment. It also aims to share responsibility for environmental planning between different levels of government and promote public participation in environmental planning and assessment.

The EP&A Act is administered by the NSW Department of Planning and Environment.

Development control plans under the EP&A Act should consider flying-fox camps so that planning, design and construction of future developments is appropriate to avoid future conflict.

😂 ecosure

Development given consent under Part 4 or activities assessed under Part 5 of the EP&A Act do not require licensing under the BC Act. Consent and determining authorities are required to consider the impacts of such proposals on threatened species, threatened ecological communities, and their habitats in accordance with Part 7 of the BC Act.

Where development consent under Part 4 or assessment under Part 5 of the EP&A Act is not required, a licence under the BC Act may be required to authorise the doing of an act that harms protected animals, threatened species, or threatened ecological community, or which damages the habitat of a threatened species or ecological community. This includes the doing of an act likely to harm any flying-fox or damaging the habitat of grey-headed flying-foxes.

Where a proposal to manage a flying-fox camp involves the cutting down, destruction, lopping or removal of a substantial part of a tree or other vegetation that is not covered by a development consent or assessment under Part 5 it may still require authorisation. Depending on the land on which the vegetation occurs and the character of the vegetation, it may require an approval or a permit under the *State Environmental Planning Policy* (*Vegetation in Non-Rural Areas*) 2017 (SEPP) or an approval under the *Local Land Services Act 2013*.

Where flying-fox camps occur or impact on private land, private land owners are advised to contact their local council to explore management options and the appropriate approval processes for addressing arising issues.

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

This policy aims to protect the biodiversity, and amenity values of trees, and other vegetation in non-rural areas of the State. A person must not cut down, fell, up root, kill, poison, ringbark, burn or otherwise destroy the vegetation, or lop or otherwise remove a substantial part of the vegetation to which this Policy applies without a permit granted by council, or in the case of vegetation clearing exceeding the biodiversity offset thresholds (as stated in Part 7 of the *Biodiversity Conservation Regulation 2017*), approval by the Native Vegetation Panel.

Proponents will need to consider whether the SEPP (Vegetation in Non-Rural Areas) applies to their proposal, and if any approvals under the BC Act.

Commonwealth

Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth's EPBC Act provides protection for the environment, specifically matters of national environmental significance (MNES). A referral to the Commonwealth DoE is required under the EPBC Act for any action that is likely to significantly impact on an MNES.

MNES under the EPBC Act that relate to flying-foxes include:

- · world heritage sites (where those sites contain flying-fox camps or foraging habitat)
- wetlands of international importance (where those wetlands contain flying-fox camps or foraging habitat)
- nationally threatened species and ecological communities.

The GHFF is listed as a vulnerable species under the EPBC Act, meaning it is an MNES. It is also considered to have a single national population. DoE has developed the Referral guideline for management actions in GHFF and SFF camps (DoE 2015) (the Guideline) to guide whether referral is required for actions pertaining to the GHFF.

The Guideline defines a nationally important GHFF camp as one that has either:

- contained ≥10,000 GHFF in more than one year in the last 10 years, or
- been occupied by more than 2500 GHFF permanently or seasonally every year for the last 10 years.

Provided that management at nationally important camps follows the mitigation standards below, DoE has determined that a significant impact to the population is unlikely, and referral is not likely to be required.

Referral will be required if a significant impact to any other MNES is considered likely as a result of management actions outlined in the Plan. Self-assessable criteria are available in the Significant Impact Guidelines 1.1 (DoE 2013) to assist in determining whether a significant impact is likely; otherwise consultation with DoEE will be required.

Mitigation standards

The action must not occur if the camp contains females that are in the late stages of pregnancy or have dependent young that cannot fly on their own.

The action must not occur during or immediately after climatic extremes (heat stress event, cyclone event), or during a period of significant food stress.

Disturbance must be carried out using non-lethal means, such as acoustic, visual and/or physical disturbance or use of smoke.

Disturbance activities must be limited to a maximum of 2.5 hours in any 12-hour period, preferably at or before sunrise or at sunset.

Trees are not felled, lopped or have large branches removed when flying-foxes are in or near to a tree and likely to be harmed.

The action must be supervised by a person with knowledge and experience relevant to the management of flying-foxes and their habitat, who can identify dependent young and is aware of climatic extremes and food stress events. This person must make an assessment of the relevant conditions and advise the proponent whether the activity can go ahead consistent with these standards.

The action must not involve the clearing of all vegetation supporting a nationally-important flying-fox camp. Sufficient vegetation must be retained to support the maximum number of flying-foxes ever recorded in the camp of interest.

These standards have been incorporated into mitigation measures detailed in Section 10.3. If actions cannot comply with these mitigation measures, referral for activities at nationally important camps is likely to be required.

PR3995 Kooloonbung Creek Camp Management Plan

Appendix 2 Flying-fox ecology & behaviour

Ecological role

Flying-foxes, along with some birds, make a unique contribution to ecosystem health through their ability to move seeds and pollen over long distances (Southerton et al. 2004). This contributes directly to the reproduction, regeneration and viability of forest ecosystems (DoE 2016a). It is estimated that a single flying-fox can disperse up to 60,000 seeds in one night (ELW&P 2015). Some plants, particularly Corymbia spp., have adaptations suggesting they rely more heavily on nocturnal visitors such as bats for pollination than daytime pollinators (Southerton et al. 2004).

GHFF may travel 100 km in a single night with a foraging radius of up to 50 km from their camp (McConkey et al. 2012) and have been recorded travelling over 500 km in two days between camps (Roberts et al. 2012). In comparison bees, another important pollinator, move much shorter foraging distances of generally less than one kilometre (Zurbuchen et al. 2010).

Long-distance seed dispersal and pollination makes flying-foxes critical to the long-term persistence of many plant communities (Westcott et al. 2008; McConkey et al. 2012), including eucalypt forests, rainforests, woodlands and wetlands (Roberts et al. 2006). Seeds that are able to germinate away from their parent plant have a greater chance of growing into a mature plant (EHP 2012). Long-distance dispersal also allows genetic material to be spread between forest patches that would normally be geographically isolated (Parry-Jones & Augee 1992; Eby 1991; Roberts 2006). This genetic diversity allows species to adapt to environmental change and respond to disease pathogens. Transfer of genetic material between forest patches is particularly important in the context of contemporary fragmented landscapes.

Flying-foxes are considered 'keystone' species given their contribution to the health, longevity and diversity among and between vegetation communities. These ecological services ultimately protect the long-term health and biodiversity of Australia's bushland and wetlands. In turn, native forests act as carbon sinks, provide habitat for other fauna and flora, stabilise river systems and catchments, add value to production of hardwood timber, honey and fruit (e.g. bananas and mangoes; Fujita 1991), and provide recreational and tourism opportunities worth millions of dollars each year (EHP 2012; ELW&P 2015).

PR3995 Kooloonbung Creek Camp Management Plan

Black flying-fox (Pteropus alecto)

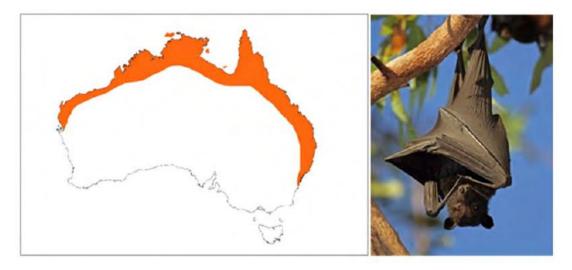


Figure 23 Black flying-fox indicative species distribution, adapted from OEH 2015a

The black flying-fox (BFF) (Figure 23) has traditionally occurred throughout coastal areas from Shark Bay in Western Australia, across Northern Australia, down through Queensland and into NSW (Churchill 2008; OEH 2015a). Since it was first described there has been a substantial southerly shift by the BFF (Webb & Tidemann 1995). This shift has consequently led to an increase in indirect competition with the threatened GHFF, which appears to be favouring the BFF (DoE 2016a).

They forage on the fruit and blossoms of native and introduced plants (Churchill 2008; OEH 2015a), including orchard species at times.

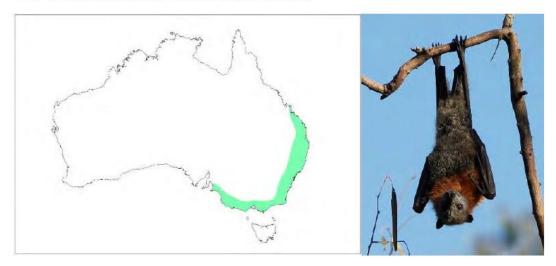
BFFs are largely nomadic animals with movement and local distribution influenced by climatic variability and the flowering and fruiting patterns of their preferred food plants. Feeding commonly occurs within 20 km of the camp site (Markus & Hall 2004).

BFFs usually roost beside a creek or river in a wide range of warm and moist habitats, including lowland rainforest gullies, coastal stringybark forests and mangroves. During the breeding season camp sizes can change significantly in response to the availability of food and the arrival of animals from other areas.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 67

Item 13.11 Attachment 1 Page 456



Grey-headed flying-fox (Pteropus poliocephalus)

Figure 24 Grey-headed flying-fox indicative species distribution, adapted from OEH 2015a

The GHFF (Figure 24) is found throughout eastern Australia, generally within 200 kilometres of the coast, from Finch Hatton in Queensland to Melbourne, Victoria (OEH 2015d). This species now ranges into South Australia and has been observed in Tasmania (DoE 2016a). It requires foraging resources and camp sites within rainforests, open forests, closed and open woodlands (including melaleuca swamps and banksia woodlands). This species is also found throughout urban and agricultural areas where food trees exist and will raid orchards at times, especially when other food is scarce (OEH 2015a).

All the GHFF in Australia are regarded as one population that moves around freely within its entire national range (Webb & Tidemann 1996; DoE 2015). GHFF may travel up to 100 kilometres in a single night with a foraging radius of up to 50 kilometres from their camp (McConkey et al. 2012). They have been recorded travelling over 500 kilometres over 48 hours when moving from one camp to another (Roberts et al. 2012). GHFF generally show a high level of fidelity to camp sites, returning year after year to the same site, and have been recorded returning to the same branch of a particular tree (SEQ Catchments 2012). This may be one of the reasons flying-foxes continue to return to small urban bushland blocks that may be remnants of historically-used larger tracts of vegetation.

The GHFF population has a generally annual southerly movement in spring and summer, with their return to the coastal forests of north-east NSW and south-east Queensland in winter (Ratcliffe 1932; Eby 1991; Parry-Jones & Augee 1992; Roberts et al. 2012). This results in large fluctuations in the number of GHFF in NSW, ranging from as few as 20% of the total population in winter up to around 75% of the total population in summer (Eby 2000). They are widespread throughout their range during summer, but in spring and winter are uncommon in the south. In autumn they occupy primarily coastal lowland camps and are uncommon inland and on the south coast of NSW (DECCW 2009).

There is evidence the GHFF population declined by up to 30% between 1989 and 2000 (Birt 2000; Richards 2000 cited in OEH 2011a). There is a wide range of ongoing threats to the survival of the GHFF, including habitat loss and degradation, deliberate destruction associated

PR3995 Kooloonbung Creek Camp Management Plan

😂 ecosure

with the commercial horticulture industry, conflict with humans, infrastructure-related mortality (e.g. entanglement in barbed wire fencing and fruit netting, power line electrocution, etc.) and competition and hybridisation with the BFF (DECCW 2009). For these reasons it is listed as vulnerable to extinction under NSW and federal legislation (see Section 3).



Little red flying-fox (Pteropus scapulatus)

Figure 25 Little red flying-fox indicative species distribution, adapted from OEH 2015a

The little red flying-fox (LRFF) (Figure 25) is widely distributed throughout northern and eastern Australia, with populations occurring across northern Australia and down the east coast into Victoria.

The LRFF forages almost exclusively on nectar and pollen, although will eat fruit at times and occasionally raids orchards (Australian Museum 2010). LRFF often move sub-continental distances in search of sporadic food supplies. The LRFF has the most nomadic distribution, strongly influenced by availability of food resources (predominantly the flowering of eucalypt species) (Churchill 2008), which means the duration of their stay in any one place is generally very short.

Habitat preferences of this species are quite diverse and range from semi-arid areas to tropical and temperate areas, and can include sclerophyll woodland, melaleuca swamplands, bamboo, mangroves and occasionally orchards (IUCN 2015). LRFF are frequently associated with other *Pteropus* species. In some colonies, LRFF individuals can number many hundreds of thousands and they are unique among *Pteropus* species in their habit of clustering in dense bunches on a single branch. As a result, the weight of roosting individuals can break large branches and cause significant structural damage to roost trees, in addition to elevating soil nutrient levels through faecal material (SEQ Catchments 2012).

Throughout its range, populations within an area or occupying a camp can fluctuate widely. There is a general migration pattern in LRFF, whereby large congregations of over one million individuals can be found in northern camp sites (e.g. Northern Territory, North Queensland) during key breeding periods (Vardon & Tidemann 1999). LRFF travel south to visit the coastal areas of south-east Queensland and NSW during the summer months. Outside these periods

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 69

Item 13.11 Attachment 1 Page 458

LRFF undertake regular movements from north to south during winter–spring (July–October) (Milne & Pavey 2011).

Reproduction

Black and grey-headed flying-foxes

Males initiate contact with females in January with peak conception occurring around March to April/May; this mating season represents the period of peak camp occupancy (Markus 2002). Young (usually a single pup) are born six months later from September to November (Churchill 2008). The birth season becomes progressively earlier, albeit by a few weeks, in more northerly populations (McGuckin & Blackshaw 1991), however out of season breeding is common with births occurring later in the year.

Young are highly dependent on their mother for food and thermoregulation. Young are suckled and carried by the mother until approximately four weeks of age (Markus & Blackshaw 2002). At this time, they are left at the camp during the night in a crèche until they begin foraging with their mother in January and February (Churchill 2008) and are usually weaned by six months of age around March. Sexual maturity is reached at two years of age with a life expectancy up to 20 years in the wild (Pierson & Rainey 1992).

As such, the critical reproductive period for GHFF is generally from August (when females are in final trimester) to the end of peak conception around April. Dependent pups are usually present from September to March (Figure 26).

Little red flying-fox

The LRFF breeds approximately six months out of phase with the other flying-foxes. Peak conception occurs around October to November, with young born between March and June (McGuckin & Blackshaw 1991; Churchill 2008) (Figure 26). Young are carried by their mother for approximately one month then left at the camp while she forages (Churchill 2008). Suckling occurs for several months while young are learning how to forage. LRFF generally birth and rear young in temperate areas (rarely in NSW).

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
GHFF				•	-		-					
BFF				•								
LRFF												

Peak conception Final trimester Peak birthing Crèching (young left at roost) Lactation

Figure 26 Indicative flying-fox reproductive cycle.

Note that LRFF rarely birth and rear young in NSW. The breeding season of all species is variable between years and location, and expert assessment is required to accurately determine phases in the breeding cycle and inform appropriate management timing.

PR3995 Kooloonbung Creek Camp Management Plan

Heat stress events

Flying-foxes suffer from heat stress when the ambient temperature exceeds the physiological limits flying-foxes can endure for maintaining a comfortable body temperature (Bishop 2014). Flying-foxes are susceptible to heat stress due to their inability to sweat (Snoyman et al 2012), therefore they need to expend energy on cooling mechanisms such as fanning. BFF are considered to be more susceptible to HSE than GHFF due to the southern expansion of their range with temperature extremes increasing in severity with latitude in eastern Australia (Welbergen et al 2008).

ecosure.com.au | 71

Item 13.11 Attachment 1 Page 460

Appendix 3 Protected Matters

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 72

Item 13.11 Attachment 1 Page 461



EPBC Act Protected Matters Report

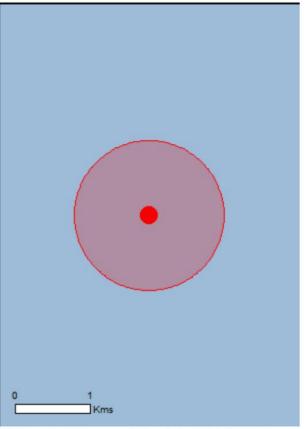
This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 16/11/18 16:27:53

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010



Item 13.11 Attachment 1

Page 462

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	52
Listed Migratory Species:	57

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	2
Commonwealth Heritage Places:	None
Listed Marine Species:	61
Whales and Other Cetaceans:	1
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	None
Regional Forest Agreements:	1
Invasive Species:	35
Nationally Important Wetlands:	None
<u>Key Ecological Features (Marine)</u>	None

Item 13.11 Attachment 1

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities	[Resource Information]		
For threatened ecological communities where the distril plans, State vegetation maps, remote sensing imagery community distributions are less well known, existing ve produce indicative distribution maps.	and other sources. Where	threatened ecological	
Name	Status	Type of Presence	
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area	
Listed Threatened Species		[Resource Information]	
Name	Status	Type of Presence	
Birds			
Anthochaera phrygia			
Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	
Botaurus poiciloptilus			
Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	
Calidris canutus			
Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	
Charadrius mongolus			
Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	
Dasyornis brachypterus			
Eastern Bristlebird [533]	Endangered	Species or species habitat likely to occur within area	
Diomedea antipodensis			
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	
Diomedea antipodensis gibsoni			
Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	
Diomedea epomophora	V tule e ve k l -		
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur	

<u>Diomedea exulans</u>

Wandering Albatross [89223]

Vulnerable

Foraging, feeding or related behaviour likely to occur within area

within area

Item 13.11 Attachment 1

Page 464

Namo	Status	Tune of Dressner
Name Diomedea sanfordi	Status	Type of Presence
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Erythrotriorchis radiatus		
Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
<u>Grantiella picta</u> Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area
<u>Limosa lapponica baueri</u> Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat likely to occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pachyptila turtur_subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area
<u>Rostratula australis</u> Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
<u>Thalassarche bulleri</u> Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<u>Thalassarche eremita</u> Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area

may occur within area

Thalassarche impavida

Campbell Albatross, Campbell Black-browed Albatross Vulnerable [64459]

Thalassarche melanophris Black-browed Albatross [66472]

Vulnerable

Species or species habitat may occur within area

Species or species habitat may occur within area

<u>Thalassarche salvini</u> Salvin's Albatross [64463]

Vulnerable

Foraging, feeding or related behaviour likely to occur within area

Fish

Item 13.11 Attachment 1

Name	Status	Type of Presence
Epinephelus daemelii	Status	Type of Fresence
Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area
Frogs		
Litoria aurea		
Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area
Insects		
Argynnis hyperbius inconstans		
Australian Fritillary [88056]	Critically Endangered	Species or species habitat likely to occur within area
Mammals		
Chalinolobus dwyeri		
Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area
Dasyurus maculatus maculatus (SE mainland populati	<u>on)</u>	
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area
Petauroides volans		
Greater Glider [254]	Vulnerable	Species or species habitat likely to occur within area
Phascolarctos cinereus (combined populations of Qld,	NSW and the ACT)	
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
Potorous tridactylus tridactylus		
Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat likely to occur within area
Pseudomys novaehollandiae		
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area
Pteropus poliocephalus		
Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area
Plants		
Acronychia littoralis Scented Acronychia [8582]	Endangered	Species or species habitat likely to occur within area
<u>Allocasuarina thalassoscopica</u> [21927]	Endangered	Species or species habitat known to occur within area
<u>Cryptostylis hunteriana</u> Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area
<u>Euphrasia arguta</u> [4325]	Critically Endangered	Species or species habitat may occur within area

Macadamia integrifolia

Macadamia Nut, Queensland Nut Tree, Smoothshelled Macadamia, Bush Nut, Nut Oak [7326]

Melaleuca biconvexa

Biconvex Paperbark [5583]

Vulnerable

Species or species habitat may occur within area

Vulnerable

Species or species habitat may occur within area

Phaius australis Lesser Swamp-orchid [5872]

Endangered

Species or species habitat may occur within area

Item 13.11 Attachment 1

Page 466

Name	Status	Type of Presence
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat may occur within area
<u>Thesium australe</u> Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
<u>Caretta caretta</u> Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea		
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
<u>Eretmochelys imbricata</u> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
Natator depressus		
Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
Listed Migratory Species		[Resource Information
* Species is listed under a different scientific name o	n the EPBC Act - Threate	· · · · · · · · · · · · · · · · · · ·
Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus		
Common Noddy [825]		Species or species habitat likely to occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Calonectris leucomelas		
Streaked Shearwater [1077]		Species or species habitat may occur within area
Diomedea antipodensis		
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora		
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans	Vulnorabla	Ecrogica fooding or related
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related
		behaviour likely to occur within area
Diomedea sanfordi	Endongorod	

Northern Royal Albatross [64456]

Endangered

Foraging, feeding or related behaviour likely to occur within area

Species or species habitat known to occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within area

> Item 13.11 Attachment 1

Page 467

Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]

Fregata minor Great Frigatebird, Greater Frigatebird [1013]

Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]

Endangered

Name	Threatened	Type of Presence
Macronectes halli		.)
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<u>Sternula albifrons</u> Little Tern [82849]		Species or species habitat may occur within area
<u>Thalassarche bulleri</u> Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
<u>Thalassarche cauta</u> Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
<u>Thalassarche eremita</u> Chatham Albatross [64457]	Endangered	Species or species habitat may occur within area
<u>Thalassarche impavida</u> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<u>Thalassarche salvini</u> Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<u>Thalassarche steadi</u> White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
<u>Caretta caretta</u> Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Dugong dugon Dugong [28]		Species or species habitat may occur within area
<u>Eretmochelys imbricata</u> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<u>Lamna nasus</u> Porbeagle, Mackerel Shark [83288]		Species or species habitat

Manta alfredi

Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]

Manta birostris

Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]

Natator depressus Flatback Turtle [59257]

Vulnerable

may occur within area

Species or species habitat may occur within area

Species or species habitat may occur within area

Breeding likely to occur within area

Item 13.11 Attachment 1

Name	Threatened	Type of Presence
<u>Sousa chinensis</u>		
Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus		
Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
<u>Hirundapus caudacutus</u>		
White-throated Needletail [682]		Species or species habitat known to occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus		
Spectacled Monarch [610]		Species or species habitat known to occur within area
<u>Myiagra cyanoleuca</u>		
Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons		
Rufous Fantail [592]		Species or species habitat known to occur within area
Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat known to occur within area
Arenaria interpres		
Ruddy Turnstone [872]		Foraging, feeding or related behaviour known to occur within area
<u>Calidris acuminata</u>		On a size on an a size habitat
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<u>Calidris canutus</u>		
Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<u>Calidris melanotos</u>		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Calidris ruficollis		
Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area
Charadrius bicinctus		

Double-banded Plover [895]

<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]

Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]

Gallinago megala Swinhoe's Snipe [864] Endangered

Foraging, feeding or related behaviour known to occur within area

Foraging, feeding or related behaviour known to occur within area

Foraging, feeding or related behaviour may occur within area

Foraging, feeding or related behaviour likely

Item 13.11 Attachment 1

Name	Threatened	Type of Presence
		to occur within area
<u>Gallinago stenura</u>		
Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area
<u>Limosa lapponica</u>		
Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<u>Numenius minutus</u>		
Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area
Numenius phaeopus		
Whimbrel [849]		Foraging, feeding or relate behaviour known to occur within area
Pandion haliaetus		
Osprey [952]		Breeding known to occur within area
Pluvialis fulva		
Pacific Golden Plover [25545]		Foraging, feeding or related behaviour known to occur within area
Pluvialis squatarola		
Grey Plover [865]		Foraging, feeding or related behaviour known to occur within area
Tringa brevipes		Fananing, faading, angelata
Grey-tailed Tattler [851]		Foraging, feeding or related behaviour known to occur within area
Tringa nebularia		One share an end of the life of
Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Xenus cinereus		
Terek Sandpiper [59300]		Foraging, feeding or relate behaviour known to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land

[Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name

Commonwealth Land - Australian Postal Commission Commonwealth Land - Australian Telecommunications Commission

Listed Marine Species

[Resource Information]

* Species is listed under a different estentific name on the FDPC Act. Threatened Species list

opecies is listed under a unerent scientific	name on the EFDC Act - Thea	aleneu opecies list.
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat known to occur within area
Anous stolidus		

Common Noddy [825]

Species or species habitat likely to occur within area

Item 13.11 Attachment 1

Name	Threatened	Type of Presence
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<u>Ardea alba</u>		
Great Egret, White Egret [59541]		Species or species habitat known to occur within area
<u>Ardea ibis</u>		
Cattle Egret [59542]		Species or species habitat may occur within area
Arenaria interpres		
Ruddy Turnstone [872]		Foraging, feeding or related behaviour known to occur within area
<u>Calidris acuminata</u>		
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<u>Calidris canutus</u>		
Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<u>Calidris melanotos</u>		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Calidris ruficollis		
Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area
Calonectris leucomelas		
Streaked Shearwater [1077]		Species or species habitat may occur within area
Charadrius bicinctus		
Double-banded Plover [895]		Foraging, feeding or related behaviour known to occur within area
Charadrius mongolus		
Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area
Charadrius ruficapillus		
Red-capped Plover [881]		Foraging, feeding or related behaviour known to occur within area
Diomedea antipodensis	Vulnerable	Forgaing fooding or related
Antipodean Albatross [64458] Diomedea epomophora	vuinerable	Foraging, feeding or related behaviour likely to occur within area
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related
		behaviour likely to occur

Diomedea exulans

Wandering Albatross [89223]

Diomedea gibsoni Gibson's Albatross [64466]

Diomedea sanfordi Northern Royal Albatross [64456]

Vulnerable*

Vulnerable

Endangered

within area

Foraging, feeding or related behaviour likely to occur within area

Foraging, feeding or related behaviour likely to occur within area

Foraging, feeding or related behaviour likely to occur within area

> Item 13.11 Attachment 1

Name	Threatened	Type of Presence
Fregata ariel		
Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area
Fregata minor		
Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area
Gallinago hardwickii		
Latham's Snipe, Japanese Snipe [863]		Foraging, feeding or relate behaviour may occur withir area
Gallinago megala		
Swinhoe's Snipe [864]		Foraging, feeding or relate behaviour likely to occur within area
Gallinago stenura		Forgeing fooding or relate
Pin-tailed Snipe [841]		Foraging, feeding or relate behaviour likely to occur within area
Haliaeetus leucogaster		
White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Heteroscelus brevipes		
Grey-tailed Tattler [59311]		Foraging, feeding or relate behaviour known to occur within area
<u>Hirundapus caudacutus</u>		
White-throated Needletail [682]		Species or species habitat known to occur within area
Limosa lapponica		
Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Macronectes giganteus		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Merops ornatus		_
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat known to occur within area
Monarcha trivirgatus		
Spectacled Monarch [610]		Species or species habitat known to occur within area
Myiagra cyanoleuca		
Satin Flycatcher [612]		Species or species habitat known to occur within area

Numenius madagascariensis

Eastern Curlew, Far Eastern Curlew [847]

Critically Endangered

Species or species habitat known to occur within area

known to occur within area

Numenius minutus Little Curlew, Little Whimbrel [848]

Numenius phaeopus Whimbrel [849] Foraging, feeding or related behaviour likely to occur within area

Foraging, feeding or related behaviour known to occur within area

> Item 13.11 Attachment 1

Name	Threatened	Type of Presence
Pachyptila turtur		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Fairy Prion [1066]		Species or species habitat known to occur within area
Pandion haliaetus		
Osprey [952]		Breeding known to occur
Pluvialis fulva		within area
Pacific Golden Plover [25545]		Foraging, feeding or related behaviour known to occur within area
Pluvialis squatarola		Earaging fooding or rolato
Grey Plover [865]		Foraging, feeding or related behaviour known to occur within area
Rhipidura rufifrons Rufaua Fantail (502)		Spaciae or opening hebitat
Rufous Fantail [592]		Species or species habitat known to occur within area
<u>Rostratula benghalensis (sensu lato)</u>		
Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
Sterna albifrons		
∟ittle Tern [813]		Species or species habitat may occur within area
Thalassarche bulleri		
Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta		
Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
		····· · , ······························
<u>Thalassarche eremita</u> Chatham Albatross [64457]	Endangered	Spaciae or energies habitat
Shanani Aivanose [04407]	Lindangered	Species or species habitat may occur within area
Thalassarche impavida		
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche salvini		
Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or relate behaviour likely to occur within area
<u>Thalassarche sp. nov.</u> Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
Thalassarche steadi	Vulnovski s*	
White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or relate behaviour likely to occur within area

<u>Tringa nebularia</u>

Common Greenshank, Greenshank [832]

Xenus cinereus Terek Sandpiper [59300] Species or species habitat known to occur within area

within area

Foraging, feeding or related behaviour known to occur within area

Species or species habitat may occur within area

Reptiles

Mammals Dugong dugon

Dugong [28]

Item 13.11 Attachment 1

Name	Threatened	Type of Presence
Caretta caretta	meatened	Type of Presence
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
<u>Eretmochelys imbricata</u> Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
<u>Natator depressus</u> Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area
Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Sousa chinensis		
Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area

Extra Information

Regional Forest Agreements	[Resource Information]
Note that all areas with completed RFAs have been incl	uded.
Name	State
North East NSW RFA	New South Wales
Invasive Species	[Resource Information]

Invasive Species

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard [974]		Species or species habitat

Carduelis carduelis European Goldfinch [403]

Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]

Lonchura punctulata Nutmeg Mannikin [399]

Species or species habitat likely to occur within area

likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur

> Item 13.11 Attachment 1

Name	Status	Type of Presence
	Sidius	Type of Presence within area
Passer domesticus		
House Sparrow [405]		Species or species habitat likely to occur within area
Pycnonotus jocosus Red-whiskered Bulbul [631]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Frogs		
Rhinella marina Cane Toad [83218]		Species or species habitat known to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Vulpes vulpes Red Fox, Fox [18]

Black Rat, Ship Rat [84]

Rattus rattus

Plants

Alternanthera philoxeroides Alligator Weed [11620]

Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Item 13.11 Attachment 1

lame	Status Type of Presence
sparagus aethiopicus	
Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus 62425]	Species or species habitat likely to occur within area
sparagus plumosus	
limbing Asparagus-fern [48993]	Species or species habitat likely to occur within area
abomba caroliniana	
Cabomba, Fanwort, Carolina Watershield, Fish Grass, Vashington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171] Chrysanthemoides monilifera	Species or species habitat likely to occur within area
itou Bush, Boneseed [18983]	Species or species habitat likely to occur within area
Chrysanthemoides monilifera subsp. rotundata	
Bitou Bush [16332]	Species or species habitat likely to occur within area
ichhornia crassipes	
Vater Hyacinth, Water Orchid, Nile Lily [13466]	Species or species habitat likely to occur within area
Senista sp. X Genista monspessulana	
Broom [67538]	Species or species habitat may occur within area
antana camara	
antana, Common Lantana, Kamara Lantana, Large- eaf Lantana, Pink Flowered Lantana, Red Flowered antana, Red-Flowered Sage, White Sage, Wild Sage 10892] Pinus radiata	Species or species habitat likely to occur within area
Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]	Species or species habitat may occur within area
Rubus fruticosus aggregate	
Blackberry, European Blackberry [68406]	Species or species habitat likely to occur within area
Sagittaria platyphylla	
oelta Arrowhead, Arrowhead, Slender Arrowhead 68483]	Species or species habitat likely to occur within area
Salvinia molesta	
alvinia, Giant Salvinia, Aquarium Watermoss, Kariba Veed [13665]	Species or species habitat likely to occur within area
enecio madagascariensis	
ireweed, Madagascar Ragwort, Madagascar Groundsel [2624]	Species or species habitat likely to occur within area

Item 13.11 Attachment 1

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-31.436161 152.908569

Item 13.11 Attachment 1

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales -Department of Environment and Primary Industries, Victoria -Department of Primary Industries, Parks, Water and Environment, Tasmania -Department of Environment, Water and Natural Resources, South Australia -Department of Land and Resource Management, Northern Territory -Department of Environmental and Heritage Protection, Queensland -Department of Parks and Wildlife, Western Australia -Environment and Planning Directorate, ACT -Birdlife Australia -Australian Bird and Bat Banding Scheme -Australian National Wildlife Collection -Natural history museums of Australia -Museum Victoria -Australian Museum -South Australian Museum -Queensland Museum -Online Zoological Collections of Australian Museums -Queensland Herbarium -National Herbarium of NSW -Royal Botanic Gardens and National Herbarium of Victoria -Tasmanian Herbarium -State Herbarium of South Australia -Northern Territory Herbarium -Western Australian Herbarium -Australian National Herbarium, Canberra -University of New England -Ocean Biogeographic Information System -Australian Government, Department of Defence Forestry Corporation, NSW -Geoscience Australia -CSIRO -Australian Tropical Herbarium, Cairns -eBird Australia -Australian Government – Australian Antarctic Data Centre -Museum and Art Gallery of the Northern Territory -Australian Government National Environmental Science Program -Australian Institute of Marine Science -Reef Life Survey Australia -American Museum of Natural History -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania -Tasmanian Museum and Art Gallery, Hobart, Tasmania -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

© Commonwealth of Australia Department of the Environment GPO Box 787 Canberra ACT 2601 Australia +61 2 6274 1111

> Item 13.11 Attachment 1

ecosure 😂

Appendix 4 Human and animal health

Human and animal health

Flying-foxes, like many animals, carry pathogens that may pose human health risks. Many of these are viruses which cause only asymptomatic infections in flying-foxes themselves but may cause significant disease in humans or other animals that are exposed. In Australia, the most well-defined of these include Australian bat lyssavirus (ABLV), Hendra virus (HeV) and Menangle virus. Specific information on these viruses is provided below.

Excluding those people whose occupations require contact with bats, such as wildlife carers and vets, human exposure to ABLV, HeV and Menangle virus, their transmission and frequency of infection is extremely rare. HeV infection in humans requires transfer from an infected intermediate equine host (i.e. close contact with an infected horse) and spread of the virus directly from bats to humans has not been reported.

These diseases are also easily prevented through vaccination, personal protective equipment, safe flying-fox handling (by trained and vaccinated personnel only) and appropriate horse husbandry. Therefore, despite the fact that human infection with these agents can be fatal, the probability of infection is extremely low, and the overall public health risk is also judged to be low (Qld Health 2016).

Disease and flying-fox management

A recent study at several camps before, during and after disturbance (Edson et al. 2015) showed no statistical association between HeV prevalence and flying-fox disturbance. However, the consequences of chronic or ongoing disturbance and harassment and its effect on HeV infection were not within the scope of the study and are therefore unknown.

The effects of stress are linked to increased susceptibility and expression of disease in both humans (AIHW 2012) and animals (Henry & Stephens-Larson 1985; Aich et. al. 2009), including reduced immunity to disease.

Therefore, it can be assumed that management actions which may cause stress (e.g. dispersal), particularly over a prolonged period or at times where other stressors are increased (e.g. food shortages, habitat fragmentation, etc.), are likely to increase the susceptibility and prevalence of disease within the flying-fox population, and consequently the risk of transfer to humans.

Furthermore, management actions or natural environmental changes may increase disease risk by:

- forcing flying-foxes into closer proximity to one another, increasing the probability of disease transfer between individuals and within the population.
- resulting in abortions and/or dropped young if inappropriate management methods are used during critical periods of the breeding cycle. This will increase the

ecosure 😂

likelihood of direct interaction between flying-foxes and the public, and potential for disease exposure.

adoption of inhumane methods with potential to cause injury which would increase the likelihood of the community coming into contact with injured/dying or deceased flying-foxes.

The potential to increase disease risk should be carefully considered as part of a full risk assessment when determining the appropriate level of management and the associated mitigation measures required.

Australian bat lyssavirus

ABLV is a rabies-like virus that may be found in all flying-fox species on mainland Australia. It has also been found in an insectivorous microbat and it is assumed it may be carried by any bat species. The probability of human infection with ABLV is very low with less than 1% of the flying-fox population being affected (DPI 2013) and transmission requiring direct contact with an infected animal that is secreting the virus. In Australia three people have died from ABLV infection since the virus was identified in 1996 (NSW Health 2013).

Domestic animals are also at risk if exposed to ABLV. In 2013, ABLV infections were identified in two horses (Shinwari et al. 2014). There have been no confirmed cases of ABLV in dogs in Australia; however, transmission is possible (McCall et al. 2005) and consultation with a veterinarian should be sought if exposure is suspected.

Transmission of the virus from bats to humans is through a bite or scratch but may have potential to be transferred if bat saliva directly contacts the eyes, nose, mouth or broken skin. ABLV is unlikely to survive in the environment for more than a few hours, especially in dry environments that are exposed to sunlight (NSW Health 2013).

Transmission of closely related viruses suggests that contact or exposure to bat faeces, urine or blood does not pose a risk of exposure to ABLV, nor does living, playing or walking near bat roosting areas (NSW Health 2013).

The incubation period in humans is assumed similar to rabies and variable between two weeks and several years. Similarly, the disease in humans presents essentially the same clinical picture as classical rabies. Once clinical signs have developed the infection is invariably fatal. However, infection can easily be prevented by avoiding direct contact with bats (i.e. handling). Pre-exposure vaccination provides reliable protection from the disease for people who are likely to have direct contact with bats, and it is generally a mandatory workplace health and safety requirement that all persons working with bats receive pre-vaccination and have their level of protection regularly assessed. Like classical rabies, ABLV infection in humans also appears to be effectively treated using post-exposure vaccination and so any person who suspects they have been exposed should seek immediate medical treatment. Post-exposure vaccination is usually ineffective once clinical manifestations of the disease have commenced.

If a person is bitten or scratched by a bat they should:

wash the wound with soap and water for at least five minutes (do not scrub)

contact their doctor immediately to arrange for post-exposure vaccinations.

If bat saliva contacts the eyes, nose, mouth or an open wound, flush thoroughly with water and seek immediate medical advice.

Hendra virus

Flying-foxes are the natural host for Hendra virus (HeV), which can be transmitted from flyingfoxes to horses. Infected horses sometimes amplify the virus and can then transmit it to other horses, humans and on two occasions, dogs (DPI 2014). There is no evidence that the virus can be passed directly from flying-foxes to humans or to dogs (AVA 2015). Clinical studies have shown cats, pigs, ferrets and guinea pigs can carry the infection (DPI 2015a).

Although the virus is periodically present in flying-fox populations across Australia, the likelihood of horses becoming infected is low and consequently human infection is extremely rare. Horses are thought to contract the disease after ingesting forage or water contaminated primarily with flying-fox urine (CDC 2014).

Humans may contract the disease after close contact with an infected horse. HeV infection in humans presents as a serious and often fatal respiratory and/or neurological disease and there is currently no effective post-exposure treatment or vaccine available for people. The mortality rate in horses is greater than 70% (DPI 2014). Since 1994, 81 horses have died, and four of the seven people infected with HeV have lost their lives (DPI 2014).

Previous studies have shown that HeV spillover events have been associated with foraging flying-foxes rather than camp locations. Therefore, risk is considered similar at any location within the range of flying-fox species and all horse owners should be vigilant. Vaccination of horses can protect horses and subsequently humans from infection (DPI 2014), as can appropriate horse husbandry (e.g. covering food and water troughs, fencing flying-fox foraging trees in paddocks, etc.).

Although all human cases of HeV to date have been contracted from infected horses and direct transmission from bats to humans has not yet been reported, particular care should be taken by select occupational groups that could be uniquely exposed. For example, persons who may be exposed to high levels of HeV via aerosol of heavily contaminated substrate should consider additional PPE (e.g. respiratory filters), and potentially dampening down dry dusty substrate.

Appendix 5 Survey results

The highest proportion of respondents were not aware of the community engagement for the development of the 'Kooloonbung Creek Nature Park Plan of Management' in 2012 (17) while the remaining had participated (11) or did know about it but had not participated (15) (Figure 1).

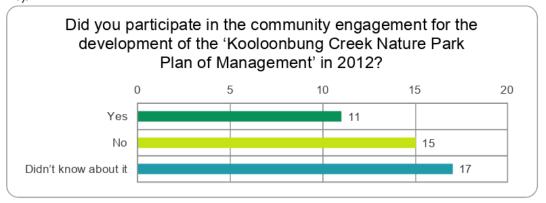


Figure 27 Responses regarding participation in the development of 'Kooloonbung Creek Nature Park Plan of Management' in 2012

Survey responses indicated that the majority were aware that the camp constitutes a Nationally Important Camp providing critical habitat (69.7% answered yes, 11.6% responded no and 18.6% did not care) (Figure 2).

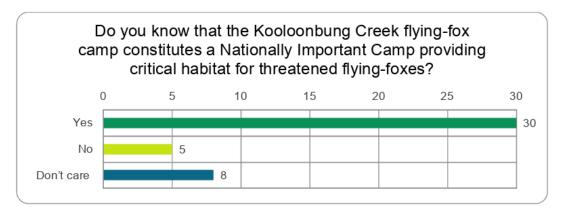


Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp

The majority of respondents were aware that flying-foxes are a protected native species (39, 92.8%) while the remaining didn't care (Figure 3).

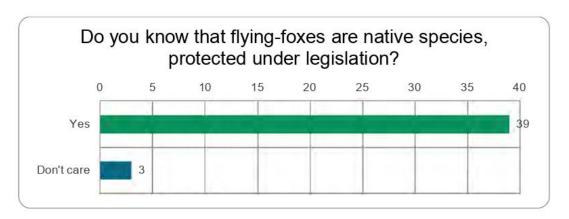


Figure 29 Knowledge of the status of flying-foxes

Similar results were provided regarding the species' role in long distance seed dispersal and pollination (86% answered yes, 6.9% responded no, 6.9% didn't care or understand the question). The majority of respondents are aware that disease can be prevented by not handling flying-foxes and through appropriate horse husbandry (83.3%), with the remaining answering no (Figure 4). When asked if the respondents knew that the GHFF is the main species of flying-fox that uses the Koolonbung creek camp site, 60.9% responded positively, while 21.9% did not know, and 17.1% didn't care.

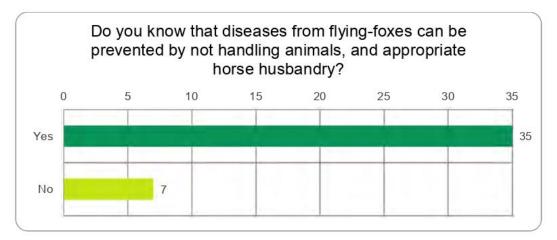


Figure 30 Disease from flying-foxes

Survey results indicated a majority of respondents held positive feelings towards the protection of flying-foxes (62.8%), with 37.2% indicating that it is not important to them (Figure 5).

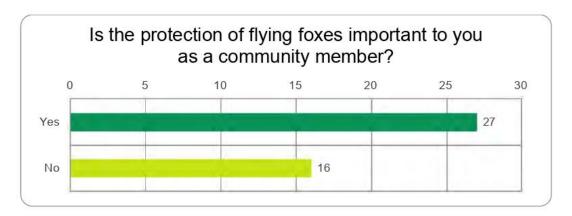


Figure 31 Protection of flying-foxes

54.7% of respondents indicated that their experience or interaction with flying-foxes in the Port Macquarie area has been negative, 35.7% responded positively and 1% were neither positive nor negative (Figure 6).

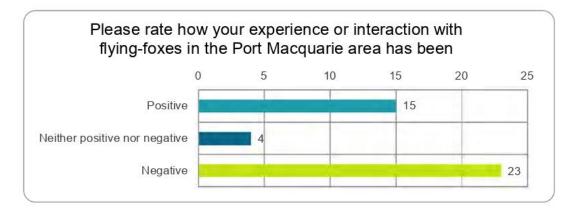


Figure 32 Experience with flying-foxes

Respondents who indicated that they are negatively impacted (23), were being most impacted around the home. These respondents identified the majority of impacts related to smell, excrement and noise (Figure 7). Twelve respondents (who selected 'other' in the survey) added 'quality of life', 'constant health issues', 'isolation due to family and friends not wanting to visit' and 'destruction of habitat for other species i.e. small birds' being of concern.

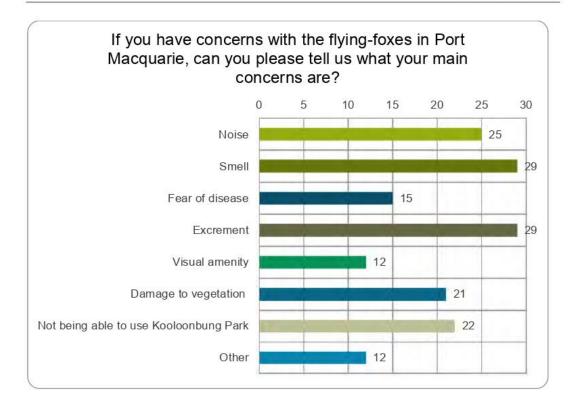


Figure 33 Main concerns about flying-foxes

In relation to costs associated with any management actions, the majority of respondents answered that is was moderately important that it was of low cost to ratepayers (48%), while 33% considered this not at all important, and 19% responded as very important (Figure 8).

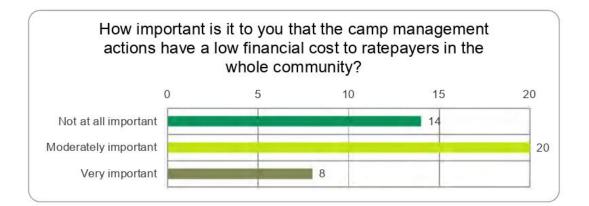


Figure 34 Financial impacts to ratepayers

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 89

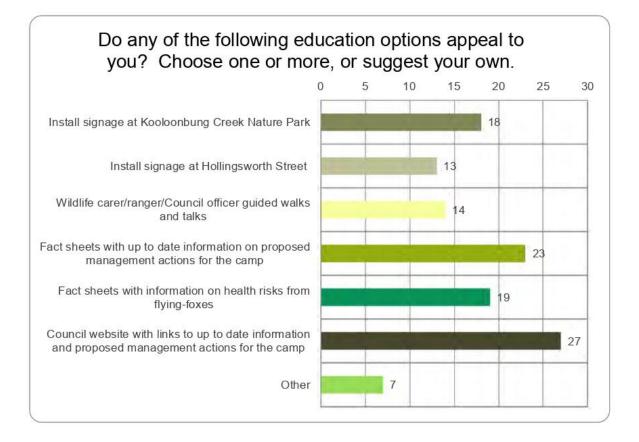


Figure 35 Educational options

Respondents were asked to choose one or more education options, or suggest their own. 'Council websites with links to up to date information and proposed management actions for the camp' received the highest number of votes (64%). The second-most highly rated option was 'fact sheets with up to date information on proposed management actions for the camp' (54%). All other options received similar ranking priority (Figure 9). Other suggested options were, 'action to reduce noise/removing the bats', 'cull a proportion of the flying-fox population' and for 'Friends of Kooloonbung Creek Nature Park' (FKCNP) to take guided walks through the park.

The majority of the respondents identified as 'not living within 100 metres of the camp' (67.4%). All (14) respondents answered 'no' when asked if more information was required concerning plants that may be attracting flying-foxes to their backyard. Of those 14 respondents, when asked 'Would receiving service subsidies help in reducing flying-fox impacts on your property if funding assistance was provided in some way?'; 9 answered 'yes' and 5 responded 'no'.

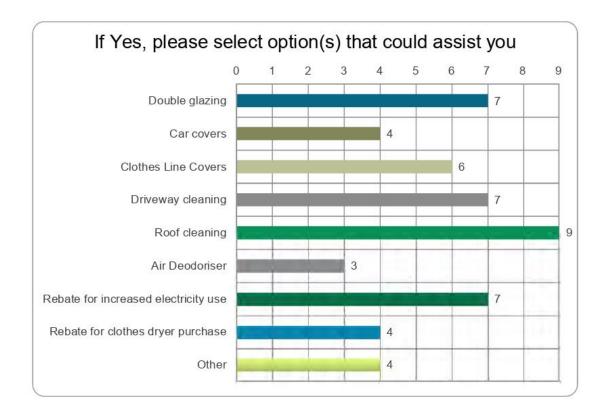


Figure 36 Management options to assist

In regards to which options could assist residents if funding assistance was provided in some way; roof cleaning had the most selections (9 selections from each of the 9 respondents) (Figure 10). The next rated options after roof cleaning were 'double glazing', 'driveway cleaning' and 'rebate for increased electricity use' with 7 votes each. Four respondents (who selected 'other' in the survey) added water rebate for hosing off outdoor areas, rebate for air-conditioner installation or solar panels to reduce electricity costs when residences must be closed due to odour/noise and rebate for regular cleaning of solar panels.

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 91

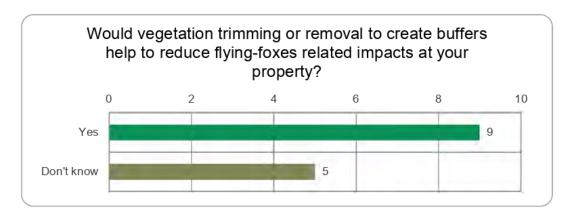


Figure 37 Buffer creation to reduce flying-fox related impacts

The majority of respondents (64.3%) answered 'yes' to would vegetation trimming or removal to create buffers would help to reduce flying-fox related impacts at their property (Figure 11). Nine respondents (who selected 'yes') added what street they live on to the survey. Addresses included; Lake Road, Glebe Close, Fischer Street and Anita Crescent.

Respondents who indicated that they are interested in learning more about management options (39), were most interested in managing impacts to amenities. Respondents selected 'improving the boardwalk to prevent slipping' as the most preferred management option (Figure 12). Nineteen respondents were interested to learn about canopy-mounted sprinklers.

Fourteen respondents (who selected 'other' in the survey) added "relocate the colony", "change conditions to move flying-fox elsewhere", "clear roosting trees along the cutting path through Kooloonbung so that the walkway and bridge can be used without the fear of slipping in excrement", "replant flying-fox roosts trees to replace those lost during the nudging process", "cull numbers of flying-fox", "minimise the camp size", "relocate the camp to state forests and national parks", "clear the area of trees due to bushfire concerns", "smoke bombs, low humming motors" and "develop an eradication program".

ecosure.com.au | 92

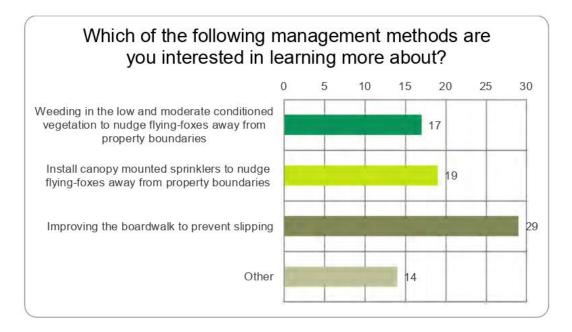


Figure 39 Management options that participants are interested in learning

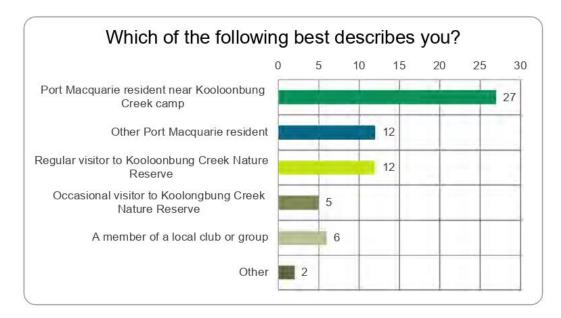


Figure 38 Survey distribution.

'Port Macquarie resident near Kooloonbung Creek camp' was the highest response group in the survey (62.8%) (Figure 13). 62.8% of participants were aged 50-75, 18.6% were 36-50, 13.9% were 76+ and 18-35 and >18 were both 2.3% of the participants.

PR3995 Kooloonbung Creek Camp Management Plan

Table 9 Responses to question; Do any of the proposed management options not appeal to you? And if so which ones and for what reason?

Response type	Respondents comments
Remove flying-fox	"Just get rid of the problem".
Remove flying-fox	"NONE - get rid of them. All of these management options cost money and don't solve the problem".
Remove flying-fox	"Rebates for water, double glazing, etc. I want population reduced and none of the options listed will achieve that".
Remove flying-fox	"Weeding - can't see how this helps unless it involves removal of future roosting & paper bark tree seedlings".
Remove flying-fox	"I would to have them removed as the smell is repulsive".
Remove flying-fox	"In Kooloonbung there are 2 endangered things. The bat camp & the rainforest, & only one of those species can be moved & or minimised. One of your options mystifies me, what do you mean by weeding ?? To my mind bats are not what you would classify as ground foragers".
Remove flying-fox	"None of the service subsidies required if bat colony persuaded to live elsewhere. Financial grants, if I understand correctly, were made to combat the problems we have. Why was no action taken? Personally, I think incompetency at a higher level should not be left unuttered. Trimming, pruning to create a buffer would only hasten the demise of our beautiful arboreal worldWe don't need to axe the rain forest the bats execute the demise effortlessly".
Remove flying-fox	"I lived in Albury before moving to Port Macquarie. We had a colony of bats move into the Botanic Gardens. The council was given permission to move the bats to another location. This was done by making a lot of noise each morning with power tools, banging tin lids etc. The bats moved to another location that was not near any homes. I feel that the people who live near the bats must find the smell unbearable".
Remove flying-fox	"Sydney moved their population along, we can do the same, within the guidelines set out by N.S.W Gov. We do not propose to killing the bats, just moving them on to a less populated area".
Remove flying-fox / cull	"as above remove them completely or cull them. The national parks condone culling of brumbies and we are allowed to cull Kangaroos why is the fox different? they have a far worse impact".
Remove flying-fox / cull	"Don't see how it will work as the smell and flying foxes will still be there with the above options".
Remove flying-fox / cull	"Remove them completely. Thats it - get them out of there".
Remove flying-fox / cull	"No none of these address the real issue. Management is not on my agenda! Eradication is is is feasible and achievable!".
Management method	"This community problem has been well known for many years and the time has come for proactive responses. Council already has the views of 10,000 residents who have Petitioned for action. This survey must recognise those voices. Options limited to information about PROPOSED management actions are insufficient. Citizens now also need to know what has actually been done and how effective (or not) that has been". "Education alone does not solve the issue"
Management method	"Sprinklers - water costs money".
Management method	"Canopy-mounted sprinklers sounds like it would require a lot of infrastructure to be

PR3995 Kooloonbung Creek Camp Management Plan

Response type	Respondents comments
	installed, this may be expensive and require vegetation to be removed or disturbed".
Management method	"Sprinklers or any other method that negatively impacts the bats' bodies, habitat or flight paths should not be used as this is a threatened species that needs as much protection as we can give it. While the bats like to roost above water, being wet could reduce their ability to keep warm and perhaps to fly and to forage. Peggy Eby told us that they are extremely loyal to their roost and are unlikely to desert it in spite of interference by humans. They occupy only a tiny part of the town and they "pay rent" in the form of the ecosystem services they deliver"
Management method	"FKCNP are already involved with the other management methods listed above".

Table 10 Further comments to survey from participants

Theme	Respondents comment
Relocate flying-fox	"Relocate them to a nonresidential or recreational area if possible".
Relocate flying-fox	"It is my understanding that the colony was moved from the Sea Acres NP in the eighties, because the NPWS did not like having them around. Back then, Kooloonbung Creek Nature Reserve was beautiful, with no fruit bat colony established until the Sea Acres 'eviction'. Additionally, back in those days, the water in Kooloonbung Creek was more brackish than it is now. The ever-increasing discharge of treated effluent into Kooloonbung Creek has diluted the naturally-occurring brackish water in the inter-tidal zone. This has provided the colony with a ready supply of drinking water that has provided the foundation for the fruit bat colony to grow more than it otherwise might have been. The fruit bat colony has ruined the amenity of a beautiful area, and it is my opinion that they should be moved from that location. Council should at least salinate the water they discharge into the creek so that it does not alter the natural state of the inter-tidal zone".
Relocate flying-fox	"I want Council \$ spent on reducing population of FFs in KCR, not on education or writing management reports with no tangible outcomes".
Relocate flying-fox	"Don't hold much hope of a council solution to relocating bats, there are avenues for this, but think the problem has become too complicated for this council. Another tourist venue destroyed in PM, only ones these days are the khaki hat brigade. No longer a tranquil spot for wedding photos etc. used to be a wonderful walk through boardwalk with visitors, no longer"!
Relocate flying-fox	"I am sure the bats will move on to another site when it suits them, when is another question".
Relocate flying-fox	"Please do something urgently, they have moved and settled into our area in the last 12 months"!!
Relocate flying-fox	"GET RID OF THEM!!!!!! WE WANT OUR ENVIRONMENT BACK SO WE CAN USE IT AND BE SAFE".
Relocate flying-fox	"I have excrement drop on my house and driveway. There are palm trees, next door, which attract the bats. The removal of these non-native plants would help, in my case. The decline of smaller native birds is very noticeable, since the bats took over the reserve. I will not use the boardwalk, since the bats took over. It used to be a special place for me. My visitors cannot enjoy the renovated picnic area, because of the noise, smell and the excrement. There have been cases where other N.S.W Councils have moved the bats on, we should be able to do the same".
Engagement process	"How is the community to comment if they do not happen to log into the website. I have not seen any notification in the local paper.

PR3995 Kooloonbung Creek Camp Management Plan

Theme	Respondents comment
	As a resident who has already expressed concern on these issues it is important to know that community engagement has been openly sought before the deadline closes".
Engagement process	"Proof read your surveys before sending them out! Too repetitive".
Engagement process / relocate flying-fox	"Your survey is false and deliberately based on lies at worst, misinformation at best. There are plenty of colonies that can be studied in this area, Wingham to Kempsey, and NSW Govt will assist with funding to relocate inappropriately located colonies. The time frame for this survey seems very short, deliberately structured to sabotage the effectiveness of this exercise. You should be ashamed. Don't you understand your responsibility as a council servant".
Park closure	"e.g Singleton area - They had to close their Park & some Businesses due to flying foxes? is this going to happen in Port Macquarie and who pays for this? Our main street and area will be abandon".
Health problems	"This year has caused health problems which I have discussed with my G.P. I am a non- smoker. I have a permanent cough and have been under great stress through lack of/disturbed sleep, sore ears from the use of ear plugs and general depression at not being able to enjoy the lifestyle in our own backyard. Our interstate visitors are not keen to return to Port because of the strong bat smell in this area; commenting on why a beautiful holiday destination is so spoilt by the stench of the flying foxes
Flying-fox advocate	"I would like to see the retention of this naturally occurring FF population within KCNP. As a rate-payer with a 17 year affiliation with the Park, I know that the FF population numbers and species are variable, and truly hope that no drastic action is taken to remove the colony to appease relatively short-term residents who chose to live next to a bushland area and wildlife corridor".
Flying-fox advocate	"if people had the opportunity to interact like the koala hospital they would realise there is more to them then the smell".
Flying-fox advocate	"To have a colony of wild animals within the township is an asset and already a tourist attraction which could be better managed and promoted. How about a Flying Fox Cafe nearby with fruit specialties on the menu, souvenirs and photos? Let's promote these gentle, intelligent and intriguing animals the way we promote our koalas. We need more signage to educate people about the bats' role in making our forests. Encourage people to wash their hands and clean their shoes after walking through, while explaining the facts about possible disease risks to address fear and disinformation. Replacing the timber boardwalk with the same black fibreglass mesh used at Sea Acres and parts of Kooloonbung would greatly improve safety and allow droppings to wash off because they can make the boardwalk slippery. If walkers are still concerned about droppings, suggest they use an umbrella or choose an alternative walking route, e.g. beside Lake Road. The proximity of homes to the bat roost is due to development being permitted too close to the creek: this is the fault of humans, not the bats, which are suffering from habitat loss throughout their range, exacerbated by climate change".
Flying-fox advocate	"FKCNP strongly support the protection of the Flying Fox camp in Kooloonbung Creek NP. Although some trees may be adversely affected by the FF's, there is also much evidence of regenerating native plants in the Reserve as a result of the FF foraging through and beyond the Reserve. FKCNP recognises the critical role that FF's play in maintaining healthy ecological processes in native forests. Having said this our group acknowledges the significant issues affecting immediate neighbours to the Reserve and is keen to work with Council and these residents to develop management actions which may alleviate some of the problems faced by the residents while at the same time minimising major disturbance to the FF camp".
Flying-fox advocate	"I think the Bats are wonderful creatures who have a vital role to play in the Eco System & I hope we have a win win situation for both bats & man in this survey".
Support for reserve	"Please save the Reserveit is unique to Port Macquarie and should be available for all to enjoy".

PR3995 Kooloonbung Creek Camp Management Plan

Theme	Respondents comment
Support for education	"I applaud the educational approach adopted by the council, education is the best option to work with people who live in the area".
Support for education	"We have neighbors that purposely disturbed the bats regularly making banging sounds with pots and pans and whistles they wake the bats in the day it's realy annoying as the bats are usually fine sleeping in the day, when they are right at our back fence I have to use the dryer or hang clothes inside but I'm happy having the bats there in fact I believe we are lucky to be able to live near them and have a duty to protect them as we are the ones who have destroyed allot of their natural habitat anyway. Just wish there was more education for those who live on the creek and penalties for those who disturb the bats".
Support for education	"I understand the difficult nature of flying fox camps in close proximity to houses but very strongly support community education regarding the importance of these species on long term forest health as well as the least invasive methods to gently nudge them away from roosting close to homes".
Council responsiveness	 "1 - This community problem has been well known for many years and the time has come for proactive responses. Spending more years on education without action to control the adverse impacts is not sufficient. Council already has the views of 10,000 residents who have Petitioned for action. This survey/report to Council must also recognise those very patient voices. 2 - The cost of attending to the problem has to be considered in the same way that all worthwhile Council initiatives are considered in the Budget - cost effective activity that addresses a recognised need. Looking for a 'low financial cost' as this survey suggests should not be the approach for any project - identifying best value outcomes is important. 3 - Intending to seek funding from the State Government, without mentioning in this survey, the relevance of the State Government's Code seems odd. 4 - To engage, in the future, only with the community 'around a camp' is limiting. Flying-foxes have impacted the broader community including tourism operators, community groups and walkers. Broader engagement is required. 5 - Engaging and educating community members is inadequate where it relates only to some input and little after that. Council should commit to: informing the community of decisions taken; planned actions and timeframes; performance measures and the results of the actions. A considered management plan could do this. 6 - All the options identified in the NSW Government's Draft Code of Practice Authorising Flying-Fox Camp Management Actions 2018 including the many practical options not identified in this survey, must be considered".
Council responsiveness	"I encourage Council to effectively deal with this problem in the near future as residents, particularly those close to Koolongbung Creek, have suffered the effects for far too long".
Council responsiveness	"We hold council totally responsible for the terrible situation we are now in. If council had acted many years ago we would not be in this position. council now needs to act with URGENCY".
Council responsiveness	"Yes, please get on with it, please don't just have this survey for some people in Council to justify their job or position, & seem to say, look what we are doing to help. You can it you wish, contact me if you need any clarification on my thoughts. Thank you for the opportunity

ecosure 😂

Appendix 6 Standard measures to avoid impacts to flying-foxes

The following mitigation measures will be complied with at all times during implementation of any activities within or immediately adjacent the camp.

- All personnel will be appropriately experienced, trained and inducted. Induction will include each person's responsibilities under this Plan.
- All personnel will be briefed prior to the action commencing each day and debriefed at the end of the day.
- Works will cease and OEH consulted in accordance with the 'stop work triggers' section of the Plan.
- · Large crews will be avoided where possible.
- The use of loud machinery and equipment that produces sudden impacts/noise will be limited. Where loud equipment (e.g. chainsaws) is required they will be started away from the camp and allowed to run for a short time to allow flying-foxes to adjust.
- Activities that may disturb flying-foxes at any time during the year will begin as far from the camp as possible, working towards the camp gradually to allow flying-foxes to habituate.
- Any activity likely to disturb flying-foxes so that they take flight will be avoided during the day during the sensitive GHFF/BFF birthing period (i.e. when females are in final trimester or the majority are carrying pups, generally August December) and avoided altogether during crèching (generally November/December to February). Where works cannot be done at night after fly-out during these periods, it is preferable they are undertaken in the late afternoon close to or at fly-out. If this is also not possible, a person experienced in flying-fox behaviour will monitor the camp for at least the first two scheduled actions (or as otherwise deemed to be required by that person) to ensure impacts are not excessive and advise on the most appropriate methods (e.g. required buffer distances, approach, etc.).
- OEH will be immediately contacted if LRFF are present between March and October or are identified as being in final trimester / with dependent young.
- Non-critical maintenance activities will ideally be scheduled when the camp is
 naturally empty. Where this is not possible (e.g. at permanently occupied camps)
 they will be scheduled for the best period for that camp (e.g. when the camp is
 seasonally lower in numbers and breeding will not be interrupted, or during the nonbreeding season, generally May to July).
- Works will not take place in periods of adverse weather including strong winds, sustained heavy rains, in very cold temperatures or during periods of likely population stress (e.g. food bottlenecks). Wildlife carers will be consulted to determine whether the population appears to be under stress.

ecosure.com.au | 98

- Works will be postponed on days predicted to exceed 35°C (or ideally 30°C), and for one day following a day that reached ≥35°C. If an actual heat stress event has been recorded at the camp or at nearby camps, a rest period of several weeks will be scheduled to allow affected flying-foxes to fully recover. See the OEH fact sheet on Responding to heat stress in flying-fox camps.
- Any proposed variations to works detailed in the Plan will be approved, in writing, by OEH before any new works occur.
- OEH may require changes to methods or cessation of management activities at any time.
- Ensure Level 2 management actions and results are recorded to inform future planning. See the OEH fact sheet on Monitoring, evaluating and reporting.

Vegetation trimming/removal (if required)

- · Dead wood and hollows will be retained on site where possible as habitat.
- Vegetation chipping/mulching is to be undertaken as far away from roosting flyingfoxes as possible (at least 100 m).

Canopy vegetation trimming/removal (if required)

Prior to works

• Trees to be removed or lopped will be clearly marked (e.g. with flagging tape) prior to works commencing, to avoid unintentionally impacting trees to be retained.

During works

- Any tree lopping, trimming or removal is undertaken under the supervision of a suitably qualified arborist (minimum qualification of Certificate III in Horticulture (Arboriculture) who is a member of an appropriate professional body such as the National Arborists Association) (e.g. Highland Arbor; Chris Watchirs).
- Trimming will be in accordance with relevant Australian Standards (e.g. AS4373 Pruning of Amenity Trees), and best practice techniques used to remove vegetation in a way that avoids impacting other fauna and remaining habitat.
- No tree in which a flying-fox is roosting will be trimmed or removed. Works may
 continue in trees adjacent to roost trees only where a person experienced in flyingfox behaviour assesses that no flying-foxes are at risk of being harmed. A person
 experienced in flying-fox behaviour is to remain on site to monitor, when canopy
 trimming/removal is required within 50 metres of roosting flying-foxes.
- While most females are likely to be carrying young (generally September January) vegetation removal within 50 metres of the camp will only be done in the evening after fly-out, unless otherwise advised by a flying-fox expert.
- Tree removal as part of management will be offset at a ratio of at least 2:1. Where threatened vegetation removal is required, the land manager will prepare an Offset

Strategy to outline a program of restoration works in other locations (in addition to existing programs). The strategy will be submitted to OEH for approval at least two months prior to commencing works.

Bush regeneration

- All works will be carried out by suitably qualified and experienced bush regenerators (i.e. Landcare groups), with at least one supervisor knowledgeable about flying-fox habitat requirements (and how to retain them for Level 1 and 2 actions) with knowledge regarding working under a camp.
- Vegetation modification, including weed removal, will not alter the conditions of the site such that it becomes unsuitable flying-fox habitat for Level 1 and 2 actions.
- Weed removal should follow a mosaic pattern, maintaining refuges in the mid- and lower storeys at all times.
- Weed control in the core habitat area will be undertaken using hand tools only (or in the evening after fly-out while crèching young are not present).
- Species selected for revegetation will be consistent with the habitat on site, and in buffer areas or conflict areas should be restricted to small shrubs/understorey species to reduce the need for further roost tree management in the future.

Stop work triggers

Management activities in or near Kooloonbung Creek camp will cease and will not recommence without consulting OEH if:

- any of the animal welfare triggers occur on more than two days during the program, such as unacceptable levels of stress (Table 10)
- there is a flying-fox injury or death
- a new camp/camps appear to be establishing
- · impacts are created or exacerbated at other locations
- there appears to be potential for conservation impacts (e.g. reduction in breeding success identified through independent monitoring)
- · standard measures to avoid impacts cannot be met.
- · Management may also be terminated at any time if:
 - unintended impacts are created for the community around the camp
 - allocated resources are exhausted.

.

🖨 ecosure

Table 11 Planned action for potential impacts during any works under or near the camp. A person with experience in flying-fox behaviour (as per Appendix 6) will monitor for welfare triggers and direct works in accordance with the criteria below.

.

Welfare trigger	Signs	Action
Unacceptable levels of stress	If any individual is observed: panting saliva spreading located on or within 2 m of the ground	Works to cease for the day.
Fatigue	 In-situ management more than 30% of the camp takes flight individuals are in flight for more than 5 minutes flying-foxes appear to be leaving the camp 	In-situ management Works to cease and recommence only when flying-foxes have settled* / move to alternative locations at least 50 m from roosting animals.
Injury/death	 A flying-fox appears to have been injured/killed on site (including aborted foetuses) dependent/crèching young present and adults likely to take flight or abandoned camp 	Works to cease immediately and OEH notified AND rescheduled OR adapted sufficiently so that significant impacts (e.g. death/injury) are highly unlikely to occur, as confirmed by an independent expert OR stopped indefinitely and alternative management options investigated.

PR3995 Kooloonbung Creek Camp Management Plan

🚔 ecosure

Appendix 7 Community feedback

Table 12 Community feedback from consultative meeting 2

Level	Theme	Actions to prioritise	Actions to disregard	How or where to implement
1	Education and awareness	Information on removal of non- natives		Friends of Kooloonbung do this in Park however, need to educate residents of home removal of weeds including tobacco and Cocos palm
		Kooloonbung Friends educate at schools		
		Update information sheets on flying-fox disease		
		Tourism		
		Information on removal of non- native		Particularly those that are sources of bat food
		Signage at Kooloonbung Park		
		Ban barbed wire in residential areas and black monofilament netting		Promote wildlife friendly netting
		Priority – facts sheets on flying-fox disease risk		
		 Information on council website 		
		 Advice on tree trimming 		
		Medium – signage at Kooloonbung Creek - Wildlife educator		
		 Information on removal of non- natives 		
		Information on removal of non- native Advice on tree trimming or removal		Removal of blossoming trees close to housing Removal of roosting trees close to housing
		Information on removal of non- native	Signage in Kooloonbung	
		Advice on tree trimming or removal	Fact sheets on flying-fox disease risk	
			information on council website	
			wildlife educator at schools or clubs	
			Signage already there	

PR3995 Kooloonbung Creek Camp Management Plan

evel	Theme	Actions to prioritise	Actions to disregard	How or where to implement
			Signage not required	
			Wildlife educator	
	Property	priority		
	acquisition	√ √		Must be at top of market value so as not disadvantage residents
	Level 1		Level 1 management actions mostly completed refer 2012 KCPoM	
	Create alternative habitat	✓		Alternative camp corner of Lake Road and Ocear Drive – mostly paperbard vegetations
	Create alternative roost sites	Priority		Look at expanding planting at the Hatch as Alternative Roost Site
	Subsidies	Air-conditioning – who pays power bill?		
		High pressure hosing		but more to do with sour and important to have shock value
		Car / clothes line / pool covers priority		
		Air deodorisers, high pressure hosing, air -conditioning, double glazed windows all priorities		rate and electricity subsidies
		Car / clothes line / pool covers, Air deodorisers, high pressure hosing, air -conditioning, double glazed windows		
		High pressure hosing – consider for cleaning back patio		
		Subsides for all air- conditioning		
		Water subsidy for daily washdown		
		Water subsidy should be in place		
		High pressure hosing, air- conditioning, double-glazed windows		Would consider this a good option to try. Would allow us to breath at

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 103

Level	Theme	Actions to prioritise	Actions to disregard	How or where to implement
				night. Think this would assist with noise control to help us get some sleep and could actually have visitors at our home
		Double-glazed windows would help with noise		
			Air deodorisers – impossible as the smell covers a huge area outside making living on back areas impossible	
			Car / clothes line / pool covers	
2	Buffers	Canopy-mounted sprinklers useful to shift bats near around homes		Near affected homes
		Canopy-mounted sprinkler; idle diesel generator motor; air compressor noise		
		Canopy-mounted sprinkler high priority seems to have worked in other areas		
		Canopy-mounted sprinkler		
		Canopy-mounted sprinkler, vegetation trimming and removal		Need to address tree choice. Less roosting trees and food sources in the park. There are huge areas of blossom down the road in the industrial area.
		Will consider canopy-mounted sprinkler, vegetation trimming, vegetation removal and acoustic barrier		
		Canopy-mounted sprinkler and vegetation removal		Bats within5 metres of back fence in tall paperbark trees
		Vegetation trimming - maybe		
			Vegetation removal not feasible otherwise compromise reserve values	
			Removal of a narrow band of trees would affect other wildlife	

PR3995 Kooloonbung Creek Camp Management Plan

🖨 ecosure

Level	Theme	Actions to prioritise	Actions to disregard	How or where to implement
			Barriers could affect movement of koalas	
		Acoustic barrier but shock value as with Royal Melbourne Botanical Gardens		
				Concerned that shadiest roost area left is along the rear of houses – other areas have lost canopy cover and therefore heat stress concern

PR3995 Kooloonbung Creek Camp Management Plan

ecosure.com.au | 105

	Revision	h History
--	----------	-----------

	-				
Revision No.	Revision date	Details	Prepared by	Reviewed by	Approved by
00	4/12/2018	PR3995 Kooloonbung Creek Camp Management Plan	Emily Hatfield, Senior Wildlife Biologist	Jess Bracks, F Biologist	Principal Wildlife
01	04/01/2018	PR3995 Kooloonbung Creek Camp Management Plan.DR2	Emily Hatfield, Senior Wildlife Biologist	Julie Whelan, Environmental	
02	06/03/2019	PR3995 Kooloonbung Creek Camp Management Plan.DR3	Emily Hatfield, Senior Wildlife Biologist	Jess Bracks, F Biologist	Principal Wildlife
03	22/03/2019	PR3995 Kooloonbung Creek Camp Management Plan.DR4	Emily Hatfield, Senior Wildlife Biologist	Jess Bracks, F Biologist	Principal Wildlife

Distribution List

Copy#	Date	Туре	Issued to	Name
1	22/03/2019		Port Macquarie-Hastings Council	Blayne West
2	22/03/2019	Electronic	Ecosure	Administration

Citation: Ecosure (2019), Kooloonbung Creek Camp Management Plan, DRAFT Report to Port Macquarie-Hastings Council, Burleigh Heads

Report compiled by Ecosure Pty Ltd

ABN: 63 106 067 976

admin@ecosure.com.au www.ecosure.com.au

PR3995-DE.Kooloonbung Creek CMP.DR4

Adelaide

PO Box 145 Pooraka SA 5095 P 1300 112 021 M 0407 295 766

Gladstone

PO Box 5420 Gladstone QLD 4720 P 07 4994 1000

Sunshine Coast

PO Box 1457 Noosaville QLD 4566 P 07 5357 6019 Brisbane PO Box 675 Fortitude Valley QLD 4006 P 07 3606 1030

Gold Coast

PO Box 404 West Burleigh QLD 4219 P 07 5508 2046 F 07 5508 2544

Sydney

PO Box 880 Surry Hills NSW 2010 P 1300 112 021

Coffs Harbour

PO Box 4370 Coffs Harbour Jetty NSW 2450 P 02 5621 8103

Rockhampton

PO Box 235 Rockhampton QLD 4700 P 07 4994 1000

Townsville

PO Box 2335 Townsville QLD 4810 P 1300 112 021



© Ecosure Proprietary Limited 2019

Commercial in confidence. The information contained in this document produced by Ecosure Pty Ltd is solely for the use of the Client identified on the cover sheet for the purpose for which it has been prepared and Ecosure Pty Ltd undertakes no duty to or accepts any responsibility to any third party who may rely upon this document. All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of Ecosure Pty Ltd.

1	Cohen		
Issue	Is there scope in this study to recommend increased protection for the rocky intertidal zone at wash house beach. Should be a Marine Park Area. can you advise of anything is in the pipeline re this area as incidence of removal of sea life beyond licence allowances and illegal removal has ramped up. It's distressing many locals to see it happen on a regular basis with nothing we can do except lobby for increased protection.		
	Council Response/ Comment:	DPI has responsibility for administering fisheries laws governing the fisheries resources of the state, which is conducted through the Fisheries Compliance Unit.	
	comment:	Fisheries Officers are charged with detecting and preventing illegal fishing and damage to fish habitats.	
		Stealing fish as well as causing damage to fish habitats are serious problems and can impact on the sustainability of fish stocks across NSW.	
		Illegal or suspect fishing activities or damage to fish habitats can be reported via:	
		 the nearest Fisheries Office the Fishers Watch Phoneline on 1800 043 536 the online report form. 	
		There are six marine parks in NSW. In NSW marine parks are declared and managed under the Marine Estate Management Act 2014 by NSW Department of Primary Industries.	
		Each of the six marine parks have an advisory committee. These committees provide a voice for local communities to contribute to the management of the state's marine estate and the local marine park. They engage with local residents and stakeholders, provide a forum for local communities to raise issue and give valuable feedback to the government.	
		A range of marine park management reforms are planned or currently underway including new marine park management plans beginning with Solitary Islands Marine Park and Batemans Marine Park.	
		More information is available here: https://www.marine.nsw.gov.au/marine-estate- programs/marine-park-management-pilots	
2	Moore		
Issue	While I have no special knowledge, I am a veterinarian, trained in scientific method, and a keen observer of natural ecology with a Scientific Licence from National Parks valid in both NSW and QLD, ties to the CSIRO and ANIC in Canberra, and I have published in both veterinary and entomology literature. I feel that I am qualified enough to know a problem when I see it, and to know that the solution lies in listening to the experts; NSW National Parks and NSW Fisheries. I am also in the unique position of being one of		

	the few people who has directly observed Lake Innes from the water, from north to south, and both eastern and western shores.		
	I know the resource that is being wasted by acting on pressure to open the Lake Cathie lagoon to the sea. I understand that the residents of Lake Cathie village wish to have their lagoon open but I do not think it is right that this should be at the cost of repeatedly sacrificing a large fresh water lake upstream It is also not right that a Facebook group without scientific training, and with a clear agenda (even if not purely financial) is directing decisions contrary to the advice of NPWS and Fisheries. Local knowledge and observation are not substitutes for careful scientific scrutiny and evaluation.		
	Council Response/ Comment:	The present management of the lake will be reviewed in future stages of the Coastal Management Program. At this time there are many differing views on how the lake should be managed. The current management strategy requires review as it is outdated and does not follow best practice scientific knowledge on how to manage ICOLL's.	
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		Management of the Lake Cathie/Lake Innes ICOLL with regards to the opening strategy will be addressed in stages 2 & 3 of the CMP process.	
Issue	It seems hard to believe it was only 6 months ago, in late October 2019, when the Crestwood Drive fire jumped Lake Innes. The Nature Reserve adjacent to our property was the place the fire started on the West side of the lake, and we were lucky to be saved by RFS. At that time, they had planes collect water from Lake Innes to drop on the flames; but that had to stop, because of the high salinity of the water (all the trees so doused lost leaves and died; there had already been multiple fish kills in the Lake due to salinity that was 4 times greater than sea water). After that day, it seemed that the fire risk had abated, but then the fire got into the peat, and continued to burn for months. Dams already depleted by drought, gave up much of their reserve as helicopters looked for fresh water that wasn't tow supply, to put on the flames. Many of the dams were too low to sustain the fire-fighting effort and helicopters needed to travel far from the fire to access water. On November 7, the fire came back out of the peat, and raced through the bush to within 20 metres of our house. Again, fortunately the folks from NPWS and RFS again were there to save us.		

	While the fire risk was higher due to drought, the artificial opening of Lake Cathie in July 2018 directly worsened the risk; that action effectively dropped the water level by a metre and it never recovered. Not only would that metre have been beneficial for the fire suppression efforts, but for maintaining biodiversity as well.	
	Council Response/ Comment:	Last bushfire season was undoubtedly on of the worst ever endured by the eastern seaboard of Australia. Locally, having more water in the lake system would have helped during summer, both from a drought and bushfire management perspective. The opening strategy review will likely bring into consideration factors such as; long range weather forecasts, bushfire season predictions, and the like in order to ensure that the lake system is not drained at inappropriate times.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to bushfire management will be addressed in stages 2 & 3 of the CMP process.
Issue	Je Then in February the rains came, and we have been privileged to see Li Innes in its glory. The water was not 100% fresh, but the salinity was dramatically reduced. Every reed and blackened stump were covered in dragonfly larval shells, and the number of mosquitoes plummeted as the feasted. The swans were breeding throughout the lake, protected by the water from feral foxes and dogs.	
	and multiple water. There paperbarks, shallows eve	e were able to see pelicans feeding on the western shoreline, cormorant nests in the dead trees, surrounded by protective e was a large roosting colony of pied cormorants in the again protected by water. Fire-tailed gudgeons were in the erywhere. The mullet were there; I watched them pushing into a pipes under Lake Innes Drive on April 27th.
	from Port Ma an unspoiled sharedecc was an unta	eautiful to look at; 2 sparkling kilometres across and stretching acquarie to Lake Cathie. For the lucky few with access it was I kayaking dream. It seemed that this remote beauty should be otourism is a powerful economic driver in our area, and here pped resource far larger and more spectacular than Lake on. All that was needed was more access points.
	Council Response/	It is widely acknowledged that access into Lake Innes is difficult and that the majority of residents and visitors may not get to see or enjoy the lake system to it's full potential.

	-	
	Comment:	Access management and tourism opportunities in Lake Innes are predominantly the function of NPWS, however Council will work in closely with government agencies to ensure that appropriate tourism and access is provided, noting the special values that abound in the remoteness of the lake system and the fact that the Park is gazetted as a Nature Reserve, which affords special protections to conservation values. The next stage of the Coastal Management Program is
		Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to lake access will be addressed in stages 2 & 3 of the CMP process.
Issue	All that changed as the Lake Cathie lagoon was opened. As it has on numerous previous occasions, Lake Innes drained - almost but not fully, a the corps of engineers found in the 1930s.	
	We can no longer access the waterway, but from previous occasions I know that the swans will lose their nests (we have found broken eggs with dog/fox teeth holes in them), the dragonflies, fish and innumerable other creatures will perish, and the lake will rot for weeks until the peat dries out The smell of those dying and dead goes on for weeks throughout the Port Macquarie area affecting homes, businesses and tourists; although that inconvenience is minimal compared to the effect on the wildlife.	
	And when the peat dries out, Port Macquarie will once again be exposed to fire risk, and at the same time will lose a vast reservoir of potential fire- fighting water. We have heard from the Bushfire Royal Commission that the coming seasons will be associated with ever increasing bushfire risk, and when the next fire season comes, we will pay the price for the misuse of a valuable resource.	
	Council Response/ Comment:	Council has historically managed the lake system to alleviate flooding of infrastructure and assets, including private property, hence the high level trigger at 1.6m AHD. As Lake Innes is connected to the lower system, when the beach berm channel is formed, the entire system drains.
		Government stakeholders and the community will all be involved in the future management of the system.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to

		identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to water management and bushfire management will be addressed in stages 2 & 3 of the CMP process.
Issue	the ocean at possible solu more intensi the original a	tion is needed than cutting a channel from a small lagoon into the expense of two large coastal lakes. A number of different utions have been discussed and this should be focussed on vely. For more than 30 years there has been a plan to reform and natural division between Lake Innes and Lake Cathie that destroyed nearly 90 years ago. It is time to look at this again.
	discussed is would allow maintain the of fire, allowi new tourism Lake Cathie	sibility that comes to mind for me that I have not heard the possibility of a weir under the bridge at Ocean Drive. This the Lake Cathie residents to have their open lagoon, but water levels of Lake Cathie and Lake Innes; reducing the risk ng the diversity of wildlife to flourish, and providing a whole opportunity that could benefit Port Macquarie, Lake Innes and at the same time. Asset management could be maintained by ir (instead of an impossible to control channel in the sand).
	northerly poi	feasible, then reclosing the artificial opening at a more nt of Cathie Creek should be a priority, as has been suggested occasions previously.
	think it will he precious res	ed a number of photographs into this short submission, as I elp to see what many people think is a "secret lake". This is a ource and with care could be turned into a biodiversity-tourism Il as a fire safety-net for the PMH area.
	Council Response/ Comment:	The 2013 Lake Innes Environmental Assessment (which looked at the reversion of Lake Innes to freshwater) concluded that the lake not be reverted to freshwater, citing significant environmental risks. However since this time additional Acid Sulphate Soil assessments have been undertaken which, if anything, has highlit that there may be additional issues that could be considered in the management of the lake system, which have previously been overlooked.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options,

		considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL will be addressed in stages 2 & 3 of the CMP process.
3	Mitchell	
Issue	I am passionate about Camden Haven Coastal Management and as a surfer, fisherman, bushwalker enjoy all it has to offer every day.	
	Haven EMP Lagoon. Loo prudent to co or are issues Certainly, the	as such I am aware that key issues identified in the Camden 2002 remain key issues in 2020, especially in Googlies king toward to the Coastal Management Plan it may be onsider if there has been a problem with 'management actions' s accelerating beyond the ability of the actions to keep up. e problems with Googlies Lagoon are more pronounced now in 2002. The clock is ticking.
	Camden Haven Started in 20	y, I have a concern that the proposed timeline would see the ven Estuary Chapter adopted in 2024 and implementation 25. Would it make more sense to run the Camden Haven, d Open Coastline concurrently so as to bring forward the date tation?
	Council Response/ Comment:	Due to staffing and resourcing constraints Council has had to prioritise certain CMP Catchment areas over others. Without a significant increase in staff and financial resourcing the Camden Haven Estuary chapter cannot be brought forward.
Issue	Another benefit may be to include the surfing community in consultation. Surfers are invariably the first to notice changes in the ocean and coastline. As an example, over the past couple of years there has been a marked increase and directional change of bluebottle deposits. Just this morning there were bluebottles on Dunbogan Beach after a solid two weeks of South Westers in the middle of June. Surfers observe these events when others may not. They may also he qualified to add comment on sand deposit and removal under different weather and swell conditions.	
	Council Response/ Comment:	Council recently undertook a recruitment campaign for members to join the Coast, Estuary & Floodplain Advisory Sub-Committee, where several vacancies were filled. It is entirely possible that some of these new members are from the surfing community.
		The surfing community is likely to form part of the stakeholder engagement strategy that will be developed as part of future stages of the CMP.
4	Ragen	
Issue		ike to voice my opinion that I don't agree with turning lake o fresh water.
	Council Response/	Noted. The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks,

	Comment:	 vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities. Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability. Management of the Lake Cathie/Lake Innes ICOLL with regards to the reversion of Lake Innes will be addressed in stages 2 & 3 of the CMP process.
5	Cabban	stages 2 & 3 of the GMF process.
Issue	Re The lake be removed Australia inc heard that th	in Lake Cathie. When the lake is dredged the sand needs to and taken away. This happens in many places around luding Port Macquarie. Why isn't the sand removed? I've is sand is classed as 'live' and this is why it's not removed. Is so what's the difference between the sand in Port Macquarie
	Council Response/ Comment:	In the past Council has dredged the sand from the lower estuary and has used it to nourish Foreshore Reserve, nourish Lighthouse Beach adjacent to Illaroo Road Council or has released the sand to the north of the lake mouth. Council can only dredge the lower lake in accordance with the Dredging Strategy (2007). Since the Lake Cathie Coastal Zone Management Plan (CZMP) was adopted in 2013, Council is now required to place the sand along the beach adjacent to Illaroo Road. In 2018 sand was used to nourish Foreshore Reserve as this area was subject to significant erosion. These areas have
		been identified for nourishment as they are subject to erosion from time to time. The dredge spoil that is placed on the beach near Illaroo Road is a key management action from the 2016 Lake Cathie Coastal Zone Management Plan which was supported by the community. The sand resource is owned by the NSW Government. Council is not permitted to remove or sell any sand.
Issue		es when the lake is in poor condition. I'm not only talking about tes I'm talking about people's spirit. It's a meeting place for our
	Council Response/ Comment:	The social and economic impact that the Lake has on the town is noted as being significant. The values of the community will be discussed during the following stages of the CMP process.

Issue		ve bridge definitely needs to be lengthened widened and the eath needs to be dredged and taken away.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to the reversion of Lake Innes will be addressed in stages 2 & 3 of the CMP process.
		However, Council recently resolved at the 21 October 2021 Council meeting that the General Manager develop a project plan and indicative costings for the replacement or augmentation of the Kenwood Drive Bridge for consideration by Council in the development of the Draft 2021-2022 Operational Plan and future draft Delivery Program and Operational Plans.
Issue	lake. It is a b Commercial is also a bea watching. I a Oakshott spe	Innes. It needs to remain salt water open to the lagoon and preeding ground for fish prawns and Monster crabs. fisherman have employees and earn a living from the lake. It putiful place for the family canoeing and boating and bird and totally against returning it back to fresh water. Rob ent some millions on surveys and its conclusion was to leave it agoon and lake. There is a ridiculous idea ATM of closing it at le.
	Council Response/ Comment:	The 2013 Lake Innes Environmental Assessment (which looked at the reversion of Lake Innes to freshwater) noted the significant impact the closure of Lake Innes would have on the commercial fishing industry (among other matters). However this report acknowledged that there were shortcomings in the recommendations made, and therefore recommended that further investigations be prepared (namely for Acid Sulphate Soils). It also recommended a review of the Lake System Estuary Management Plan which is now nearly 30 years old.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the

		identification and evaluation of management options,
		considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to the reversion of Lake Innes will be addressed in stages 2 & 3 of the CMP process.
Issue	I've also been told that council has already given Charlie Brothers wines the go ahead/ permission to dam Lake Innes to farm fresh water eels to export to China. There has been no consultation with the community and I can't get answers from Malinda Pavey or Lesley Williams so I will be interested in following the results of this.	
	Council Response/	Council has not received any applications relating to the closure of Lake Innes from any person or corporation.
	Comment:	Should any member of the community wish to research applications lodged with Council, they can do so via our on- line Application Tracker. In many instances, particularly for applications made in the last 10 years, consents and other documents can be downloaded from Application Tracker at no cost. Application Tracker is available here: <u>www.pmhc.nsw.gov.au/application-tracker</u>
Issue	I wish you would pay attention and work with the majority of the community people's wishes Instead of basing your conclusions around small groups that form pretending they are representing the majority because they do not. In fact the committee doesn't live in Cathie!	
	Council Response/ Comment:	Council works with all who reach out to us, including individuals, government agencies, community groups, and the like. In the past 18 months, various local groups have formed which have garnered a significant number of followers in a short space of time. This large support base is likely made up of a broad spread of members, many of whom are indeed likely to live in Lake Cathie and surrounding areas within the LGA.
		Council strives to weigh up community sentiment when making decisions around the management of the lake, however we acknowledge that there are considerably differing viewpoints within the community on how to manage the coastal and estuarine areas of our LGA. Council must weigh these aspects up when making decisions for the community. This can add complexity and time to the development of management actions.
		Council strives to engage with the community in a meaningful way and anticipates that the future stages of the CMP will allow relationships to be built.
		Consultation and engagement is at the core of the CMP process. Community engagement and feedback will be undertaken throughout all stages of the CMP.
6	NSW SES	

Issue	The NSW SES main involvement lies within Section 16 of this plan relating to the current and former coastal and estuary management arrangements. In particular item a. Coastal Erosion Emergency Action Plan which is quoted on page 69 and stated below;			
	manage risks	"A plan has been developed under this plan which identifies actions to manage risks to public safety in the event of a coastal erosion emergency. It has not been necessary to implement any of these response actions to date".		
	Managemen	ES supports the management of the Coastal Zone t Plan, Section 16 Item a. if and when it includes the esponse arrangements information contained in the relevant Plans.		
	Council Response/	Noted.		
	Comment:			
Issue	Plan 2018 th amendments NSW State E June 2018. T coastal erosi changes, sin	rmation, the NSW SES has updated the NSW State Storm the plan details coastal management references for future s on response arrangements. The endorsement date by the Emergency Management Committee (SEMC) occurred on The changes to the NSW State Storm Plan in relation to on have focused on incorporating the recent legislative inplification and shortening of the document with clarification of a responsibilities of the NSW SES and Councils.		
	Council Response/ Comment:	Noted.		
7	Lake Cathie	Progress Association		
Issue	It is important that the Lake Cathie / Lake Innes and Bonny Hills Estuary and Coastline areas have been identified as the area to have completed and approved as stage one of the Coastal Management Program.			
	Council Response/ Comment:	Noted.		
Issue	Illaroo Road Storm Water Redirection works. This is important to stop the beach erosion along the Illaroo Road beach frontage and needs to be completed as a matter of urgency. If the work cannot be completed along the side of the existing road way due to the Cultural & Heritage survey results then serious consideration and engineering analysis needs to be given to incorporating the redirection storm water pipes into the Revetment Wall design. There is also growing concern in the community over the lack of action by Council regarding the removal of the asbestos contamination on a section of this site.			
	on a section			

	Comment:	CZMP. Council continues to work on this project and is working through the planning aspects before commencing construction. Unfortunately the dumped asbestos and Aboriginal archaeology issues have slowed the progress of this project and had delayed construction. Council hopes to have the archaeology matters resolved in early 2021, and the asbestos remediated soon after. Until both of these matters are resolved, construction of the stormwater networks cannot occur.
Issue	too long and this project e analysis and not been cor community a this work cor Managemen	Revetment Wall works. This matter has been going on for far the existing NSW State Government Ministerial approval for expires at the end of December 2021. The Cost Benefit the Cost Distribution analysis documents for this project have mpleted and approved within the timeframes provided to the and there appears to have been no urgency by Council to have mmenced under the current Ministerial Coastal Zone t Plan approval. This is extremely disappointing. This project to be fast tracked by Council as matter of urgency.
	Council Response/ Comment:	Council also acknowledges the importance of this project, as it was identified as the key action item from the Lake Cathie CZMP. Council continues to work on this project and has recently been working through the funding model and Cost Benefit Analysis (CBA). Both of these components of work have involved input from the NSW government so they have taken some time to deliver. Community consultation on the findings of the funding model are the next critical stage in this project.
Issue	Kenwood Drive Bridge upgrade. This project has been on the Progress Association's list of works required to be undertaken in the area for a long time. Although we have been directing our resources towards Illaroo Road in the past few years the Kenwood Drive Bridge problems are a long standing Community issue. The Association supports the Revive Lake Cathie group in their endeavours to have the issues associated with the Bridge and its surrounds addressed. The bridge needs to be lengthened and widened and more culverts placed under the road to allow a more even flow of tidal waters into the Lake Cathie estuary. This should also help arrest the buildup of sand on the area west of the Ocean Drive bridge and in the estuary.	
	Council Response/ Comment:	Council recently resolved at the 21 October 2021 Council meeting that the General Manager develop a project plan and indicative costings for the replacement or augmentation of the Kenwood Drive Bridge for consideration by Council in the development of the Draft 2021-2022 Operational Plan and future draft Delivery Program and Operational Plans.
Issue	Lake Innes issues. Council needs to pressure NSW National Parks to close off the man made canal linking Lake Innes to the Lake Cathie Estuary system. NSW National Parks previously agreed to undertake this project and allocated monies for this work in 2013 - but changed their minds. Lake Innes needs to be returned to its original status as a fresh water lake system.	

	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to the reversion of Lake Innes will be addressed in stages 2 & 3 of the CMP process.
Issue	readdressed expectations complex issu license from	g Policy. The current lake opening policy needs to the by Council with more local community input so that the of the Community are met. Whilst we appreciate that this is a ue, we ask that Council included the need to obtain an ongoing the various NSW Government departments for the lake dredging works to be undertaken in a regular and timely
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to the Opening Strategy will be addressed in stages 2 & 3 of the CMP process.
Issue	Lake and Estuary Dredging. The draft scoping document needs to include a more detailed reference to the timing and amount of sand to be dredged from the lagoon area (east of Ocean Drive) and depositing of this excess sand on the beach front along Illaroo Road. Reference also needs to be made to cover off the area to receive the excess sand after the Illaroo Road Revetment wall is built. There will still be a need to have some sand deposited in front of the wall but the vast majority of it will need to be pumped onto the beach area north of the Lake Cathie entrance. This will help to stop the sand being washed back into the lake. This is particularly important prior to the revetment wall being constructed.	
	Council Response/	Studies have shown that beach lowering will occur as a result of the construction of the revetment wall. This will impact on beach access and amenity as the beach width will

	Council Response/ Comment:	Crown land has numerous 'unidentified' parcels of land that are not able to have licences issued over them nor be transferred to Council. Crown land are responsible for identifying these potions of land, and undertaking the process to hand them to Council.
Issue	Foreshore Recreational Area. We ask that Council included reference to this area (east of the Ocean drive bridge) in particular the requirement for Council to hold an ongoing management license with NSW Crown Lands, if it has not already been obtained. One of the issues that came out of the Lake Foreshore Master plan was that Council did not have a management license for the reserve area off Aqua Crescent.	
		Management of the Lake Cathie/Lake Innes ICOLL with regards to dredging upstream of the Ocean Drive Bridge will be addressed in stages 2 & 3 of the CMP process.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
Issue	Drive bridge needs to be and all respo going forwar option is for water's edge in the estuar	as west of the Ocean Drive bridge and south of Kenwood have large buildups of sand in the lake area and this issue addressed in the scoping document. We request that Council onsible NSW Government Departments agree on a policy d to address the issue of this excess sand. Our preferred the excess sand to be pushed up into mounds around the e on the western side of the estuary so that the main channels y are made deeper for recreational use by boats and people a lake system.
		However it is acknowledged that there is a shortfall of sand available in the entrance to combat the beach lowering that will occur should the wall be constructed. It is likely that there will be periods where the beach in front of the wall will be usable due to nourishment, and other times where the beach will not be useable owing to tidal, wave and storm impacts. If the dredged sand is pumped on the north side of the Lake Cathie entrance, longshore drift will take this sand northwards and the beach in front of the wall will not be useable.
	Comment:	be reduced. The Lake Cathie CZMP stipulates that Council will continue to nourish the beach in front of Illaroo Road (even after the wall is constructed) in order to combat the loss of the beach in front of the wall.

		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to tenure ownership and management responsibility will be addressed in stages 2 & 3 of the CMP process.
Issue		nmencement of flooding of footpath, in the Aqua Reserve, ke height reaches 1.5m is also of concern to residents.
	Council Response/ Comment:	The footpath on Aqua crescent was built in 2005 as part of reclamation works for a stormwater upgrade. Council will look to raise the level of these footpaths owing to the ongoing sustained pressure from the Lake Cathie community to be able to use these footpaths at all times.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the Lake Cathie/Lake Innes ICOLL with regards to foreshore improvement and infrastructure upgrades will be addressed in stages 2 & 3 of the CMP process.
Issue	In summary, it is noted that Council's ongoing relationship with the Lake Cathie community has been eroded over time (the last 10 years particularly) by Council's inaction and – as the community perceives it – passive resistance to addressing its real concerns. In particular this relates to its handling of the Illaroo Road revetment wall and related storm water management issues and the ongoing licensing issues / management of the lake frontage.	
		ship between Council and the Lake Cathie community will only when these issues are finally addressed in a meaningful way.
	Council Response/	There are considerably differing viewpoints within the community on how to manage the coastal and estuarine areas of our LGA. Council must weigh these aspects up

	Comment:	when making decisions for the community. This can add complexity and time to the development of management actions.
		Council is required to abide by a large number of state and federal government controls. This ads significant complexity in anything we do and can result in long timeframes for the delivery of projects. There have been multiple changes made to the legislation that governs how Council's manage their coastlines and estuaries in the past 4 years, many of which have significantly shifted the focus for Council and has impacted on our ability to deliver outstanding projects.
		Council strives to engage with the community in a meaningful way and anticipates that the future stages of the CMP will allow relationships to be built.
8	Kennelly	
Issue	We feel that the Bonny Hills headland in Honeysuckle Road needs undergrowth attention in respect of a lot of dry matter lying on the ground and as a matter of the recent fires along the coastline, this needs a cool burn to maintain the risk of out of control fires. We have been advised that this has not been done for some 30 years and the risk of embers passing to the houses along these areas is extremely high. We have a lot of elderly in that area who wouldn't be able to evacuate down to the beach or even be able to leave by car as many of them are on their own. This is a very irresponsible issue by the Council and fire authorities and the magnitude of how fires can quickly become castastrophic should be learnt from recent fires.	
	Council Response/ Comment:	This forms part of the Bushfire Risk Management Plan and is a separate matter to the Coastal Management Program.
Issue	Another request is to install a boardwalk along the coastline from the Bonny Hills caravan park right through to Grants Headland. This would encourage our locals and visitors to enjoy the physical exercise of walking the headlands as well as the safety of kids staying off the edge of roads when walking or riding bikes to the patrolled and unpatrolled beaches. There should also be some viewing platforms along the boardwalk for the purpose of whale watching. The section of boardwalk through the Bonny Hills caravan park has proven its success however, it's just a shame it does not extend the whole length of the headlands to Grants Head and what a tourist attraction it would bring to the area.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options,

Issue	Addresses is	sues of erosion along the rivers and estuaries.
		Management of marine flora and fauna will be addressed in stages 2 & 3 of the CMP process.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Short term management of localised turtle nesting areas is provided when they become known to managing stakeholders.
	Council Response/ Comment:	NSW TurtleWatch is an initiative of the Department of Planning, Industry and Environment's Saving our Species Program with Australian Seabird Rescue. Volunteers collect data on marine turtle nesting in NSW and work closely with NPWS staff to monitor and protect the turtles.
Issue	Includes the	management of turtle nesting along our coastline.
		Interaction of neighbouring catchment will be addressed in stages 2 & 3 of the CMP process.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
Issue	Includes the	effects of neighbouring catchments on our LGA.
9	Searle	
		Management of the Bonny Hills foreshore will be addressed in stages 2 & 3 of the CMP process.
		considering important issues like; feasibility, viability and acceptability.

Comment:	vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
	Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
	Management of riverbank and foreshore erosion will be addressed in stages 2 & 3 of the CMP process.
addresses d	rainage issues on the North Shore.
Council Response/ Comment:	Council attempted to provide improved drainage via localised road raising and supporting drainage network upgrades in 2013, however this was not supported by the North Shore community.
	Existing drain maintenance was carried out in 2014 and ongoing maintenance is carried out as required.
	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
	Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
	Management of stormwater will be addressed in stages 2 & 3 of the CMP process.
includes the impact of future increases in recreation and tourism within the coastal management area.	
Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
	Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
	Management of recreation and tourism impacts will be addressed in stages 2 & 3 of the CMP process.
	addresses d Council Response/ Comment: includes the coastal mana Council Response/

10	Camden Haven Chamber of Commerce		
Issue	Timeline		
	The Camden Haven estuary and open coastline are of significant social, cultural, environmental and economic value to the Camden Haven community. The health of these natural assets stands to impact livelihoods, tourism, and health and well-being in the Camden Haven. The timeline provided in Table 19 (page 93) indicates the Camden Haven estuary and Open coastline Chapters are adopted in 2024, with		
	since the las	ion commencing 2025. Since significant change has occurred t estuary strategy in 2002, the planned five-year delay before ion presents a risk based on the currently significant values	
		end the adoption and implementation of the Camden Haven Open coastline Chapters of the CMP moved forward to FY23.	
	To achieve t	his, we recommend that PMHC consider:	
	a) Allocating additional resources to the CMP by either increasing internal staff or outsourcing relevant professionals so that the CMP for all four geographical areas are adopted by 2023.		
		ne order of Chapters (geographic areas) so that Camden ings and Open coastline run concurrently.	
	Council Response/ Comment:	Due to staffing and resourcing constraints Council has had to prioritise certain CMP Catchment areas over others. Without a significant increase in staff and financial resourcing the Camden Haven Estuary chapter cannot be brought forward.	
Issue	Language		
	The negative language used in some sections of the CMP Scoping Study (for example 'Expectations' on page 96), is of particular concern, as it is non-conducive for the achievement of objectives, nor supportive of positive change. Given the social, environmental, cultural and economic significance of our coastal areas, our recommendation is for PMHC to apply increased dedication and investment in this program.		
	Council Response/ Comment:	Due to staffing and resourcing constraints Council has not been able to be proactive in the management of the coast and estuaries within the LGA. However, it is noted that there are many other stakeholders involved in the management of our coasts and estuarine systems, many of which have also undergone significant change in recent years, and therefore are less able to provide improved services.	
		It is hoped that once Stages 2 & 3 are complete, that increased funding and resourcing will be provided, and that government agencies better support Council in the delivery of actions identified in the CMP's.	
Issue	Community	Consultation	
	We recognise PMHC's efforts to undertake community engagement when preparing various plans and programs across the LGA. Table 21 (page 98)		

	outlines the	various stakeholders to engage throughout the CMP process.		
	While 'Comn specific user	While 'Community' and 'Industry' are listed, this table does not detail specific user groups. For the successful capture of all interests, our		
	recommendation is for the PMHC's community engagement plan supporting the CMP includes the following stakeholders:			
	Indigenous culture			
	Commercial fishing			
	Recreation	al fishing		
	Recreation	al surfers		
	Aquaculture	e		
	• Tourism			
	 Agriculture 			
	General co	mmunity		
	Conservation	on (for example Landcare groups, Coastal Warriors)		
	 Science 			
	Council	Council will develop a detailed community engagement plan		
	Response/	for the future stages of the CMP, and it is very likely that the above stakeholders (plus many more) will be consulted.		
	Comment:	above stakeholders (plus many more) will be consulted.		
Issue	Please adjus	at the following items accordingly:		
	 Page 42, last paragraph – The Camden Haven also experiences a significant influx of visitors over peak periods (mainly recreational fishers and recreational water users) putting pressure on coastal areas 			
	• Page 46 – Many businesses in the Camden Haven rely on continued use of the coastal zone by recreational fishers and recreational water users (both local, regional (PMHC LGA), intrastate and interstate visitors			
	• CMP Scoping Study language be consistent with the Marine Estate Management Agency (MEMA) Threat and Risk Assessment (TARA) by replacing the word 'issues' with 'threats'			
	• Table 16 (page 86) – This table does not appear to capture marine debris, discarded fishing gear, disturbance or catch of significant species as threats. These are some of the priority threats identified in the TARA and anecdotally of threats to the Camden Haven estuary.			
	Council Response/	CMP wording updated where required.		
	Comment:			
11	Smith			
Issue		for Duchess Creek, refer 13.3 Coastal Vulnerability Areas page apacts to the creek will be from rising sea levels and increasing s.		
	Also currently relevant to Duchess Creek and Rainbow Beach (north of the creek mouth), is the Sewer Treatment Plant operation of its "exfiltration trench" discharging tertiary treated effluent water at the sand dunes onto			

	the beach. This operation over many years has caused 'caves' in the dune face and the loss of trees and shrubs along the dune.	
	It is anticipat this dune.	ed rising sea levels and increasing storm surges will degrade
	Council Response/ Comment:	The impacts of rising sea levels will be wide ranging and complex to manage. It will require the development of well integrated and proactive management policy/plan in order for Council to be well prepared for the impacts of change.
		Climate change is a key consideration of the CMP so it will be addressed in the future stages of the CMP.
		The operation of the Sewer Treatment Plan is not known to directly cause any adverse impacts to the structural integrity of the stream banks or fringing vegetation.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of Saltwater and Duchess Creek will be addressed in stages 2 & 3 of the CMP process.
Issue	Plan (2005),	or Saltwater Creek, refer 16.2.4 Saltwater Creek Management where problems were identified and 'A range of strategies and then recommended to manage specific issues'.
	and if approp future) it is a	at 'Management actions contained in the plan will be reviewed briate, included in the CMP', however (since 2005 and into the pparent that the situation at Saltwater Creek will deteriorate. the actions on 'flooding' and 'erosion' must be included in the dy.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of Saltwater and Duchess Creek will be addressed in stages 2 & 3 of the CMP process.

Issue	Saltwater Creek meets the sea immediately adjacent Rainbow Beach Reserve (recently coastal erosion at Rainbow Beach Reserve has necessitated "sand bagging" along the foreshore to protect the Reserve, refer 13.3 Coastal Vulnerability Areas page 51). Most impacts to the creek will be from rising sea levels and increasing storm surges. The issues will be flooding of/up the creek and bank erosion of the creek and Reserve.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of Saltwater and Duchess Creek will be addressed in stages 2 & 3 of the CMP process.
Issue	10.7 Climate	e Change
	Regarding Sea Level Rise page 41 it is concerning that 'Whilst the NSW Government has repealed the NSW Sea-level rise Policy Statement 2009, PMHC believes this is the best available information ' .	
	It is noted that 400mm rise by 2050 and 900mm rise by 2100 will be used for CMP , however what is now the "official" NSW Policy ? Will rises be the same or worse?	
	Any sea level rise and large storm surges will cause beach (dune) erosion.	
	The CMP should account for the increased frequency of East Coast Lows which seem to be directly related to the water temperature rise of the East Australian Current and hence this will cause increased large storm activity at the coastal strip, ie impacting beaches.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.

		Management of coastal and estuarine areas, with regards to
		climate change impacts will be addressed in stages 2 & 3 of the CMP process.
Issue	13.2 Coastal	Wetlands and Littoral Rainforests
	Noted 'Coastal wetland and littoral rainforest communities have high biodiversity values', 'Some remnants of littoral rainforest are located along the coastline', any degradation of the coast dunes will adversely affect rainforest and biodiversity!	
	Council Response/	Noted.
	Comment:	
Issue	13.3 Coastal	Vulnerability Areas
	'no state-wid	regarding impacts to beach erosion and shoreline recession, le mapping has yet been adopted', so when will this "officially" for the CMP?
	Council Response/ Comment:	The mapping has since been released to PMHC. PMHC is yet to review the mapping however it is expected that this mapping may form the basis of investigations under stage 2 & 3 of the CMP.
12	Revive Lake	e Cathie Inc.
Issue	Revive Lake Cathie supports State agencies and fellow identified Lake Stakeholders in encouraging Council to prepare a Coastal Management Program (CMP) for Lake Innes /Lake Cathie &Bonny Hills Estuary & Coastline. It is agreed by all Stakeholders that this is the most appropriate mechanism available to Council to tackle the complexity of issues that abound around the management of this lake system and its interaction with the community and coastal processes.	
	Coastline. It mechanism a abound arou	is agreed by all Stakeholders that this is the most appropriate available to Council to tackle the complexity of issues that ind the management of this lake system and its interaction with
	Coastline. It mechanism a abound arou	is agreed by all Stakeholders that this is the most appropriate available to Council to tackle the complexity of issues that ind the management of this lake system and its interaction with
Issue	Coastline. It mechanism a abound arou the communi Council Response/ Comment: We encourag seeking guid support the p	is agreed by all Stakeholders that this is the most appropriate available to Council to tackle the complexity of issues that and the management of this lake system and its interaction with ity and coastal processes.
Issue	Coastline. It mechanism a abound arou the communi Council Response/ Comment: We encourag seeking guid support the p coordinated Council Response/	is agreed by all Stakeholders that this is the most appropriate available to Council to tackle the complexity of issues that and the management of this lake system and its interaction with ity and coastal processes. Noted.
Issue	Coastline. It mechanism a abound arou the commun Council Response/ Comment: We encourag seeking guid support the p coordinated	is agreed by all Stakeholders that this is the most appropriate available to Council to tackle the complexity of issues that ind the management of this lake system and its interaction with ity and coastal processes. Noted. ge Council to liaise with the NSW Government Stakeholders in ance, technical advice, reducing red tape and grant funding to preparation of Port Macquarie-Hastings Council's CMP for the management of the NSW coastal zone in a timely fashion.

	community values these systems and helps frame Lake / Estuarine management.		
	Council Response/ Comment:	Consultation and engagement is at the core of the CMP process. Community engagement and feedback will be undertaken throughout all stages of the CMP.	
Issue	Strongest possible request of Port Macquarie-Hastings Council to prioritise the needs of the Lake Cathie/Lake Innes Estuarine System through the implementation of strategies to halt the significant decline of the system and achieve the sustainable health and amenity of the Lake Cathie/Lake Innes Estuarine System.		
	Council Response/ Comment:	The lake Cathie/Bonny Hills CMP chapter has been prioritised over other coastal and estuarine areas of the LGA based on the risks identified during the Scoping Study phase.	
Issue	Revive Lake Cathie Inc seeks action through inclusion of a number of RLC priorities into the Port Macquarie-Hastings Council Draft Coastal Management Plan (CMP) highlighted below. Inclusion will enable us all to achieve the sustainable health and amenity of Lake Cathie/Lake Innes Estuarine System.		
	1. Implement Interface.	tation of regular sand grading of the Lake Cathie Ocean/Lake	
	2. Replacem	ent of Kenwood Drive Bridge.	
	3. Address e	3. Address environmental degradation in Lake Innes.	
	4. Undertake	4. Undertake scientific water & soil testing.	
	5. Create Es	5. Create Estuary baseline measures.	
	6. Immediate removal and re-purpose sand (sediment)build up in the Lake Cathie/Lake Innes Estuarine System.		
	7. Creation of a Lake Cathie/Lake Innes Estuarine System - Citizen Science Education Program.		
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		Management of the Lake Cathie/Bonny hills area will be addressed in stages 2 & 3 of the CMP process.	
Issue	Future Grow	th of Lake Cathie	

	Under Port Macquarie-Hastings Council's Urban Growth Strategy 2017- 2036 (UGS), Lake Cathie is forecasted to grow by 3,395 people or 52%. Additional urban growth is placing and will continue to place additional risk and impacts on the health of Lake Cathie/Lake Innes Estuarine System.		
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		Management of population growth on the coast & estuary will be addressed in stages 2 & 3 of the CMP process.	
	Focus on Im	plementation	
	RLC have not found any evidence of any report compiled or completed in the past that have addressed the issue of low water levels and its effect on the Lake Cathie and Lake Cathie Lagoon estuary systems. Even though the PMHC has an Opening Strategy for height of 1.6 >ADH and low of <0.2 ADH, only strategy is for opening with flood waters coming from upstream.		
		mmediate need to develop low water level strategy for the of Lake Cathie and Lake Cathie Lagoon estuary systems.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		Management of lake openings will be addressed via a revised opening strategy which will be undertaken in stages 2 & 3 of the CMP process.	
Issue	Focus on Im	plementation	
	Consideration of inclusion of a manual opening mechanism of the Lake Cathie Ocean/Lake Interface or Berm once safe pedestrian passage is impeded on pathway, infrastructure at Aqua Reserve, sewage infrastructure within the community, property flooding issues and back waters flooding various roads around the boundary of Lake Cathie.		

	The review of these issues surrounding Lake Cathie / Lake Innes Estuarine System is required to be commenced of immediately not waiting for the CMP to be completed.	
	Review of the height levels for opening need to become more flexible to cover the many variables that are developing in the estuarine system now and into the future.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of infrastructure and assets will be undertaken in stages 2 & 3 of the CMP process.
Issue	Water Monito	oring of Lake Cathie
	Revive Lake Cathie seeks for Council to add further and support strategically placed locations for water monitoring and require installation of remote monitoring devices, similar to those funded in the Port Macquarie-Hastings Council 2019-2020 Draft Operational Plan along the Hastings River in Port Macquarie.	
	Council Response/ Comment:	The new river level and rainfall gauge came out of the Hastings River Floodplain Risk Management Plan, which was adopted in 2014.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of water quality will be addressed in stages 2 & 3 of the CMP process.
Issue	Depth Monito	oring of Lake Cathie
	Similar to the water monitoring key point above, RLC seeks strategically locations identified and implemented for water depth measurement and monitoring throughout the Lake Cathie/Lake Innes Estuarine System.	

	0	The next stars of the Constal Management Deserves in
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of sand shoaling will be addressed in stages 2 & 3 of the CMP process.
Issue		Council Staff Member to the role of implementing strategies to / Lake Innes Estuarine System
	Cathie/Lake RLC therefor 2021-2022 C environment System and	and that an issue as important as the health of Lake Innes Estuarine System, needs to be adequately resourced. re seeks that the Port Macquarie-Hastings Council 2020-2021, Operational Plan budget includes a suitably qualified al officer to manage the Lake Cathie/Lake Innes Estuarine act as a direct contact for the community, organisations and h environmental concerns.
	Council Response/ Comment:	Staffing has been provided by Council via the Natural Resources team.
Issue	Education	
	Improved education of intermittently open and closed lake systems (ICOLL), of which Lake Cathie is one. Knowledge of the understanding of what is happening in the lakes wetted perimeter that expands and contracts depending on the season and whether the entrance is open or closed and the impacts in the back of the estuarine system in Lake Innes, Lake Cathie which eventually impacts the entire estuary to the Lake Cathie Lagoon opening.	
	Council Response/ Comment:	Council has updated the PMHC website on multiple occasions in the last 18 months, and has also erected a new information sign at foreshore reserve. Council staff have also held numerous meetings with key stakeholders and community groups to discuss the complexity and ramifications of decisions that are made regarding the management of the lake system.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.

		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Education on the management of the lake system will be addressed in stages 2 & 3 of the CMP process.
Issue	Solutions	
		f the Lake Cathie/Lake Innes Estuarine System is suffering mental degradation and is in significant decline, we need the utions:
	managemen of Lake Inne	of a Council Staff Member with their sole role being the t of implementation of strategies to stop the significant decline s, Lake Cathie and Lake Cathie Lagoon to achieve the nealth and amenity of Lake Cathie ecosystems, waterways ent.
	2. Implemen	tation of the following strategies: -
	Kenwood Dr	Concept Designs for options of a new wider opening for ive Bridge and make available for community consultation in a er- UNDERWAY – May 2020
	- Removal and repurpose of sediment throughout Lake Innes, Lake Cathie and Lake Cathie Lagoon estuary systems.	
	- Sediment barrier Infrastructure to stop further sediment moving in from Cathie Creek and other streams feeding into the lake system especially Lake Innes and Lake Cathie.	
	- Installation of remote water quality monitoring devices -	
	- Multiple height measures implemented alongside remote monitoring devices, with a visible measure at Cathie Creek for community visibility –	
	Ocean/Lake on pathway, the commun	f a manual opening mechanism of the Lake Cathie Interface or Berm once safe pedestrian passage is impeded infrastructure at Aqua Reserve, sewage infrastructure within ity, property flooding issues and back waters flooding various d the boundary of Lake Cathie.
	- The review of these issues is required to be commenced immediately no waiting for the CMP to be completed.	
	- Review of the height levels for opening need to become more flexible to cover the many variables that are developing in the estuarine system now and into the future.	
	the manager best way Re participate fu	e Cathie is a committed team wanting to assist in improving ment of the Lake Cathie/Lake Innes Estuarine System. The vive Lake Cathie can assist Council at this stage is to ally in the CMP preparation process to clearly identify actions oup will be able to undertake or assist Council with.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore

		involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities. Following this, Stage 3 will be completed which will 'Identify
		and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system will be addressed in stages 2 & 3 of the CMP process.
13	Lake Cathie	Amateur Fishing Club
Issue	does not refl This fishery I since 2009. I Flathead, Lu Sand Whiting Two Lakes v financial valu is a push by would not su	fers to reduced Commercial Fishing Catch in the Estuaries but ect that Lake Cathie / Lake Innes have a commercial fishery. has harvested 71,488 kg of seafood for the commercial market it is an important breeding ground for, Bream, Crab, Eel, derick, Sea Mullet, Mulloway, School Prawns, Taylor and g. Recreational fishing catch can only be estimated, but the value to the community for the recreation activities and ue to the community is underestimated. Especially when there some to convert Lake Innis back to a Fresh Water Lake. We upport a move to close of Lake Innis and attempt to convert it Vater System.
	Council Response/	Table 5 of the CMP refers to Oyster production, which does not occur within the lake system.
	Comment:	Table 6 contains information relating to the entire LGA's commercial fishing and prawning net revenue.
		Council is fully aware that a commercial fishery operates within the lake system, and certainly acknowledges the importance of this industry when assessing options relating to the management of the system, especially regarding the reversion of Lake Innes.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system, including the reversion of Lake Innes, will be addressed in stages 2 & 3 of the CMP process.
Issue		npeting interest by a number of Community Groups and Organisations followed by studies after study that seem to

		unan time the True I also from a ballow to the 10 st
	When you co these review reasonable t they had bee	every time the Two Lakes face a challenge by drought or flood. onsider the money has been expended over the years on rs / studies with no real action taken. We believe it's o consider what we could have achieved with these funds if en converted in to positive action to resolve that agreed issues Kenwood Drive Ocean Drive Bridges.
	Council Response/ Comment:	Council recently resolved at the 21 October 2021 Council meeting that the General Manager develop a project plan and indicative costings for the replacement or augmentation of the Kenwood Drive Bridge for consideration by Council in the development of the Draft 2021-2022 Operational Plan and future draft Delivery Program and Operational Plans.
Issue	Wall along II the issue of t years. As the	argent priority should be given to addressing the Revetment laroo Road; Lake Cathie. The design was completed in 2015; finding suitable hard rock surely can't have taken over five a years go by the construction cost would be escalating and at ning unstainable.
	Council Response/ Comment:	Council also acknowledges the importance of this project, as it was identified as the key action item from the Lake Cathie CZMP. Council continues to work on this project and has recently been working through the funding model and Cost Benefit Analysis (CBA). Both of these components of work have involved input from the NSW government so they have taken some time to deliver. Community consultation on the findings of the funding model are the next critical stage in this project.
Issue	We have submitted recommendations in the past regarding the build of sand on the Western side of the recently constructed Camden Haven Boat Ramp. This build up is effectively reducing the launching of larger boats on the western ramp. Seagrass has now moved into the area of siltation compromising remediation of the issue. Recommendations have been submitted in the past for the repair/ replacement of the Boat Ramp at Lake Cathie and adjacent fish cleaning tables, we support these recommendations being included in infrastructure planning for this program.	
	Council Response/ Comment:	Noted.
Issue	Department Restocking; numerous R Operations i	eed to support restoration programs in the study, with of Industry – Fisheries grants available for Native Fish Oyster Reef Restoration. We believe engagement with the ecreational Fishing Clubs and the Commercial Fishing n the area would be beneficial to the Coastal Management proving both Commercial and Recreation fisheries and water
	Council Response/	Council will develop a detailed communications and engagement plan for the future stages of the CMP. The local

	-	fishing industry and fishing clubs will be identified a key
	Comment:	stakeholder of this engagement plan and will therefore be directly consulted. DPIE Fisheries will also be directly consulted in all future stages of the CMP.
14	Saving Lake	e Cathie
Issue	Chapter 1 of the Coastal Management Plan has been identified as Lake Cathie / Lake Innes & Bonny Hills Estuary and Coastline. As this chapter would be the most complex area covered in the overall program of work and also potentially the most controversial, it should be prioritised.	
	Council Response/ Comment:	Noted.
Issue	sections of the reference po been complete view of common common view of common common view of common common view of common common view of common comm common common comm	comments section of this document outlines the various ne scoping study where Community Plans could be used as a int. Council Community Action Teams (CCAT) have recently eted in a number of areas and would provide a more recent munity vision, values, objectives and actions. Some of the e Lake Cathie Community Plan directly correlate with the
	Council Response/ Comment:	Noted.
Issue	Knowledge gaps have also been identified in relation to the economic context for areas outside Port Macquarie which is a concern. For example, tourism numbers in Lake Cathie are not formally recorded but anecdotally are known to be impacted by the state of the lake and this has a resulting impact on local businesses.	
	Council Response/ Comment:	Noted.
Issue	Another area is climate change and specifically the movement of sand along the coast and the impact of climate change on that movement. This is relevant both from an erosion perspective as well as from a lake opening perspective.	
	Council Response/ Comment:	Council has detailed coastline hazard and sand movement information for Lake Cathie as a result of the Coastal Zone Management Plan (CZMP). This information takes climate change into consideration.
		Council will review the NSW State Government Coastline Hazard Mapping as part of stages 2 & 3 in order to determine where the greatest risks are for the remaining LGA coastline.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks,

		 vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities. Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability. The need for sand movement studies will be addressed in stages 2 & 3 of the CMP process.
Issue	needs to be Innes EIS fro which have b data for the I items identifi EIS were not	Council approval for design options for Kenwood Drive bridge factored in and references to documents including the Lake om 2013 must consider the shortfalls in these documents been identified over time. These include the use of old height Lake Innes, Lake Cathie and Cathie Creek as well as those ed in the July 2019 acid sulfate report where shortfalls in the ted including better knowledge of acid sulfate soils than what e at the time the EIS was written.
	Council Response/ Comment:	The Kenwood Drive Bridge is the subject of a recent resolution of Council to commence development of concept design for the Kenwood Drive Bridge as part of the 2020 - 21 Operational plan.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		The need for additional studies will be addressed in stages 2 & 3 of the CMP process.
Issue	should consi	ion will be a critical component of the CMP and Council der a communications plan that can be followed for each e CMP and then through each stage.
	Council Response/ Comment:	A detailed communications and stakeholder engagement plan will be developed as part of the future stages of the CMP.
Issue	sub-committe well as using	the representatives on the Coast, Estuary and Floodplain ee during the CMP stages both from an input perspective as them as part of the communication process with the nust be formalised.

	Council Response/ Comment:	Council is presently seeking to fill positions of the CE&F Committee and plans to utilise the committee on a more regular basis.
Issue	stated in the	Objectives – This is should be retitled as "Purpose" which is first sentence. Objectives should be specific, measurable, I achievable and have a specific timeframe. Either change the ewrite.
	Council Response/ Comment:	Section 2.2 of the CMP contains the 'purpose'. Section 2.4 contains the 'objectives'. Slight wording change incorporated to section 2.4 to clarify the difference between the two sections.
Issue	will use ident the CMP. Fo Community I encompasse community p	lues and Responsibilities – This section states that the CMP tified community values to guide the long-term outcomes of r each Chapter the CMP should reference that areas Plan and the values outlined in them. Chapter 1 which es Bonny Hills and Lake Cathie have both recently had their plan endorsed by Council and these should be the basis for hity values referenced in the CMP.
	Council Response/ Comment:	Incorporation of values from the community plans will be considered as part of the development of future stages of the CMP.
Issue	Section 8 Strategic Context – Again this should reference the relevant parts of the applicable community plans. References to strategic plans that are looking 10 years out has some context but spending anytime referencing a 2050 strategic plan makes little sense as it is just too far into the future to have any relevance to this program other than as an overall vision. Other than at a very high level even looking at 2036 could be misleading.	
	Council Response/ Comment:	Section 1.5.1 of the NSW Government Coastal Management Manual, part B, Stage 1 requires Council to look 50-100 years into the future.
Issue	Section 11.3 Community Values and Uses – This section, for Lake Cathie, uses the EMP and the CZMP for Community Values but as these documents reflect values that were noted up to 20 years ago, they may not be totally reflective of today. Paddle boarding and crabbing being two uses that are missing and the Seawide Estate development off Rainbow Beach didn't exist when these early documents were developed. This may require a more detailed survey to update properly or as stated above, using the recent Community Plans may assist.	
	Council Response/ Comment:	Values and uses of the Lake System will be reviewed as part of future stages of the CMP.

Issue	The 1983 Colin Creighton report, "The Lake Innes, Lake Cathie catchment – Resource Appraisal with Recommendations for Restoration Works and Management" is considered a key reference document by many of the subsequent studies despite its age, yet this document has not been included as a reference in the scoping study.	
	Council Response/ Comment:	Reference to Creighton report has not specifically been included in this document however many of the reports and studies in the Scoping Study have relied upon Creighton's work. Future stages of the CMP process will look at former studies as they relate to the Lake Cathie/Innes catchment.
Issue	December 2	vailable for any issues identified in the CZMP up until 021. What progress is being undertaken to apply for funding tte the completion of these?
	Council Response/ Comment:	Council also acknowledges the importance of this project, as it was identified as the key action item from the Lake Cathie CZMP. Council continues to work on this project and has recently been working through the funding model and Cost Benefit Analysis (CBA). Both of these components of work have involved input from the NSW government so they have taken some time to deliver. A Council report is being prepared for this project.
		The Lake Cathie/Bonny Hills CMP chapter has been prioritised over other areas. This will allow for incorporation of the CZMP actions.
lssue	While not specific to the CMP, should PMHC consider a name change for Lake Innes to Lake Burrawan which was its original name.	
	Council Response/ Comment:	Noted.
Issue	Section 10.7 Climate Change – While the East Australian Current runs from North to South, sand along the coast actually moves from South to North. This is driven by storms and a predominantly southerly swell. However, as waters warm there is documented analysis that this will lead to a change, over time, where the swells become more from the North- East and as a result sand movement will reverse. Sand movement should be considered as part of the CMP and its potential impact on coast lines and lake openings.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the

Issue	Other Points	of note for Section 17 include:
	Response/ Comment:	will be addressed in stages 2 & 3 of the CMP.
	Council Besponse/	These issues, among others are well known to Council and
	Ø The Coast, Estuary and Floodplain sub-committee has a large number of outstanding actions. These are all known issues and should all be mapped against the categories identified in this document for investigation in stage 2 of each relevant chapter. Some are already included but not all.	
		es the Asbestos issue at the Lake Cathie southern headland fit a known issue? and
	Ø Public Health should be a category given the recent issues at Lake Cathie and the waterway usage by the public. In addition, issues such as the recent mosquito plague and the role that the lake plays in exacerbating these infestations should be investigated;	
	Ø Sedimentation – mapping of height levels throughout the Lake Cathie / Lake Innes system. Height levels have not been surveyed for a significant amount of time;	
	Ø Land Use Planning Impacts – In addition to development control plans the impact of diverting storm water into the lake Cathie system should be investigated, similar to what was done for the Coastal Hazard Storm Water at Lake Cathie. This is of particular concern given DA approvals for the Southern and Western ends of Lake Cathie which, when completed, will see a large increase in storm water directed into the lake;	
	Ø Amenities reduced or impacted - Investigate raising of the Aqua Reserve footpaths where they are below the flood trigger;	
lssue	Section 17 W above we wo	/here Action is Required – In addition to the items noted ould include:
		Future stages of the CMP process will look at former studies and will undertake research into tourism impacts based on present day context.
	Council Response/ Comment:	A Tale of Two Lakes report looked into the tourism related aspects of the lake system and the impact on the community of Lake Cathie.
Issue	Section 12 Economic Context - Tourism, for Lake Cathie, is unknown in that, unlike Port Macquarie, no tourism numbers are recorded. Anecdotal numbers have been noted at different times but nothing formal. The link between the Lake / Lagoon system and businesses in the Lake Cathie area is not reflected in this section at all so is assumed to be another unknown element that needs to be captured in the scoping.	
		The need for sand movement studies will be addressed in stages 2 & 3 of the CMP process.
		identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.

	Ø Many of the studies done including the 2011 Hydrology study and 2013 Lake Innes EIS utilise data from much older studies. Any modelling results or recommendations that rely on this data need to be redone using updated data or only used as an historical reference;		
	Ø The recent Council approval for design options for Kenwood Drive Bridge also needs to be factored into any modelling including sediment movements and siltation studies; and		
	Ø Any review of the Lake Innes EIS must consider the impacts on the whole estuary system, not just Lake Innes in isolation. Given the existing EIS only looked at Lake Innes, the recent ASS (Acid Sulfate Soil) report identified shortfalls in the EIS as well as more recent knowledge which would change some of the assumptions, an EIS on the entire system should be considered not just a review.		
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		The need for reviewing existing studies will be addressed in stages 2 & 3 of the CMP process.	
Issue	Communicat	ion	
	The recent Facebook Q&A by PMHC was quite good; however, it does not reach all demographics. Some of the community either do not have a computer or are not on Facebook. While it is certainly one method of reaching the community, it may need to have other methods considered when appropriate. We understand that Covid-19 has also influenced this method. In addition, as a participant it was quite difficult to focus on what the Council officers and guests were saying while also trying to type questions. Possibly emphasising the need for questions ahead of the Q&A, whilst still allowing questions in the live stream, would provide more detail particularly when the public plays the recording later. It would also allow more detailed answers by Council and guests and reduce potentially being caught without being able to provide a proper answer.		
	Council Response/	Noted. Feedback appreciated.	
	Comment:		
Issue	Communication On Page 98 – Stakeholders and specifically the Coast, Estuary and Floodplain Advisory subcommittee, as has already been commented at the May meeting, the engagement with this group should be during the development of documents not after documents have already reached a		

	draft stage. Recommend a working group approach be used to allow feedback and even direction from the local LGA representatives on the committee in preparing the draft reports as well as using them to assist in communication with the community. Going forward a communications plan which allows for community information updates and for input where appropriate in parallel with the chapters and stages would help bring the community along rather than potentially presenting them with results at the end. The current "Have Your Say" request for feedback on the scoping study left many in the community, who we spoke too, confused, felt it was too difficult or thought it was asking about issues. Council should consider providing guidelines on exactly what they are looking for, in particular when the document is quite technical. As mentioned earlier Council need to also consider other methods of feedback as many in the community don't have	
		or are not computer literate.
	Council Response/ Comment:	Council is presently seeking to fill positions of the CE&F Committee and plans to utilise the committee on a more regular basis. Specific working groups have historically been used when formulating key documents, such as the Lake Cathie CZMP. It is anticipated that a working group will be developed for the development of the CMP.
		A detailed communications and stakeholder engagement plan will be developed as part of the future stages of the CMP.
Issue	Saving Lake	Cathie Survey
	Saving Lake Cathie recently conducted a survey of the community focussing on known issues in the lake and estuary system. This was done to gauge community feelings on options for some of the known issues, identify risks or issues that had been missed and also to identify area where education was required.	
	A graphical summary of each questions answer statistics is shown below, a print out of each individuals survey answer has been handed to Council. The survey kicked off at 8pm on Monday 22nd June and as at Thursday 25th June 67 surveys had been completed.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and
		opportunities.

15	Northside Progress Association Inc.	
Issue	The North Shore of Port Macquarie is a complex area of Beach, river estuary known for its importance to the Seed Oyster Industry across NSW and littoral rainforest. It also covers the Wilson River for part of its topography. The North Beach extends from the mouth of the Hastings River to Pt Plomer, a popular tourist area.	
	We wish to k	now if this area is included in the Scope.
	Council Response/ Comment:	Yes, then entire coast, and estuary of the LGA is included in the Scoping Study.
Issue	growth in por along the Riv two vehicula managemen Hibbard ferry We also wish may need to of 4 WD's ar	The have an increase in turtle hatching on the North beach and pulation and in tourist numbers. There is significant erosion ver, drainage problems, increased 4WD on the Beach. With r ferries operating there are implications for traffic t, particularly as erosion is undermining the road access to /. In to know if we have to wait for the final Scoping plan when we act immediately on issues before it is finalized. E.g. increase and dirt bikes on the sand dunes and beach leading to of turtle nesting places.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of beach driving will be addressed in stages 2 & 3 of the CMP process.
16	Love	
Issue	riverbank of Ferry/Riversi river to the p are falling or the river whe	o express concerns for the erosion occurring along the the North Shore but in particular, along Hibbard ide Drive. Our family has noticed significant erosion on the oint it appears to be impinging on the road. A lot of bush/trees slowly slipping into the water. We often see large turtles in en travelling on the ferry and it would be detrimental to their erosion keeps occurring.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to

		identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Riverbank protection will be addressed in stages 2 & 3 of the CMP process.
Issue	The drainage along Shoreline Drive & North Shore Drive is another concern. Whether it be rain or high tides, you only need a small amount of water for the roads to flood. At the moment, you only need to see the amount of damage to the whole road, to realise the impact. Land is being eroded & soil slipping back into the river.	
	Council Response/ Comment:	Council attempted to provide improved drainage via localised road raising and supporting drainage networks in 2013, however this was not supported by the North Shore community.
		Drain maintenance was carried out in 2014.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of stormwater will be addressed in stages 2 & 3 of the CMP process.
17	Port Macqua	arie Tidal Pool Committee Incorporated
Issue	to Chapter # formally ask	arie Tidal Pool Committee Incorporated we would like to speak 4 Port Macquarie-Hastings Open Coastline . We would like to for provision for an ocean tidal pool on a Port Macquarie would be a valuable asset for all of our community and
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and
		opportunities.
	Port Macqua to Chapter # formally ask beach . This tourism. Council Response/	identify, analyse and evaluate risks, vulnerabilities and opportunities. Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability. Management of stormwater will be addressed in stages 2 & 3 of the CMP process. arie Tidal Pool Committee Incorporated arie Tidal Pool Committee Incorporated we would like to speak 4 Port Macquarie-Hastings Open Coastline . We would like to for provision for an ocean tidal pool on a Port Macquarie would be a valuable asset for all of our community and The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to

18 Issue	suggest that and that exp CVA –Coast as coastal er	identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability. This matter will be addressed in stages 2 & 3 of the CMP process. s page contains a Heading "glossary and abbreviations". I this be changed to Glossary of Abbreviations and Acronyms anded information be provided. For example: al vulnerability area – areas subject to coastal hazards such rosion and tidal inundation.
	coastal featu lagoons and This would a	al environment area – areas that are characterised by natural res such as beaches, rock platforms, coastal lakes and undeveloped headlands. ssist members of the community perusing this and planning documents in the Coastal Management Program.
	Council Response/ Comment:	Noted. Minor wording changes made to the document.
Issue	Due to human habitation and development the ability of the Lake Cathie/Lake Innes system to function as a healthy ICOLL has diminished. Significantly flow impedance has increased in recent decades and scouring capacity has declined. This has been caused by the Kenwood and Ocean Drive bridges, the large sand island that has "grown" between the bridges, resultant increase in sand deposition and the loss of channels in the system.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system will be addressed in stages 2 & 3 of the CMP process.
Issue	The section on notable beaches has not included Lighthouse Beach along the "Cathie Straight", Lake Cathie itself and Middle Rock. Frequently cars are seen parked along the roadside where surfers and fisherman access the beach by walking through the bush and over the sand dune.	

	01	
	Often cars are also parked on the roadsides near place like where the fire trails are located and along Bells Plain for the purpose of walking in the bush for things like exercise, viewing of flora and fauna.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Beach access and trail management will be addressed in stages 2 & 3 of the CMP process.
Issue	Once the level in the system reaches between 1.4 and 1.5m AHD flooding begins to be more noticeable in various areas. This is described as nuisance flooding in the document. This is more then nuisance. Loss of amenity occurs and there are a range of increased risks for the community.	
	Council Response/	Investigation for raising of footpaths, sewer infrastructure and roads has been included in chapter 17.
	Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system will be addressed in stages 2 & 3 of the CMP process.
Issue	There is discussion in the document about the artificial opening trigger for the system being 1.4 – 1.8mAHD at different times over the years. The document is silent regarding opening triggers for when the system reaches low levels or has poor water quality. In March 2019 Council resolved not to open the system to the ocean even though the 0.2m AHD and poor water quality triggers for an artificial opening had been reached – adopting a wait and see approach1. This approach was maintained. Subsequently the water level dropped more, water quality deteriorated further and there were more fish kills2. This also meant that the system lacked sufficient water to prevent spread of the bushfires in some instances and underground peat fires continued to burn for many months until there was sufficient rainfall to fill the system. The system by that time was fresh water and many species of flora and fauna – including endangered species were no longer present	

	: + +		
	in the system. The entire ecosystem was compromised. For approximately 12 months the system was unsafe for swimming and for several years fish were considered unsafe for consumption by the community3.		
	It is important that the CZMP and EMP adopted as a result of the Coastal Management Program incorporate poor water quality and low water levels as triggers for an artificial opening if it is decided that the desired outcome is for the system to be maintained as an ICOLL.		
	Council Response/	Council were guided by NSW State Government guidance on the management approach during the drought.	
	Comment:	Council's water quality monitoring did not indicate that the water did not meet ANZECC guidelines at any stage throughout the drought, however signs were erected as the water was visually of poor quality and odorous.	
		DPI Fisheries and NSW Health did not close the lake system to fishing and swimming at any time throughout the drought.	
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		Management of the lake system, specifically the opening strategy, will be addressed in stages 2 & 3 of the CMP process.	
Issue	It is important that the scoping document recognise the current health of the system with regard to species of flora and fauna that has been lost due to recent devastation. Many of these will never recover naturally and others will take many years. Basic food sources for marine life have been lost such as the sea grasses and yabbies.		
	Rehabilitation of the natural environment of the system needs to be a component of the EMP. There needs to be capacity to begin this work before the CZMP and EMP are finalised.		
	Council Response/ Comment:	Council does not have the capacity to undertake environmental works relating the management of the coast and estuary without significant contributions from the state government. In order to receive funding from the government, Council must follow the coastal management program. Hence there is minimal capacity for Council to bring forward any works before the CMP is completed.	
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to	

		identify, analyse and evaluate risks, vulnerabilities and opportunities.	
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.	
		Management of the lake system will be addressed in stages 2 & 3 of the CMP process.	
Issue	lifestyles and the system a	nity values and uses needs to be expanded. It supports I can support more business if there was more certainty about and its amenity. The beach is patrolled during the holiday surf club use the lagoon from time to time for training and ies.	
	It provides a very safe swimming area with high level access – the northern side of the lagoon is a type of naturally occurring tidal pool/bath – that could be easily developed – without compromising the natural environment - to provide not only safe swimming but also protect the park foreshore on the northern side from erosion due to wave surge and allow for the reestablishment of the channel that use to run along the southern side.		
	Council Response/ Comment:	The social and economic impact that the Lake has on the town is noted as being significant. The values of the community will be discussed during the following stages of the CMP process.	
		The lake Cathie foreshore master plan was recently adopted, and does not contain any specific development plans for a tidal pool within the lower lake.	
Issue	Tourism – Lake Cathie is an important tourist destination not only for visitors to the region but also for those living in the LGA. It has a huge potential to be a major asset for tourism in the region that is largely untapped.		
	The CZMP and the EMP need to take this into consideration. Things like increased access to the beaches all along the Cathie Straight with proper off road parking and marked tracks to the beach and on the Lake side access roads to the water with picnic/camping/self composting ablution facilities and walking tracks.4		
	Council Response/ Comment:	The social and economic impact that the Lake has on the town is noted as being significant. The values of the community will be discussed during the following stages of the CMP process.	
Issue	Agriculture, Forestry and Fishing sector – Lake Cathie/Lake Innes supports a viable fishing industry. The tonnage produced of fish and prawn is not noted in the document.		
	Council Response/	The commercial fishery located within the lake system is recognised as being an important matter for consideration in	

	Comment:	the management of the system. Council does not hold any information on fish stocks nor fish catches. However the fishing industry will be included in key discussions regarding the management of the lake system.
Issue	The connectivity of the development in the Kenwood Drive area would be significantly enhanced by reopening the road connecting Kenwood Drive to Houston-Mitchell Road. If this were to go ahead in the future it is important that the possibility be	
	formalised in	• • • • •
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system will be addressed in stages 2 & 3 of the CMP process.
Issue	The plan for the building of an enhanced boat ramp where the current one is located. This will not only help to reduce disturbance in the sand/water due to the operation of motors in the shallow water that currently can occur.	
	Something model on what is in place at McInernery Park on the Hastings with a jetty and deeper water around the boat launching area. This would have the additional benefit of providing another area for some fishing from a jetty where the fishing can occur without swimmers etcetera about.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system with regards to boat access and facilities will be addressed in stages 2 & 3 of the CMP process.
Issue	In several pla (2007)1.	aces in the Study reliance is placed on the Short Report

I disagree with this reliance as it gives a limiting view of the uses/activities etcetera of the areas concerned.		
□ Prawning occurs in both the upper and lower reaches of the estuary with most occurring West and North of the Ocean Drive bridge and at the mouth of Lake Cathie itself (Kenwood Bridge)and can occur at times when the Lake is closed		
Port Macqua by the vehicl	d beach fishing occurs along the entirety of the beach from rie south to Bonny Hills. This is evidence among other things es on the beach and parked along the roadsides and in the ake Cathie, "Sixties" and the Rainbow Beach Estate.	
Council Response/ Comment:	The values referenced in table 4 are a reflection of those established by the community at the time that each CZMP and EMP were developed.	
	The values of the community will be discussed during the following stages of the CMP process.	
	apping Section states: "No seagrass meadows are shown to Cathie/Lake Innes, which is not uncommon for an ICOLL."2	
I have seen large areas of seagrass in Cathie Creek whilst kayaking and boating in the system. The largest being an area between the "channels" that ran around a sanding flat that was always under water – even during low tides - that extended from about the Perch Hole back towards approximately adjacent the footy field.		
Council Response/ Comment:	Noted. Minor wording change made to clarify.	
We last successful recreationally harvested prawns from the system in 2014. Since that time the catches were so diminished that the effort of dragging the netted scoops for them could not be justified. This reduction in prawns catches seems to be correlated to the recent rapid decline of the systems health.		
Council Response/ Comment:	Noted.	
In the late 1960s – early 1970 the Norfolk Pines along Bundella Avenue were planted by two local residents. At that time the foreshore there was 3- 4 metres on the lagoon side of the trees. In the subsequent decades there has been a huge amount of erosion on that foreshore area. The Norfolk pines are now at the very edge of the precipice and if any of them were to fall the consequent damage to public and private property could be extensive. The revetment plan appears to address part of this issue – but possibly not all. This needs attention urgently and if necessary review to ensure that the		
	ttention urgently and if necessary review to ensure that the ddressed in those works.	

		1
	Council Response/ Comment:	A review of documentation and aerial photos back to the 1940's does not show any significant or sustained erosion. It is noted that some minor erosion has occurred over time, which is normal for an exposed location, but the bank is relatively stable in the most part.
		Council's tree management section identifies trees that are at risk of failure, so if these trees require removal this will be undertaken in due course. However at this stage, the trees appear to be in good health and are growing well.
Issue	compromise addition to d Creek) –	ake Innes via kayak and boat has been increasingly d in recent years by the increased deposition of sediments. In redging the lower reaches to the estuary (eg lagoon, Cathie some dredging of the "reverse delta" – so that a channel ance access and flows - is warranted.
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system with regards to dredging will be addressed in stages 2 & 3 of the CMP process.
Issue	Saving Lake Cathie ran a brief poll/questionnaire to help members of the community have involvement in the consultation process. It would be useful for feedback to the community as a whole regarding the outcomes of the poll/questionnaire. This will achieve an even greater level of community engagement and help diminish the risk of extrapolating the poll/questionnaire results as being representative of the community's wishes/thoughts. Many people in the community are not engaging and if they do not they will be more likely critical of whatever outcomes result from the process for the future of the system.	
	Some people in the community have suggested that a form of census should be used to help people engage even more widely. This would be helpful particularly for those in the community who do not engage online. Resourcing this could be difficult but perhaps volunteers could be used to help facilitate that form of engagement.	
	Council Response/	A high level communications and engagement strategy has ben developed as part of the Scoping Study.
	Comment:	A detailed communications and stakeholder engagement plan will be developed as part of the future stages of the CMP.

19	NSW Maritime (Transport for NSW)		
Issue	• NSW Maritime is now a department within Transport for NSW (TfNSW). References to Roads and Maritime should be replaced with NSW Maritime or TfNSW (Maritime)		
	 NSW Maritime is a stakeholder for each stage of Port Macquarie- Hastings Council's Coastal Management Program. 		
	• As part of the CMP process, NSW Maritime wishes to highlight the broad range of functions and responsibilities Maritime has under our legislation to promote safe, responsible and sustainable use of NSW waterways.		
	O This includes but is not limited to how Maritime applies legislation to manage waterway issues such as providing infrastructure, undertaking compliance, consulting with users when considering new restrictions, managing hazards and obstructions, improving amenity, managing environmental impact of boating activity and managing conflicting activities.		
	• NSW Maritime promotes all forms of waterway activity in line with community expectations but does not generally support the characterisation or zoning of the waterways that segregate different forms of boating activities.		
	• NSW Maritime may not be the lead agency on a number of waterway concerns and issues. However it should be emphasised that Maritime has a significant role in informing, supporting and promoting safe, responsible and sustainable use on NSW waterways, including the Hastings River and Camden Haven River.		
	O As an example and with regards to dredging, dredging activities impact on the safe navigation of vessels and requires navigational assessments. Our expertise is required to identify priority areas and hazards, manage the resulting impacts and improve access and safe navigation.		
	O Similarly with regards to boating infrastructure, Maritime provides usage, planning and technical engineering experience, support and guidance for maritime facilities though Maritime may not be directly involved in the establishment of physical works on site.		
	• NSW Maritime when managing the environmental impact of boating activity including bank erosion requires evidence-based data to drive and implement management actions.		
	• NSW Maritime supports maintaining and improving public access to the waterways of the Hastings River and Camden Haven River.		
	NSW Maritime supports initiatives to protect the natural habitat of local areas.		
	• NSW Maritime supports consultation with the traditional landowners as part of the CMP development process.		
	Council Response/ Noted. Minor wording changes made to clarify.		

Issue	NSW Maritime requests the opportunity to provide comment and input throughout the CMP process.	
	Council Response/	NSW Will be consulted throughout the development of the CMP.
	Comment:	
20	DPI Fisherie	2S
Issue	Area of the C	CMP
	DPI Fisheries notes the current draft CMP Scoping Study is for the coastal zone within the Port Macquarie-Hastings LGA, although subsequent stages of the CMP will be separated into four 'chapters' which are characterised by unique management areas. DPI Fisheries supports this approach and the focus on completing the Lake Cathie/Lake Innes & Bonny Hills Estuary & Coastline chapter first-off.	
	With regard to the geographical areas covered by each of the four chapters, particularly the Hastings River Estuary and Camden Haven River Estuary chapters, it should be noted that upstream catchment areas outside of the scope of the CMP may pose noteworthy threats and risks to the values of downstream areas (e.g. poor water quality), and addressing these risks may be best achieved by including these upstream catchments within the CMP. It is recommended that Council consider the interactions between upstream catchments on downstream values and adjust CMP boundaries according to these interactions.	
	Council Response/ Comment:	The CMP Catchment boundary areas have been shown in order to defining the focus areas of each CMP chapter. However areas further upstream in the catchments will still be considered as they are acknowledged as being a key contributor to lower estuarine health.
Issue	Section 3 - G	Governance
	Within the first paragraph in the discussion of the roles of state agencies, consider including reference to state agencies also regulating certain activities that can be undertaken on land within the coastal zone (as DPI Fisheries does not own or actively manage any land within the PMHC LGA).	
	Within the second paragraph, change sediment boundaries to sediment compartments.	
	Council Response/ Comment:	Noted. Minor wording changes made to clarify.
Issue	Section 10.7	2 - Sea Level Rise
10000	Section 10.7.2 - Sea Level Rise Within the second paragraph, a noteworthy impact in addition to those listed includes the requirement for marine vegetation (mangroves and saltmarsh) and other riparian vegetation to migrate upslope (i.e. shoreward) and that this landward migration resulting from sea level rise	

	may be impa roads etc.).	acted by existing/future infrastructure (e.g. retaining walls,
	Council Response/ Comment:	Noted. Minor wording changes made to clarify.
Issue	Section 14 -	Barriers and Opportunities
	Within the tenth paragraph, it should be noted that DPI Fisheries is now part of the Department of Regional NSW. In addition, mention of those stakeholders having ownership and primary control should also include 'and/or regulate certain activities that can be undertaken on some coastal land' (e.g. DPI Fisheries which regulates certain activities but does not own or have primary control of certain coastal land).	
	Council Response/ Comment:	Noted. Minor wording changes made to clarify.
Issue	16.2.3 - Lake	e Cathie/Lake Innes Estuary Management Plan
		anagement Actions section, the list of studies completed de the Lake Innes Reversion Study (2013).
	Within the Lake System Acid Sulphate Soils section, include up-to-date information regarding impacts of the most recent artificial opening undertaken on 22 May 2020.	
	Council Response/	Noted. Minor wording changes made to clarify.
	Comment:	
Issue	17.2 - First F	Pass Risk Assessment
	Within Table	17:
	Fish/prawns/oyster stock changes: DPI Fisheries is responsible for ensuring that fish stocks are conserved and that there is "no net loss" of key fish habitats upon which they depend. This is achieved on a state wide basis by administration of the FM Act and its associated regulation and includes a range of measures including those related to the harvest of fish (e.g. size limits, catch limits/quotas, gear restrictions etc.) and the protection of key fish habitat (i.e. those habitats that are crucial to the survival of native fish stocks). The specified investigation in relation to this threat/issue may provide a good indicator of the success of various other management actions targeted at addressing priority threats to the fisheries resources within the PMHC LGA, although given the state wide nature of fisheries management undertaken by DPI Fisheries, data on the local scale required to undertake this investigation may not be available. Further data collection may be required to obtain such fine scale data, and such an activity by DPI Fisheries would be reliant upon its relevance to the current management of fish stocks on a state wide basis and/in addition to successfully accessing additional external funding.	

Seagrass changes: DPI Fisheries undertakes mapping of aquatic macrophytes such as seagrass on an ad-hoc basis. While understanding the rate of seagrass decline through regular mapping is important in understanding the severity of impacts or the success of various management actions, investment in actions to prevent seagrass decline is most important. Through the aquatic habitat provisions of Part 7 of the FM Act, seagrass is afforded protection from the impacts of certain activities that may directly or indirectly impact it (such as coastal development works). However, these provisions do not adequately protect seagrass from a range of indirect impacts such as those associated with diffuse source water pollution. To minimise seagrass decline within the PMHC LGA caused by indirect impacts which are not able to be well managed through the existing provisions of the FM Act, such as poor water quality, DPI Fisheries recommends prioritising a focus on the development and implementation of measures such as a Risk Based Framework for water health within the Hastings and Camden Haven Rivers Riparian zone impacts and Riverbank erosion: Bank management, including management of private foreshore structures, was identified as a threat and risk to environmental values and community use of the NSW marine estate and two management actions of the Marine Estate Management Strategy will see DPI Fisheries coordinate preparation of foreshore structure strategies and bank management strategies for a number of NSW estuaries. Outcomes being sought from these strategies include reduced red tape and informed assessment of private structures spanning the intertidal foreshore (such as pontoons and boat ramps) and, in suitable areas, fast tracked assessments for proponents who adopt the bank treatment recommendations within a relevant bank management strategy. DPI Fisheries highlights the significant opportunity for efficiencies, consistency and transparency for foreshore development proposals that can be achieved by developing and incorporating such strategies into Council's planning assessment process and identifying these as actions within CMPs. Water guality changes: Diffuse water guality impacts from coastal floodplain land use has been identified in the State-wide Threat and Risk Assessment as one of the highest threats and risks to environmental, social, cultural and economic benefits derived from the NSW marine estate. DPI Fisheries support identification of a range of actions to improve floodplain management. Consideration should be given to the development of drainage management plans that will consider cumulative impacts; prioritise actions, investment planning; and support decision making. ICOLL entrance opening: Review of the Lake Entrance Strategy is noted and agreed. Sea level rise/tidal inundation: Migration of wetlands due to sea level rise accords with a statewide threat and risk to marine vegetation along the NSW coast. A management action to develop marine vegetation strategies has been developed within the Marine Estate Management Strategy. These strategies aim to direct decision making toward maximising resilience, accommodating sea level rise, addressing key threats (e.g. clearing & drainage, cattle grazing, four-wheel drives on saltmarsh), facilitating rehabilitation opportunities, and reducing red tape for low impact works (e.g. mangrove trimming for safe traffic sight lines). Effective implementation of marine vegetation strategies will rely on CMPs

	specifically referring to such strategies as an evidence-based estuary-wide document that informs decision making about intertidal marine vegetation. General comment: Consider revising the title of the 'Responsibility' column to 'Responsible agency' and including an additional column titled 'Relevant stakeholder groups' as this will assist with differentiating the responsible		
	agency from part of the in	those agencies/groups that will be required to be consulted as vestigation.	
	Council Response/	Numerous updated made to Chapter 17 to reflect these comments.	
	Comment:		
21	NSW Nation	nal Parks & Wildlife Service	
Issue	NPWS areas	s of interest	
	• E	rticularly interested in: insuring that NPWS and Council management of estuarine isues and values is complementary.	
		ligning with the NSW Marine Estate Management Strategy and ssociated TARA.	
	 Understanding the issues including current and future hazards impacting natural, cultural and heritage values and built assets within reserves. 		
	• N	lanagement of:	
		 Vegetation including endangered ecological communities. 	
		 Riparian zones, bank erosion, floodplain and estuarine wetlands. 	
		 Flora and fauna species including threatened species and their habitats. 	
		 Beach nesting birds, shore birds and marine wildlife including turtles and enhancing habitat while reducing disturbance and threats. 	
		 Weeds and pests. 	
		 Built assets including visitor camping, day use, infrastructure and fire trails. 	
		 Estuarine water quality. 	
		 Access to beach and estuarine areas including dog walking areas where they intersect with NPWS estate and 4x4 beach driving and associated impacts to the open beaches 	
		 Heritage including the protection and management of Aboriginal Cultural Heritage. 	

		Community engagement including involvement of traditional owners.
	NPWS may	also be able to assist with:
	• Ir	formation on specific natural values and threats.
		pecific advice on matters such as the management of species nd ecological communities.
		plans of management can be accessed here: ww.environment.nsw.gov.au/topics/parks-reserves-and- d-areas/park-management/parks-plans-of-management
	Council Response/	Noted.
	Comment:	
Issue	NPWS supp be greater e	ze of the catchment, mixed uses and water quality issues, ort the focus on the catchment and water quality. There could mphasis on describing the management of catchment lands serves, state forest and farming lands.
	Council Response/ Comment:	Noted. Minor wording changes made to clarify.
Issue	Unfortunately, and sadly for wildlife in the LGA, the 2019/20 fire emergency has demonstrated the landscape scale threat to species, ecosystems and catchment waterbodies. This issue should be included in the scope of the CMP.	
	Council Response/ Comment:	Council was awarded a Bushfire Recovery Grant to look into the impacts of the bushfires on the Lake Cathie/Innes catchment.
		The results of this research project will be included as part of stage 2 & 3 of the CMP.
Issue	 NPWS supports the direction for the Port Macquarie Hastings Council Coastal Management Program including the establishment of sub programs/chapters. Lake Cathie/Lake Innes and Bonny Hills Estuary and Coastline. Hastings River Estuary. Camden Haven River Estuary. 	
	•	Port Macquarie-Hastings Open Coastline.
	Council Response/	Noted.
	Comment:	

lssue	Marine Estate Management Strategy (MEMS) and associated Threat and Risk Assessment (TARA) – while there is reference to the MEMS and the TARA NPWS recommends a section be added addressing both documents and outlining the values, issues, risk rating, objectives, strategies and actions that are relevant to the LGA coast.	
	Council Response/ Comment:	To be addressed under future stages of the CMP.
Issue	DPI&E Biodi responsible f	marily responsible for reserves and marine wildlife. Off park versity and Conservation Division and DPI&E Fisheries are for the management of many species and it is suggested that this document to these divisions for comment.
	Council Response/ Comment:	Council has referred the Draft Scoping study to numerous NSW Government Agencies, including DPIE & Fisheries. Council will continue to consult and engage with these agencies (and others) when developing the CMP chapters.
		Council will develop a detailed community engagement plan for the future stages of the CMP. Government agencies are recognised as being critical stakeholders and will consulted during the development of the engagement plan for each CMP chapter.
Issue		est the opportunity to recap on NPWS issues and t status as each of the 4 sub programs/chapters are
	Council Response/ Comment:	Council will develop a detailed community engagement plan for the future stages of the CMP. Government agencies are recognised as being critical stakeholders and will consulted during the development of the engagement plan for each CMP chapter.
lssue	NPWS request that the CMP consultant(s) meet with each reserve Ranger and review each of the relevant reserve management plans and current management and summarise for the CMP. Where there is an intersection with NPWS reserve issues, the CMP and current (and future) Poms should align and be complimentary wherever possible.	
	Council Response/ Comment:	To be addressed under future stages of the CMP.
Issue	Ideally relevant actions in the CMP can be considered for inclusion in the relevant reserve management plans when they a due for review. With regards to the Lake Cathie/Lake Innes chapter (including actions and entrance management), the CMP and/or specific actions relating to the Lake Inness Nature Reserve and water management can potentially be linked to a revised reserve plan of management.	

	Council Response/ Comment:	Noted.
Issue	NPWS would like to see greater consideration given to ecological communities and flora and fauna species including threatened species. Ideally the ecological assessments for each chapter of the CMP, including the one proposed for Lake Cathie/Lake Innes would have a broad focus. As there are potentially significant changes to water regimes being considered for Lake Innes, NPWS suggests that both positives and negatives of each potential management scenario be assessed for the range of values and management issues. This information will assist Council, NPWS and stakeholders to evaluate options and select the best pathway forward for the management of the Lake Cathie/Lake Innes system.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of the lake system will be addressed in stages 2 & 3 of the CMP process.
Issue	NPWS data suggests that the estuaries and coastline are utilised by a variety of threatened species and migratory birds. Ideally the CMP would include actions to support these – increase habitat, improve the quality of habitat, support breeding events (including beach nesting birds and turtles), address threats including predation, disturbance, light pollution.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of coastlines and estuaries will be addressed in stages 2 & 3 of the CMP process.

Issue	The CM SEPP mapping indicates significant areas of wetland in the lower estuarine and floodplain areas including reserves. NPWS support the management of wetlands being included in the scope of the CMP.	
	Council Response/	Noted.
	Comment:	
Issue	The LGA coast would seem to have great potential for turtle nesting, and while turtle nesting might not be well known right at present (Suggest a BioNet search for turtle records), other parts of the coast south of about Yamba seem to have had a spike in turtle nesting events over the last 10 years. Due to ground temperatures impacting the sex development, nests at the southern limit of breeding are exceptionally important for male recruitment into the population. As a climate adaptation opportunity, NPWS suggest identification and maintenance of potential habitat including actions to specifically address threats including light pollution, recreational and commercial fishing, boat strike, pests, poor water quality and stormwater pollution.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities. Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of coastlines and estuaries will be addressed in stages 2 & 3 of the CMP process.
Issue	The estuary is likely to support an endemic population of Indo-Pacific Bottlenose Dolphins (Tursiops aduncus). Indo-Pacific Bottlenose Dolphins (Tursiops aduncus) have quite discrete populations along some parts of the NSW coast. Each local estuary population (where they exist) is potentially vulnerable to population level impacts on a small population size, despite the species being regarded as common or abundant across NSW. Back Channel is a resting place for dolphins and can easily be impacted through changes to boat use. Relevant actions in the CMP to support good water quality, healthy fish stocks, respectful recreational vessel behaviours, careful regulation of some high-risk fishing methods, and limits on coastal development impacting the habitat are likely to be generically important to the CMP, with added benefit to resident dolphin populations.	
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to

		identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of coastlines and estuaries will be addressed in stages 2 & 3 of the CMP process.
Issue	policy around	velopment is the ideal opportunity for Council to establish d management of marine mammals including response to and carcass removal.
	Council Response/ Comment:	NPWS has a ' <i>Checklist for land managers disposing of whale carcasses</i> ' that could be used to inform Councils response to the management of carcasses on beaches that we are responsible for managing.
		The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of coastlines and estuaries will be addressed in stages 2 & 3 of the CMP process.
Issue		scoping study and CMP encourage less hardening of the ith seawalls and greater use of environmentally friendly bank
	Council Response/ Comment:	The next stage of the Coastal Management Program is Stage 2, which is where we will 'Determine risks, vulnerabilities and opportunities'. Stage 2 will therefore involve undertaking detailed studies that help councils to identify, analyse and evaluate risks, vulnerabilities and opportunities.
		Following this, Stage 3 will be completed which will 'Identify and evaluate options'. Stage 3 will therefore involve the identification and evaluation of management options, considering important issues like; feasibility, viability and acceptability.
		Management of coastlines and estuaries will be addressed in stages 2 & 3 of the CMP process.

Issue	Suggest there needs to be a greater emphasis on the engagement and involvement of the Traditional owners in coastal program development and implementation.	
	Council Response/ Comment:	Council will develop a detailed community engagement plan for the future stages of the CMP. Traditional owners are recognised as being critical stakeholders and will be consulted during the development of the engagement plan for each CMP chapter.
22	Department	of Planning, Industry & Environment - Crown Lands
Issue	General Cor	nment - Naming Conventions
	Environment Office of E	s is now located within the Department of Planning, Industry and (DPIE), as is Environment, Energy and Science (formerly the nvironment and Heritage) and Planning and Assessment Department of Planning).
	functions, re	ing to specific legislative responsibilities and state agency ferences to DPIE should be narrowed to the particular part of ent that is responsible for the subject legislation / state agency
	References t	to Crown Lands should be as follows:
	Department of Planning, Industry and Environment – Crown Lands, thereafter: DPIE – Crown Lands.	
	Council Response/	Noted. Minor wording changes made where required.
	Comment:	
Issue	3. Governance numerous state agencies including Department of Planning, Industry and Environment, Department of Primary Industries Fisheries, National Parks and Wildlife Services, NSW Office of Water, Roads and Maritime, and Crown Lands also own and manage land within the coastal zone and must be consulted with before works can occur. These departments have governance decisions over their land on which Council must seek permission and licensing from before works are undertaken	
	Other key stakeholders are the Local Aboriginal Land Councils, which must be consulted and give permission for works on land that is owned and managed by the traditional owners of this land.	
		road references to DPIE should be amended to accord with the slative roles and responsibilities that are being referred to in the
	Other stakeholders include the Maritime Infrastructure Delivery Office (MIDO), in Transport for NSW. MIDO are responsible for state owned coastal infrastructure such as river entrance break walls, regional harbours,	

	the NSW Coastal Dredging Strategy and the 'Rescuing our Waterways' navigational dredging program.		
	The reference to Local Aboriginal Land Councils could be amended to account for land that is affected by a claim lodged under the Aboriginal Land Rights Act 1984.		
	Amend text a	as follows:	
	Other key stakeholders are the Local Aboriginal Land Councils, which must be consulted and give permission for works on land that is owned and managed by the traditional owners of this land. This requirement may also apply where a claim has been lodged on Crown land under the Aboriginal Land Rights Act 1984.		
	Add MIDO, 1	Fransport for NSW as a stakeholder requiring consultation.	
	Council Response/	Noted. Minor wording changes made where required.	
	Comment:		
Issue	5. VALUES	AND RESPONSIBILITIES	
	As a way of both understanding the community needs and wants as well as providing guidance to the community regarding how the CMP works, Council staff as well as members of the Coast, Estuary and Floodplain Advisory Committee (including government agency representatives) will be responsible to undertake broad community consultation. This consultation will focus on specific geographical areas and will assist in identifying important assets, issues, risks, solutions and the values and priorities of the community.		
	undertake br CMP. Amendment Council staf Floodplain		
	Council Response/ Comment:	DPIE Crown Lands are key stakeholders in the management of the Coasts & Estuaries of NSW. DPIE Crown land Involvement is of paramount importance.	
lssue	 5. VALUES AND RESPONSIBILITIES An overview of some of the identified community values that will be used to guide the long-term outcomes for the CMP are outlined below, Council welcomes more suggestions as we work through the community engagement: Unique coastal zone character Amenities Public access Equity and fairness 		

	 Water quality Biological diversity Ecosystem integrity and resilience Recreational use Business/employment benefits Community benefits p. 13 An object of the Crown Land Management Act 2016 is: (e) to facilitate the use of Crown land by the Aboriginal people of New South Wales because of the spiritual, social, cultural and economic importance of land to Aboriginal people and, where appropriate, to enable the comanagement of dedicated or reserved Crown land, An object of the Coastal Management Act 2016 is: (c) to acknowledge Aboriginal peoples' spiritual, social, customary and economic use of the coastal zone Aims relating to Aboriginal Heritage are also included in the Mid North Coast Regional Strategy. The incorporation of Aboriginal peoples' values, including cultural heritage 	
	Council Response/ Comment:	uld be considered in terms of the long-term actions and r the CMP. Council will develop a detailed community engagement plan for the future stages of the CMP, and the relevant LALC's will be consulted. Similarly the incorporation of Aboriginal peoples values including heritage values will be of paramount importance.
Issue	6. STRATEGIC CONTEXT 6.2 Historical Coastal Management framework The Council's local government area extends to the beach foreshore, being the area between the high watermark and the low watermark. Therefore, Council is required to manage risk in the coastal zone such as foreshore erosion, noting that it should be done so in accordance with ESD and in collaboration with other managing agencies, i.e. Crown Land. p.15	
	For completeness, this section could note that land below the mean high water mark (MHWM) is Crown land. Amendment to text (in bold) suggested: in collaboration with other managing agencies, i.e. DPIE- Crown Lands who own the submerged land below the mean high water mark to 3 nautical miles.	
	Council Response/	Noted. Minor wording changes made where required.
	Comment:	
Issue	11.2 CULTU p. 44	RAL AND HERITAGE
	This section, as well as section 13, should incorporate and acknowledge the <i>Aboriginal Land Rights Act 1984</i> and the <i>Native Title Act 1993</i> which provide	

	a framework for recognising the rights and interests of Aboriginal people with respect to certain Crown land. This may include Crown land within the CMP study area, noting that there are large areas of Crown land subject to a claim lodged under the <i>Aboriginal</i> <i>Land Rights Act 1984</i> (eg Lighthouse Beach, Chepana Reserve, Grants Beach). To date, no claims have been lodged under the <i>Native Title Act</i> <i>1993</i> in the Port Macquarie-Hastings LGA	
	Council Response/	Noted. Minor wording changes made where required.
	Comment:	
Issue	13. LEGISL/ p. 48-57	ATIVE AND PLANNING CONTEXT
	This section focuses on the relevant LEP, DCP and the <i>Coastal Management Act 2016</i> and <i>Coastal Management SEPP 2018</i> . It would benefit from acknowledging other key pieces of legislation relevant to managing the coastal zone. This could include the <i>Crown Land Management Act 2016</i> , <i>Aboriginal Land Rights Act 1984</i> and <i>Native Title Act 1993</i> , as above.	
	Council Response/ Comment:	There is a plethora of legislation that applies to the management of the Coastal Zone. These pieces of legislation will be addressed during future stages of the CMP.
Issue	14. BARRIERS & OPPORTUNITIES DPIE which includes NPWS, Fisheries, Crown Land, LLS and others, are key stakeholders in the management of the coastal area. These stakeholders have ownership and primary control over much of the coastal land, including National Parks and Nature Reserves, waterways, Crown Lands and the like. p. 58-59	
	DPI-Fisheries and LLS are now in a separate department, in the Department of Regional NSW. The Maritime Infrastructure Delivery Office (MIDO), in Transport for NSW are responsible for state owned coastal infrastructure such as river entrance break walls, regional harbours, the NSW Coastal Dredging Strategy and the 'Rescuing our Waterways' navigational dredging program.	
	It would be p	prudent to consult with MIDO on the scoping study.
	Council Response/ Comment:	Council will develop a detailed community engagement plan for the future stages of the CMP where consultation with relevant government agencies that exist at the time will be undertaken.
Issue	16. CURRENT & FORMER COASTAL & ESTUARY MANAGEMENT ARRANGEMENTS 16.1.1 Town Beach CZMP Management Actions In partnership with Crown Land, PMHC have periodically accepted the dredged material from the Hastings River, which provides sand nourishmen	

Item 13.12 Attachment 1 Page 561

	to the beach. This has historically occurred sporadically, and the sand has only been accepted on Town Beach when the beach needs nourishing. p. 64	
	The Rescuing our Waterways dredging program is now located within the Maritime Infrastructure Delivery Office, Transport for NSW.	
	It would be p	rudent to consult with MIDO on the scoping study.
	Council Response/ Comment:	Council will develop a detailed community engagement plan for the future stages of the CMP where consultation with relevant government agencies that exist at the time will be undertaken.
Issue	16.2.3 LA	KE CATHIE/LAKE INNES ESTUARY MANAGEMENT
	Opening of Further imper- Land advice (Review of E new REF wo Council does Drive bridge	IIE/LAKE INNES ESTUARY MANAGEMENT PROGRAM Lake Cathie etus to update the Opening Strategy comes from recent Crown where it was determined that as the environmental approval Environmental Factors - REF) was greater than 5 years old, a build be required before lake openings could be undertaken. As is not own the land (i.e. the lower estuary, downstream of Ocean is Crown Land) works cannot be undertaken until a licence is will not be issued by Crown Land unless it is supported by an EF.
	Crown Lands' advice also reflected a concern regarding the adequacy of the REF in describing current environmental conditions. Amend text as follows: Further impetus to update the Opening Strategy comes from recent Crown Land advice where it was determined that as the environmental approval (Review of Environmental Factors - REF) was far greater than 5 years old and may not reflect current environmental conditions, a new REF would be required before lake openings could be undertaken.	
	Council Response/ Comment:	Noted.
Issue	16.2.4 SALTWATER CREEK MANAGEMENT PLAN Saltwater Creek had not received formal management or maintenance for some years prior to this management plan. One of the reasons for this has been multiple ownerships (i.e. private landowners, Crown Lands and PMHC). p. 82	
	investigation Crown lands noting howev is managed	ement of this area is complex and may require further s has responsibility for land below MHWM east of the bridge ver, that Reserve 81643 - Lot: 2//1171577, on the southern bank by Council. Crown Lands directly manages Reserve 754444 - 1444 and Crown land on the beach and below.

		tion of the land status of the creek and bed, west of the Beach
	Street bridge	e, is recommended to determine management responsibilities.
	Council Response/	Noted.
	Comment:	
Issue	 Hastings F December 2 Westport P Bonny Hills Lake Cathie Bruce Porte (Draft) Flyn Town Beac Coastal Was Port Macque This section Manager of a Government of managem alignment a prepared for Should this I (2019, draft) 	Park - Plan of Management, January 2012 a Reserves Master Plan 2012 be Foreshore Master Plan 2018 er Reserve Master Plan 2011 ons Beach Master Plan 2019 th Master Plan 2013 alk Master Plan 2017 varie Foreshore Walkway Master Plan (Concept) 2019 should note that where council is the appointed Crown Land a Crown reserve classified as 'community land' under the Local Act 1993 (LG Act), council is required to have an adopted plan then the the council is the appointed that there is nd consistency between the CMP and any PoMs that are
	Council Response/	Noted. Minor wording changes made where required.
	Comment:	
lssue	17.2 FIRST I Table 17. F gaps and re Crown Lands Priority Three	ACTION IS REQUIRED PASS RISK ASSESSMENT Priority Threats/Issues, current management, knowledge equired investigations. s has been nominated as having responsibility for the following at/Issues within the specified CMP Area:
	Recreation Land Owne River Bank Coastal La Innes Sedimenta Cathie/ Bonr ICOLL Entr	osion - Lake Cathie, Lake Innes, Bonny Hills, open coastline al Users Impacts – All ership /Management/ Responsibilities Uncertainties – All Erosion – Hastings, Camden Haven ake or Watercourse Entrance Instability – Lake Cathie/ Lake tion/ Shoaling – Hastings River, Camden Haven River, Lake hy Hills/ Lake Innes rance Opening – Lake Cathie/Lake Innes ership/Management Responsibilities Uncertainties'
	p. 88-91	
	Whilst DPIE-	Crown Lands may have an approval role for development and at occur on Crown land, for example the provision of

	Landowner's Consent and/or authorisation under the <i>Crown Land</i> <i>Management Act 2016</i> , the department is generally not responsible for managing the coastal hazards identified in the table, that is: • Coastal Erosion • River Bank Erosion • Coastal Lake or Watercourse Entrance Instability. DPIE-Crown Lands is not responsible for managing 'Recreational Users Impacts'. Where Crown land is reserved for the purpose of 'public recreation', council has the primary management responsibility for managing the recreational values associated with this land. *Land ownership/Management Responsibilities Uncertainties': • DPIE-Crown Lands can provide advice and work with council and other agencies to clarify land ownership and management responsibilities. • Crown Lands licencing requirements have not changed as far as Councils requiring Crown Lands licences to open estuary/ICOLL mouths where on Crown land. Remove DPIE-Crown Lands from the responsibility column for: • Coastal Erosion • Recreational Users Impacts • River Bank Erosion • Coastal Lake or Watercourse Entrance Instability • Sedimentation/ Shoaling • ICOLL Entrance Opening With respect to the comment against 'Land ownership/Management Responsibilities Uncertainties' and 'Current Management', remove the comment that 'Crown Land licensing arrangements have changed.' 'Land ownership/Management Responsibilities Uncertainties' - This action could include the need to investigate and understand any implications under the <i>Aboriginal Land Rights Act 1984</i> and <i>Native Title Act 1993</i> for areas of focus in the CMP.	
		rudent to consult with the Maritime Infrastructure Delivery Office ransport for NSW regarding the scoping study. Noted. Section 17 has been revised.
	Response/ Comment:	
Issue	17. Forward Works Program Table 18 Potential governance and management arrangement for the CMP State Agencies: Department of Industry - Crown Lands and Water	
	As per comment (1), Crown Lands is within DPIE, not Industry. References to Crown Lands should be as follows: Department of Planning, Industry and Environment – Crown Lands, thereafter DPIE – Crown Lands.	
	Council Response/ Comment:	Noted. Minor wording changes made where required.

Saving Lake Cathie Facebook Survey	Participants = 67
I would like to see PMHC keep the lake open as often as possible	 Yes- 63 No - 4
Reason	 Tourism, fishing, sightseeing So we can have fresh clean water and no gross smell. No mozzies breeding. Happy fishing, long lunches while adoring the clean lake Health of the Lake - Mental health/feeling good rather then feeling dispirited and depressed because of it being unhealthy of the lake system/dead and dying marine life and flora - looking at an appalling unpleasant aesthetic sight - Over the last 18 months we have seen an environmental devastated and destroyed. Marine life trying to escape to the sea and failing. Dying endangered stingrays. Yabbies dying and the their skeletal remains left on the banks the list goes on It use to be such a safe and friendly place to swim for families, the elderly and disabled people and others - Businesses need certainty - and the community and visitors want the businesses to be here - accommodation, food, hire kayaks/paddle boards/ etc - The vibrancy of the community that we love is important - and Lake Cathie use to attract so many tourists and has the potential to attract so many more just look at the project growth of this area - people don't just want to visit, they want to come here to live Tourism, Local business, Active kids and family time, Clean and flushed water, Marine life not dying, It wouldn't be neglected if situated in Port Macquarie. I want our council to care about Lake Cathie the same way they care about other towns and rate payers. We have to look after our fragile ecology Looks cleaner for everyone's use Better fishing Stops localised flooding It would greatly help local businesses and tourism in the area. Though in saying that I want the health of the lake to riority. Because our lake is the meeting place for the community. When the lake is thriving so does this community and the people who visit. It's also vital to have the lake in prime health for businesses to survive. 1. For my enjoyment of the lake - solend. It is a place for my family conditions a

•	So many reasons. It keeps the air fresh, it helps keep the mozzies away, it makes the lake fishable for the community which can be for
	fun or to feed family's, during summer it gives the community a place to gather for events and as you drive over that bridge with the sun shinning on the blue water it makes you smile so it's great for
	mental health
•	Environmental and wildlife. Ecosystem Community spirit Local business
•	It promotes our region and allows families, friends and visitors to
	enjoy our beautiful lake and picnic area. It brings fish into the
	estuaries and birds. It helps to keep our local businesses open and
•	operating The health or the system and marine life so it can recover for its
	currently devastated condition
•	The local community & businesses will have a tourist spot that is the
	envy of many other councils
•	Constant fresh salt flushing is imperative for the lakes survival
•	It is the jewel of this whole area, it's the reason we moved here! It
	has increased business. It looks better. It's good for tourism.
•	The lake will always healthier & fresh. Fantastic for families to visit & enjoy.
•	Cleaner water with regular tides
•	The wildlife, the community, tourism and customers for our local businesses.
•	When the lake is open it is an inviting place to come to and brings a
	lot of visitors to our little village. When it is closed, no-one (including
	my family) wants to go there- it becomes a wasted resource.
•	For the future and health of our lake and community
•	The Lake opened is a major tourist attraction and vital for the
	revenue of many small businesses that exist in the Lake Cathie/Bonny Hills areas. Also as a community an opened Lake
	Cathie provides excellent recreational options - not just for Cathie
	locals, but also the broader Hastings community. It is a safe, friendly
	place for families of all ages that provides swimming, picnicking,
	kayaking, canoeing and boating, as well as fishing opportunities that
	are treasured by all.
•	It is absolutely a tourist attraction that brings many families here.
	and boost our businesses in the holiday season and the locals all
	year round. The lake has so many great things about it, animal life, wildlife to ocean life. Magnificent views.
•	To keep the system fresh and useable.
•	Brings lot of tourism to our little town and people enjoy the
	beautiful view
•	If the lake doesn't flush it will look and smell like it does now. FOUL
	and it's been open for almost a month. The fish will also begin to die.
•	It seems quite evident that both the natural environment and the
	built environment benefit greatly from the lake being open and
	suffer quite dramatically when it is closed for any length of time. The
	benefits would seem to greatly outweigh any negative impact.
•	Environmental; to stop the ecosystem from collapsing. Support local
	businesses. Lake Cathie's beaches are quite dangerous and largely

	not patrolled, as LC grows larger we need safe swimming options.
	Promotes a healthy lifestyle for all residents. Stop the spread of
	disease, including intraspecies ie. to humans. Shows that the council
	is listening to residents needs.
•	Much more pleasant to swim and see all the families down there
	enjoying it and our rates seem to be going up each quarter least
	we can see we a bit of our money's!!
•	To keep our sea life alive good for our Tourism and business in our
	area
•	The lake needs life. The people need to be able to swim and fish in
	the Lake with no health concerns. The properties need permanent
	protection from flooding.
•	Less mosquitoes Better for Marine life Better for tourism Safe
	location for swimming and water sports Lower fire risk (if drought)
•	Having the lake open brings prosperity to the town and more
	abundant use of the lake and facilities.
•	Health of the water/hence healthy fish and bird life Helps businesses
•	by promoting tourism Ugly/dirty when closed for prolonged periods
•	Common sense
•	This will keep the lake fresh and help maintain the fish
•	It brings life to our community! Businesses thrive, local come out to
	play, wildlife and nature flourish when it's open.
•	Ecologically when the Lake is opened the wildlife it attracts is
	amazing.
	0
•	Better for the community, better for local businesses, provides safe
	swimming and recreation - its what the residents want! Too many
	problems when its closed, mosquitoes, flooding, looks like a swamp,
	dead marine life, stench. The lake people freeh essan water to refrech it regularly.
•	The lake needs fresh ocean water to refresh it regularly.
•	When the lake is closed it is an eye sore. It smells, unpleasant to
	spend time down there and effects tourism/businesses. It kills the
	fish. Families come to spend time at the lake which is the last thing
	you want yo so when it has been closed for a long time.
•	It is a tourist hotspotit brings life and money to the local
	community. It has been disregarded for too long by a local council
	that frankly has almost admitted it doesn't care. If it is open it is a clean and healthy system. Good for the fish,
•	birdlife, the surrounding environment and a great place for families
	to visit and enjoy.
	The lake is beautiful at the moment. Pelicans are gathering, as well
•	as cormorants and seagulls. We can use the walkways around the
	lake and it is clean enough to swim in. The lake is the heart of our
	community. Please continue to keep it open.
•	It's a paperbark wetland not a tidal estuary with mangroves, we can
	have the best of both when the timing is right.
•	Keeps the water flowing and residents happy
•	Reduce mosquito's, prevent flooding, keep estuary healthy
•	I have friends and family in the area whose homes and livelihoods
	are at risk. I am also concerned for the environmental impact that
	the recent lack of management and action has caused.

	 We moved here to use the lake. Fishing, swimming, bbq and everything family. When it's closed u can't do any of that as it's disgusting. The lake is the life of our community, when it is open the economic and social impact is positive for the residents and tourists. When the lake is closed the economic and social environments are negatively impacted. It is essential for the survival of our community that the lake is kept open. Man made bridges and interference to the neck of Lake Innes have inhibited the natural opening. Flush out lake to provide a healthy environment for marine life & wildlife It will keep the lake healthy, outgoing tide will cleanse the lake and incoming will refresh it .We have seen what prolonged closure will do the fragile environment This is an intermittent icol. It shouldn't be open as often as possible or all the time, however council needs to be prepared to open it at high and low trigger points. Therefore, all necessary refs, epa's and other paperwork must be up to date. It seems to me to have an up to date standing agreement with DPI and National Parks would be advantageous The health of the estuary system is dependent upon the lake being open to the sea to receive fresh sea water. The ecosystem has evolved over many thousands of years to expect to regularly receive the sea water, so it is not possible for it to survive and thrive without it. As has been seen in recent years, the lake will virtual turn into a cesspit without the fresh sea water. It produces a foul smell, the marine life dies, it is not safe to swim in, and it breeds mosquitoes when it has too much fresh water. It is a threat to human and animal life when left without being opened to the sea.
I would like to see the lake opened permanently	• • Yes - 57 • No - 9
Reason	 It is a major incentive for people to visit the area (locals and holiday makers) which directly impacts the success of the businesses in the area. What was once a spectacular waterway used by everyone has become and embarrassment, an eyesore and a public health risk and it's unacceptable to spend another 40 years arguing over what should have been dealt with decades ago. The environment is important - yes. But at what stage are residents and other peoples needs considered to be equally as important. Continual use is far better than intermittent use. It would become a well known location and we would be more known as a town and businesses would thrive and for fishing purposes and to go for a walk every day and see it open not closed. Holiday season will be profitable for all businesses. Residents can finally enjoy long summer swims and picnics. Family to spent more time together at the lake swimming

•	A permanent opening will benefit all (see above) and allow the
	environment to adapt and survive without being compromised into
	the future as it has been in recent times
- -	to keep it healthy and support fish and other marine life which relies
	on the lake
	Looks cleaner for everyone's use Better fishing Stops localised
	flooding
	I believe all parties should work together to dredge sand from the
	western side of the Ocean Drive bridge to increase water depth.
•	
	It's good for tourism and the people that live and visit here.
•	I think it will increase the value of my property in lake cathie.
•	Because it would be an amazing place for families not only lake
	Cathie residents but for the wider community to spend time in the
	summer
•	A permanent solution to the health of the entire system.
	scientific advice
-	away, it makes the lake fishable for the community which can be for
	fun or to feed family's, during summer it gives the community a
	place to gather for events and as you drive over that bridge with the
	sun shinning on the blue water it makes you smile so it's great for
	mental health
•	,,
	business
	enjoy our beautiful lake and picnic area. It brings fish into the
	estuaries and birds. It helps to keep our local businesses open and
	operating
•	The health or the system and marine life so it can recover for its
	currently devastated condition
•	For the overall health of the estuary system plus the wellbeing of the
	community when it is constantly opened with fresh salt water
	continuing to flow to the upper reaches
-	has increased business. It looks better. It's good for tourism.
•	businesses.
•	······································
	lake over the last 12months, can't happen again.
•	· - · · - · · · · · · · · · · · · · · ·
•	· · · · · · · · · · · · · · · · · · ·
	that would definitely attract businesses and with that critical
	employment opportunities in a regional area - which are gold. It
	would also be a visitor hub for the expanding local community in the
	southern areas of the Hastings - who as rate payers are largely left
	out when it comes to Council development considerations.

Item 13.12 Attachment 2 Page 569

•	,
	Great for our small local towns businesses.
	To keep the system fresh and useable.
•	Would stop the smell and dirty ness off the lake with all the brown
	and tea tree build up and the marine life would have a fair chance at
	a good life instead of having half a survival rate
	Lake Cathie is an ICOLL and this natural system should be allowed to
	continue
	If the lake doesn't flush it will look and smell like it does now.FOUL
	and it's been open for almost a month . The fish will also begin to
	die.
	businesses Lake Cathie's beaches are quite dangerous and largely
	not patrolled, as LC grows larger we need safe swimming options.
	Promotes a healthy lifestyle for all residents. Stop the spread of
	disease, including intraspecies ie. to humans. Shows that the council
	is listening to residents needs.
•	
•	
	businesses flourish. Let the people enjoy this lake without it closing
	and ruining the swimming and fishing. You know by the bird life that
	it is coming to life again. It will take a long time to come back after
	all life in the lake died due to not opening, the bush fires and Covid
	19. Please let the lake live.
•	•
	location for swimming and water sports
•	· · · · · · · · · · · · · · · · · · ·
	Having the lake open brings life to the local community, businesses
	and community groups that support the town
•	, , ,
	by promoting tourism Ugly/dirty when closed for prolonged periods
•	······································
	and see the state of the Lake, we have new schools, we'll established
	buissiness's medical centre optometrists expensive land blocks that
	people invest in and then this dirty dried up Lake with dying fish and
	eroded sand banks Not to mention the health aspect, spike in Ross
	River fever when stagnet water lays around the homes people live in
	! We have a unique little village that welcomes visitors to our area
	and benefits all the people in the area that come down to the Lake
	for a family day out! It improves everyone's mental health when a
	family or friends can gather at the Lake after a hard weeks work and
	costs nothing to do that so it is good for all.
•	
•	·····8- ··· ·····, ··· ···· - ···· - ··· - ··· - ··· - ··· - ··· - ··· - ··· - ··· - ··· - ··· - ···
•	A huge tourist attraction and wildlife attraction. Open the Lake once
	and for all, a one off expensive instead of money being thrown away
	year after year. No more back and forth.
•	Better for the community, better for local businesses, provides safe
	swimming and recreation - its what the residents want! Too many
	problems when its closed, mosquitoes, flooding, looks like a swamp,
	dead marine life, stench.

•	It is supposed to be an ICOLL, and used to work properly as one until man's intervention ruined it. It's fine when it's closed if it's not left
	too long.
•	When the lake is closed it is an eye sore. It smells, unpleasant to
	spend time down there and effects tourism/businesses. It kills the
	fish. Families come to spend time at the lake which is the last thing
	you want yo so when it has been closed for a long time.
•	There are already outline suggestions to achieve thisthe lake could
	be kept pristine instead of turning into a smelly and disgusting
	brown pond. There is no real strategy from CouncilI'm sure that
	they would love all this to just go away.
•	It would be great for the environment and we then wouldn't have to
	wait for Council to decide if and when they will get around to
	opening it. The risk of flooding would also be greatly reduced.
	If it was meant to be open all the time it would be a natural
	occurrence.
•	The value of the lake and estuary system as a vibrant ecological
	community and its value as a community and district asset are both
	enhanced by the opportunity for the waters to be regularly
	refreshed by natural tidal flows, providing a consistent and settled
	habitat for aquatic life and associated ecological systems but also
	providing a predictable and amenable resource to sustain the local
	community and attract visitors who will contribute to the local
	economy. The environmental and economic disaster of 2019/2020 is
	a lesson that does not need to be repeated.
•	If it is possiblekeep the ecosystem on the right track
•	Healthier estuary system
•	To have a clean waterway
•	The lake is the life of our community, when it is open the economic
	and social impact is positive for the residents and tourists. When the
	lake is closed the economic and social environments are negatively
	impacted. It is essential for the survival of our community that the
	lake is kept open. It is also important for the council to consider the
	opinions of Lake Cathie's ratepayers rather than playing political
	games which have little to do with the wants of the Community.
•	It was never open permanently.
•	I hope I am correct that it had never been permanently opened since
	European settlement but I believe that the Birpai Elders should be
	asked this question!
•	To provide a healthy environment for everyone
•	If the naturally opening and closing estuary is maintained properly
	and opened when trigger points are reached the health can only be
	improved
•	My comments refer to Lake Cathie, not the lagoon, commonly called
	Lake Cathie. This is an icol and shouldn't be opened permanently.
	However council needs to be prepared to open it at high and low
	trigger points. Therefore all necessary refs, epa's and other
	necessary paperwork must be up to date.
•	the health of the ecosystem depends on a regular injection of fresh
	sea water. Ideally this would be permanent and then the sea life

	would be able to flourish and the threat to human health would be removed by the water being clean and fresh.
l would like to see the replacement of Kenwood Drive Bridge	 Yes - 62 No - 2
Kenwood Drive Bridge Reason	 Widen the bridge if their are ecological benefits. Too narrow not enough water flow council you are choking the lake!! Sooner rather than later Better water flow to main areas. It's a small dangerous bridge for residents anyway. It is clearly blocking flows. The expanse of the bridge must be significantly increased. This is a major problem with the vitality of the lake system Its not wide enough to service the body of water it covers. Resident' back there deserve to have easy access without worrying their property will flood or live with mosquito due to lack of lake management whether it be a wider bridge or opening the lake to flush it and reduce water levels. I'm not convinced it would help also the expense is out of reach I believe the bridge prevent flow To help with the water flow! Because I am told it will help the lake open naturally more easily/often. Due to the last flood the bridge was not rebuilt to it original width. Once again money and people caused this issue It chokes the natural flow of the system. It's incorrect size has caused imeasurable and ongoing harm to the lake I believe this is a key factor to help with flow Long term solution to lake staying open It is currently impeding current flows of the water - compromising the system It was never supposed to be so narrow plus council only made it worse when they dumped the extra block at either end of the approaches Choking the flow of water To increase the water flow, which in turn will affect the whole lake system.
	 The current bridge is way too narrow and short, not allowing water to free flow. Too narrow bottleneck encourages silting up of western lake area For all the reasons why the lake has failed. Not enough water pushing through causing flooding and ongoing issues. It will be beneficial for the health of the lake.

• The impact of this bridge on tidal flows has been scientifically validated since the 1980's. Theses same scientific reports submitted to Council, accurately predicted that the limited tidal flows would significantly contribute to a build up of sediment and sand banks that would eventually combine to choke the Lake and bring on catastrophic damage to the Lakes Ecosystems. All of these predictions have eventuated. It is important to state that while the Kenwood Drive bridge has to be replaced with a larger, better designed bridge - the build up of sediment and sand also needs to be addressed on either side of the bridge. Council has been given a simple approach by Professor Colin Creighton as to how that should be best done.
As the water flow tightens threw the underneath structure and
doesnt let the water flow enough.
• This is the major problem for the system.
As a new bridge would allow more of a flow into the lake mouth
I dont believe it is a significant contributor to low water levels or
poor water quality based on environmental reports i have read.
• Stand on the bridge when a couple of cars pass each other. This
bridge has passed its use by date
I feel like environmental experts can decide this one
It will help keep the entente open good for the environment
So the lake will stay open
Better lake conditions To assist in permanently sustaining the flow of the water estuary
 To assist in permanently sustaining the flow of the water estuary. Choking the flow and destroying the Real Lake Cathie
 Choking the flow and destroying the Real Lake Cathie Kenwood Bridge needs replacing! Invest in this growing town!
 Will help stop the sand build up
 To fix the problem of the lake closing.
 Lake Cathie is a fast growing community. The bridge is way out dated
 and let's only a small amount of water through to the other side. To allow the lake to flow, to make it wider, to stop the bottleneck, to
help
 keep the lake open, blue and beautiful!
• It is supposed to be an ICOLL, and used to work properly as one until
man's intervention ruined it. It's fine when it's closed if it's not left
too long. both of the bridges need to be a lot wider and the grass mounds between them need to be removed to allow it to flow properly again.
 This would allow a better water flow. Won't be such a bottleneck.
• The bridge(s) installed quite obviously hinder the drainage of the
lakehence the sand build up and choking effect that has on the
opening. I fail to see why, after many 'consultant' reports nothing
has eventuated. I have lived here for 20 yearswhy has nothing
changed?
• A longer bridge would allow for better flow of the water, keeping the
lake healthy.
• This has been a man-made disaster. The bridge has been blocking
the waterways and silting up the lake for years and the lake is now
very clogged. Please replace the bridge to help open the lake.

Item 13.12 Attachment 2 Page 573

	Only if it would halp 2222 But would it that is the guestion
	 Only if it would help ???? But would it - that is the question It is clear that the restricted water movement caused by the narrow opening at the Kenwood Bridge has a negative effect on the hydrology of the lake and estuary interchange and the movement of sands in the estuary and at the opening. Even if a permanent opening cannot be maintained, it is not tenable to claim that the system operates as a natural ICOLL when these man-made structures interfere with natural hydrologic processes. Stop the build up of water that has been going on since I have been on the area around 1980. It is too narrow and contributes to the problems with the lake To increase water flow. It stops the flow of water and has led to the silting up of the lake. The cheap option has failed the Lake and the Lake Cathie community. To remove the bottleneck so that water flows freely The flow is so restricted by the existing bridge that the lake is choked from the tidal flows which cleanse the estuary and lake Kenwood Drive bridge is a choke. Because of this Lake Cathie is already silted above sea level and can't operate as it should. Remove the dam, remove the silt and maybe tourists will return for the prawning, kayaking, swimming if not the beauty of the lake itself. Put a boardwalk around it for pedestrians and cyclists and add value to the whole area. As has been shown by many studies, the inadequate width of Kenwood drive bridge has permanently altered the natural tidal flows of the lake and led to massive build up of sand / sediment which has been detrimental to the health of the ecosystem. Therefore it is necessary that the bridge be replaced.
Flooding - several	• Yes - 48
properties are flood	• No - 4
prone particularly in	Unsure - 1
relation to the lake	
opening frequency. I	
would like to reduce	
the trigger point to 1.4mAHD	
Other	 Look after these rate payers. I don't know enough about the actual water level. Don't know enough to comment If it was opened all the time you wouldn't need a trigger point No need for trigger if lake always open No opening trigger point should be used, open permanently. I would like to see the lake opened permanently. Keep it to 1.6 or higher I live in one those properties and it's only small part of the land that goes under

I would like to see	Swimming - 64
Lake Cathie used for	 Fishing - 62
the purposes of	Commercial Uses - 16
the purposes of	
	 Recreational Uses Only - 54 Other - 12
Other Deserves	
Other Purposes	Markets - from time to time
	Consideration of people who are physically challenged - they need
	more then steps to get to the beach
	Birdwatching
	More picnic areas. The perch hole could be made into a beautiful
	BBQ area. The western side of the bridge needs attention.
	Prawning, crabbing
	• This lake could be the envy of other councils if it was maintained better.
	• It needs to be stand alone not included in the estuaries committee
	as this committee is too broad for the needs to a lake system that is different to the Hastings & Camden Haven rivers
	Families and visitors to enjoy the lake
	Stand up paddle board yoga!
	The only Commercial uses I would like considered would be hiring of
	water based recreational equipment and Eco guided tours. No
	commercial fishing.
	It should be enjoyed
	human powered boat sports
	Picnics
	• So much. I'd love to see music and art festivals, children playing, lovers cuddling. The lake is beautiful. Let's keep it that way. Thank
	you.
	No power boats
	Birdwatching and canoeing
	• The lake system is an absolutely vital asset to the community. Given the level of surrounding residential and commercial development, it is negligent to persist with the policies of benign neglect that have
	been pursued in recent years. Such an asset requires careful,
	planned and consistent management to ensure that it is not degraded debilitated.
	 possibly commercial parenting ad in the past when the Lake was healthy.
	As part of the local government and community effort to educate
	the non-Aboriginal community and visitors to the area about the
	Aboriginal / Birpai connection to Lake Cathie and Lake Innes prior to
	European settlement.
	• Remove the dam (the bridge), remove the silt and maybe tourists will return for the prawning, kayaking, swimming if not the beauty of the lake itself. Put a boardwalk around it for pedestrians and cyclists and add value to the whole area.
	•
In addition to the above, I would like	Implement a new entrance opening procedure, inline with keeping the system healthy and usable - 59
the following actions	

considered in the CMP	 Potential reversion of Lake Innes into a freshwater system by installing a levee - 29 Establish run-off quality guidelines eg: Stormwater discharge - 41 Water quality monitoring - 52 Facility and access upgrades - 42 Dredging of lower estuary - 46 Widening of the opening at Ocean Drive Bridge - 50
Other	 An important issue is to re-establish the flora and fauna that has been lost from the system. Many species will not regenerate - yabbies, oysters etc Just dig it open whenever it closes. kenwood bridge widening
I would like you to consider the following for the Coastal Management Plan for Lake Cathie	 We need a break wall built ASAP, just as port Macquarie and north haven have done. The man man adjustments to those areas directly impact the lake cathie/ocean entrance and have a flow on effect which has been detrimental. Coastal Walk continued so Lake Cathie connects to Light house beach and extends to Bonny Hills. Footpaths. You approved all those housing estates on the Southern end with no safe footpaths to walk or cycle to the businesses. I believe there needs to be better communication between residents and Council. It has appeared in recent times that internal bickering has had a negative impact on the health of the lake. Those employees of Council should be held accountable to achieve their KPI's. Council is there to represent the best interests of rate payers. When dredging take the sand away. Sell it to help with the cost of dredging. Leave Lake Innes open to the lagoon and Lake. It is a breeding ground for fish including snapper that come in from the sea, prawns and crabs. Rob Oakshott studies show that reversing it would cause ecological problems and that it would not help with the the lake opening. People also earn a living from the lake. Taking jobs away affects with other people's jobs that comes from this. Consider the wants and needs of this community not what you as councillors personally think should happen! Dig it open whenever it is closed. Dredge it to get all the sand out so it opens more easily naturally. Fix the bridge - everyone is saying this will help the lake open more easily. Keep the lake opened Rehabilitating the system. Marine life and its food sources need restocking. There need to be channels in the system and the large sand islands are severely impacting on flow. The revetment wall to be completed not just talked about Putting in place a policy which ensures that opening the lake as necessary is easy and fast to achieve- I never want to see the delays that occurred over the last 12 months happen

	 Consider all the locals from Port Macquarie and out skirts who visit for the day too, it's not just locals in Cathie who suffer when Lake is closed it's everyone in the Hastings area Revetment installedthus control of the longshore drift in both winter and summer. Yes please. Sand that is dredged between the two bridges to make islands for wildlife eg little terms which are endangered on the Australia watch lists and pump sand back up to lake Innes to block it off to salt water You already have water quality monitoring but you don't do anything with it- testing something doesn't change anything! It needs to be recognised and acknowledged by Council that Lake Cathie is of supreme importance to ratepayers who reside in Lake Cathie. Rather than being left to rot, it needs to be looked after. The failure of PMHC to act to restore the lake to its normal state has had a significant impact on the physical, emotional and psychological health of Lake Cathie's residents. It has been simply devastating and the Council needs to act now to restore the lake to a healthy state.
Revetment wall - It would be helpful if a better copy of the planned project – in particular the map at Figure 50 on page 66 could be distributed and further details provided regarding how this is to progress	 Yes - 49 No - 4
Kenwood and Ocean Drive bridges are identified as issues - I would like to see target dates for the replacement of these assets. Council has already agreed to start conceptual designs on Kenwood Drive bridge. I would like this completed in the earliest possible timeframes.	 Yes - 62 No - 2
I would like to see the following things addressed while the Coastal Management	 Dredging - 56 Asbestos fixed on southern end of the beach - 50 Raising the pathway at Aqua Reserve above 1.6mAHD - 40 Actions relating to the acid sulfate report - 41

Plan is being developed.	Fortnightly water quality testing, reimplementing the five sites of previous testing - 50
I strongly support a	• Yes - 29
Reversion of Lake	• No - 14
Innes to fresh water	Other - 4
	Not sure - 5
Reason	I really don't mind
	 The conversion was well adjusted prior to any develop in Lake Cathie. It is a part of our community and environment has reached equilibrium. Lake Innes is not the major source of the current issues and predicament we find ourselves in.
	Rob Oakshott spent millions on this in other studies. Changing it will not help with the lake opening. It's been open for 90 years it is now an excellent breeding ground for fish, monster crabs and prawns. I've heard that council has already given the go ahead / approval for Charlie Brothers Wines to block/ dam Lake Innes to farm fresh wate eels to export to China. All this without community consultation. I look forward to watching the side show that seems to be going on behind the scenes. It is now a beautiful quiet spot to canoe with families of all age groups young and old. Bird watching fishing crabbing is lovely up in that part of the lake especially in tourist season as visitors don't venture that far up into the lake. The reeds around the edges change colour when the sun shines on them especially at sunset. It's a great place for photography. It's wonderfu as it is just leave it as it is. The answer is NO.
	• i want it to be tidal, open to the sea.
	Because of once again greed and human intervention this lake was ruined
	 The entire system has human interference. Return it to its original state. We cannot continue to call it an icoll when it hasn't operated like one in years. Returning lake Innes to fresh water, can be done. Commercial fisherman can fish elsewhere. This MAY be a good idea but needs thorough scientific assessment. I think the damage has been done no need to undo it just do the best to fix it
	 I can see no advantage to the health of either Lake by separating the two Lakes. I will lose access to the recreational fishing by boat - I do not want that activity removed. I have been enjoying by being able go up into Lake Innes.
	• At this point it is just another item but the most important is lake Cathie, Cathie Creek & Lake Cathie lagoon
	 Natural state Increases silting up of system
	 Unsure- i want whatever is best for the health of the lake
	 This was a man made intervention. The purposes for this intervention did not work, yet we have persevered in defiance of what nature had created. I have seen the reports of what was once
	magnificent mainly fresh water system that supported world heritage bird life and an amazing eco system that would now be almost unique in Australia. There is again an abundance of scientific

	reports that can be accessed to show how this could be simply done
	- explaining the importance of having overflow interaction between
	the fresh and salt water aspects.
•	The salt ocean water is so natural, its just stunning seeing the ocean
	tides come in and going out.
•	In a country that is crying out for fresh water the opening of lake
	innes to saltwater was a national disgrace.
•	The Lake Innes was originally a fresh water ecosystem and although
	it has been drastically altered it would be best to once again
	seperate the Lake Innes Fresh water system from the salt water
	ICOLL that is Lake Cathie.
•	The lake is alive and has been for many years when open to the
	ocean. The lake will always need to be opened due to property
	flooding. The houses will flood if the lake is not open. The lake is
	beautiful when opened to the ocean
•	Need further information.
•	I think it would take a long time for lake innes lake to revert to fresh
	and may possibly do more harm in the meantime. I would like to see
	it fresh again though.
	I believe that the lake could be managed with ongoing and relevant
	planning suggestions. The sand within the lake area needs to be dug
	out and removed before any renovation work could be successfully
	undertaken.
•	Lake Innes was originally fresh water. We are constantly placed on
_	water restrictions. Returning Lake Innes to fresh water would
	potentially boost our water supplies.
•	Just to retain a freshwater lake as it once was
	Decisions about this should be taken in the light of a detailed, long-
-	term plan for management of the waters. I am not sufficiently
	informed yet to express an opinion on this.
•	It may regenerate to what nature intendeda clean healthy
·	environment.
	I believe Lake Innes was a fresh water destination and habitat for
-	migratory birds. Also it was a unique fresh water habitat that there is
	an opportunity to restore!
•	To provide a natural environment & assist Lake Cathie
•	Commercial fishing is a non event the lake is dead! Revision to fresh
	water would bring the lake back to the way it was prior to 1933
	supporting fresh water fish and bird life not to mention fresh water
	for wildlife in this area.
•	A large body of freshwater is advantageous as we continue down the
•	path of warmer, drier climate shifts, with larger and longer bushfire
	events. Offering recreational freshwater fishing draws a different set
	of visitors to the area. Lake Innes has the potential to be a fabulous
	ecosystem for hikers, campers, holiday makers and those seeking
	ecoholidays, to say nothing about the relationship we have with
	wildlife, or could have with wildlife.
•	The inundation of Lake Innes with salt water from the Lake Cathie
	estuary has completely destroyed the ecological value of Lake Innes.
	The flora and fauna of Lake Innes evolved to depend upon fresh
	water. It was the largest inland body of fresh water in NSW.
	water, it was the largest mand body of nesh water in NSW.

	Obviously the freshwater species of fish have been unable to survive in what is left of Lake Innes. In addition to freshwater fish, the lake previously supported Hardhead and Pacific Black ducks, black swans, Australasian shovelers, black-necked storks and a range of other wildlife. The loss of this habitat is difficult to fathom. Reverting the lake to freshwater has been debated for many years, the time has come to act. The benefits of reverting the lake include providing crucial habitat for threatened species, providing a source of fresh water for the Hastings region in times of drought, improving tourism by restoring the ecosystem to one that people will actually want to visit.
Any further	• All areas of the lake need to be usable on a consistent basis. This will
comments	encourage tourism and assist with economic recovery.
	• Make the main bridge wider and make a break wall to keep it open
	for good!!
	We love living in this beautiful community and want see its potential
	to bloom. We are an important asset to Port Macquarie tourism We
	really appreciate that Saving Lake Cathie has help us to have
	involvement in Council's Planning processes because engaging in
	such processes is not something we usually do. We Care!!
	Councillors and Employees of Council needs to be held accountable
	for their actions. Communication needs to improve to all parties.
	Councillors need to remember who they represent and act
	accordingly.
	Dredging of the Western side of the bridge is needed. Surely an
	agreement with the other stakeholders for a one off dredge and removal of the sand could be achieved.
	 Lake Cathle is a better town to live in when the lake is open. End of. For over 50 years, we have seen inaction. With the support of
	genuine community members, we can fix this permanently. Please
	understand the love we have for our home, and help us restore its
	health.
	PMHC has more staff than any of the adjoining councils so they have
	the ability & facilities to get this project started & completed in a fair
	timeframe so please just do the job your paid to do please
	• The whole community spirits lift when the lake is open, this is
	important for mental health particularly after the fires and covid 19.
	There has been an abundance of scientific reports into the Lake
	Cathie/ Inness systems. Many aspects of these reports into what
	should be done to remediate the system have been recently
	validated as still viable options. Surely these can be referred to and
	peer reviewed to determine their validity, therefore saving costs and
	time. The other factor which I implore the CMP committee to keep
	in mind at all times is that the problems with this lake system are
	mostly man made and they will require a man made solution. The suggestion that nature will determine the best solutions to this
	problem will assign the Lake to a fate we will all regret.
	 The Lake needs to stay open to the ocean
	 Prior to settlement of the port Macquarie area I understand that the hasting river also flowed through lake Innes and exited at the mouth
	of lake cathie. I have seen old topography supporting this. As
	of lake carrie. Thave seen our topography supporting this. As

 settlement and reclaiming land in Port Macquarie has destroyed the flow from the Hastings river. I strongly believe that it is our responsibility to repair the damage to enhance the abundance of wildlife the estuary should behold. Lake Cathie is growing rapidly and I feel the Lake when opened is a draw card to the town, especially for the businesses to flourish. Thank you for considering these proposals. Good luck The neglect of the marine life and environment over the last year horrified me. It is clear that a more proactive and effective management plan is urgently required. I would like to know that the Birpai Local Aboriginal Elders Group is fully consulted and included in all planning and local government decisions from now on starting from today! I would like to see clean up of debris from Lake Cathie proper with a fire break between the lake & surrounding areas. Fires sprung up during the fire season from the dry lake (peat build up) to surrounding areas. Many trees were burnt & fell over & now are in the lake.

PORT MACQUARIE-HASTINGS



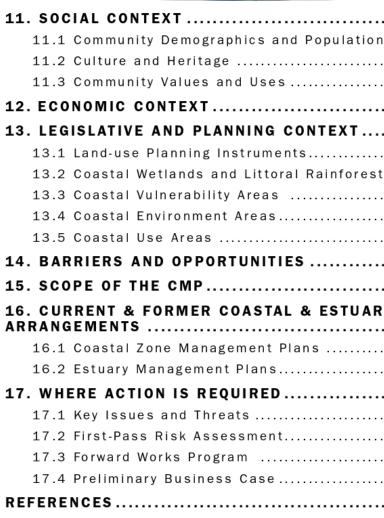
Coastal Management ProgramStage 1 - Scoping study



2

TABLE OF CONTENTS

TABLE OF CONTENTS	2
Table reference	4
Abbreviations	5
1. INTRODUCTION	6
1.1 Coastal Management Program Framework	7
2. PURPOSE, VISION AND OBJECTIVES	8
2.1 Limitations	8
2.2 Scoping Study Purpose	8
2.3 VISION	9
2.4 Objectives	9
3. GOVERNANCE	10
4. PORT MACQUARIE-HASTINGS COASTAL ZONE	12
5. VALUES AND RESPONSIBILITIES	14
6. STRATEGIC CONTEXT	16
6.1 Backgorund	16
6.2 Historical Coastal Management Framework	16
6.3 Existing & Former Management Plans	17
7. NEW COASTAL MANAGEMENT FRAMEWORK	18
7.1 Coastal Management Act 2016	18
7.1 Coastal Management Act 2016 7.2 State Environmental Planning Policy (Coastal Management) 2018	
	19
7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual	19 19 20
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council 	19 19 20 20
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council 7.6 Coastal and Estuary Grants Program 	19 19 20 20 21
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council 	19 19 20 20 21
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council 7.6 Coastal and Estuary Grants Program 	19 19 20 20 21 22
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs	19 19 20 20 21 22 22
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs	19 19 20 20 21 22 22 26
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs	19 19 20 21 22 22 26 28
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs	19 19 20 20 21 22 22 26 28
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council 7.6 Coastal and Estuary Grants Program 8. COUNCILS STRATEGIC PLANNING FRAMEWORK 8.1 Strategic Plans 9. PORT MACQUARIE-HASTINGS LGA OVERVIEW 10. ENVIRONMENTAL CONTEXT. 10.1 Climate 	19 19 20 21 22 22 26 28 28
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council. 7.6 Coastal and Estuary Grants Program 8. COUNCILS STRATEGIC PLANNING FRAMEWORK 8.1 Strategic Plans 9. PORT MACQUARIE-HASTINGS LGA OVERVIEW 10. ENVIRONMENTAL CONTEXT 10.1 Climate 10.2 Significant Climatic Events 10.3 Physical Features and Coastal Processes 10.4 Sediment Compartments 	19 19 20 21 21 22 22 28 28 28 28 30 31
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council 7.6 Coastal and Estuary Grants Program 8. COUNCILS STRATEGIC PLANNING FRAMEWORK 8.1 Strategic Plans 9. PORT MACQUARIE-HASTINGS LGA OVERVIEW 10. ENVIRONMENTAL CONTEXT 10.1 Climate 10.2 Significant Climatic Events 10.3 Physical Features and Coastal Processes 10.4 Sediment Compartments 10.5 Habitat Condition 	19 19 20 21 22 22 22 28 28 28 30 31 35
 7.2 State Environmental Planning Policy (Coastal Management) 2018 7.3 Coastal Management Programs 7.4 NSW Coastal Management Manual 7.5 NSW Coastal Council. 7.6 Coastal and Estuary Grants Program 8. COUNCILS STRATEGIC PLANNING FRAMEWORK 8.1 Strategic Plans 9. PORT MACQUARIE-HASTINGS LGA OVERVIEW 10. ENVIRONMENTAL CONTEXT 10.1 Climate 10.2 Significant Climatic Events 10.3 Physical Features and Coastal Processes 10.4 Sediment Compartments 	19 19 20 21 22 22 28 28 28 30 31 35 38



ORDINARY COUNCIL 17/02/2021

			 	44
n			 	44
			 	46
			 	47
			 	48
			 	50
				50
ts			 	50
			 	52
			 	56
			 	57
			 	60
				62
		AGEN		
CT IVI	A N			64
				64
			 	74
				84
				84
				85
				107
				116
	• • • •		 	

TABLE REFERENCE

4

•	Table 1. A summary of recommendations to improve riparian condition at each of the 34 Hastings -Camden Haven Ecohealth study sites
•	Table 2. Forecast population, households and dwellings (.id, 2017)
•	Table 3. PMHC's age structure from the 2011 and 2016 Census compared with Regional NSW. PMHCgenerally has a higher proportion of older age groups.(.id, 2017)
•	Table 4. Community values and uses identified from CZMP's and EMP's. 47
•	Table 5. Oyster Production in the Macleay, Hastings, Camden Haven and Manning Rivers from historicpeaks to 2015/2015. (NSW DPI, 2016)
•	Table 6. 2012 - 2018 Revenue for Fishing, Hunting & Trapping and Aquaculture. (REMPLAN, n.d.).
•	Table 7. Key issue/threats to Coastal Management Areas 84
•	Table 8: Consequence scale. Sourced from NSW Coastal Management Manual Part B: Stage 1 (OEH,2018) and adapted from Climate Change Risk Management: A guide for business and government (AGO,2006)
•	Table 9. Likelihood scale. Sourced from NSW Coastal Management Manual Part B: Stage 1 (OEH, 2018)and adapted from NSW Marine Estate TARA (MEMA, 2017)
•	Table 10. Risk assessment matrix. Sourced from Sourced from NSW Coastal Management Manual PartB: Stage 1 (OEH, 2018) and adapted from Climate Change Risk Management: A guide for business andgovernment (AGO, 2006)
•	Table 11.1. Lake Cathie & Bonny Hills Risk Assessment Outcomes (Ranked Highest to Lowest Risk) 88
•	Table 11.2. Hastings River Risk Assessment Outcomes (Ranked Highest to Lowest Risk)
•	Table 11.3. Camden Haven Risk Assessment Outcomes (Ranked Highest to Lowest Risk)
•	Table 11.4. Open Coast Risk Assessment Outcomes (Ranked Highest to Lowest Risk)
•	Table 12. Forward plan stages and indicative timeframes
•	Table 13.1. Forward Plan for Lake Cathie and Bonny Hills
•	Table 13.2. Forward Plan for the Hastings River 101
•	Table 13.3. Forward Plan for the Camden Haven 103
•	Table 13.4. Forward Plan for Open Coastline 105
•	Table 14. Potential CMP Governance and Management 106
•	Table 15. Program stakeholders and responsibilities 114

ABBREVIATIONS

TERM	DEFINITION
ASS	Acid Sulphate Soils
CBA	Cost-Benefit Analysis
CEA	Coastal Environment Area
CE&F	Coast, Estuary & Floodplain Advisory Sub-Commi
CM Act	Coastal Management Act 2016
CM SEPP	State Environmental Planning Policy (Coastal Ma
CMP	Coastal Management Program
CP Act	Coastal Protection Act 1979
CSP	Community Strategic Plan
CUA	Coastal Use Area
CVA	Coastal Vulnerability Area
CWLRA	Coastal Wetlands and Littoral Rainforest Area
CZMP	Coastal Zone Management Plan
DPI	Department of Primary Industries
DPIE	Department of Planning, Industry and Environme
EMP	Estuary Management Plan
ESD	Ecologically Sustainable Development
ICOLL	Intermittently Closed and Open Lakes and Lagoo
IP&R	Integrated Planning and Reporting Framework
KSC	Kempsey Shire Council
LEP	Local Environmental Plan 2011
LGA	Local Government Area
LSPS	Local Strategic Plannng Statement
Manual	NSW Coastal Management Manual
MCC	Mid Coast Council
NPWS	National Parks and Wildlife Service
NSW CP	NSW Coastal Policy 1997
NSW EP	NSW Rivers and Estuaries Policy
PMHC	Port Macquarie-Hastings Council
SEPP 14	State Environmental Planning Policy Coastal Wetl
SEPP 26	State Environmental Planning Policy Littoral Raint
SEPP 71	State Environmental Planning Policy Coastal Prot
SES	State Emergency Services
TfNSW	Transport for NSW
UGMS	Urban Growth Management Strategy

ORDINARY COUNCIL 17/02/2021

ittee
anagement) 2018
ent
ons
5110
tlands No. 14
forests No. 26
tection No. 71

5

1. INTRODUCTION

In NSW, coastal management is quickly becoming a high-profile area of concern for coastal councils, public and private asset owners, and the extended community.

Port Macquarie-Hastings Council (PMHC) recognises that the coastline is one of our greatest assets. It is a diverse, complex and dynamic environment made up of sandy open-coast beaches, dunes, rocky headlands, cliffs, rock platforms, estuaries, coastal floodplains, coastal lakes and lagoons. It has a range of unique values, natural and urban landscapes and cultural significance that support our vibrant, healthy and prosperous lifestyle.

The Port Macquarie-Hastings Coastal Zone, from Point Plomer in the north to Diamond Head in the south is characterised by its natural beauty, clear water and numerous inviting sandy beaches. An ever-increasing number of residents and tourists are attracted to the natural, cultural, social and economic values that our coastline offers.

The coastal zone is highly vulnerable to changes over time due to escalating environmental and socio-economic pressures. These pressures combined with social sensitivities to shifts in environmental conditions present unique challenges to coastal zone managers.

The NSW Government is delivering a new legislative and regulatory framework to better equip coastal communities to respond to the dynamic nature of the coast and sustainably manage the coastal environment. Local councils and public authorities are required to manage their coastal areas and activities in accordance with relevant state legislation, policies and plans.

PMHC has resolved to prepare a Coastal Management Program (CMP). A CMP aims to provide a long term, coordinated strategy for managing the coastal zone in accordance with the Coastal Management Act 2016 (CM Act) and local objectives. This management program will be implemented through the coordination between Council, state agencies and other key stakeholders. Framework, Stage 1 of preparing a CMP is to undertake a Scoping Study. The scoping study aims to consolidate information gathered both during Stage 1 and from previous management plans and outline the proposed pathway for the following stages of the CMP.

Key components of the scoping study include:

- Strategic context for coastal management.
- Purpose, vision and objectives of the CMP.
- · CMP scope issues and areas, including maps of relevant CMAs
- Review of current management practices and arrangements.
- Identification of roles and responsibilities including other councils and relevant public authorities.
- · First-pass risk assessment to identify where action is required, including studies to be completed in Stage 2.
- Stakeholder and community engagement strategy.
- Preliminary business case.
- Plan for future stages and timetable for CMP preparation. Include a timeframe for steps in the preparation of a planning proposal if changes to the LEP are proposed.

The CMP will focus on and be guided by understanding, addressing and contributing to solutions around the following topics:

- · How do we use our coastal zone?
- · How do we balance environmental values with these uses?
- What do want our coastal zones to look like in the future?
- · How do we adapt to the increasing challenges of living on the coast?
- · Who is responsible for management of the coastal zone?

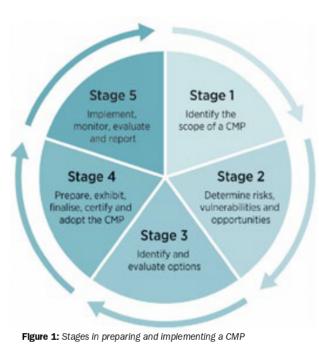
The methods used to develop the CMP will be guided by existing legislation, such as the CM Act, the NSW Coastal Management Manual and by the values and desires of our community.

1.1 COASTAL MANAGEMENT PROGRAM FRAMEWORK

In 2016, the NSW Government introduced a new framework to manage the coastal environment in an ecologically sustainable way for the social, cultural and economic wellbeing of the residents and visitors of NSW. The cornerstone of this framework, the Coastal Management Act 2016, contains provisions that should be followed to develop long-term strategies for the management of the coastal zone.

The CMP will set the long-term strategy for the coordinated management of the coastal zone. It will achieve the purpose and objectives of the CM Act. The process to write a CMP is prescriptive so that it provides consistency across the NSW.

Each CMP follows a five-stage program that is outlined in the NSW Coastal Management Manual [see Figure 1].



the proposed CMP areas. Each chapter will identify management issues and the actions, specific to the local area, which are required to address these issues in a strategic and integrated way. Each chapter will contain detail regarding:

- How and when those actions are to be implemented?
- Costs and proposed cost-sharing arrangements for each action.

In accordance with the NSW Coastal Management

6

ORDINARY COUNCIL 17/02/2021



The scoping study is the first stage in the process of preparing a CMP. It will assist councils to identify the community and stakeholders and prepare an engagement strategy, determine the context of coastal management in the local area and establish roles, responsibilities and governance arrangements to deliver management actions across the Local Government Area (LGA). After the scoping study is completed, the remainder of the CMP will be divided into four 'chapters' based on geographic areas, to better manage localised issues. Each of the stages 2, 3, 4 and 5 will be done repetitiously for the four below chapters (areas) to ensure site-specific detail to enable best management of the on-ground issues.

The chapters include:

1. Lake Cathie/Lake Innes & Bonny Hills Estuary & Coastline - incorporating the open coastline from the 4 x 4 access track adjacent to Dirah Street, Lake Cathie to the southern side of Grants Head at Bonny Hills (referred to in this document as the Lake Cathie/Bonny Hills chapter for simplicity).

2. Hastings River Estuary

3. Camden Haven River Estuary

4. Port Macquarie-Hastings Open Coastline (excluding the open coastline that is covered in the Lake Cathie/Bonny Hills area

Refer to [Section 13.6] for further information on

• Who is responsible for each action?

2. PURPOSE, VISION AND OBJECTIVES

2.1 LIMITATIONS

Much like all LGA's, PMHC faces limitations to the scale and extent of coastal zone management it can feasibly achieve. Limitations include land tenure, funding resources, the complexity of stakeholder engagement which requires a balance between multiple government agencies and community needs with possible competing priorities and the legislative complexities that take time to complete. A hurdle in all LGA's is finding a balance amongst the desires of all ratepayers in the LGA. The majority of income derived for projects is from ratepayers and must be divided into various priority areas and competing needs and desires. These priorities include roads, water availability, sewer, recreation, and arts and culture to name a few.

The CMP aims to provide a framework for management of the coastal zone, which acknowledges and reflects the needs of the coastal area but balances this with the reality of the competing needs of the LGA and the various desires/mandates of other stakeholders. Opportunities for funding will be sought often and communication and engagement will be top priority .

2.2 SCOPING STUDY PURPOSE

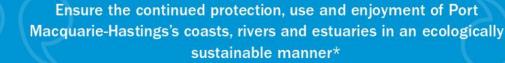
The purpose of preparing this scoping study is to identify how the coastal zone is currently managed and to consider if further investigations or changes to management actions are required. This assessment includes a review of existing Coastal Zone Management Plans (CZMP) and Estuary Management Plans (EMP) to identify any gaps in knowledge and determine if any further management actions are required in light of the objectives of the new Coastal Management Act 2016.

Stage 1 is designed to assist councils to:

- Review the strategic context for coastal management in the local area.
- Determine the purpose of the CMP and the key outcomes that it is intended to deliver.
- Identify the appropriate scope for the CMP consider the area and range of issues to be dealt with and identify which organisations and communities need to be involved.
- Determine the adequacy of available information and management actions and identify subsequent stages in the preparation of the CMP, including the possibility of fast-tracking.

The scoping study will guide the direction of stages 2, 3, 4 and 5 of the coastal management program. PMHC will engage both the community and relevant stakeholders throughout the process to develop a shared understanding of the current situation and identify any changes to coastal values so that they are integrated into the planning process.

2.3 VISION



This vision aligns with PMHC's overarching vision of "A sustainable high-quality of life for all". (Source: Towards 2030 Community Strategic Plan - Port Macquarie-Hastings Council)

* It is envisioned that the CMP vision will be refined during further community and stakeholder engagement.

2.4 OBJECTIVES

The purpose of the Coastal Management Program is to provide a framework for the long-term strategic and integrated management of priority coastal hazards, issues and risks to the Port Macquarie-Hastings Coastal Zone, in line with the community's needs, NSW state objectives and legislation. The successful development and implementation of a robust CMP will provide a range of short, medium and long-term outcomes. These objectives will be refined during Stage 2 in consultation with stakeholders and the community so that they are consistently reflecting local issues and conditions. The CMP will also identify who is responsible for delivery of key management actions.



In accordance with the Coastal Management Manual:

ORDINARY COUNCIL 17/02/2021



Figure 2. Tacking Point Lighthouse, Port Macquarie

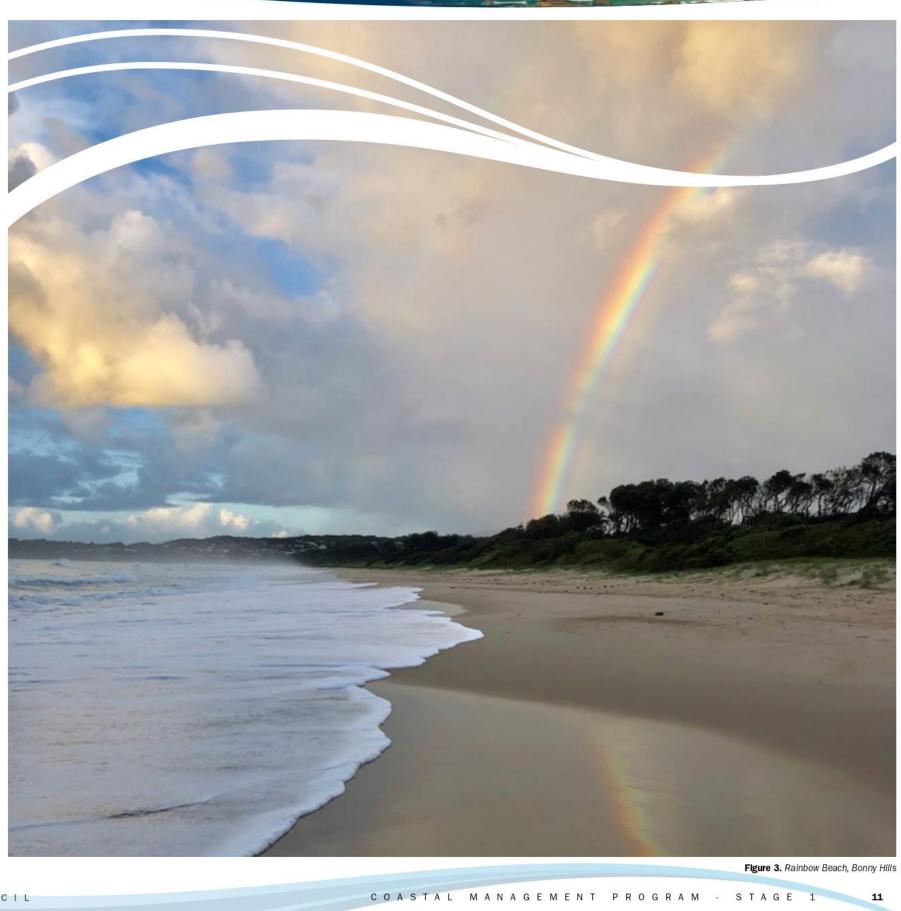
3. GOVERNANCE

The CMP covers a large geographic area in the PMHC LGA and lays over various land zones. Within Council's governance structure, the action or manner of governing, there are multiple land managers including the Natural Resources, Recreation and Building, Strategic Planning, and Infrastructure Planning sections that may all need to be consulted before works may be undertaken. In addition to internal consultation, numerous state agencies including Department of Planning, Industry and Environment, Department of Primary Industries Fisheries, National Parks and Wildlife Services, NSW Office of Water, Roads and Maritime, and Crown Lands also own, regulate certain activities and manage land within the coastal zone and must be consulted with before works can occur. These departments have governance decisions over their land on which Council must seek permission and licensing from before works are undertaken. Other key stakeholders are the Local Aboriginal Land Councils, which must be consulted and give permission for works on land that is owned and managed by the traditional owners of this land.

When discussing governance, it is also important to remember to be a good neighbour and as such when undertaking works near the LGA boundaries of Kempsey and MidCoast Councils, further discussions need to occur to manage the risks of shared estuaries and sediment compartments.

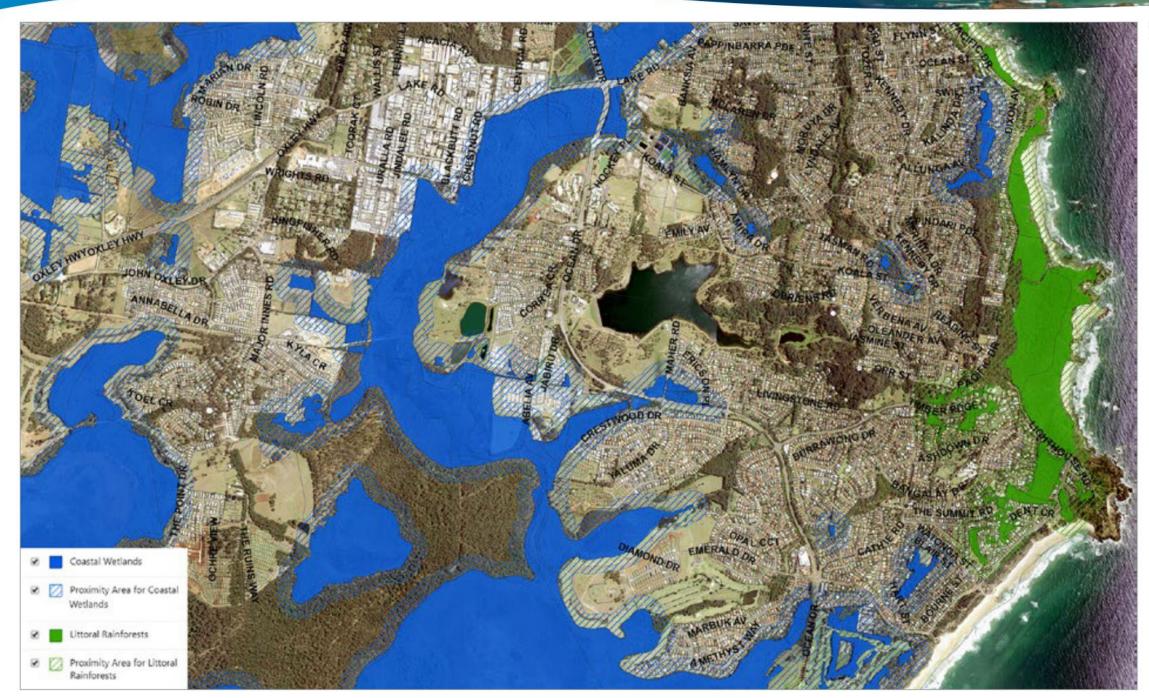
Consultation will always be a key factor in governance. One way to ensure Council is making sound management decisions is PMHC's internal Coast, Estuary and Floodplain Advisory (CE&F) Sub-Committee that is used for regular review and consultation of policies, projects and studies. Members of this committee consist of representatives from PMHC Councillors, waterways users, community members, development industry, oyster industry, Council staff, Crown Lands, DPI -Fisheries, NPWS, DPIE, TfNSW - Maritime division, and SES.

10



ORDINARY COUNCIL 17/02/2021

4. PORT MACQUARIE-HASTINGS COASTAL ZONE



The Coastal Management Act 2016 defines the coastal zone as the area of land comprised within the coastal management areas i.e. coastal wetlands and littoral rainforests area, coastal vulnerability area, coastal environment area and coastal use area. The Coastal Management SEPP 2018 (CM SEPP) identifies these areas and provides mapping for coastal wetlands and littoral rainforests area, coastal environment area and the coastal use area. The CM SEPP states that at the commencement of the policy, no coastal vulnerability area was adopted and therefore this area has not been identified or mapped.

The NSW State Government has generated mapping for the coastal wetlands and littoral rainforests area, coastal environment area and the coastal use area. The mapping for the coastal wetlands and littoral

rainforest area includes a proximity area which is included in the definition. The proximity areas include land up to 100 metres area around the defined coastal wetlands and littoral rainforest area [see Figure 4].

Coastal and estuaries within the LGA have historically been managed as separate areas i.e. EMP's and CZMP's. This same principle will be followed within the CMP in order to specify actions and determine priority areas. The following sections identify the Coastal Management Areas mapped or identified in the LGA in context to each area as it applies i.e. estuary, coast or catchment (covering both).

ORDINARY COUNCIL 17/02/2021

Figure 4. Example of Coastal Wetlands and Littoral Rainforest map with proximity areas.

COASTAL MANAGEMENT PROGRAM - STAGE 1 13

5. VALUES AND RESPONSIBILITIES

Council's Community Strategic Plan (CSP) is an overarching 10-year plan. It is prepared by Council and the community based around community priorities. The current CSP was prepared by Council in 2008 and subsequently reviewed and updated in 2012 and 2016. The plan enables Council to coordinate funding priorities, activities and services to align to community needs and desires. The CSP goals specifically for the Natural and Built Environment are to achieve a connected, sustainable, accessible community and environment that is protected now and into the future. Some of the key priorities of the CSP are:

- A community that is prepared for natural events and climate change.
- Sustainable and environmentally sensitive development outcomes that consider the impacts on the natural environment.
- Infrastructure provision and maintenance that meets community expectations and needs.
- Well planned communities that are linked to encourage and manage growth.
- · Accessible and protected waterways, foreshores, beaches and bushlands.
- · An environment that is protected and conserved for future generations.

Council is currently in the development of a new Community Strategic Plan (CSP) "Think 2050". This plan needs to be developed before June 2021 to align with the state governments Integrated Planning and Reporting (IPR) framework.

How does the CSP affect the CMP?

In preparing the CMP Council must integrate the various planning documents and strategies that affect the local community and the state. Being mindful that the CMP will become a reference tool for Council, the community, government agencies and other stakeholders, the document must be practical, achievable and must integrate the actions of the CMP into the larger scope of the Council in order to manage the PMHC coastal zone.

As a way of both understanding the community needs and wants as well as providing guidance to the community regarding how the CMP works, Council staff as well as members of the Coast,

14

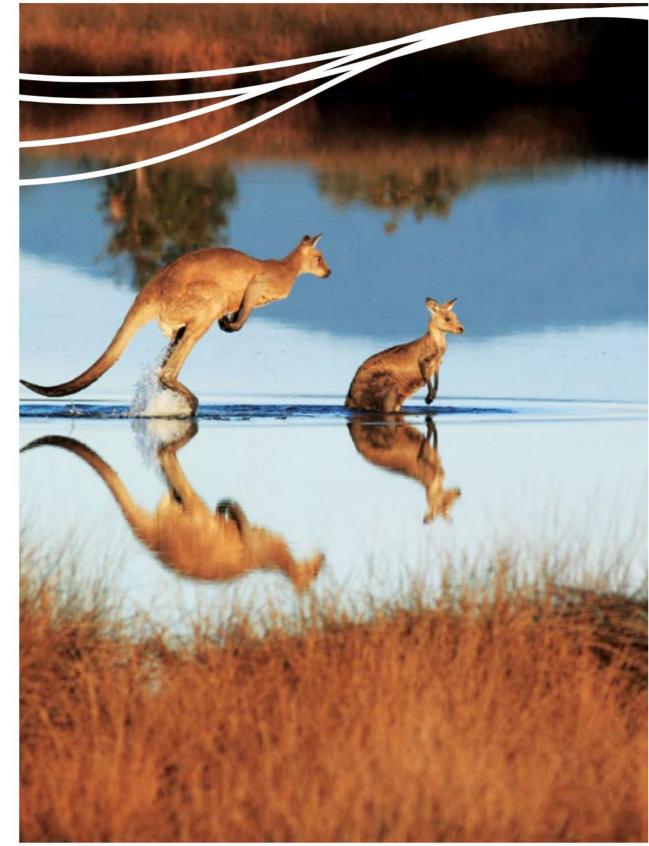


Figure 5: Wildlife at Lake Cathie - Photo: Brett Dolsen

- Water quality

- · Community benefits

In addition to the broader community, Council is also acutely aware of our neighbouring Councils as we share estuaries and sediment compartments across our Council boundaries. The Camden Haven River Estuary and Tacking Point-Crowdy Head sediment compartment is shared with Mid Coast Council (MCC) and the Hastings River Estuary and the South West Rocks-Port Macquarie sediment compartment is shared with Kempsey Shire Council (KSC). The Coastal Management Act 2016 requires consultation with other local Councils where those Councils share a coastal sediment compartment or estuary. As such, consultation will be undertaken with neighbouring Councils specifically for those actions that effect either a shared estuary or a shared sediment compartment.

ORDINARY COUNCIL 17/02/2021



Estuary and Floodplain Advisory Committee (including government agency representatives) will be responsible to undertake broad community consultation. This consultation will focus on specific geographical areas and will assist in identifying important assets, issues, risks, solutions and the values and priorities of the community.

An overview of some of the identified community values that will be used to guide the long-term outcomes for the CMP are outlined below, Council welcomes more suggestions as we work through the community engagement:

- Unique coastal zone character
- Amenities
- Public access
- · Equity and fairness
- Biological diversity
- · Ecosystem integrity and resilience
- Recreational use
- · Business/employment benefits

6. STRATEGIC CONTEXT

6.1 BACKGORUND

NSW & Local Government have historically managed coasts and estuaries in accordance with the following legislation:

- Coastal Protection Act 1979 (CP Act)
- NSW Coastal Policy 1997 (NSW CP)
- State Environmental Planning Policy Coastal Wetlands No. 14 (SEPP 14)
- State Environmental Planning Policy Littoral Rainforests No. 26 (SEPP 26)
- State Environmental Planning Policy Coastal Protection No. 71 (SEPP 71)
- NSW Rivers and Estuaries Policy (NSW EP)

The NSW State Government undertook coastal reforms in 2016. These reforms repealed the CP Act and replaced it with the Coastal Management Act 2016 (CM Act).

The new framework for managing the NSW coast primarily consists of:

- Coastal Management Act 2016 (CM Act)
- State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP)
- NSW Coastal Management Manual (Manual).
- Coastal Management Programs (CMPs)
- NSW Coastal Council

A CMP is being developed which will provide integrated management of defined coastal areas within the Port Macquarie-Hastings Local Government Area and will replace existing Coastal Zone Management Plans (CZMP) and Estuary Management Plans (EMP) once implemented.

The Manual provides guidance on the development of CMPs and divides the development into five (5) stages, with Stage 1 being a scoping study [see section 1.1].

6.2 HISTORICAL COASTAL MANAGEMENT FRAMEWORK

The coastal zone has historically been managed in accordance with the following legislation.

- Coastal Protection Act 1979 (CM Act 1979): Required Council's to develop CZMPs.
- NSW Coastal Policy 1997 (CP 1997): This policy provided overarching direction for Council in its preparation and implementation of its CZMP.
- State Environmental Planning Policy Coastal Wetlands No. 14 (SEPP 14): This policy provided restriction for development on certain types of land to ensure the protection of coastal wetlands. This SEPP is now repealed and has been replaced with the Coastal Management SEPP.
- State Environmental Planning Policy Littoral Rainforests No. 26 (SEPP 26): This policy provided restriction for development on certain types of land to ensure the protection of littoral rainforests. This SEPP is now repealed and has been replaced with the Coastal Management SEPP.
- State Environmental Planning Policy Coastal Protection No. 71 (SEPP 71): This policy provided considerations and development conditions on coastal land to ensure developments are suitable and do not impact on the land. This SEPP is now repealed and has been replaced with the Coastal Management SEPP.
- Environmental Planning and Assessment Act 1979 (EPA Act): This Act required Council to consider the suitability of the site in assessing proposed development including considering the risks of coastal hazards. It also requires the consideration of the principles of ecologically sustainable development, being an object to the EPA Act. A further section regulating the management of coastal hazards was s149 of the EPA Act, which assisted those applying for a s149 certificate to understand what policies affected the land by restricting development, as well as other relevant matters affecting the land.
- Environmental Planning and Assessment Regulation 2000: Clause 92 of this Regulation required Council to consider the provisions of the CP 1997 when determining development applications within a coastal zone.
- NSW Rivers and Estuaries Policy (NSW EP): This policy encompassed a suite of component policies each focussing on the protection or management of ecosystem processes and associated values. It also provided for clear management objectives and principles to reflect the State's commitment to resource sustainability.
- Local Government Act 1993 (LG Act): This Act requires Council to properly manage, develop, protect,

restore, enhance and conserve the environment of the area for which it is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development (ESD). The Council's local government area extends to the beach foreshore, being the area between the high watermark and the low watermark. Therefore, Council is required to manage risk in the coastal zone such as foreshore erosion. noting that it should be done so in accordance with ESD and in collaboration with other managing agencies, i.e. Crown Land.

6.3 EXISTING & FORMER MANAGEMENT PLANS

6.3.1. COASTAL ZONE MANAGEMENT PLANS

The Coastal Protection Act 1979 & Coastal Policy suggested that Councils develop and implement Coastal Zone Management Plans (CZMPs) to manage their coastlines. CZMPs were intended to provide management guidance for coastal zones including understanding coastal processes and how the coastal zones were used. For detailed information on existing CZMPs and EMPs refer to Chapter 16 of this scoping study.

The following CZMPs were developed:

- Town Beach Coastal Zone Management Plan (2006). NB. This CZMP was not gazetted as it was not certified by the NSW state government.
- Lake Cathie Coastal Zone Management Plan (2016). NB: This CZMP was gazetted on 27 January 2017.

6.3.2. ESTUARY MANAGEMENT PLANS

The NSW Rivers and Estuaries Policy required Councils to develop EMPs in order to achieve integrated, balanced, responsible and ecologically sustainable use of estuaries which formed a key part of coastal catchments.

The following EMPs were developed:

- Lake Cathie-Lake Innes Estuary Management Plan (1994)
- Hastings River Estuary Management Plan (2001)
- Camden Haven River Estuary Management Plan (2002)
- Saltwater Creek Management Plan (2005)

6.3.3. FLOODPLAIN MANAGEMENT PLANS

Councils also have a role managing floodplain risk. Although these plans coincide with the same geographical area as the coastal zone at times, these management plans are still in effect. No changes in legislation or policy have altered these plans.

The following floodplain risk management plans have been developed and are still in effect:

- Camden Haven Floodplain Risk Management Plan, Bewsher Consulting Pty Ltd, 2004
- Hastings Floodplain Risk Management Plan, Worley Parsons Services Pty Ltd, 2014

6.3.4. OTHER MANAGEMENT PLANS

There are a large number of reserves located in the coastal zone that PMHC manages using Masterplans and Plans of Management. [See section 16.2.5] for other Plans and Reports for further information.







7. NEW COASTAL MANAGEMENT FRAMEWORK

7.1 COASTAL MANAGEMENT ACT 2016

The CM Act establishes the framework and overarching objects for coastal management in New South Wales.

The purpose of the CM Act is to manage the use and development of the coastal environment in an ecologically sustainable way, for the social, cultural and economic well-being of the people of New South Wales.

The CM Act also supports the aims of the Marine Estate Management Act 2014, as the coastal zone forms part of the marine estate.

The CM Act defines the coastal zone, comprising four (4) coastal management areas:

- · Coastal wetlands and littoral rainforests: areas which display the characteristics of coastal wetlands or littoral rainforests that were previously protected by SEPP 14 and SEPP 26.
- Coastal vulnerability area: areas subject to coastal hazards such as coastal erosion and tidal inundation.
- Coastal environment area: areas that are characterised by natural coastal features such as beaches, rock platforms, coastal lakes and lagoons and undeveloped headlands. Marine and estuarine waters are also included.
- Coastal use area: land adjacent to coastal waters, estuaries and coastal lakes and lagoons.

The CM Act establishes management objectives specific to each of these coastal management areas, reflecting their different values to coastal communities.

Different management objectives exist across the four coastal management areas. New maps defining the coastal management areas were released with the commencement of the Coastal Management SEPP. If multiple areas apply to a single parcel of land, the CM Act imposes a hierarchy as to which coastal management objectives apply.

A Coastal Management Manual has been developed as part of the reform package. The manual contains the mandatory requirements which must be imposed when developing Coastal Management Programs (CMPs).

The Act has abolished the NSW Coastal Panel, and established a new NSW Coastal Council.

TRANSITION FROM OLD TO NEW

The Act has introduced CMP's to replace the Coastal Zone Management Plans (CZMPs) that were implemented under the Coastal Protection Act 1979. Council's must have new CMPs in place and adopted before works can qualify for grant funding. As part of the legislation change no transition arrangements were provided meaning all existing Council adopted Estuary Management Plans are now no longer capable of receiving grant funding.

Hence until a CMP is adopted, no estuary management works will be funded by the NSW State Government. Coastal management works that are contained within a certified CZMP are still eligible for funding, but only until December 2021.

Estuary management works have not been capable of receiving NSW state government grant funding since April 2018 which has significantly impacted on Council's ability to undertake estuary management works.

7.2 STATE ENVIRONMENTAL PLANNING POLICY (COASTAL MANAGEMENT) 2018

The State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP) identifies and maps the coastal zone according to definitions in the CM Act and aims to streamline coastal development assessment requirements.

The CM SEPP identifies development controls for consent authorities to apply to each coastal management area to achieve the objectives of the CM Act. And as such, the CM SEPP establishes the approval pathway for coastal protection works.

Statewide mapping is available for:

- · Coastal wetlands and littoral rainforest area
- Coastal environment area
- Coastal use area

At the commencement of the CM SEPP no Coastal Vulnerability Area Maps were adopted and therefore no coastal vulnerability areas are identified in this policy.

7.3 COASTAL MANAGEMENT PROGRAMS

CMPs will set the long-term strategy for coordinated management of the coast with a focus on achieving the objects of the CM Act. Local Councils in consultation with their communities and relevant public authorities prepare them. Councils are not required to develop a CMP if they choose not to.

If a CMP is proposed, it must:

- 1. Identify the coastal management issues affecting the areas to which the program is to apply
- 2. Identify the actions required to address those coastal management issues in an integrated and strategic manner
- 3. Identify how and when those actions are to be implemented
- 4. Identify the costs of those actions and proposed cost-sharing arrangements and other viable funding mechanisms for those actions
- 5. Include a coastal zone emergency action sub-plan if the local Council's LGA contains land within the coastal vulnerability area and beach erosion, coastal inundation or cliff instability is occurring on that land.

A CMP may also include other matters as may be authorised or permitted by the Manual.







7.4 NSW COASTAL MANAGEMENT MANUAL

The Manual provides mandatory requirements and guidance for the preparation, development, adoption, implementation, amendment and review of CMPs.

It provides systematic guidance on how to prepare a CMP and integrate coastal management actions with Councils other strategic and land-use planning processes.

The Manual is comprised of three parts:

PART A	PART B	PART C
Outlines the mandatory requirements in the CM Act, and the essential elements that councils are required to follow.	Describes in detail the process for preparing a CMP	Provides a technical toolkit with advice on a range of topics.

7.5 NSW COASTAL COUNCIL

The NSW Coastal Council is appointed by the NSW Government to provide independent advice to the Minister on coastal issues. The NSW Coastal Council replaces the NSW Coastal Panel and the Coastal Expert Panel.

7.6 COASTAL AND ESTUARY GRANTS PROGRAM

The Coastal and Estuary Grants program provides funding assistance to help Councils prepare and implement CMPs. Funding has historically been provided for planning and implementation works at a ratio of 1:1, meaning for every one-dollar Council commits, the NSW government will provide a matching one-dollar.

In April 2020 the NSW Government announced that it was increasing financial assistance to Councils to help mitigate coastal erosion risks and restore degraded coastal habitats.

Minister for Local Government Shelley Hancock said the funding ratio for eligible projects under approved Coastal Management Programs will increase to 2:1 meaning the State will now contribute two-dollars to every one-dollar put in by Councils.

These changes are part of 32 supported recommendations from a recent review that examined ways of improving Councils access to funding under the Coastal and Estuary Management program.

The 2:1 funding ratio will bring the Coastal & Estuary Management grants program in line with the Floodplain Management Grants Program.

The 2:1 funding ratio is only applicable to planning and implementation projects where they are in an approved CMP as such the action items from the certified Lake Cathie CZMP are not eligible for 2:1 funding and will only be able to access funding from the NSW Government at a 1:1 ratio.

Current Coastal & Estuary Grant Program funding is only available until the end of the 2020/2021 financial year. Grant funding arrangements after this time are unknown.



20 PORT MACQUARIE-HASTINGS COUNCIL

COASTAL MANAGEMENT PROGRAM - STAGE 1 21

ORDINARY COUNCIL 17/02/2021

8. COUNCILS STRATEGIC PLANNING FRAMEWORK

8.1 STRATEGIC PLANS

PMHC is guided by a number of key strategies and plans which will assist with integrating the aspects of population growth, land use, community values and expectations into the CMP. These strategies and plans are summarised below.

INTEGRATED PLANNING AND REPORTING FRAMEWORK (IP&R)

The Integrated Planning and Reporting (IPR) framework was legislated by the New South Wales Office of Local Government in 2009. It provides councils with a planning framework that is guided by the vision of the community for a 10 year period and gives local governments a structure for establishing local priorities and to link this information to operational functions.

The framework includes a suite of integrated plans that set out a vision and goals and strategic actions to achieve them. It involves a reporting structure to communicate progress to council and the community as well as a structured timeline for review to ensure the goals and actions are still relevant.

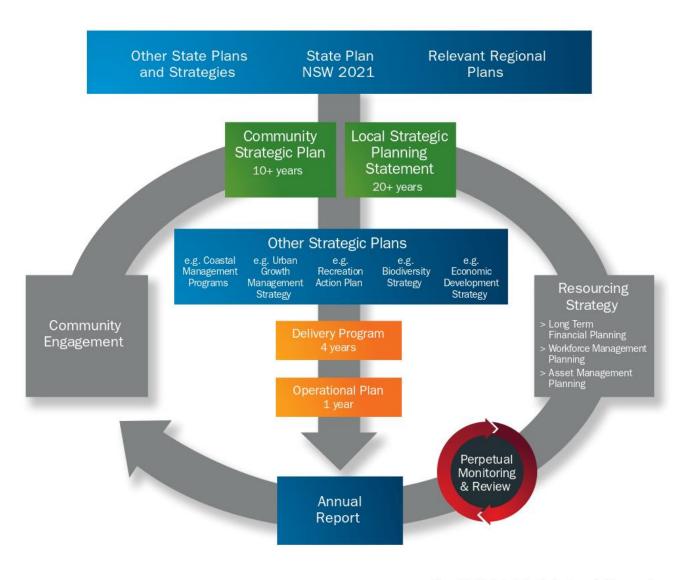
The framework is made up of four major elements, which are linked and continually assessed through regulatory reporting channels.

These are the:

- Towards 2030 Community Strategic Plan (CSP) 2017-2021
- Delivery Program (DP) (Revised)
- · 2020-2021 Operational Plan (OP)
- Resourcing Strategy (RS)



Under the framework, councils are required to give due regard to State Plan NSW 2021 and other Relevant Regional Plans to inform Council in identifying relevant issues for its Community Strategic Plan. Likewise, Council also have a wide range of plans for consideration, which highlight key local community issues. A number of examples include Coastal Management Programs, Urban Growth Management Strategy, Economic Development Strategy, Recreation Action Plan, Biodiversity Strategy, and Cultural Plan.



ORDINARY COUNCIL 17/02/2021





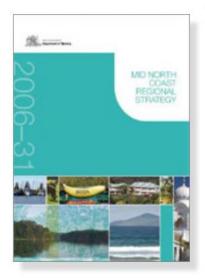


NORTH COAST REGIONAL PLAN 2036

The North Coast Regional Plan 2036 is a broad strategic plan that reflects the community's aspirations and opportunities for the north coast of NSW until 2036.

MID NORTH COAST REGIONAL STRATEGY 2006 - 2031

The Mid North Coast Regional Strategy 2006 - 2031 was released by NSW Department of Planning in March 2009. The primary purpose of the regional strategy is to ensure that adequate land is available and appropriately located to accommodate projected housing and employment needs of the region's population over the next 25 years.



24

In summary the aims of the strategy are to:

- Protect high value environments and habitat corridors, cultural and Aboriginal heritage and scenic landscapes.
- Provide up to 58,400 new homes by 2031 to cater for a forecast population increase of 91,000. With smaller households and an ageing population, a more suitable mix of housing will be encouraged, including more multi-unit style dwellings.
- Ensure an adequate supply of land is available to support economic growth and an additional 47,000 jobs.
- Encourage the growth and redevelopment of the Region's four major regional centres (Grafton, Coffs Harbour, Port Macquarie and Taree) and six major towns (Maclean, Woolgoolga, Bellingen, Macksville, Kempsey and Forster-Tuncurry) through urban design and renewal strategies.
- Protect the coast by focusing new settlement in areas identified on local strategy maps. Development in places constrained by coastal processes, flooding, wetlands, important farmland and landscapes of high scenic and conservation value will be limited.

TOWARDS 2030 COMMUNITY STRATEGIC PLAN 2017

The CSP identifies what the community wants for the future of the LGA and what should be prioritised. This plan should be reviewed every 10 years and is the overarching guidance for Councils strategic direction. The Delivery Program and the Operational Plan are the underlying plans of the CSP, which provide more detailed targets and actions to be delivered and how they can be achieved.

The CMP must consider the strategic direction of the Community Strategic Plan to ensure that it coincides with what the community wants for the LGA. This will then have to be integrated into the Delivery and Operational Plans once specific actions are determined.

PMHC's Towards 2030 Community Strategic Plan (CSP) for the natural and built environment aims "to achieve a connected, sustainable, accessible community and environment now and into the future". The results of the CSP will be:

- · Effective management and maintenance of essential water, waste and sewer infrastructure
- · A community that is prepared for natural events and climate change
- · Sustainable and environmentally sensitive development outcomes that consider the impact on the natural environment
- · Accessible transport network for our communities
- Infrastructure provision and maintenance that meets community expectations and needs
- · Well planned communities that are linked to encourage and manage growth
- · Accessible and protected waterways, foreshores, beaches and bushlands
- · An environment that is protected and conserved for future generations
- Renewable energy options that are understood and accessible by the community

PMHC continues to look to the future and therefore has already begun preparing the "Think 2050 CSP" which will supersede the current CSP when completed.

PMHC URBAN GROWTH MANAGEMENT STRATEGY (UGMS) 2017-2036

The PMHC UGMS aims to identify opportunities for new economic development and housing that will meet the needs of the growing community. The Community Vision for the Port Macquarie-Hastings is "A sustainable high quality of life for all". The strategy focuses on the coastal area and major towns and villages where urban growth is expected to take place over the next 20 years.



THINK 2050 COMMUNITY STRATEGIC PLAN

Port Macquarie-Hastings Council Jaunched the Think 2050 Community Strategic Plan and commenced community engagement on 4 December 2019.

Think 2050 is centered on engaging with everyone in our community including those that live, work, study, attend school or do business, as well as those that shop or visit our beautiful region.

Throughout 2020 and the first half of 2021 Council will be engaging with community members and asking for ideas, suggestions, and feedback to help plan for the ongoing and future needs of the region. These findings will be incorporated into the CMP as they develop.

ORDINARY COUNCIL 17/02/2021





9. PORT MACQUARIE-HASTINGS LGA OVERVIEW



The Port Macquarie-Hastings LGA is located on the Mid-North Coast of NSW, about 320 kilometres north of Sydney, 420km south of Brisbane, QLD and has an area 3,687 km2 [Refer to Figure 8]. Significant localities situated on the coast in the LGA are North Shore, Port Macquarie, Lake Cathie, Bonny Hills, North Haven, Dunbogan and Laurieton. Port Macquarie is the most populous and attracts most of the coastal activity, especially activities related to tourism.

There are three main catchments in the LGA: the Hastings River, Lake Cathie/Lake Innes and the Camden Haven [see Figures 9, 10 and 11]. The Hastings River is the largest of all these catchments and encompasses an area of 3,864km2. The river itself is 165km long and is the source of the majority of the LGA's drinking water supply which is pumped from Koree Island, upstream of Wauchope.



Figure 9. Hastings River from Koree Island



Figure 10. Lake Cathie looking west

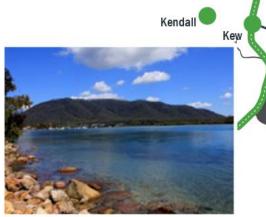


Figure 11. Camden Haven River looking towards North Brother mountain

The mouth of the Hastings River is located at Town Beach Port Macquarie while the Camden Haven River comes out between North Haven and Dunbogan. The Lake Cathie/Lake Innes catchment does not have a major river feeding the system, but instead is fed by a number of small creeks that flow into both lakes. Lake Cathie is an Intermittingly Closed and Open Lake or Lagoon (ICOLL) meaning it does not permanently have open access to the ocean.

The Port Macquarie-Hastings LGA has a remarkable coastline extending from Point Plomer in the north to Diamond Head in the south [see Figure 12]. There are numerous beaches in the LGA and among some of the finest in the state, offering a mixture of fine sandy shores, rocky headlands and rainforests. Some of the most visited beaches include Town Beach (Port Macquarie), Lighthouse Beach (Port Macquarie to Lake Cathie) and Shelly Beach (Port Macquarie). Other notable beaches include Rainbow Beach (Bonny Hills), North Haven Beach, Middle Rock Beach (Lake Cathie) and Pilot Beach (Dunbogan).

LOCAL GOVERNMENT AREA



COASTAL MANAGEMENT PROGRAM - STAGE 1





Figure 12. Port Macquarie-Hastings LGA showing coastal areas



10. ENVIRONMENTAL CONTEXT

10.1 CLIMATE

The PMH LGA is located in the subtropical region of Australia where it experiences a warm temperate climate. Summers are moderately warm and humid with coastal storms often occurring in the evening during the later summer months. Winters are generally mild with frosts often occurring in the inland areas.

Weather data sampled at the Port Macquarie Airport shows the mean maximum temperature is 23.8° C and the mean minimum temperature is 12.7° Celsius. The mean annual rainfall for the LGA varies depending on proximity to the coast and the higher peaks inland. Generally speaking, the mean annual rainfall for the LGA is approximately 1500mm.

As is the rest of NSW and Australia, PMHC is prone to experiencing prolonged droughts with significantly less than average rainfall occurring throughout the region at times. This leads to lower river levels and increased bushfire intensity and frequency.

10.2 SIGNIFICANT CLIMATIC EVENTS

PMHC experiences a number of coastal storm events with the latest significant event being the East Coast Low of June 2016. This event included strong north-easterly winds (gusts up to 120km/h) with the highest individual wave recorded on the NSW coast of 17.7m at Eden (BOM, Manly Hydraulics Laboratory and OEH, 2016). This event occurred at the same time as the winter solstice spring tide and significant rainfall which both compounded the erosive damage and storm debris to PMHC's coast.

PMHC has experienced some major flood events (1963 and 1968) as well as more frequent relatively minor events (1978, 1995 and 2013). The 1963 flood was the worst in the lower catchments (Hastings & Camden Haven) due to high ocean conditions. This was estimated to be a "1 in 100-year" event and anecdotally the worst Wrights Creek flood recorded. The 1968 flood was also estimated to be a "1 in 100-year" event and mostly affected the upper catchments due to high rainfall. The 1978, 1995 and 2013 Hastings River floods were all approximately "1 in 20 year" events.

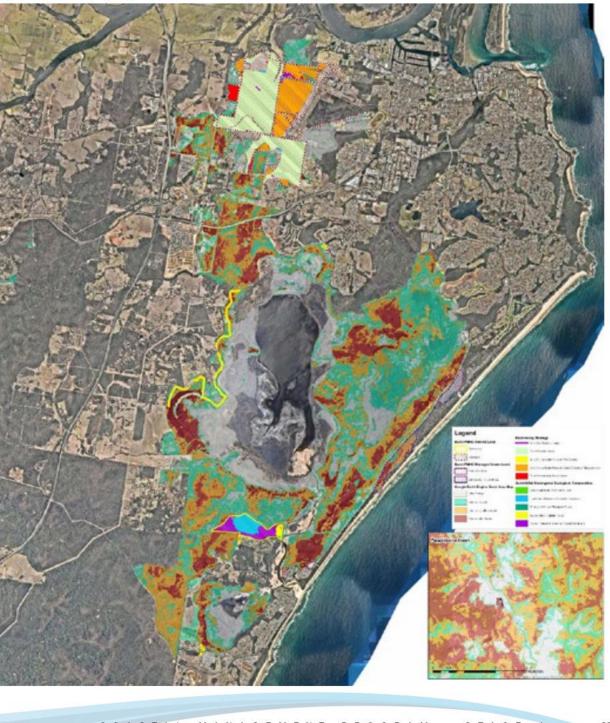
Drought has affected most of New South Wales since early 2017 and in 2019 the PMH LGA experienced its lowest recorded amount of annual rainfall (514mm) since 1870. The rainfall deficiencies contributed to the stoppage of water flow in the Hastings River which meant that PMHC and private landholders were unable to extract water for domestic and irrigation purposes from the system. This also led to heavy water restrictions being placed on the local community by PMHC. The Lake Cathie/Innes estuarine system was also adversely affected by the ongoing drought conditions. Council last artificially opened the lake entrance in July 2018 as the lake reached 1.6m AHD and began affecting properties that are susceptible to nuisance flooding. Post opening, a lack of rainfall and small depositional waves naturally closed the entrance and with high temperatures and high evaporation rates following the closure, the lake dropped to very low levels. The lowered water levels within the system exposed extensive foreshore areas comprising ASS, caused elevated water temperatures, low dissolved oxygen levels, hypersalinity and fish kills, therefore highlighting the need to review the Entrance Opening Strategy.

During the extraordinarily damaging bushfire season of 2019-20 approximately 140,000 Ha of land was burned within the PMH LGA. This included 3,572 Ha around the Lake Innes Nature Reserve south to Lake Cathie and around the Queens Lake Conservation Area *[refer to Figure 13]*. There has been considerable debate regarding the underlying cause of the intensity and scale of the recent fires, including the role of fire management practices and climate change. Bushfires however, are not new to the area, major bushfire events being experienced in the past.

Since 2000 there have been significant fires in Limeburners National Park (2002, 2010), Christmas Bells Plains (2002), Bonny Hills (early 2000's), Dunbogan (2005) and Pappinbarra (2017, 2019).

Bushfires can have various impacts on waterways both during and post fires. The key contaminants of concern for managers include increased suspended solids and turbidity, increased nutrients, increased risk of toxic algal blooms and increased metal concentrations. Fire also increases the potential for runoff and erosion as well as unburnt organic matter washing into waterways and reducing dissolved oxygen as it decomposes.

Figure 13. Bushfire map depicting burnt land in the Port Macquarie area during 2019-20



ORDINARY COUNCIL 17/02/2021



10.3 PHYSICAL FEATURES AND COASTAL PROCESSES

The coastline is subject to a high energy wave climate. The offshore swell wave climate (wave height, period and direction occurrences) has been recorded by the NSW Government Manly Hydraulics Laboratory with Waverider buoys located at Sydney, Crowdy Head and Coffs Harbour for many years. The wave data show that the predominant swell wave direction is south-southeast (SSE) with over 70% of swell wave occurrences directed from the SSE. The average deep-water significant wave height is measured at 1.6m with the average wave period being 10 seconds as recorded at Crowdy Head (SMEC, 2008).

East Coast Lows (ECLs) have occurred in the area causing coastal erosion and washing up of debris. One large event was recorded in June 2016 [see Figures 14 to 17 to the right]. ECLs are intense low-pressure systems that occur off the east coast of Australia. They can form at any time of the year and significant ECLs occur on average about 10 times each year. These storms can have severe consequences in terms of wind damage, storm surge, heavy and damaging surf and flash flooding (AdaptNSW). Climate modelling projects a decrease in the number of small to moderate ECLs in the cool season with little change in these storms during the warm season. However, extreme ECLs in the warmer months may increase in number but extreme ECLs in cool seasons may not change.

The open coastline is made up of sandy beaches and rocky headlands with significant portions of the coastline made up of the Coastal Wetland and Littoral Rainforest Area (CWLRA), and National Parks. Parts of the coast are susceptible to coastal erosion, in particular, Town Beach and Lake Cathie Beach (Lighthouse Beach). For example, a conservative estimate of future long term recession of 0.20 m/ year was adopted for the beach at Lake Cathie (Coastal Hazard Study, SMEC 2010).

Lighthouse Beach at Lake Cathie is comprised of underlying consolidated or indurated sands (coffee rock) which is more resistant to erosion than typical unconsolidated beach sand.

30



Figure 14. Town Beach East Coast Low event June 2016 (before and during)



Figure 15. And after looking east towards Kiosk



Figure 16. Lake Cathie East Coast Low Event June 2016. Pictured at intersection of Kalang Drive and Bundella Avenue, Lake Cathie. Left photo taken 8 September 2015 and right photo taken 26 July 2016.



Figure 17. Lake Cathie East Coast Low Event June 2016 - during early and later phases of event, looking south along Illaroo Road.

Despite this, erosion of the sand dune happens often after storm events and the close proximity of privately owned houses and public assets to the shoreline means it requires management. Town Beach is the main beach in the LGA. While there are no residential properties under threat, there are a number of assets such as roads and park infrastructure that are exposed to this risk. Flynns Beach is one such beach that contains assets that are exposed to risks, which has been confirmed via coastal hazard studies. The existing sea wall is not adequate in protecting the assets behind the beach, so a new sea wall is required. The first stage of the sea wall replacement has occured at Flynn's beach which now protects the surf club, kiosk, road access and open space reserve. Other beaches where erosion has been identified, though not studied, are Rainbow Beach. Shelly Beach, North Shore Beach (Corilla Estate) and Dunbogan Beach. These are areas where investigations will be considered during the CMP process.

10.4 SEDIMENT COMPARTMENTS

Coastal sediment compartments are defined areas that have similar coastal processes and are based on sediment flows and landforms.

The Australian Government initiated the Coastal Compartments Project which aimed to establish a consistent approach in managing Australia's coastline (Thom, N.D.). This project resulted in sediment compartments being mapped along Australia's entire coastline. These sediment compartments are divided into three levels:

- · Primary level defined by large landforms e.g. headlands and rivers
- Secondary level defined by sediment movement within and between beaches
- Tertiary level where sediment moves in the nearshore area e.g. individual beaches

PMHC shares two coastal sediment compartments with neighbouring Councils that are defined as secondary level compartments. The South West Rocks-Port Macquarie sediment compartment [see Figure 18] is shared with KSC and the Tacking Point-Crowdy Head sediment compartment [see Figure 19] is shared with MCC. These sediment compartments are identified in Schedule 1 of the CM Act.

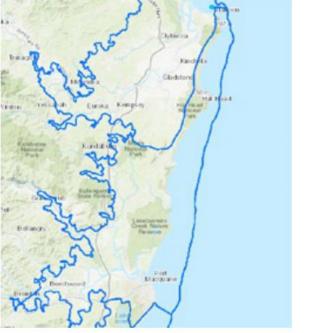


Figure 18. South West Rocks-Port Macquarie sediment compartment

(Geoscience Australia, 2016)

ORDINARY COUNCIL 17/02/2021



Figure 19. Tacking Point-Crowdy Head sediment compartment (Geoscience Australia, 2016)

31

ESTUARY CATCHMENTS AND RIVER CONDITION

Estuaries in the PMHC LGA are the Hastings River estuary, Camden Haven River estuary and Lake Cathie-Lake Innes estuary. PMHC shares two estuaries with neighbouring Councils. The Camden Haven River Estuary is shared with MCC and the Hastings River Estuary is shared with KSC.

Consultation with other local councils on the draft CMP is required by s16 (1) (b) (i) and (ii) of the CM Act where those councils share a coastal sediment compartment or estuary as specified in Schedule 1 of the CM Act. Consultation will occur with each Council in developing management actions for these shared areas which will be developed through the stakeholder enagement and consultation strategies as part of future stages of the CMP.

ECOHEALTH MONITORING

Ecohealth reports determine the health of estuaries and rivers in the LGA based on effects from diffuse sources. They are assessed based on Ecohealth indicators (water quality, riparian vegetation, geomorphic condition, macroinvertebrates and plankton) and are provided with a score. Ecohealth Reports were prepared in 2012 & 2017.

The 2017 Ecohealth report (Darren Ryder, 2017) gave the LGA an overall score of "C" which is rated as fair. The Lake Innes/Lake Cathie catchment slightly declined from 2011, the Hastings River catchment declined and the Camden Haven River catchment had no change (Darren Ryder, 2017). Across the Hastings and Camden Haven catchmentsthere was a typical decline in geomorphic condition which highlights the importance of maintaining healthy riparian vegetation to promote bank stability. The best riparian condition was surrounding the coastal lagoons where it was assessed as being in very good condition. The Camden Haven catchment was assessed as having moderate riparian condition while the Hastings River catchment was moderate in the freshwater reaches, but was poor in the Hastings River main stem. Main issues identified were the dominance of invasive weeds, vegetation clearing that has reduced riparian connectivity and damage from livestock.

Water quality was moderate across both Hastings and Camden Haven catchments and had declined from 2011 to 2015, driven largely by high nutrient concentrations, more acidic pH and low dissolved oxygen - all of which were directly linked to very low flows experienced during the study. Aquatic macroinvertebrate condition was moderate across the catchments with a small decline between the two assessments in abundance and richness. Again this was the result of low flows and macroinvertebrate condition did improve in the latter stages of the assessment when stream flows increased, indicating a resilience to extreme low flows. It is noted though that this resilience is reliant on good habitat quality which is linked to good riparian condition.

The management priorities identified in the Ecohealth report (freshwater and estuarine reaches) included:

HASTINGS RIVER CATCHMENT

- · Weed monitoring for the movement and spread of weed species.
- Weed control for the removal of various noxious and environmental weed species.
- · Native riparian plantings for site rehabilitation, native regeneration assistance, increased riparian width, continuity and connectivity to larger tracts of remnant vegetation.
- Riparian fencing to reduce livestock impact and reduce bank erosion, encourage regeneration of native vegetation, accumulation of woody debris and to increase riparian width, continuity and connectivity to larger tracts of remnant vegetation.
- · Investigate subcatchment sources of TN, TP, NOx and SRP to the river.

CAMDEN HAVEN CATCHMENT

- Weed monitoring for the movement and spread of weed species.
- Weed control for the removal of various noxious and environmental weed species.
- · Investigate subcatchment nonpoint sources of TN and NOx to the river.
- · Phase out exotic dominants planting of native canopy species to replace strategic removal of exotic canopy and midstory species.
- Riparian fencing to reduce livestock impact and reduce bank erosion, encourage regeneration of

native vegetation, accumulation of woody debris and to increase riparian width, continuity and connectivity to larger tracts of remnant vegetation.

 Native riparian plantings: to replace exotic dominants, site rehabilitation and native regeneration assistance, increased riparian width, continuity and connectivity to larger tracts of remnant vegetation.

LAKE CATHIE AND LAKE INNES CATCHMENT

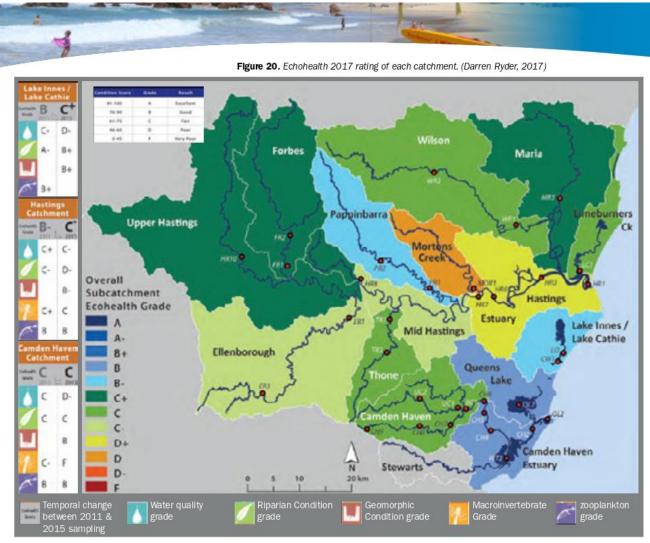
- · Weed monitoring for the movement and spread of weed species.
- · Weed control for the removal of various noxious and environmental weed species.
- · Maintaining adequate riparian width supports ecological function by buffering against exotic species and environmental impacts while allowing for the accumulation of woody and non-woody debris, which through the provision of niche habitats supports native woody regeneration and native animal species.
- Investigate sub-catchment nonpoint sources of TN, TP and NOx to the estuarine lagoons.

All other sites/sub-catchments investigated produced similar management actions seen in the following table:

Sites	Weed monitoring	Weed control	Native plantings	Fencing	Weed specles	Woody debris	Maintain Riparian	Water quality	High nutrient concentrations
					phase-out		width		T 11 110
Black Creek (BC1)	Y	Y	Y	Y	Y		Y	Poor	TN, NOx
Camden Haven (CH2)	Y	Y	Y				Y	Moderate	TN, NOx
Camden Haven (CH4)	Y	Y					Y	Poor	TN, NOx
Camden Haven (CH5)	Y	Y			Y		Y	Very poor	TN, NOx
Camden Haven (CH6)	Y	Y					Y	Moderate	TN, NOx
Camden Haven (CH7)	Y	Y		Y	Y		Y	Poor	TN, NOx
Camden Haven (CH8)	Y	Y		Y			Y	Moderate	TN, NOx
Camden Haven (CH9)	Y	Y					Y	Poor	TN, NOx
Lake Cathie (CW1)	Y	Y					Y	Poor	TN, TP, NOx
Ellenborough River (ER1)	Ŷ	Y	Ŷ	Y			Y	Moderate	TN, TP, NOx
Ellenborough River (ER3)	Y	Y		Y			Y	Poor	TN, TP, NOx
Forbes River (FR1)	Y	Y	Y	Y	Y		Y	Good	TN, NOx
Forbes River (FR3)	Y	Y		Y			Y	Moderate	TN, NOx
Gogleys Lagoon (GL1)	Y	Y					Y	Moderate	TN, NOx, TP, SRP
Hastings River (HR1)	Y	Y			Y	Y	Y	Moderate	TN, NOx, SRP
Hastings River (HR3)	Y	Y	Y	Y		Y	Y	Moderate	TN, NOx, SRP
Hastings River (HR6)	Y	Y	Y	Y	Y		Y	Poor	TN, NOx, SRP
Hastings River (HR7)	Y	Y	Y	Y	Y		Y	Poor	TN, NOx, SRP
Hastings River (HR8)	Y	Y	Y	Y			Y	Moderate	TN, TP, NOx
Hastings River (HR10)	Y	Y	Y	Y			Y	Poor	TN, TP, NOx
Limeburners Creek (LC1)	Y	Y					Y	Moderate	TN, NOx, SRP
Lake Innes (LI1)	Y	Y					Y	Poor	TN, TP, NOx
Mortons Creek (MOR1)	Y	Y		Y	Y		Y	Moderate	TN, NOx
Maria River (MR1)	Y	Y		Y			Y	Very poor	TN, NOx
Pappinbarra River (PR1)	Y	Y		Y	Y		Y	Moderate	NOx
Pappinbarra River (PR2)	Y	Y		Y			Y	Good	NOx during low flows
Queens Lake (QL2)	Y	Y					Y	Poor	TN, NOx, TP, SRP
Thone River (TR1)	Y	Y	Y	Y			Y	Moderate	TN, TP, NOx
Thone River (TR2)	Ŷ	Y	Y	Y			Y	Moderate	TN, TP, NOx
Upsalls Creek (UC1)	Ŷ	Y		Y	Y		Y	Moderate	TN, NOx
Upsalls Creek (UC2)	Ŷ	Y					Y	Moderate	TN, NOx
Watson Taylors Lake (WT2)	Ŷ						Y	Poor	TN, NOx, TP, SRP
Wilson River (WR1)	Ŷ	Y	Ŷ	Y	Y		Y	Poor	TN, NOx
Wilson River (WR3)	Ŷ	Y	Ŷ	Y	Y		Y	Moderate	TN, NOx
Total	34	33	13	21	12	2	34	N/A	N/A

Table 1. A summary of recommendations to improve riparian condition at each of the 34 Hastings - Camden Haven Ecohealth study sites.

33



The University of New England (UNE) with funding from PMHC has historically undertaken the Ecohealth reports. Consideration will be provided to committing to long-term funding for this project.

NSW ESTUARY HEALTH RISK DATASET

34

The NSW Government is leading a water quality initiative to improve the management and co-ordination of urban and rural diffuse source water pollution in New South Wales (NSW) as part of their requirements to implement the Marine Estate Management Strategy 2018-2028 (MEM Strategy). A key approach to delivering this initiative is to adopt the Risk-based framework for considering waterway health outcomes in strategic land use planning decisions (Risk-based Framework).

In May 2017, the former Office of Environment and Heritage (OEH) and the NSW Environment Protection Authority released an introductory resource on the Risk-based Framework in response to 3 years of consultation on urban planning and wider catchment management.

The former OEH applied the first two steps of the Risk-based Framework and produced the NSW Estuary Health Risk Dataset to help inform Stage 1 scoping studies during the preparation of coastal management programs under the NSW Coastal Management Manual (2018). The dataset can be used to map (spatially prioritise) where further studies and/or management actions in a catchment would help achieve outcomes for coastal environment areas and coastal wetlands and littoral rainforests areas specified in the Coastal Management Act 2016. These outcomes are specifically to:

 protect and enhance the coastal environmental values and natural processes of coastal waters, estuaries, coastal lakes and coastal lagoons

- · enhance natural character, scenic value, biodiversity and ecosystem integrity of coastal environments
- · reduce threats to and improve the resilience of coastal waters, estuaries, coastal lakes and coastal lagoons, including in response to climate change
- maintain and improve water quality and estuary health
- · support social and cultural values of coastal waters, estuaries, coastal lakes and lagoons
- · protect coastal wetlands and littoral rainforests in their natural state, including their biodiversity and ecosystem integrity
- · promote the rehabilitation and restoration of degraded coastal wetlands and littoral rainforests improve the resilience of coastal wetlands and littoral rainforests to the impacts of climate change, including
- opportunities for migration
- support the social and cultural values of coastal wetlands and littoral rainforests
- · promote the objectives of NSW Government policies and programs for wetlands or littoral rainforest management.

ACID SULPHATE SOILS (ASS) MANAGEMENT

The LGA has 19,513ha of high risk ASS and 6,874ha of low risk mapped ASS. Many management actions were undertaken in past EMPs and 5,122ha of ASS has been remediated including 145km of excavated drains and channels.

There are multiple solutions for managing ASS issues. These may include engineered weir structures such as what was installed in partnership with Partridge Creek landholders or to fill the drains completely but many of these are on private land. Future remediation works in Maria River may involve a joint venture with Kempsey Shire and with Mid Coast Council to achieve management actions for Watson Taylor Lake, Stewarts River and surrounding lands.

Estuaries and rivers in the LGA are under an ever-growing threat of encroaching development. Managing development and its impacts is a key management action for the CMP.

10.5 HABITAT CONDITION

The PMHC LGA is an area rich in biodiversity supporting a diverse range of both terrestrial and aquatic plants and animals. The area includes specific areas of biological importance. Limeburners Creek Nature Reserve for example, is one of only two coastal wilderness areas in NSW. Lake Innes Nature Reserve has been considered the 'engine room' for Koala populations in the LGA and has historically contained a 'nationally significant population' (as defined by Federal Government criteria). Sea Acres Nature Reserve and adjoining council land are some of the largest remaining patches of littoral rainforest, particularly outside far northern Queensland.

The estuaries and foreshores of the Camden Haven and Hastings Rivers are of immense importance for migratory shorebirds listed under international conventions and agreements.

The PMHC LGA has, until recently, been identified as an area that held the largest remaining coastal population of koalas. A lot of work has been done, and continues to be done, in maintaining these populations which continues to be challenging given the significant increase in development over a number of years and increased bushfire severity and intensity.

ORDINARY COUNCIL 17/02/2021

An audit	and development of
	nance plan may be
	ed for all existing ASS
nfrastru	



SEAGRASS MAPPING

Seagrass meadows are a vital habitat for many estuarine species and make valuable contributions to estuarine ecology. Multiple studies have shown that seagrasses within NSW estuaries have suffered long-term declines over the last 50 - 60 years. NSW estuaries have even had reported losses of up to 85% of seagrasses during this time (West, 2006). A review of the existing literature suggests that the long-term decline in seagrass biomass is likely a result of anthropogenic impacts on our estuarine systems and their catchments. Urbanisation, dredging and poor catchment management practices are perhaps the leading contributors to the decline and these issues need to be addressed and closely managed if the long-term losses are to be reduced.

Seagrass mapping was undertaken in 2012 and meadows exist in both the Hastings River Estuary and the Camden River Estuary. No seagrass meadows are mapped in Lake Cathie/Lake Innes, which is not uncommon for an ICOLL. Anecdotally, there have been sightings of seagrass within Cathie Creek. Reports in fish and prawn stock declines in the Camden Haven Estuary may be associated with a decline in seagrass and may also be associated with known Acid Sulphate Soil (ASS) discharge emanating from the western side of Watson Taylor Lake. Collaborating with Mid Coast Council will be necessary to investigate management options for the ASS. An investigation may be undertaken on an LGA-wide scale to try to identify changes in seagrass distribution and abundance.

NATIVE VEGETATION

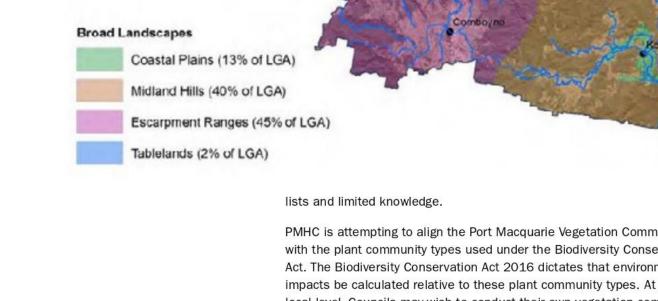
36

The PMHC LGA can be broadly divided into four landscapes: Coastal Plains, Midland Hills, Escarpment Ranges and Tablelands [see Figure 21]. Each of these different landscape units has different biophysical factors (e.g. geology and climate) and therefore supports a different assemblage, or mix, of plants and animals.

Broadly speaking, PMHC has a good coverage of remaining native vegetation however the Coastal Plains Landscape has undergone the most extensive development and has the lowest percentage (56%) of remaining vegetation.

PMHC has completed detailed vegetation mapping which shows all remnants outside state forests and national parks. There are 83 vegetation communities that have been mapped. There are approximately 1,890 native plant species and 621 native animal species recorded in the PMHC LGA.

Of these, there are approximately 140 threatened animals, 50 threatened plants and 9 threatened ecological communities. These numbers are approximations only given the dynamic nature of these



impacts be calculated relative to these plant community types. At local level, Councils may wish to conduct their own vegetation com mapping, which further splits NSW plant community types into loca recognised discrete communities. Mapping plant community types easy because areas frequently include components of two commu - this is particularly true where the communities occur adjacent t other (in what are called ecotones).

COASTAL MANAGEMENT PROGRAM - STAGE 1 37

ORDINARY COUNCIL 17/02/2021

Figure 21. Broad Landscapes of PMHC LGA (Port Macquarie-Hastings Council, 2017).



unities		
rvation		
nental		
the		
nmunity		
ally		
is not		
inity types		
to each		

10.6 ESTUARINE AND COASTAL WETLANDS AND COASTAL LAKES

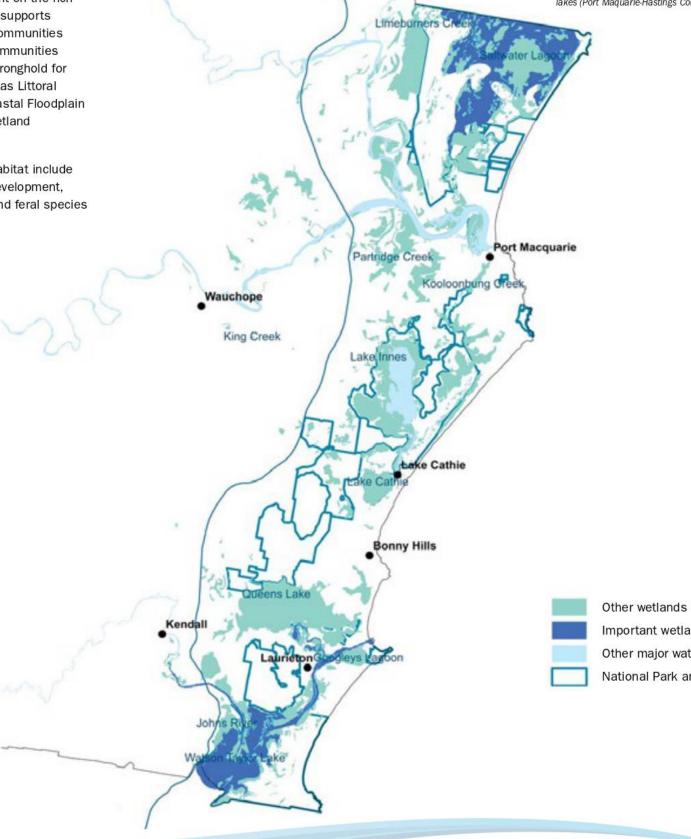
Estuarine wetlands, coastal floodplain wetlands and coastal lakes are ecologically, socially and economically important. They provide many ecosystem functions, ecosystem services and habitats for a wide range of animals (e.g. waterbirds, fish, frogs and invertebrates) and water-dependent plants (e.g. sedges, rushes and various tree species), including many threatened species and ecosystems. Estuarine and coastal wetlands and coastal lakes also provide shelter, breeding grounds and nurseries for a variety of fauna, particularly insects, fish, frogs and waterbirds, including migratory birds listed under various international agreements including the Bonn Convention and the bilateral migratory bird agreements with Japan, China and the Republic of Korea.

The PMH LGA has some very significant estuarine and coastal wetlands and coastal lakes located along its coastal strip. These include wetlands within Limeburners Creek Nature Reserve (listed on the Directory of Important Wetlands in Australia), Partridge Creek, Lake Innes, Saltwater Lake, Lake Cathie, Googleys Lagoon (Watson-Taylor Lake) and Queens Lake. Such areas are highly valued by the community and biodiversity alike. Saltwater Lake is considered to be in near pristine condition as per 'EcoHealth' Assessments undertaken by the University of New England (Darren Ryder, 2017). The location of these important biological assets (as identified and classified by the Northern Rivers Biodiversity Management Plan (Northern Rivers Catchment Management Authority, 2010)) is shown in [Figure 22]. (Port Maguarie-Hastings Council, 2017).

38

With its coastal location and long history of agriculture and housing development on the rich coastal floodplains, the PMHC LGA supports numerous Threatened Ecological Communities (TECs) & Endangered Ecological Communities (EEC's). The LGA is an important stronghold for many types of TEC's & EEC's, such as Littoral Rainforest, Lowland Rainforest, Coastal Floodplain Forest communities and various Wetland communities.

Historical and ongoing threats to habitat include clearing of vegetation, increased development, restricted distribution of habitats and feral species invasions.



ORDINARY COUNCIL 17/02/2021

Figure 22. Location of coastal and estuarine wetlands and lakes (Port Maquarie-Hastings Council, 2017).

Important wetlands Other major waterways National Park and State Forest

10.7 CLIMATE CHANGE

The future threats of sea level rise, increasing temperatures and changes to rainfall will place increasing pressure on species, ecosystems and human settlements in general. The range of potential impacts due to climate change is significant for coastal areas and it is necessary that they be considered in coastal management planning.

The changes in rainfall will directly impact on PMHC's water supply planning due to Council relying heavily on extraction from the Hastings, Wilson, Thone and Camden Haven for its water supply.

By 2050:

40

- Temperatures are expected to rise by an average of 1.5 degrees
- Rainfall is expected to reduce by 3.5% pa with significant seasonal changes
- Evaporation is expected to increase by 6% pa
- · Annual streamflows are expected to reduce by 10.8% pa but will be affected by seasonal differences
- · Annual water demands are expected to increase by 4.3% pa (mostly in spring).

There are also assumed changes in river flows which may be coupled with rising residential water demands. The modeling suggests that there is an expected increase on residential water demand by 4.3% pa while streamflows are predicted to drop by more thatn 10% pa. In a drought event both predicted changes are likely to coincide, making the impacts on water supply and the environment are potentially worse off.

Climate change projections for the north coast of NSW have been modelled by the NSW and ACT Regional Climate Modelling (NARCliM) project. The following snapshot provides climate predictions for 2020-2039 (near future) and for 2060-2079 (far future).

Long-term trends on the North Coast indicate that temperatures in the region have been increasing since around 1960, with the largest increase in temperature occurring in the most recent decades. It is expected that the North Coast will experience an increase in all temperature variables (average, maximum and minimum) for the near future and the far future, with projections of more hot days (maximum temperature greater than 35°C) and fewer cold nights (minimum temperature less than 2°C) (OEH, 2014).

10.7.1 RAINFALL

Extreme rainfall events are often associated with large storms and can cause damage to property and infrastructure, flash flooding, soil erosion and impacts on water quality. In recent research by the NSW and ACT Regional Climate Modelling (NARCIIM) to assess the potential for the frequency and intensity of extreme rainfall events in the future it was found that:

- · Rainfall extremes are projected to increase in the near future (2030) and far future (2070).
- · The increases in the near future are not considered significant - the changes fall within the range of inter-annual rainfall variability recorded in the past.
- In the far future, significant increases in several rainfall extreme indices are projected for some regions of NSW.
- · The Simple Precipitation Intensity Index (SDII) is the only index to have significant increases over

Projected temperature changes	
Maximum temperatures are projected to increase in the near future by 0.4 – 1.0°C	Maximun increase
Minimum temperatures are projected to increase in the near future by 0.5 – 1.0°C	Minimum increase
The number of hot days will increase	The num
Projected rainfall changes	
Rainfall is projected to decrease in winter	Rainfall is in autum
Projected Forest Fire Danger Index	x (FFDI) cha
Average fire weather is projected to increase in summer and spring	Severe fin

n.d.).

ORDINARY COUNCIL 17/02/2021

large parts of NSW. This suggests that the mean rainfall intensity will increase even though the more extreme indices do not show significant changes.

 Over most of NSW, little change is projected in the maximum wet spell. A small but not significant increase projected in the maximum dry spell is a reverse of the decreasing trend apparent in past rainfall records.

The frequency and intensity of floods and storms are likely to be affected by climate change and whilst these events as well as East Coast Lows (ECLs) can be damaging and costly, it is important to remember they are also essential for water security bringing the heavy soaking rainfall that fills dams along the coast and tablelands (AdaptNSW,

In the past NSW has experienced periods of very stormy weather and this should be considered in future risk assessment and planning.



10.7.2 SEA LEVEL RISE

On a global scale, sea levels are rising which is increasing the risk to coastal communities from inundation and erosion. Of all the potential impacts from climate change, the projected rise in sea levels is concerning for long-term management of the coastal zone.

Some potential impacts over time due to sea level rise include:

- Higher projected storm surge and inundation levels.
- · Landward recession of sandy shorelines. Depending on the rate and scale of sea level rise, the environmental, social and economic consequences of recession within low lying intertidal areas, in particular, may be significant in the medium-long term.
- Migration of marine vegetation (mangroves) and saltmarsh) and other riparian vegetation upslope (i.e. shoreward). This landward migration resulting from sea level rise may be impacted by existing/future infrastructure (e.g. retaining walls, roads etc.).
- · Salt water intrusion and landward advance of tidal limits within estuaries. This may have significant implications in the medium-long term for freshwater and saltwater ecosystems and development margins, particularly building structures and foundation systems within close proximity to the shoreline. [Refer to Section 13.3] for further information
- Existing coastal gravity drainage, stormwater infrastructure and sewerage systems may become compromised over time as mean sea level rises.
- Sea level rise will influence the entrance opening regimes for intermittently closed and open lakes and lagoons (ICOLLs) and alter catchment flood behavior over time.
- The level of protection provided by existing seawalls and other hard engineering structures will decrease over time due to the increasing threat from larger storm surges and inundation at higher projected water levels.

The potential implications of climate change and sea level rise will be considered by PMHC during all Stages of the CMP Whilst the NSW Government has repealed the NSW Sea-level rise Policy Statement 2009, PMHC believes this is the best available information and work will be undertaken using the benchmarks of 400mm sea level rise above 1990 mean sea levels by the year 2050 and 900mm rise by the year 2100.

10.7.3 FIRE

There is considerable uncertainty surrounding the nature and effects of climate change on fire regimes and fire management, particularly the effectiveness of prescribed burning and the effects on biodiversity. Future climate change is expected to increase bushfire risk through more adverse fire weather including a projected increase in the number of days of severe fire danger, and a potential lengthening of the fire season, over much of New South Wales.

Fire weather is largely monitored in Australia using the Forest Fire Danger Index (FFDI). The Bureau of Meteorology issues Fire Weather Warnings when the FFDI is forecast to be over 50 and average FFDI values are often used to track the status of fire risk.

The North Coast region is expected to experience an increase in both severe and average FFDI values in the near future and the far future (OEH, 2014).

Hazard reduction burning and wildfires under a changing climate will affect the ability of species to persist under a changing fire regime, which has potential implications for catchment management strategies. It is critical to identify likely thresholds of species decline for each component of the fire regime and apply these thresholds to ongoing fire management. [Refer to Section 10.2] for impacts relating to the recent 2019/20 bushfire season.

10.7.4 WATER QUALITY

Increased water temperatures and an increase in extreme hydrological events including floods and droughts are anticipated to affect water quality and intensify various forms of water pollution - from nutrients, pesticides, pathogens, dissolved organic carbon, sediments and sewage, as well as changes to thermal pollution with possible implications for ecosystems and human health. Ocean acidification is also linked to climate change as carbon dioxide (CO2) from the atmosphere is being absorbed in larger amounts. As sea water takes up more CO2, it becomes more acidic which lowers pH and affects the chemistry of the water making it harder for many animals to build skeletons and shells. This process could potentially be damaging for oyster production in our estuaries.

When considering the impacts of climate change, it will be important for planning and management programs to be adaptive and able to respond to a wide range of possible climate futures.



ORDINARY COUNCIL 17/02/2021

11. SOCIAL CONTEXT

11.1 COMMUNITY DEMOGRAPHICS AND POPULATION

The PMH LGA has an estimated population of 84,525 as of 30 June 2019 (ABS, ERP 2019) with a population density of 0.23 persons per hectare. The population is expected to grow to approximately 104,000 by 2036 [as shown in Table 2]. This growth is expected to be concentrated in the major towns and villages, particularly in Port Macquarie which is comprised of many significant coastal areas. This population increase will create demand for approximately 10,000 more dwellings by 2036.

PMH Council area	Forecast year					
	2016	2021	2026	2031	2036	
Population	79,905	86,183	92,240	98,123	103,993	
Change in population (5yrs)	1.00	6,278	6,057	5,884	5,870	
Average annual change	250	1.52%	1.37%	1.24%	1.17%	
Households	34,097	36,646	39,185	41,649	44,077	
Average household size	2.31	2.31	2.31	2.31	2.31	
Population in non-private dwellings	1,277	1,639	1,899	2,019	2,229	
Dwellings	37,024	39,626	42,273	44,899	47,496	
Dwelling occupancy rate	92.09	92.48	92.70	92.76	92.80	

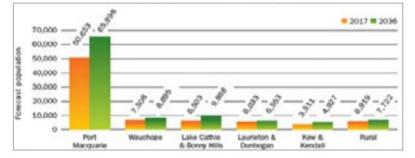


Table 2. Forecast population, households and dwellings (.id, 2017)

Figure 25. Forecast Population Growth for key centres in PMHC LGA to 2036, UGMS. PMHC, 2018.

PMHC has developed an Urban Growth Management Strategy (UGMS) to ensure that land use and population growth will be managed to maintain and enhance quality of life for all persons in the community in a balanced way for current and future generations. A "balanced way" means that social, economic and ecological objectives are balanced with each other (Urban Growth Management Strategy - Port Macquarie-Hastings Council). This strategy is closely integrated with PMHCs Towards 2030 Community Strategic Plan

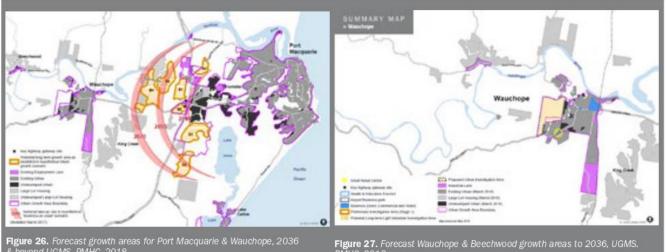
The UGMS has identified that the main areas planned for new residential development are located in Port Macquarie, Lake Cathie/Bonny Hills and near Kew in the Camden Haven. Future growth is being directed westward of Port Macquarie due to several constraints including national parks and flood-prone lands. (PMHC, 2018). The majority of existing developed land is within close proximity to the coast and needs to be managed for any risks accordingly.

The PMHC LGA experiences a large influx of tourists during the summer months and school holidays. Port Macquarie is the most affected by this influx along with other key coastal centres such as the Camden Haven, Lake Cathie and Bonny Hills. Coastal areas are used extensively throughout these periods, especially beaches and foreshore reserves, which places pressure on PMHC to ensure that these areas are not adversely affected. Similarly, population growth projections will place pressure on existing infrastructure (notably, water, sewer and stormwater) as well as pressure on recreational facilities and over time which will challenge how we maintain values important to the local community.

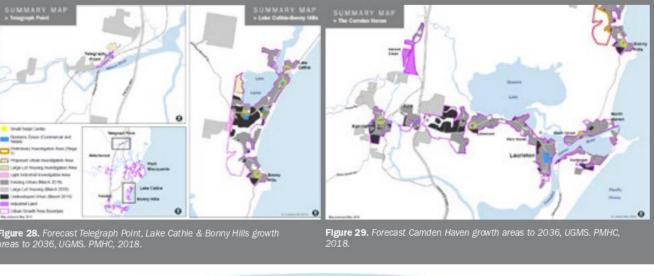
On a national scale, if current population trends continue, in Australia we will continue to increasing our population by about 400,000 per year (1 canberra each year) will result in a population of 40 to 70 million by 2100, with a significant portion of this growth potentially occurring along the coastline.

Port Macquarie-Hastings Council area Total persons (usual residence)		2016		2011			Change	
	Number	%	Regional NSW %	Number	%	Regional NSW %	2011 to 2016	
Bables and pre-schoolers (0 to 4)	3,820	4.9	5.8	3,985	5.5	6.3	-165	
Primary schoolers (5 to 11)	6,473	8.2	8.9	6,165	8.5	9.0	+308	
Secondary schoolers (12 to 17)	5,694	7.2	7.3	5,715	7.9	8.2	-21	
Tertiary education and independence (18 to 24)	4,637	5.9	7.9	4,338	6.0	8.1	+299	
Young workforce (25 to 34)	6,634	8.4	11.0	5,706	7.8	10.4	+928	
Parents and homebuilders (35 to 49)	13,023	16.6	18.0	13,322	18.3	19.5	-299	
Older workers and pre-retirees (50 to 59)	10,903	13.9	13.8	10,156	14.0	13.9	+747	
Empty nesters and retirees (60 to 69)	11,852	15.1	13.1	10,549	14.5	11.9	+1,303	
Seniors (70 to 84)	12,523	15.9	11.4	10,315	14.2	10.3	+2,208	
Elderly aged (85 and over)	2,981	3.8	2.7	2,446	3.4	2.3	+535	
Total	78,540	100.0	100.0	72,697	100.0	100.0	+5,843	

Table 3. PMHC's age structure from the 2011 and 2016 Census compared with Regional NSW. PMHC generally has a higher proportion of older age groups.(.id, 2017)



gure 26. Forecast growth areas for Port Macquarie & Wa beyond UGMS. PMHC. 2018



ORDINARY COUNCIL 17/02/2021



ood growth areas to 2036, UGMS. chope & Beer



11.2 CULTURE AND HERITAGE

The LGA has four Aboriginal representative bodies under the Aboriginal Land Rights Act 1983:

- Birpai Local Aboriginal Land Council
- Bunyah Local Aboriginal Land Council
- · Kempsey Local Aboriginal Land Council
- Taree-Purfleet Local Aboriginal Land Council

At this time there is little information available on aboriginal heritage and cultural deposits within the LGA. Site specific projects and planning approvals have been undertaken in consultation with Local Aboriginal Land Councils, including at Lake Cathie for the Stormwater Redirection project and Town Green for the foreshore upgrade projects. Further work will be required to study the cultural connection of aboriginal prople to the land within our LGA and beyond. An LGA wide Aboriginal heritage study has been identified by Council. Once completed it is anticipated that the results of this work will inform future projects undertaken within the Coast & Estuary areas of the LGA.

The Birpai people are the original occupants and inhabitants of the land in and around the Hastings area and have been for more than 40,000 years. The Birpai land was a rich luscious area of open forests and grasslands with pockets of thick eucalypt forests and rainforests that harboured an abundance of food and wildlife. Fire was a valuable tool in restraining the rampant rainforest with many rivers, creeks, lakes, lagoons and swamps to help control the spread of fire. They exercised traditional rights over the area including the lands and waterways of the Hastings. The Birpai people relied on these lands and waterways to provide them with much of their food and sustenance for life. They constructed temporary huts along the river and around the lakes in which they lived as they followed the seasonal food trail within their tribal boundaries. Numerous middens are still found in the area giving recognition to the gathering of the traditional owners and inhabitants. PMHC's Statement of Reconciliation and Commitment is built on the legacy of the traditional owners and the continuing contribution of the Birpai and other Aboriginal people to the local area.

Surveyor-General John Oxley changed traditional Birpai life with the mapping and naming of this area in 1818. In 1821 Port Macquarie was established as a place of secondary punishment under the Governorship of Lachlan Macquarie. In 1830 Port Macquarie was proclaimed open to free settlement.

The timber industry has driven the area's development from the convict timber cutters to the cedar cutters of the hinterland in the 1870's through to the supply of hardwood for use as railway sleepers and electricity poles. The North Coast Railway reached Wauchope in 1915.

The extensive local river systems provided highways for commerce. In the early part of the 1900's log dumps dotted the banks of the Hastings, Maria, Wilson and Camden Haven Rivers only to be rendered obsolete when road transportation began in earnest following World War II.

The LGA boasts a significant amount of heritage locations located in the coastal zone, particularly with Port Macquarie being settled in the early 19th century. The Municipality of Hastings Heritage Study was completed in July 1991 to identify heritage items related to European settlement and does not include issues related to Aboriginal or natural heritage. No comprehensive LGA-wide Aboriginal heritage study has ever been undertaken. It is recognised that the identification and assessment of Aboriginal heritage sites needs to be undertaken by a professional archaeologist and not left to "fortuitous" discovery.

The PMHC LEP lists known European heritage items in the PMHC LGA and limits development where these items are located. These locations are mapped in PMHC's GIS system.

11.3 COMMUNITY VALUES AND USES

Previous community consultation has been undertaken for CZMPs and EMPs. The values that were identified in these consultations [as shown in Table 4].

The findings exemplify that the community values the unique natural beauty of the LGA, access and facilities for recreational activities and the rich biodiversity. It is intended that additional community and stakeholder engagement sessions will be undertaken in Stage 2 of the CMP process to further build on this information.

Plan Reference	
Hastings River EMP	 Sustainably maintain the estuary's ecological strain strain
	 Protecting the marine environment Maintain a viable mix of business, lifesty Maintain naturalness Support lifestyles Be responsible for future generations
Camden Haven EMP	 Visual aesthetics such as North Brother Rural landscapes Areas of open waterways Recreational boating Historical and heritage sites Mooring facilities Recreational fishing Unique urban environment Fisherman's Co-operative Shoreline vegetation Tourism
Lake Cathle EMP	 Recreational Values (Swimming, wading Recreational fishing Commercial fishing & prawning Nature observation (canoeing, walking, Tourism Visual amenity
Lake Cathie CZMP	 Natural environment: Ocean, beach, estuary and lake, littoral Lifestyle: Relaxed coastal environment, the quietr the community, the village atmosphere, Community Uses: Swimming and surfing - family orientate Bridge which is the most intensively use Middle Rock provides reasonable waves Walking along the beach and foreshore observation, including bird watching, Fishing – popular areas are at 'the drair Prawning when the entrance is open, at beach fishing (Short 2007). Boating upstream of the Ocean Drive Bi Beach driving - permitted north of Dirah (Short 2007).
Town Beach CZMP	Environmental: North-facing beach North-facing beach Protected during southerly Safe winds and swell One of Port Macquarie's best beaches Bush setting and bird life loca Mosaic of landscapes Views from higher ground Natural amphitheatre from hills Access to natural areas Hist Suni Fish The beace Surr uses

Table 4. Community values and uses identified from CZMP's and EMP's.

46

ORDINARY COUNCIL 17/02/2021

Community Values	
ogical quality	
yle and recreation	
r backdrop	
(& pick-nicking)	
birdwatching)	
on awaterning/	
rainforest, climate and natura	l beauty.
ness, the ambience, its peacefi a place to raise children and t	ulness, living close to the water, he recreational opportunities
ed swimming and wading down ed area of the lake. Swimming s during east and southeast sw reserves as well as bushwalki	at the beach and surfing. vells (Short 2007).
n' and either side of Ocean Dri t which time good gutters form	ve Bridge. either side of the entrance for
ridge - paddle craft and small n Street and south of Middle R	powerboats in deeper areas. ock subject to a Council permit
	Economic:
essibility e swimming	Important resource for tourism Family tourist town
rolled beach	International tourists visit
ximity to CBD al point for tourists and	Visibility and accessibility Connectivity to CBD
als	Central part of economic
bodies Port Macquarie ge	development strategy
d beach for bodyboarding surfing	
torical significance	
baking ning off break wall	
name encapsulates the	
ch rounding paths are well	
S	

47

12. ECONOMIC CONTEXT

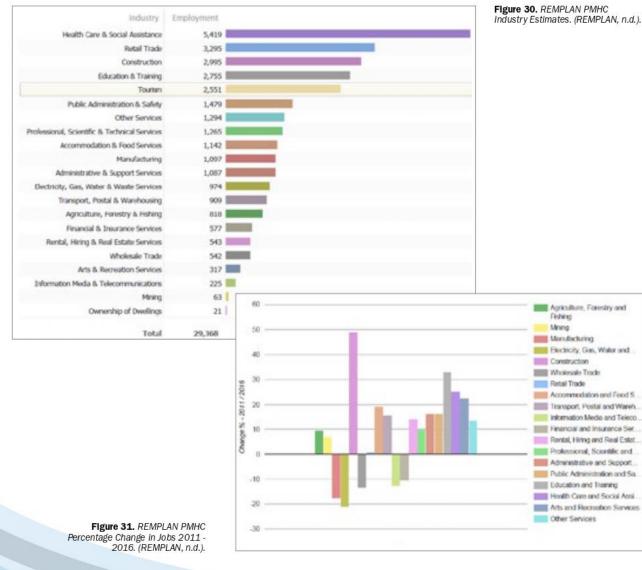
Approximately 29,000 people work within the PMH LGA with over 2,500 of those jobs supported by tourism. The largest employer by industry is the Health Care and Social Assistance sector (5,419 or 18%) followed by the Retail Trade (3,295 or 11.2%), Construction (2,995 or 10.19%) and Education and Training (2,755 or 9.38%) [see Figure 30].

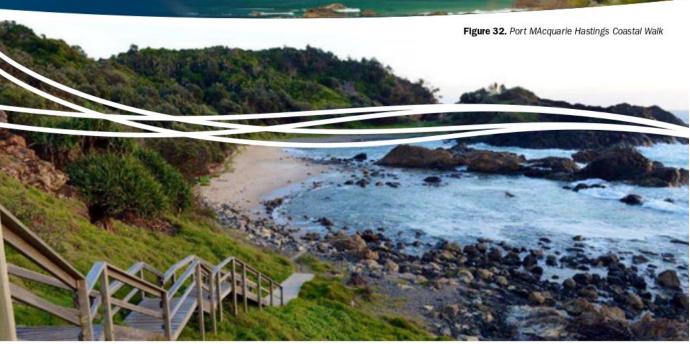
TOURISM

48

Tourists are generally drawn to the scenic beaches and accessible coastal walks with Port Macquarie the main destination. An increasing local population combined with abundant and frequent tourist visitors will inevitably put more pressure on the coastal environment. Many businesses rely on the continued use of the coastal zone for predominantly tourist activities such as tour boats, whale watching, stand-up paddle boarding, surfing lessons, cafés and restaurants, deep-sea fishing and scuba diving.

Promoting Port Macquarie-Hastings as a tourist destination is a significant contributor to the local economy, but in doing so it is important to maintain the naturalness and environmental attributes that keep visitors coming to the area.





AGRICULTURE, FORESTRY AND FISHING SECTOR

The Agriculture, Forestry and Fishing sector makes up approximately 818 jobs in the LGA. Commercial fishing, prawning and oyster farming are still active throughout the LGA. Oyster leases are prevalent in the Hastings River extending to Munns Channel, Blackmans Point and Limeburners Creek, and in the Camden Haven River extending from Gogleys Lagoon at the entrance into Watsons Taylor and Queens Lake. Oyster production in the Hastings River peaked in 1987/88 producing 433.9 tonnes and in the Camden Haven River the peak was in 1977/78 producing 285.6 tonnes. Since then, there has been a steady decline with the Hastings River and Camden Haven River producing 176.5 tonnes and 285.6 tonnes respectively. In comparison to the surrounding estuaries of the Manning and the Macleay River, The Hastings River and the Camden Haven River appear to have remained commercially viable [see Table 5]. Oyster production in NSW has declined since the mid 1970's, which has been attributed to many factors such as oyster disease, the effects of Pacific Oyster introduction and the degradation of water quality in many coastal rivers, lakes and estuaries.

Estuary	Historic Peak (tonnes)	2014/2015 (tonnes)
Macleay River	367.6 (1974/75)	19.8
Hastings River	433.9 (1987/88)	176.5
Camden Haven	229.5 (1977/78)	285.6
Manning River	428.4 (1960/61)	70.5

Table 5. Ovster Production in the Macleav, Hastings, Camden Haven and Manning Rivers from historic peaks to 2015/2015. (NSW DPI, 2016).

Industry sector \$M %		
Industry sector \$M %	\$M %	
Fishing, Hunting & Trapping 0.2% \$	4,352 0.1%	
Agriculture \$30,772 0.3% \$3	32,886 0.5%	
Total \$46,971 0.5% \$3	37,237 0.6%	

PORT MACQUARIE-HASTINGS COUNCIL





In 2018, Fishing, Hunting and Trapping and Aquaculture contributed \$46.971 million to the total PMH LGA revenue [see Table 6] (NSW DPI, 2016).

13. LEGISLATIVE AND PLANNING CONTEXT

13.1 LAND-USE PLANNING INSTRUMENTS

LOCAL ENVIRONMENT PLAN 2011

The Port Macquarie-Hastings Local Environment Plan 2011 (LEP) contains provisions to protect and conserve the environment in the LGA. The LEP provides development restrictions and provisions in certain lands as defined in the LEP.

For the protection of PMHC's coastline, it has the following restrictions or provisions:

- a. Development consent is required for works on land identified in the Acid Sulphate Soils Map. The types of allowable works vary depending depth and adjacency to higher classes. Any works on ASS require an Acid Sulphate Soils Management Plan in accordance with the Acid Sulphate Soils Manual.
- b. Exempt or complying development cannot be carried out in environmentally sensitive areas including coastal waters of the State, a coastal lake, the Coastal Wetland and Littoral Rainforest Area (CWLRA), an aquatic reserve or marine park, land within a wetland of international significance, land within 100m of the previously mentioned, as well as areas of aboriginal and cultural significance and high biodiversity values. Development consent is required for any development above the mean high-water mark of tidal waters.
- c. Land on which aboriginal or heritage items are located require an assessment in order to preserve the cultural significance.
- d. Development consent is required for land defined in the Flood Planning Area and cannot be granted if detrimental increases are identified to other properties or environmental factors.
- e. Development consent is required for any land mapped as having a coastal erosion risk and cannot be granted unless impacts from the hazards are not increased and the risk is managed appropriately.

DEVELOPMENT CONTROL PLAN 2013

50

At present, there are two development control plans in force: 2011 and 2013. The Port Macquarie-Hastings Development Control Plan 2011 (DCP 2011) applies to specific areas within the LGA

while the Port Macquarie-Hastings Development Control Plan 2013 (DCP 2013) has conditions that apply to all land within the LGA as well as some area-specific parts. The DCP 2013 is the primary development control plan and is the key supporting document to the LEP and provides detailed guidance on design considerations and general standards.

The DCP makes provision for various aspects relating to protection of the coastal zone including:

- Protection Endangered Ecological Communities (EEC) close to waterways or wetlands
- Compliance with Council's Flood Policy
- · Stormwater controls (Council's AUSPEC Design Specifications)
- Coastal Hazard Management for Lake Cathie

13.2 COASTAL WETLANDS AND LITTORAL RAINFORESTS

The Coastal Wetland and Littoral Rainforest Area (CWLRA) is land that displays the hydrological and floristic characteristics of coastal wetlands and littoral rainforest communities and lands adjoining those features (OEH, 2018).

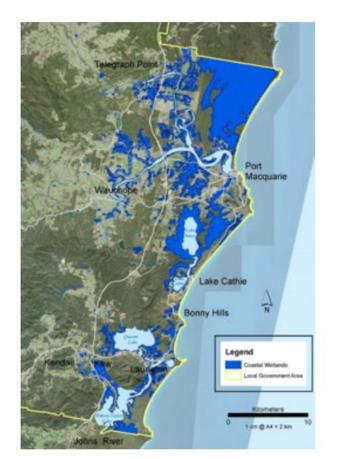
Coastal wetland and littoral rainforest communities have high biodiversity values and are of regional and state significance. These communities are very sensitive to certain types of development and environmental threats.

COASTAL WETLANDS

Coastal Wetlands are identified in low-lying areas throughout the LGA. In the Hastings River catchment, they run along Koolonbung Creek. the floodplains along the Hastings River in close proximity to the airport, extending to the north along the banks of the Maria River, Wilsons River and Limeburners Creek area. Locations adjacent to some tributaries to the Hastings River such as King Creek, Sarahs Creek and Stoney Creek are mapped as Coastal Wetlands. There are also isolated patches mapped in the upper catchment near Rollands Plains and Upper Rollands Plains.

In the Lake Cathie/Bonny Hills area, Lake Cathie

and Lake Innes both have Coastal Wetlands mapped on the outer boundaries of both lakes including some isolated patches west of the Pacific Highway. In the Camden Haven Coastal Wetlands extend along the Camden Haven River up to the township of Kendall. They border both Queens Lake, Watson Taylor Lake and areas of Gogleys Lagoon [see Figure 33 below].





LITTORAL RAINFOREST

Figure 33. Coastal Wetlands Areas

POSSIBLE FUTURE ACTIONS

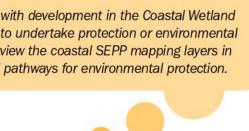
Complexity of development controls associated with development in the Coastal Wetland Littoral Rainforest Areas hinder Council's ability to undertake protection or environmental enhancement works, future actions will be to review the coastal SEPP mapping layers in PMHC and examine how to streamline approval pathways for environmental protection.

ORDINARY COUNCIL 17/02/2021



Figure 34. Littoral Rainforests Areas

Some remnants of Littoral Rainforests are located along the coastline. Areas where they are located in PMH are the North Shore, Port Macquarie, Lake Cathie, Bonny Hills, North Haven and Dunbogan. All of these areas are prone to development pressures with greater emphasis on Port Macquarie and Lake Cathie/Bonny Hills localities [see Figure 34 above].





13.3 COASTAL VULNERABILITY AREAS

The Coastal Vulnerability Area (CVA) is land which is subject to current and future hazards (OEH, 2018). These hazards (defined in the CM Act) are:

- · Beach erosion
- Shoreline recession
- Coastal lake or watercourse entrance instability
- Coastal inundation
- · Coastal cliff or slope instability
- Tidal inundation
- Erosion and inundation of foreshores caused by tidal waters and the action of waves, including the interaction of those waters with catchment floodwaters

Studies into each of the abovementioned hazards will be addressed in future stages of the CMP.

The Coastal Erosion in New South Wales Statewide Exposure Assessment (OEH, 2017) identified a broad overview of coastal erosion potential impacts on assets along the NSW coastline. This assessment includes the PMHC LGA. The assessment is limited to beach erosion on opencoast beaches. It uses three methodologies:

- 1. Proximity analysis (First Pass): This identifies sandy shorelines and proximity buffer distances to potentially exposed assets.
- 2. Regional Analysis (Second Pass): This uses a sediment compartment-based approach and probabilistic framework to estimate the volume of potential coastal erosion. These hazard lines differ from local government hazard lines used in the Third Pass.
- 3. Local government hazard lines (Third Pass): This is the result of coastal hazard studies undertaken in an LGA using the Zone of Slope Adjustment as the hazard lines. This pass only considers hazard lines produced after 2008 due to SLR projection differences.

Council has focused its attention on areas that have had recorded events of significant coastal erosion, with and without storm events and which have sensitive infrastructure and assets at risk. The reason the investigations have been focused onto the areas is because these areas have shown to actively erode in normal coastal processes

52

and even more so as the result of storm events. As such, PMHC has undertaken coastal hazard mapping for Town Beach and Lake Cathie (for their associated CZMPs).

This mapping shows hazard lines for various current (at the time of study) and future scenarios including sea-level rise [see Figures 35 - 37]

Further to the above-mentioned coastal hazard mapping two additional beaches have had further investigations completed due to specific project needs. These beaches include Rainbow Beach at Bonny Hills via a coastal hazard study (under a Part 3A approval) and the investigation of Flynns Beach during the Flynns Beach Seawall Detailed Design Report.

PMHC has incorporated the coastal hazard mapping for Lake Cathie into the LEP. The mapping completed for Town Beach, while still useful, is now outdated and therefore PMHC will not seek to map this in the LEP. Considering that the erosion issues at Town Beach are known and reasonably well defined, PMHC does not see the need to undertake further hazard studies on this area in the near future. Instead efforts may be directed towards other areas of coastline where hazards may exist, i.e. Lighthouse Beach, North Haven beach, Rainbow Beach (Bonny Hills), Shelly Beach, North Shore Beach (Corilla estate).

PMHC shares coastal sediment compartments [Section 10.3] with Kempsey Shire Council (KSC) and Mid Coast Council (MCC). [Section 16 (1) (b) (i)] of the Coastal Management Act 2016, states that if a shared coastal sediment compartment is within the CVA zone, the neighbouring Councils should consult with each other before adopting a CMP. Only two areas have been identified as having coastal hazards (Town Beach and Lake Cathie) and these areas are not in close proximity to the LGA boundaries. Therefore, PMHC considers that further consultation on this specific matter is not required. Nevertheless, PMHC will consult with KSC and MCC if any future identified issues or works are considered to potentially affect either Council.

PMHC also share and must consult with NPWS regarding mutual issues and associated management of 4WD access north to Queens Head.





Figure 35. Town Beach Coastal Hazard Mapping (Town Beach CZMP, Port Macquarie-Hastings Council, 2010)



Figure 37. Lake Cathie Coastal Hazard Mapping (south) (Lake Cathie CZMP, Port Macquarie-Hastings Council, 2016)

ORDINARY COUNCIL 17/02/2021

Figure 36. Lake Cathie Coastal Hazard Mapping (north) (Lake Cathie CZMP, Port Macquarie-Hastings Council, 2016)

53

BMT WBM was commissioned by Port Macquarie-Hastings Council (PHMC) in 2013 to undertake an estuary and coastline inundation mapping study to assist in the assessment of areas at risk from sea level rise.

The aim of the study is to determine the estuarine and coastal inundation extent for a range of design ocean events including: spring tide; king tide; 1 year Average Recurrence Interval (ARI); 50 year ARI, and; 100 year ARI.

The three epochs and associated mean sea levels (MSL) included in the study are: **Current** (MSL = 0.0 m AHD), **2050** (MSL = 0.4 m AHD), and **2100** (MSL = 0.9 m AHD).

These levels are based on the previous NSW Government planning benchmarks which are a projected rise in sea level (relative to the 1990 mean sea level) of 0.4 metres by 2050 and 0.9 metres by 2100 (DECCW, 2009). It is important to note that due to the inherent difficulty in forecasting actual rates of sea level rise (SLR) the mapping in this study shows the impact of 0, 0.4 and 0.9 m of SLR but does not specify the timing of these changes to mean sea level. The best available estimates of sea level rise projections indicate that these increases in mean sea level will occur by the year 2050 and 2100 as presented in the former NSW Planning Guidelines and adopted by Council (along with many other coastal Councils in NSW).

The study uses three numerical models of the major estuaries in the LGA including:

- Hastings;
- · Lake Cathie/Lake Innes, and;
- · Camden Haven.

High quality mapping of the inundation extents for the estuaries and coastal areas was undertaken using LiDAR ground elevation data collected for Council in October 2005 [see Figure 38].

A discussion of changes to predicted tidal inundation extents due to sea level rise for each of the three (3) estuaries and the coastline is presented in the report. In particular an attempt was made to highlight key areas that are susceptible to tidal inundation which will be exacerbated by rising sea levels. It is important to note that the purpose of the study is to produce a "first-pass" assessment of areas that may be at risk from tidal inundation due to SLR. This "first-pass" assessment may be used by Council to undertake further studies in order to evaluate potential risks associated with future events. The areas identified below are based on interpretation of the mapped inundation extents provided in the report and are meant as a broad-scale (locality) assessment only.

Areas of specific interest were identified as:

Lake Cathie/Innes Catchment:

Kenwood Drive

54

- Lakeside Way
- Hibbard/Hastings River Drive

Hastings River

North Shore

Catchment:

Riverside

- Settlement Point
 CBD/Short Street
- The Hatch
- Blackmans Point

Camden Haven River Catchment:

Dunbogan

Laurieton

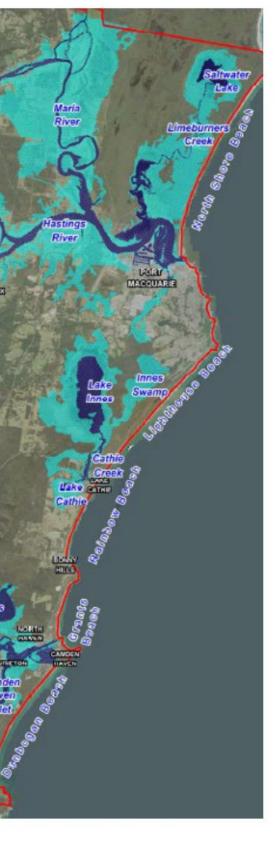
North Haven

- Bonny Hills: • Duchess Creek
- Buonocolor

LEGEND Tidal Inundation Design Extent pring Tide 0m SLR 100yr 0.9m SLR PMHC LGA Boundary

Figure 38. PMHC LGA Sea Level Rise Mapping (BMT WBM, 2014)

ORDINARY COUNCIL 17/02/2021



13.4 COASTAL ENVIRONMENT AREAS

Coastal Environment Areas (CEA) are made up of environmental features such as state waters, estuaries, coastal lakes and lagoons. It also includes land adjoining those features such as headlands and rock platforms. (OEH, 2018) [see Figure 39].

Section 16(1) (b)(i) of the Coastal Management Act 2016 states that if two or more Councils share an estuary then consultation with each other is required before adopting a CMP PMHC shares estuaries with KSC (Hastings River Estuary) and MCC (Camden Haven River Estuary). As such, Council will be working in consultation with these neighbouring LGA's before any works are undertaken.

The CM SEPP identifies sensitive coastal lakes where development constraints are needed to limit adverse impacts on water quality. The Port Macquarie Hastings LGA contains a sensitive coastal lake listed in the CM SEPP. This being Saltwater Lake in the Limeburners Creek Nature Reserve.

Other coastal lakes exist within the LGA, these being Queens lake, Watson Taylor Lake, Lake Cathie & Lake Innes. These lakes are all sensitive receivers which are highly susceptible to degradation from poor water quality inputs from inappropriate land and water management practices.



Figure 39. Coastal Environment Area



Coastal Use Areas (CUA) are lands adjacent to coastal waters, estuaries, costal lakes and lagoons, where impacts of development on the use and enjoyment of the beaches, foreshores, dunes, estuaries, coastal lakes and lagoons, and the ocean, need to be considered (OEH, 2018) [see Figure 40].

The CM SEPP restricts development in these areas to ensure that adverse impacts on access, overshadowing, visual amenity, Aboriginal heritage and built environment heritage.

Management of CUAs involves ensuring access, use and amenity is maintained for the community. This includes ensuring that there is sufficient beach access, car parks, boat launching ramps, reserves, signage, etc. Fortunately, these themes are addressed through the Community Strategic Plan and the underlying Plans of Management or Masterplans associated with site specific areas. These plans allow for the community's input into the design of foreshore reserves and coastal recreational areas and will be considered during the design and development of the CMP.

The desires, outcomes and values of each of these plans will be used in future stages of the CMP.



ORDINARY COUNCIL 17/02/2021





Figure 42. Coastal Management Program Study Area - Hastings River Catchment

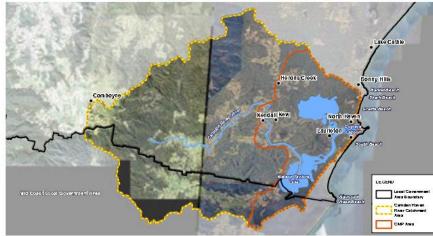


Figure 43. Coastal Management Program Study Area - Camden Haven River



Figure 44. Coastal Management Program Study Area - Open Coastline

1. Lake Cathie/Bonny Hills chapter

58

This chapter will cover the Lake Cathie/Lake Innes estuarine system as well as the open coastline from the 4 x 4 access track adjacent to Dirah Street to the southern side of Grants Head. This will ensure that the existing CZMP is included as it directly interacts with the lagoon entrance and its management in times of flood mitigation. It will also cover Bonny Hills.

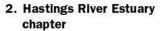


Figure 41. Coastal Management Program Study Area - Lake Cathie / Bonny Hills



ORDINARY COUNCIL 17/02/2021

EGEN	ν
	Local Government Area Boundary
	Camden Haven Rwar Caldhmeni Ansa CMP Ansa



This chapter will cover the Hastings River Estuary extending from the entrance at the Town Beach to the tidal limits of the Hastings River. Further investigations into the distance and amount of upper catchment extent will be explored during this chapter's development.

3. Camden Haven River chapter

This chapter will cover the Camden Haven River Estuary extending from the entrance between North Haven and Dunbogan to the tidal limits of the Camden Haven River. Further investigations into the distance and amount of upper catchment extent will be explored during this chapter's development.



4. Port Macquarie-Hastings Open Coastline chapter

This chapter will cover all of the open coastline within the PMHC LGA with a focus on areas identified as being prone to coastal hazards. These areas include Town Beach, North Shore Beach, Flynns Beach, Shelly Beach, Lighthouse Beach and North Haven Beach. The open coastline from the 4 x 4 access track adjacent to Dirah Street (Lake Cathie) to the southern side of Grants Head is not included as it is covered in the Lake Cathie/Bonny Hills chapter.

14. BARRIERS AND OPPORTUNITIES

Funding, legislation, land ownership and management responsibilities are predominantly the main barriers for undertaking management actions. Broadly speaking, previous management actions undertaken under EMP's have not had a significant impact on estuary health due to the scale of the actions and the large amount of funding required. An exception to this is the ASS remediation works that were successfully carried out in the 2000's and early 2010's. Those actions identified in the EMP provided means to seek the employment of an ASS project officer, resulting in many benefits to waterway health and sustainable land management practices. This work which brought about large-scale benefits relied heavily upon dedicated PMHC staff members. significant funding and landowner buy-in. In order to continue large scale projects, such as the ASS program. large amounts of funding and dedicated resources will have to be a priority. These programs have proven to be and will continue to have the greatest effects in improving and maintaining estuarine health.

Working with landowners and various government stakeholders can be a potential barrier as well as an invaluable opportunity. At times, differing opinions, perspectives and desires can conflict. Financial burdens, ongoing maintenance requirements and legislative hurdles can place challenges in the way of successful programs. However, in reviewing existing management plans there is a good opportunity to renew relationships and continue to work towards better environmental outcomes.

For landholders, it has been over 15 years since they have been specifically consulted with and given the time that has lapsed, any previous arrangements may have ceased, been forgotten or have unknowingly been dismissed by new landholders through ownership transfers. PMHC views working with the community as an essential and valuable component of the CMP process.

For NSW government agencies they may have competing responsibilities and priorities they need to address and manage on the land and in the waterways, which may not align with Council and local community expectations.

The CM SEPP, among other legislation, imposes a requirement for development consent for all development (including the clearing of native vegetation) on land mapped within a CWLR Area. The CM SEPP also declares that development in a CWLR area is designated development for the purpose of the EP&A Act, which requires an Environmental Impact Statement and gives rise to merit appeal rights to people who object to the proposed development. Also where development is carried out with a 100 metreproximity area of a CWLR area where development consent is required, additional considerations apply.

The CWLR area is also included in a biodiversity value map and as such automatically requires the preparation of a Biodiversity Development Assessment Report (BDAR) to be prepared with the designated development application in accordance with the Biodiversity Conservation Act (2016).

The consequence of land being mapped as within a CWLR Area is that it also must be mapped as Category 2 - Regulated Land (Sensitive regulated land) under Part 5A of the Local Land Services Act 2013, when in a rural zone. This makes it an offence to clear native vegetation on the land unless it is undertaken in accordance with the Land Management (Native Vegetation) Code 2018, or the works are authorised pursuant to another relevant approval.

60

Mapping inconsistencies have been identified within the LGA where CM SEPP mapping interacts with roads, carparks and other assets. For example there are a total of eight bridges in the area that have been included in the mapping, which results in the necessity of taking different environmental approvals for maintenance and upgrades.

PMHC staff have recently met with DPIE to discuss a possible amendment to the SEPP mapping and guiding policies. Consultation is ongoing at the time of writing this scoping study.

DPIE which includes NPWS, Fisheries, Crown Land, LLS, others, are key stakeholders in the management of the coastal area. These stakeholders have ownership, primary control and/or regulate certain activities that can be undertaken over much of the coastal land, including National Parks and Nature Reserves, waterways, Crown Lands and the like. Council must work closely with these departments since nature knows no land tenure boundaries.

Although there are barriers and challenges to this work there are also immense opportunities. Working with government stakeholders in DPIE, environmental organisations, landowners and the Indigenous community provides Council with a rich tapestry of information and perspective from which to draw. This perspective and knowledge allow well rounded management decisions to achieve the triple bottom line of environment, economy and social needs. It ensures that decisions are made collectively rather than by an individual organisation. It allows the manifestation of partnerships and collaborative work relationships which achieve on-ground solutions to difficult problems. It may also assist in leveraging funds or resource sharing to assist in the financial burden and can result in a more rigorous review of an action, giving a better environmental outcome.



ORDINARY COUNCIL 17/02/2021

Item 13.12 Attachment 3 Page 612

61

15. SCOPE OF THE CMP

PMHC has already completed an extensive number of plans and supporting studies in relation to coastal management. This includes two CZMP's (one of which has been gazetted), three, EMP's, vegetation mapping, sea-level rise mapping, and floodplain mapping.

The scope of the CMP should build upon existing knowledge of environmental, economic and social issues and the effectiveness of any management plans currently in place.

The Manual indicates that CMP's should consider the following factors when determining the scope:

- Local management issues, challenges and opportunities identified for each coastal management area, including the spatial extent
- Effectiveness of existing management approaches and land use planning instruments to address current and future challenges
- Responsibilities and capacities of Council. public authorities, communities and other stakeholders to address coastal management issues
- Future population growth and development pressures
- Risks and liabilities associated with coastal hazards and threats to coastal environments
- · Vulnerability of coastal assets, environments and social and economic systems
- Potential opportunities to adapt to change and thereby enhance the resilience of natural features and coastal communities.

The purpose of a CMP, as defined by the CM Act is 'to set the long-term strategy for the co-ordinated management of land within the coastal zone with a focus on achieving the objects of the Act'. The Manual also imposes mandatory requirements as per the CM Act.

PMHC intends creating a CMP that is representative of community values and can sustainably manage issues affecting the present time and future.

62



Figure 46. Town Beach, Port Macquarie. Photo: Matt Cramer

ORDINARY COUNCIL 17/02/2021

63

16. CURRENT & FORMER COASTAL & ESTUARY MANAGEMENT ARRANGEMENTS

16.1 COASTAL ZONE MANAGEMENT PLANS

16.1.1 TOWN BEACH CZMP

PMHC commissioned a preliminary appraisal of Town Beach coastal hazards in 2001. The preliminary appraisal suggested that changes to the offshore entrance bar have resulted in an increased penetration of north-easterly swell to Town Beach and a subsequent realignment of the beach to reflect this change in wave direction. The investigations and wave refraction modelling carried out show that, while there has been a change in offshore bathymetry, there is an increased wave energy reaching the northern end of the beach under most offshore swell wave directions and that it is this increase in wave energy that has resulted in the erosion. (SMEC, 2005).

Following the preliminary findings, PMHC engaged SMEC to undertake the Town Beach Hazard Definition Study in 2005. This was a detailed hazard definition study which included photogrammetric analysis, wave transformation modelling and storm bite determination. The study quantified the observed long-term beach recession at Town Beach and estimated the beach recession that would be caused by climate change induced sea-level rise.

The Town Beach CZMP was finalised in 2010 and built on the findings of the 2005 Hazard Definition Study. The Town Beach CZMP was developed to create a strategy to integrate effective management of long-term coastal processes with the further realisation of the recreational and economic potential of Town Beach and associated coastal reserves (Port Macquarie-Hastings Council, 2010) [see Figure 47].

The Town Beach CZMP was prepared in accordance with NSW guidelines at the time and was submitted for certification in August 2008 & September 2010 but was never certified by the NSW Government which at that time was going through a significant policy shift on coastal management.

64

CZMP Key Issues

Key issues were identified in the CZMP following input from the community, Council and other government agency officers. These issues include:

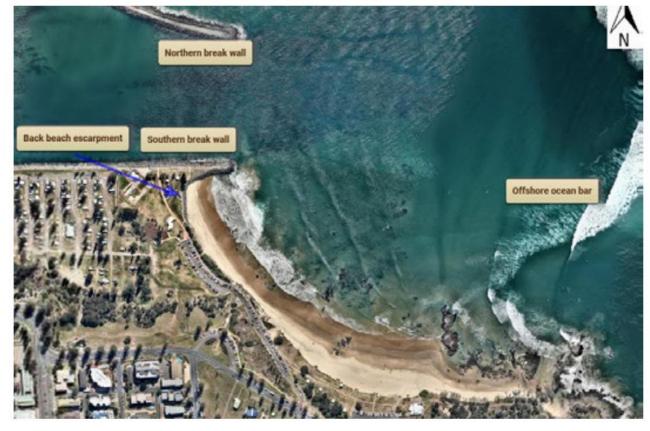
- · Ongoing management of coastal hazards, particularly coastal erosion and overtopping of the back beach area at the northern end of the beach;
- · High levels of usage of the beach and adjacent reserves, often with competing interests in the use of the area:
- · Pressure to improve lookouts, reserves and facilities; and
- · Management and maintenance of beach access points, amenities and facilities.

The northern section of Town Beach has been subject to ongoing erosion since approximately the 1980s. Indications are that the construction of the northern break wall at the entrance to the Hastings River at Port Macquarie has altered the near shore wave climate along the beach. This lowered the offshore ocean bar, resulting in larger waves reaching the shore than would have done so previously. Consequently, sand is being eroded from the beach, causing recession of the back-beach escarpment and undermining part of the southern break wall [as shown in Figure 49 over page].

Analysis shows that the back-beach escarpment at the northern end of the beach is now approximately 30 metres landward of its 1980 position. In addition, the low back beach escarpment is occasionally overtopped by storm wave run-up, inundating the reserve lands behind the beach [refer to Figure 48].



Figure 47. Town Beach CZMP Study Area (Port Macquarie-Hastings Council, 2010).



The photogrammetric analysis (1971 to 2003) completed by SMEC in 2005 as a part of the Town Beach Hazard Definition Study identified that Town Beach has:

- Built up by approximately 15 to 25 metres at the southern end
- Remained reasonably constant where the kiosk is located
- Undergone approximately 15 to 20 metres of recession north of Gaol Rock
- · Undergone approximately 30 metres of recession for approximately 50m south of the southern break wall.

The northern break wall was built in 1979 and the greatest period of recorded change in the beach was in the 10 years following. The northern section of the beach is presently not subject to active erosion as a result of rock protection works undertaken in the 2006, however continues to be affected by wave overtopping and tidal surges and remains to be an 'at risk' area

Modelling was done to assess the risk of inundation and hazards from wave run-up in a 1 in 100 year Average Recurrence Interval (ARI) storm event. This modelling indicated that:

- The kiosk at the time of modelling is landward of the average and 2% wave run-up levels but some inundation would be expected at maximum wave run-up levels.
- The car parking area at the southern section of the beach average would not be inundated.
- A section of road around the base of Gaol Point would be inundated at average wave run-up levels.
- · The northern end of the beach and adjoining foreshore will be subject to wave overtopping and subsequent inundation.

ORDINARY COUNCIL 17/02/2021

Figure 48. Town beach depicting break walls, back-beach escarpment and offshore ocean bar.

Management Actions

Several management recommendations were included in the report. The highest priority actions were:

- 1. Control of erosion and coastal hazards at the northern section of beach
- 2. Redevelopment of the kiosk in the southern section
- 3. Actions to upgrade various amenities.

Works completed since the report was commissioned include:

- 1. Extension of the southern break wall approximately 100m further south to alleviate the erosion of the foreshore reserve.
- 2. Reconstruction of the northern dune in 2006 to protect the foreshore reserve from significant wave overtopping.
- 3. In partnership with Crown Land, PMHC have periodically accepted the dredged material from the Hastings River, which provides sand nourishment to the beach. This has historically occurred sporadically, and the sand has only been accepted on Town Beach when the beach needs nourishing.
- 4. The Town Beach Kiosk was upgraded in 2016 with the provision of new public toilets and upgraded sea rescue facilities.
- 5. A new Skate Park was constructed in 2012
- 6. A new Kiosk was built on the northern end of Town Beach in 2016. Both the kiosk and the skate park are within areas which are at significant risk of inundation in storm events.

In addition to the works completed, an Emergency Action Plan was developed for the Town Beach area in response to coastal hazards. This plan focuses on the evacuation of at-risk areas in significant storm events and beach closure. While PMHC has closed the beach to the public in storm events, evacuation procedures have not yet proven to be necessary.

66

Management action status

Of the 30 management actions in the existing CZMP, 10 have been completed, 7 are ongoing, 8 have been started (but not completed) and 5 have not been started.

Key issues ongoing

Of the 19 management issues relevant to the open coastline identified for the future, the equal highestranking risks with high level of risk in the present day are:

- Impacts of public access and recreational usage on the environment
- Inadequate / need for maintenance of public access and recreational infrastructure:
- · Terrestrial weeds and pests; and
- · Equity in distribution of costs and benefits from coastal management activities.

A total of seven issues are categorised as high in the 100-year planning horizon; this includes those listed above, as well as:

- · Impacts of climate change and sea level rise;
- · Coastal cliff or slope instability; and
- · Open coast erosion.

This is due to the ongoing impacts of climate change, resulting in issues such as long-term trends of shoreline recession, which places more assets at risk from coastal hazards.



Figure 49. Town Beach showing wave overtopping rock revetment wall during June 2016 East Coast Low event.

16.1.2 LAKE CATHIE CZMP (2016)

Lighthouse Beach (adjacent to Lake Cathie) is approximately 2 km long. The beach south of the estuary entrance is backed by residential development along Illaroo Road and by Johnathon Dixon Reserve which is seaward of development along Chepana Street (Port Macquarie-Hastings Council and SMEC, 2016).

The Lake Cathie Coastal Zone Management Plan (CZMP) was initiated by Council in 2007 following coastal erosion along the coastline at Lake Cathie which damaged stormwater infrastructure and beach access points and threatened to undermine Illaroo Road. The Lake Cathie CZMP was prepared in accordance with the former CP Act, NSW Coastal Policy, NSW Sea Level Rise Policy 2009 and the 2010 Guidelines for Preparing Coastal Zone Management Plans 2010 and was overseen by the CE&F sub-committee.



Figures 50 and 51. Coastal erosion at Lighthouse Beach causing damage to stormwater infrastructure at Jonathan Dickson Reserve.

Goals

The Lake Cathie CZMP was proposed and written in order to achieve the following goals:

- Protect and restore natural areas through stormwater and foreshore management.
- Provide community access and opportunities to enjoy our natural environment through reserve improvements, continuing public access and beach nourishment.
- Plan and take action to minimise the impact of natural events and climate change through further investigations, contingency measures and construction of a revetment to protect private development and Illaroo Road.
- Manage development outcomes to minimise the impact on the natural environment through development controls.

General Issues Identified

A broad list of issues identified in consultation with community members, discussions with various NSW state agencies and a review of the literature and information at hand yielded the following list:

- Erosion and erosion control
- Safe beach access
- Maintaining recreational amenity
- · Soil/sand stability at stormwater outlets
- · Property values
- Increased tourism

ORDINARY COUNCIL 17/02/2021



Revegetation/weeds

Detailed review of issues

Upon completion of the general list of issues Council began to have a more detailed review of the following two issues:

- · Erosion and erosion control
- Soil/sand stability at stormwater outlets

These were addressed through the following studies.

Coastal Hazard Study - 2008

This first study undertaken was to work on ways to solve the erosion and erosion control issues. This was the priority since it dealt with the highest issues of risk, that being risk to life and property.

In order to understand these issues of erosion more comprehensively Council commissioned SMEC in 2008 to complete the Lake Cathie Coastal Hazard Study.

Coastline Management Study - Stage 1 - 2009

Following the 2008 Hazard Study, a two stage Management Study was undertaken. The Lake Cathie Coastline Management Study - Stage 1 was completed by SMEC in 2009 and focused on obtaining information from the community about their values and opinions on how the Lake Cathie coastline was used. Thirteen potential management option were assessed and after a period of public exhibition and consultation (where 344 submissions were received), four primary management options were endorsed for further investigation.

The shortlisted options from stage 1 were:

- 1. Planned Retreat (services relocation, development controls, voluntary purchase and property acquisition)
- 2. Beach Nourishment

68

3. 400m Revetment Wall for Illaroo Road 4. Grovne

Coastal Hazard Study - 2010

SMEC were engaged again in 2010 to revise the hazards to take into account the sea level rise planning benchmarks contained in the NSW Sea Level Rise Policy Statement 2009. The 2009 NSW Government Sea Level Rise Policy required that Council consider, as a minimum, 400mm sea level rise above 1990 mean sea levels by the year 2050 and 900mm rise by the year 2100. Following a review of the science behind the benchmarks, the NSW Chief Scientist and Engineer (2012) found that the science was 'adequate' in light of the evolving understanding of the associated issues. However, the Chief Scientist and Engineer also highlighted uncertainty associated with sea level rise projections and the possibility of undertaking more regionally specific calculations. Following these findings, the NSW government repealed the NSW Sea-level rise Policy Statement 2009 and its associated benchmarks, instead recommending that individual Councils could adopt a range of locally relevant projections commensurate with competent scientific opinion, and that these could be used for risk assessment under local planning instruments with suitable development controls.

It should be noted that although the NSW Government has repealed the Sea Level Rise Policy (benchmarks), PMHC feels this is the best available information and all work has been undertaken on this basis.

Coastline Management Study - Stage 2 - 2012

The Stage 2 Management Study (2012) assessed the four management options in detail. PMHC held public consultation and exhibited the report in mid-2012. Following large public support received via submissions (over 4500 submissions were received), PMHC resolved to proceed with the preparation of the Lake Cathie Coastal Zone



Management Plan incorporating a revetment and beach nourishment as the management option for Illaroo Road.

Illaroo Road Rock Revetment Wall - Detailed Design - 2013

As a result of the adoption of a revetment wall in 2012 under the Stage 2 Management Study and the resolution to proceed with a CZMP Council engaged Aurecon to investigate and design revetment wall for Illaroo Road [see Figure 52].

The detailed design for a rock armoured revetment was completed in 2015. The rock revetment wall included pedestrian footpaths, beach access points, and additional car parking. The wall was estimated to cost \$8.1M in 2015, however this estimate was heavily dependent on the availability of hard, durable rock from nearby quarries.

Lake Cathie Coastal Zone Management Plan - 2013

Council prepared Coastal Zone Management Plan (CZMP) for Lake Cathie due to the Lake Cathie Beach being designated a coastal erosion hotspot. The purpose of a CZMP is to describe proposed actions to be implemented to address priority management issues including:

- · Managing risks to public safety and built assets,
- · Pressure on coastal ecosystems, and
- · Community uses of the coastal zone.

Council has previously undertaken the abovementioned studies in preparation for the CZMP. On the basis of considerable public support for a revetment with sand nourishment to mitigate coastal erosion risks at

ORDINARY COUNCIL 17/02/2021

Figure 52. Illaroo Road Rock Revetment Wall Detailed Design, Aurecon 2015





Illaroo Road, Council adopted the Coastal Zone Management Study (Stage 2) in July 2012. This is the preferred management option referred to in the current CZMP and forms the focus of this document.

The CZMP was adopted by Council in 2013 on the basis that funding for the total cost of the revetment wall construction would be provided by both the NSW and Commonwealth Governments.

Certification of the CZMP by the NSW State Government was requested in March 2014. In March 2015 the Minister for Planning requested a number of actions be undertaken before the CZMP would be certified.

Of particular note, Council was requested to:

- include updated costs for the construction of the revetment wall which was based on Aurecon's detailed design,
- incorporate the results of a Cost Benefit Analysis (CBA) that was being prepared by OEH on Council's behalf, and
- consider reviewing the management of stormwater to minimise the direct outflow of stormwater onto the beach.

Hazard Study Review - 2014

The Lake Cathie Coastal Zone Management Plan included actions for further investigation. One such action related to geotechnical investigation targeting indurated sands "coffee rock" within the study area. The main issue being the uncertainty relating to the influence of regional coffee rock formations on long term shoreline recession and storm erosion demand at the study site.

This review included:

70

- · A geotechnical investigation of the indurated sand (coffee rock) strength and extent.
- Producing a conceptual sediment transport model for the site.
- Undertaking photogrammetric analysis of the

exposed coffee rock over time.

Results of the review showed that there was no justification to change the previously adopted hazard lines from the 2008 and 2010 SMEC reports.

Lake Cathie Coastal Zone Management Plan -2016

Council revised the CZMP to incorporate the actions requested by the minister. The plan was adopted by Council in April 2016 and ministerial certification was subsequently requested.

Ministerial certification of the Lake Cathie Coastal Zone Management Plan 2016 was provided in November 2016 and was Gazetted in January 2017.

The certification again came with a list of actions which were required to implement the plan. The letter advised that the next critical step was the development of a workable funding model based on a distributional analysis that accords with the provisions of the new Coastal Management Manual.

The CZMP is the final document of the coastal zone management process and as such is a summarising document containing important information gathered from the three previous studies.

Implementation of CZMP Actions as at March 2020

a. 440m Revetment Wall for Illaroo Road

As mentioned above, at the direction of the Minister, OEH (now DPIE) engaged Balmoral Group in 2015 to undertake a Cost-Benefit Analysis (CBA) of management options along with a socio-economic profile of Lake Cathie. The analysis concluded that beach nourishment had the greatest net social benefit for the community, closely followed by the option of building a revetment wall.

Following the direction from the Minister in 2016

Council engaged Marsden Jacob & Associated to prepare a funding model which would rely on the results of the 2015 Balmoral Group CBA. However, upon review of the Balmoral modelling a number of fundamental issues with the modelling were uncovered. Accordingly, a new CBA and Funding Model needed to be completed.

The revised CBA & funding model:

- synthesized and accurately reported cost components based on the results of the Cost Benefit Analysis and associated engineering studies.
- identified and evaluated the strengths and limitations of alternative funding models. The assessment focuses on current opportunities and alternative management options and strategies that could result in a budget neutral outcome for the Council or identify long-term alternative sustainable funding.
- described the public and private beneficiaries and the extent of the benefits to each beneficiary associated with the preferred option.
- · identified funding options and models that could support the development of the revetment and that are founded on the Council's statutory ability to levy fees and charges under relevant state government legislation.
- recommend a preferred funding model. In developing this model, we note that we would need to consider the capacity of beneficiaries to pay apportioned costs.

At this time, a preferred funding model has been recommended, but further consultation with residents is required before an assessment can be made on their willingness and capacity to pay for coastal protection measures (i.e. the revetment wall). Community engagement is planned to be undertaken in order to inform the directly impacted residents and community at large of the outcome. This project has not been finalised or adopted by Council at the time of writing this Scoping Study.

b. Short-term beach management

Short-term beach management includes monitoring the beach for erosion following storm events, continuing interim development controls, continuing beach nourishment with sand from dredging activities in Lake Cathie, foreshore management and construction of Illaroo Road stormwater realignment.

c. Illaroo Road Stormwater realignment

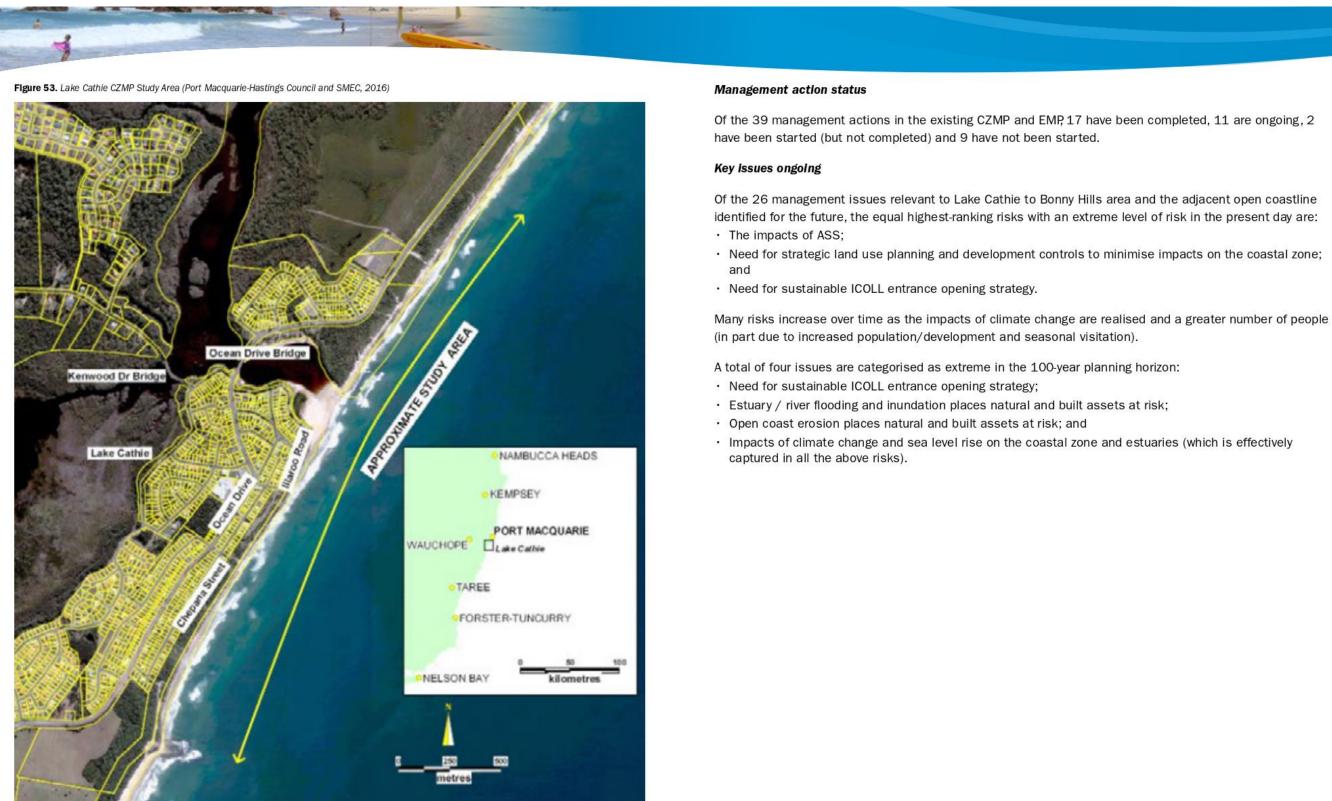
Council successfully sought grant funding to undertake construction works to redirect stormwater away from two outlets that currently discharge water directly onto the beach at Illaroo Road. The project aims to capture this stormwater and discharge the water into a single outlet in Bundella Avenue. The stormwater realignment is currently on-hold due to dumped asbestos (building waste) and Aboriginal archaeological findings at the site which are undergoing further investigation.

d. Emergency Action Plan

A plan has been developed under this plan which identifies actions to manage risks to public safety in the event of a coastal erosion emergency. It has not been necessary to implement any of these response actions to date.

ORDINARY COUNCIL 17/02/2021





ORDINARY COUNCIL 17/02/2021

16.2 ESTUARY MANAGEMENT PLANS

The NSW Government introduced the Estuary Management Policy in 1992 which was consistent with the former Catchment Management Act 1989. The Estuary Management Policy was introduced in order to achieve an integrated, balanced, responsible and ecologically sustainable use of estuaries. Preparation of Estuary Management Plans was in accordance with the NSW Estuary Manual which saw the establishment of coast and estuary management committees.

16.2.1 HASTINGS ESTUARY MANAGEMENT PLAN

The Hastings EMP was prepared for PMHC and overseen by the Hastings Council Estuary Management Committee (now Port Macquarie-Hastings Council Coast, Estuary and Floodplain Advisory Sub-Committee) in 2001 by Umwelt (Australia) Pty Limited. The EMP was developed in accordance with the NSW Estuary Management Manual 1992.

The Hastings EMP was created to provide integrated management of the estuarine system by obtaining information about system processes and current conditions and designing management actions to address any issues identified.

The Hastings Estuary Management Plan covered the following areas:

- The waterways of the Hastings estuary and its tributaries (e.g. the Maria River, Limeburners Creek and Kooloonbung Creek), up to the limit of tidal influence.
- The foreshore and other lands adjacent to the estuary, including all wetlands and floodplain areas that are functionally related to the estuary; and
- The catchment areas of the estuarine waterways, in relation to the impacts of catchment processes on the estuarine environment. The interaction of the catchment and estuary as parts of a single system is a fundamental concept for sustainable estuary management.

Key Issues

Key issues that affected the Hastings Estuary were identified as:

- Estuary form and processes
- · Acid sulphate soils
- Bank erosion
- · Riparian vegetation and conservation values
- Water quality
- Scenic value
- Management Actions

Numerous actions were adopted under this plan with many being completed. Some notable actions include:

- The appointment of an Acid Sulphate Soils Officer
- Development of a Hydrodynamic Model
- Rocks Ferry upgrade
- Completion of the Partridge Creek Management Strategy and subsequent remediation of the Partridge Creek Acid Sulphate Soil hotspot.

Management action status:

Of the 76 management actions in the existing CZMP and EMP 60 have been completed, 11 are ongoing, 3 have been started (but not completed) and 3 have not been started.

Key issues ongoing:

Of the 24 management issues relevant to the Hastings River identified for the future, there were seven issues that represented the equal highest risks in the present day:

- · Impacts of public access and recreational usage on the environment;
- Estuary / river bank erosion:
- · Impacts on estuarine macrophytes (e.g. seagrass) and wetlands;
- · Acid sulfate soils;
- · Need for strategic land use planning and development controls;
- Impacts on riparian zone; and
- · Terrestrial weeds and pests.

Many risks increase over time as the impacts of climate change are realised and a greater number of people (in part due to increased population/development), and built and natural assets are impacted.

The highest ranking risk in the 100-year planning horizon is estuarine / river flooding and inundation due to a combination of catchment and coastal processes, which increases under climate change and has potential to impact a large area due to the low-lying nature of parts of the catchment.

A total of three other issues also emerge extreme risks in the 100-year planning horizon: Estuary / river bank erosion;

- · Impacts on estuarine macrophytes (e.g. seagrass) and wetlands; and
- Impacts of climate change and sea level rise on the coastal zone and estuaries.

Dredging

Floodplain production

· Aquatic primary production

- · Population growth and age structure
- Tourist and recreational use
- Community views about the value of the estuary

ORDINARY COUNCIL 17/02/2021

75



16.2.2 CAMDEN HAVEN ESTUARY MANAGEMENT PLAN

The Camden Haven EMP was developed in 2002 for PMHC, overseen by Camden Haven Estuary Committee (now merged into the CE&F committee).

The plan involved significant community consultation and stakeholder engagement throughout the process.

Key Issues

Key issues that affected the Camden Haven Estuary were identified as:

- · Development and Human Impacts growing pressures from urban growth adjacent to the estuary. Clearing and drainage of land has resulted in oxidation of acid sulphate soils.
- · Water Quality stormwater and acid runoff can deteriorate water quality even during minor rainfall and flood events. The poor flushed parts of the estuary such as Mirror Bay and Gogleys Lagoon are most susceptible to these impacts.
- · Bank Erosion continued erosion of shoreline, in particular along Stingray Creek at Henry Kendall Reserve
- · Estuary Sedimentation infilling of the estuary, particularly at locations where navigation is important such as the Camden Haven River entrance to Watsons Taylor Lake
- · Fishery Decline in fish stocks and effects to oyster farming
- · Preservation of Wetlands, Mangroves, Saltmarsh and Seagrass
- Maintenance of the aesthetic attributes the close proximity of tall mountains (the 'Three Brothers') to the estuary is a unique feature.

Management Actions

The plan incorporated both long-term and short-term strategies for managing the estuary. Long term strategies focused on regional issues such as reversing larger scale human impacts whilst short term strategies related to work or measures that could be implemented as soon as funding became available. Several strategies were created ranging from Priority 1 Actions (initiated over the next 2 years) to Priority 3 Actions (initiated over the next 5-10 years).

These actions included

- Implementing water quality monitoring programs.
- Community education relating to estuarine processes and responsible stormwater runoff management.
- · Design and construction of pollution control devices.
- · Development controls.
- Bank stabilisation for erosion control
- Further studies/reviews relating to vegetation mapping, priority conservation areas, acid generation, biological assessment of seagrass beds, significant wetlands and reported reduction in fish stocks.
- Estuarine/lakeside linkages project aimed at reducing feral pests and invasive weeds.

Management action status

Of the 46 management actions in the existing CZMP, 19 have been completed, 17 are ongoing, 5 have been started (but not completed) and 5 have not been started.

Key issues ongoing

Of the 24 management issues relevant to the Camden Haven River estuary, the top 3 highest ranking were: · Need for strategic land use planning and development controls;

- · Inadequate / need for maintenance of public access and recreational infrastructure; and
- · Declines in water quality.

Many risks increase over time as the impacts of climate change are realised and a greater number of people (in part due to increased population/development), and built and natural assets are impacted.

The four highest ranking risks in the 100-year planning horizon, with a rating of extreme, are:

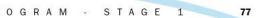
- · Estuary / river bank erosion places natural and built assets at risk;
- · Impacts on estuarine macrophytes (e.g. seagrass) and wetlands;
- · Estuary / river flooding and tidal inundation places natural and built assets at risk; and
- · Impacts of climate change and sea level rise on the coastal zone and estuaries.

The next highest-ranking risks are the same three listed above for the present day highest ranking risks.



Figure 54. Camden Haven Estuary fishing. Photo: Lindsay Moller

ORDINARY COUNCIL 17/02/2021



16.2.3 LAKE CATHIE/LAKE INNES ESTUARY MANAGEMENT PLAN

The Lake Cathie/Lake Innes EMP was created in 1994 in collaboration with NSW Public Works (now Public Works Advisory) and the National Parks and Wildlife Service (NPWS).

Key Issues

Issues that were identified were discussed with the Lake Cathie-Bonny Hills Estuary Management Committee along with the community and environmental groups to determine and prioritise management actions.

The key issues identified are listed below:

- Entrance opening increased salinity when lake is closed, waterbirds nesting and seasonal feeding, organic staining of waters when lake is closed, recreational activities, fish and prawn migration, deoxygenation of waters and pollution build up.
- · Shoaling in the lower estuary the construction of the Ocean Drive and Kenwood Drive bridge have changed the shoaling patters and tidal and flood flows and sand infeed from the ocean entrance
- · Closing of Lake Innes based on Lake Innes historically being freshwater system and may impact fisheries, salt marsh populations, flood and tidal hydrodynamics, water quality, biology and lake opening/closing frequencies.
- Water quality surrounding residential development results in increased stormwater runoff impacting on gross pollutants, nutrients, bacteria and particulate matter.
- Flooding several properties are flood prone particularly in relation to the lake opening frequency
- · Waterway uses recreational, commercial, access
- Sedimentation limited volumes for fine suspended sediments (clays and silts) enter the estuarine system with surrounding wetlands acting as barriers

Management Actions

EMP management actions included:

- · Implement combined entrance opening strategy and modified entrance opening procedure
- · Potential reversion of Lake Innes into a freshwater system by installing a levee
- Establish run-off quality guidelines
- Adoption of flood policy changes
- Water quality monitoring and establish nutrient budgets
- Facility and access upgrades
- Dredging of lower estuary

Further studies have been completed to understand the complex processes in the estuarine system, some of which are listed below:

- Nutrients in the Lake Cathie / Lake Innes Lagoonal System, Port Macquarie (Southern Cross University, 1994)
- Cathie Creek Maintenance Dredging Environmental Review, (Webb, McKeown & Associates, November 1994)
- Lake Cathie/Lake Innes Water Quality Study, (Department of Public Works and Services, Manly Hydraulic Laboratory, November 1995)
- · Lake Cathie/Lake Innes Entrance Opening Strategy Environmental Review, (Webb, McKeown & Associates, May 1995)
- Lake Cathie/Lake Innes Waterway Users Study, (Webb, McKeown & Associates, July 1998)
- Lake Innes Nature Reserve Plan of Management, (NPWS, November 1999)

- · A Tale of Two Lakes Managing Lake Innes and Lake Cathie for Improved Ecological and Community Outcomes - Issues and Options, (Umwelt, February 2004)
- Maintenance Dredging of Lake Cathie Review of Environmental Factors, (GHD, September 2004)
- Port Macquarie-Hastings Council Dredging Strategy, (Port Macquarie-Hastings Council, September 2007)
- Lake Innes Environmental Assessment (Hale, 2013)
- Lake Cathie and Lake Innes Acid Sulfate Soil Risk Assessment, (Soil Conservation Services, July 2019)

Water quality monitoring

PMHC undertakes water quality monitoring at Lake Cathie typically monthly and primarily from the Ocean Drive Bridge. As of June 2019, PMHC is also undertaking monitoring at three separate locations in the estuarine system. Water quality is broadly considered within acceptable limits although there have been some recent occurrences of high salinity. Water level data is recorded by the NSW Government from automatic recording equipment, managed by Manly Hydraulics Laboratory.

Connection of Lake Innes to Lake Cathie

Lake Cathie and Lake Innes are a connected system however this has not always been so. Before 1933, Lake Innes was a stand-alone freshwater lake. A channel was dug between both lakes in an attempt to drain Lake Innes to create farmland, this resulted in Lake Innes being converted to an estuarine system with permanent connection to Lake Cathie. This gauging station has recently been upgraded by Manly Hydraulics Laboratory and now provides information on Salinity, Electrical Conductivity and Water Temperature.

Opening of Lake Cathie

The Intermittently Closed and Open Lake or Lagoon (ICOLL), from which the town of Lake Cathie takes its name, is part of a wider system that includes Cathie Creek and Lake Innes to the north.

PMHC (and its earlier counterpart i.e. Hastings Shire Council) has been artificially opening Lake Cathie since the 1960s. This is typically done by excavating a small starter channel through the beach dune when water levels exceed 1.6m AHD, however this level has formerly been 1.5m AHD and 1.8m AHD.

PMHC in consultation with the community established the Lake Cathie Opening Strategy in 1995. The strategy was reviewed in 2001, 2004/2005 and 2011. Artificial openings, to alleviate flooding have occurred on average once every 12 months. The Strategy aimed to minimise adverse effects on the ecology of the area, minimise build-up of sand in the lake entrance, and reduce impacts of flooding, while providing residents and visitors with opportunities for recreational activities. The former Opening Strategy flowchart is shown in [Figure 55 over page].

A hydrodynamic model was developed by BMT WBM in 2011 to assist in management of the Lake Cathie ICOLL. This report did not recommend any changes be made to the opening strategy.

Lake Cathie continues to be a contentious area in regard to its existing and ongoing management from the perspective of the community and environmental groups. The health of the estuary is questioned constantly with community members quite often requesting that PMHC open the lake regardless of whether opening triggers have been met or not. Extensive consultation and education work have been undertaken in the last two years however there appears to be an ever-growing demand for a change in management strategy. Considering this community interest and the length of time since the latest review. (2011) a review of the existing Opening Strategy will be prioritised in the Lake Cathie/Bonny Hills chapter.

Lake Cathie Lake Innes Estuary - Hydrodynamic Model Development & Investigation (BMT WBM, May 2011)

79

Further impetus to update the Opening Strategy comes from recent Crown Land advice where it was determined that as the environmental approval (Review of Environmental Factors - REF) was greater than 5 years old, a new REF would be required before lake openings could be undertaken. As Council does not own the land (i.e. the lower estuary, downstream of Ocean Drive bridge is Crown Land) works cannot be undertaken until a licence is issued, this will not be issued by Crown Land unless it is supported by an up to date REF.

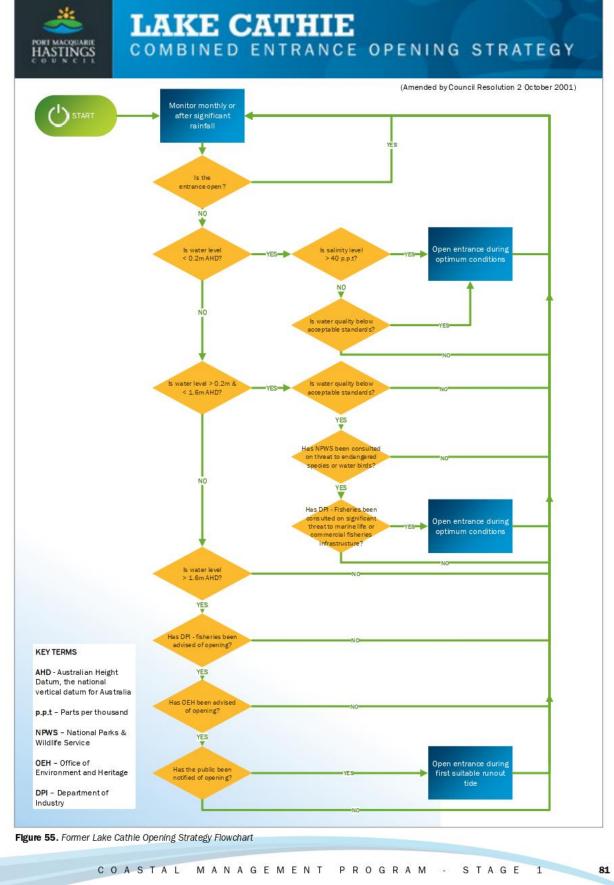
Lake System Acid Sulphate Soils

The latest artificial opening of Lake Cathie occurred in mid-July 2018 as water levels reached the upper threshold of 1.6m AHD under the opening strategy. The draining of the lake system followed a similar pattern to other opening events whereby the initial discharge of lake water scours the beach berm down to meet the prevailing low tide mark. However ongoing drought conditions on the east coast of Australia during 2019 resulted in the lowest annual rainfall total for Port Macquarie ever recorded. After the lake entrance closed the water levels continued to decline and expose extensive foreshore areas comprising Acid Sulfate Soils. Ongoing evaporation, dry and hot conditions and bushfires resulted in the lake water levels dropping further causing high water temperatures, low dissolved oxygen, hypersalinity and fish kills.

In order to better understand the ASS risk within the lake system, Soil Conservation Services (SCS) were engaged By PMHC & NPWS to undertake a risk assessment. This report confirmed that a significant ASS storage and high risk contamination exists and needs further investigation. Accordingly, it was agreed between managing stakeholders that additional ASS studies were required. Council set aside \$147,500 to fund this work in 2019 and applied for grant funding to cover the additional \$147,500. The application is on a reserve list and may be activated upon the completion of this scoping study.

80

The lake filled in early 2020 following sustained rainfall, which submerged the ASS. However due to sustained community and political pressure to open the lake, Council resolved to provide a shallow flood relief starter channel in the beach berm. This was against the advice of the NSW State Government agencies who recommended a scraping to 1.6m AHD. Ultimately the shallow channel which was dug on 22 May 2020 resulted in a full opening of the lake system, which drained the lakes and has resulted in tidal waters pumping the ASS and has generated acidic discharge and a substantial Iron Floc. This has resulted in visually poor water quality upstream from the Ocean Drive Bridge, and Council has had to erect signage to advise against swimming and eating fish caught within the lakes. This highlights the need to undertake a substantial review of the Entrance Opening Strategy in order to avoid similar situations happening again.



ORDINARY COUNCIL 17/02/2021

16.2.4 SALTWATER CREEK MANAGEMENT PLAN

Saltwater Creek is a small creek that flows through the northern section of Bonny Hills and drains a catchment of 2.5km2. The creek flows intermittently into the ocean at Rainbow beach immediately north of the Bonny Hills Surf Life Saving Club.

The Management Plan was developed in 2005 to identify issues associated with Saltwater Creek and its catchment, and proposes a strategy and action plan to address these issues.

The impetus of the plan came from the local community and the former Hastings Coast and Estuaries Committee who highlighted the deteriorating visual and environmental aspects of the creek and its surrounds.

Saltwater Creek had not received formal management or maintenance for some years prior to this management plan. One of the reasons for this has been multiple ownerships (i.e. private landowners, Crown Lands and PMHC).

Key Issues

Key issues explored and addressed by the plan are:

- Aesthetics
- Flooding
- Creek Water Quality
- Stormwater Quality
- · Maintenance of Stormwater Infrastructure and derelict structures
- Sedimentation
- Debris Build up and rubbish dumping
- Erosion
- Vegetation Management

Management Actions

The management plan identified issues and prioritised them according to their environmental impacts and importance placed by community. A range of strategies and actions were then recommended to manage specific issues.

Management actions contained in the plan will be reviewed and if appropriate, included in the CMP.

16.2.5 OTHER PLANS AND REPORTS

There are many other documents that fall within all coastal management areas and are managed by different Council sections, other government agencies and some in partnership with community groups. Some of these documents are listed below:

- Hastings Regional Crown Reserve Precinct A Plan of Management, December 2014
- Westport Park Plan of Management, January 2012
- Bonny Hills Reserves Master Plan 2012
- Lake Cathie Foreshore Master Plan 2018
- Bruce Porter Reserve Master Plan 2011
- (Draft) Flynns Beach Master Plan 2019
- Town Beach Master Plan 2013
- Coastal Walk Master Plan 2017
- Port Macquarie Foreshore Walkway Master Plan (Concept) 2019



ORDINARY COUNCIL 17/02/2021

Figure 56. Town Beach, Port Macquarie

83

17. WHERE ACTION IS REQUIRED

17.1 KEY ISSUES AND THREATS

Key issues/threats to Coastal Management Areas have been previously determined through the EMPs and CZMPs. These threats have been reviewed and most are considered to still be relevant [see Table 7 below].

Issue Description	Hastings River	Camden Haven	Lake Cathle & Bonny HIIIs	Open Coastline	Coastal Wetlands & Littoral Rainforests (CWLRA)	Coastal Vulnerabilit Area (CVA)	Coastal Environmental Area (CEA)	Coastal Use Area (CU)
Open coast erosion places natural and built assets at risk	Y		Y	γ	Y	Y	Y	Y
Estuary / river bank erosion places natural and built assets at risk		Y	Y		Y		Y	Ŷ
Coastal lake or watercourse entrance instability negatively impacting natural and built assets			Y		Y	Ŷ	Y	Y
Coastal inundation places natural and built assets at risk	Y		Y	Ŷ	Y	Y	Ŷ	Ŷ
Coastal cliff or slope instability places natural and built assets at risk	Y			Y	Y	Y	Y	Y
$\ensuremath{Estuary}\xspace/$ river flooding and inundation places natural and built assets at risk		Y	Y		Y	Y	Y	Ŷ
Impacts of climate change and sea level rise on the coastal zone and estuaries		Y	Y	Ŷ	Y	Y	Y	Ŷ
Estuary sedimentation and/or shoaling negatively impacts navigation and recreational use		Y	Y		Y		Y	Ŷ
Need for dredging strategy, plan and protocols to minimise conflict between recreational and commercial waterway users and coastal protection	Ŷ	Y				Y	Y	Y
Need for sustainable ICOLL entrance opening strategy that considers flood risk as well as estuary processes	Ŷ		Y		Y	Ŷ	Y	Y
Need for conservation and promotion of scenic character/views, visual impacts have occurred	Ŷ	Y	Y	Ŷ		Y	Y	Y
Lack of appreciation of the value of native vegetation / clearing of native vegetation	Y	Y	Y	Y	Y		Y	
Inadequate / need for maintenance of public access and recreational Infrastructure	Y	Y	Y	Y	Y	Ŷ	Y	Y
Impacts of public access and recreational usage on the environment	Y	Y	Y	Ŷ	Y	Y	Y	Ŷ
Conflicts between recreational users of the foreshore and waterway areas / overcrowding	Y	Y	Y	Y		Y	Y	Ŷ
Need for conservation and promotion of Indigenous and non-Indigenous cultural heritage	Y	Y	Y	Y	Y	Y	Y	Ŷ
Declines in water quality	Y	Y	Y	Y	Y	Y	Y	Y
Acid sulfate soils have a range of impacts on built and natural assets		Y	Y		Y	Y	Y	Y
Need for sustainable management of commercial fisheries and oyster aquaculture that considers other waterway users		Y			Y	Ŷ	Y	Ŷ
Need for strategic land use planning and development controls to minimise impacts on the coastal zone	Y	Y	Y	Y	Ŷ	Ŷ	Y	Ŷ
Impacts on estuarine macrophytes (e.g. seagrass) and wetlands		Y	Y		Y		Y	Ŷ
Impacts on riparian zone due to recreational boating, agricultural practices and other land use practices		Y	Y		Ŷ	Y	Y	Y
Terrestrial weeds and pests	Y	Y	Y	Y	Y		Y	Y
Impact of stormwater runoff from urban, rural, agricultural and industrial areas	Y	Y	Y	Y	Ŷ		Y	Y
Need for compliance and regulatory enforcement (e.g. of antisocial behaviour, illegal dumping, fishing regulations, sewage disposal from vessels)	Ŷ	Y	Y	Ŷ	Y	Y	Y	Ŷ
Need for sustainable management / development of tourism	Y	Y	Y	Ŷ			Y	Y
Lack of community awareness of environmental issues and conservation values	Y	Y	Y	Y			Y	Ŷ
Uncertainty around land tenure and management responsibilities, need for coordinated strategic management	Ŷ	Y	Y	Y	Y		Y	Ŷ
Equity in distribution of costs and benefits from coastal management activities to ensure sustainable management of the coastal zone	Ŷ	Y	Y	Y	Y	Y	Y	Ŷ

17.2 FIRST-PASS RISK ASSESSMENT

A first-pass risk assessment was undertaken based on the issues identified in [Section 16]. This risk assessment was done in order to prioritise issues to determine when and where action needs to be taken.

The risk assessment methodology was sourced from the Manual Part B: Stage 1. [Table 8] shows the consequence scale and [Table 9] shows the likelihood scale and [Table 10] shows the risk assessment matrix. The success criteria in the consequence scale was chosen based on what was most applicable to each issue.

Each issue was assessed based on the likelihood of it occurring and the consequence of it occurring. This assessment was done for each catchment as issues vary in significance across the LGA [see Tables 11.1 to 11.4].

Issues identified as high risk and above are considered to be priority risks and should be considered in Stage 2 of the CMP. Low or moderate risks will still be considered, however timeframes for completion may be longer than high priority issues.

Table 7. Key issue/threats to Coastal Management Areas

84





			SUCCESS CRITERI	A		
Rating	Public safety	Local Economy and Growth	Community and Lifestyle	Biodiversity	Natural Water Quality and Physical Processes	Score
Catastrophic	Loss of life. Large number of injuries	Regional decline leading to widespread business failure, loss of employment and hardship.	Region seen as unattractive due to poor quality of life. Very high levels of conflict between users that receive attention across the region. Loss of several pieces of key recreational	Significant, widespread and ongoing decline in habitat and associated species, including loss of conservation significant species and/or communities. Little to no potential for recovery and restoration works unlikely to be successful. Irreversible change or significant deterioration in multiple water quality parameters over a large area. Little to no potential for recovery or restoration.	Significant and irreversible impact on natural processes as a result of human activities.	5
Major	Moderate to large number of injuries.	Regional stagnation such that businesses across multiple sectors of the economy are unable to thrive and employment does not keep pace with population growth.	Major decline in condition, and loss of some areas of habitat/species over large area. Long term impact. Limited potential for natural recovery. Restoration works likely required.	Major and/or widespread impact on natural processes as a result of human activities. Significant deterioration in several water and/or sediment parameters over a large area. Limited potential for recovery and restoration. Some clean-up / remediation required.		4
Moderate	Small to moderate number of injuries	Several businesses within more than one sector of the economy experience declines in economic performance.	General, noticeable decline in services. Conflict between a small number of users, may occur regularly/ seasonally. Damage to, or decline in condition of, facilities.	Major decline in condition of habitat/species in small area, or moderate decline over larger area. Medium term impact Moderate to good potential for natural recovery, some restoration works required.	Moderate impact on natural processes in a limited area as a result of human activities. Deterioration of a limited number of water quality parameters throughout study area, or for several parameters in specific location. Potential for recovery by restoration works or long-term natural processes.	3
Minor	Near misses, single or small number of injuries.	Some individuals within certain sectors of the economy experience declines in economic performance.	Some individuals within certain sectors of the economy experience declines in economic performance.	Minor impact on habitat/species over a limited area. Short to medium term impact. Good potential for natural recovery, restoration works unlikely to be required.	Minor impact on natural processes in a limited area as a result of human activities. Deterioration of 1-2 water quality parameters in a particular location. Good potential for recovery by restoration works or short-term natural processes.	2
Insignificant	No injuries. Has appearance of harm but no actual harm.	Negligible to minor shortfall relative to current forecasts	Area supports generally good lifestyle for a wide sector of the community. Very few reports of conflict between users. Infrastructure only requires routine maintenance.	No or negligible impact over the short term to riparian and estuarine habitat or associated species. No restoration works required	No or negligible impact on natural physical or water quality processes as a result of human activities.	1

 Table 8: Consequence scale. Sourced from NSW Coastal Management Manual Part B: Stage 1 (OEH, 2018) and adapted from Climate Change Risk Management: A guide for business and government (AGO, 2006).

SCORE	LIKELIHOOD	DESC
5	Almost Certain	Very likely. The event is expected to occur in most years, co
4	Likely	The event will probably occur in most circumstances. 20-50
3	Possible	May occur at some time. 10-20% chance of occurrence in a
2	Unlikely	Uncommon, the event could occur but is not expected. 2-10
1	Rare	The event may occur in exceptional circumstances. Event u occurrence in any given year.

 Table 9. Likelihood scale. Sourced from NSW Coastal Management Manual Part B: Stage 1 (OEH, 2018) and adapted from NSW Marine Estate TARA (MEMA, 2017).

		CONSE	QENCE	CONSEQENCE												
Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic											
Almost certain	Medium	High	High	Extreme	Extreme											
Likely	Medium	Medium	High	High	Extreme											
Possible	Low	Medium	High	High	High											
Unlikely	Low	Low	Medium	Medium	High											
Rare	Low	Low	Medium	Medium	High											

 Table 10. Risk assessment matrix. Sourced from Sourced from NSW Coastal Management Manual Part

 B: Stage 1 (OEH, 2018) and adapted from Climate Change Risk Management: A guide for business and government (AGO, 2006).

ORDINARY COUNCIL 17/02/2021

RIPTOR

could occur several times per year.

50% chance of occurrence in any given year.

n any given year.

10% chance of occurrence in any given year.

unlikely to occur in an individual's lifetime. <2% chance of





17.2.1 LAKE CATHIE AND BONNY HILLS

Issue Description		Existing Risk 2019		Futu	re Risk - 20yrs (20	050)	Futu	re Risk - 50yrs (2	070)	Future	e Risk - 100 yrs (2	2120)
	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk
Acid sulfate soils have a range of impacts on built and natural assets	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High
Need for strategic land use planning and development controls to minimise impacts on the coastal zone	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High
Need for sustainable ICOLL entrance opening strategy that considers flood risk as well as estuary processes	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C4 - Major	Extreme	L5 - Almost certain	C4 - Major	Extreme	L5 - Almost certain	C4 - Major	Extreme
Estuary / river flooding and inundation places natural and built assets at risk	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C4 - Major	High	L5 - Almost certain	C4 - Major	Extreme
Estuary $/\operatorname{river}$ bank erosion places natural and built assets at risk	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Inadequate / need for maintenance of public access and recreational infrastructure	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Estuary sedimentation and/or shoaling negatively impacts navigation and recreational use	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts of public access and recreational usage on the environment	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Declines in water quality	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts on estuarine macrophytes (e.g. seagrass) and wetlands	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Terrestrial weeds and pests	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impact of stormwater runoff from urban, rural, agricultural and industrial areas	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Uncertainty around land tenure and management responsibilities, need for coordinated strategic management	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Equity in distribution of costs and benefits from coastal management activities to ensure sustainable management of the coastal zone	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Need for conservation and promotion of Indigenous and non-Indigenous cultural heritage	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Need for sustainable management / development of tourism	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Open coast erosion places natural and built assets at risk	L2 - Unlikely	C4 - Major	Medium	L2 - Unlikely	C4 - Major	Medium	L3 - Possible	C5 - Catastrophic	High	L4 - Likely	C5 - Catastrophic	Extreme
Coastal lake or watercourse entrance instability negatively impacting natural and built assets	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts of climate change and sea level rise on the coastal zone and estuaries	L2 - Unlikely	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C4 - Major	High	L5 - Almost certain	C4 - Major	Extreme
Lack of appreciation of the value of native vegetation / clearing of native vegetation	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Conflicts between recreational users of the foreshore and waterway areas / overcrowding	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Impacts on riparian zone due to recreational boating, agricultural practices and other land use practices	L2 - Unlikely	C3 - Moderate	Medium	L2 - Unlikely	C3 - Moderate	Medium	L2 - Unlikely	C3 - Moderate	Medium	L2 - Unlikely	C3 - Moderate	Medium
Need for conservation and promotion of scenic character/ views, visual impacts have occurred	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low
Need for compliance and regulatory enforcement (e.g. of antisocial behaviour, illegal dumping, fishing regulations, sewage disposal from vessels)	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low
Coastal inundation places natural and built assets at risk	L1 - Rare	C3 - Moderate	Low	L1 - Rare	C3 - Moderate	Low	L2 - Unlikely	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Lack of community awareness of environmental issues and conservation values	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low

 Table 11.1. Lake Cathie & Bonny Hills Risk Assessment Outcomes (Ranked Highest to Lowest Risk)

88

ORDINARY COUNCIL 17/02/2021



17.2.2 HASTINGS RIVER

Issue Description		Existing Risk 2019		Futu	re Risk - 20yrs (2	050)	Futu	re Risk - 50yrs (2	070)	Future	e Risk - 100 yrs (2	2120)
	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk
Impacts of public access and recreational usage on the environment	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
$\ensuremath{Estuary}\xspace$ / river bank erosion places natural and built assets at risk	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C4 - Major	Extreme
Impacts on estuarine macrophytes (e.g. seagrass) and wetlands	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C4 - Major	Extreme
Acid sulfate soils have a range of impacts on built and natural assets	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Need for strategic land use planning and development controls to minimise impacts on the coastal zone	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts on riparian zone due to recreational boating, agricultural practices and other land use practices	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Terrestrial weeds and pests	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Inadequate / need for maintenance of public access and recreational infrastructure	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Conflicts between recreational users of the foreshore and waterway areas / overcrowding	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Need for conservation and promotion of Indigenous and non-Indigenous cultural heritage	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Declines in water quality	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impact of stormwater runoff from urban, rural, agricultural and industrial areas	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Estuary / river flooding and inundation places natural and built assets at risk	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C4 - Major	High	L5 - Almost certain	C5 - Catastrophic	Extreme
Need for conservation and promotion of scenic character/ views, visual impacts have occurred	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Need for sustainable management of commercial fisheries and oyster aquaculture that considers other waterway users	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Need for sustainable management / development of tourism	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Equity in distribution of costs and benefits from coastal management activities to ensure sustainable management of the coastal zone	L3 - Possible	C2 - Minor	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Impacts of climate change and sea level rise on the coastal zone and estuaries	L2 - Unlikely	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C4 - Major	High	L5 - Almost certain	C4 - Major	Extreme
Uncertainty around land tenure and management responsibilities, need for coordinated strategic management	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Estuary sedimentation and/or shoaling negatively impacts navigation and recreational use	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Need for dredging strategy, plan and protocols to minimise conflict between recreational and commercial waterway users and coastal protection	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Lack of appreciation of the value of native vegetation / clearing of native vegetation	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Need for compliance and regulatory enforcement (e.g. of antisocial behaviour, illegal dumping, fishing regulations, sewage disposal from vessels)	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Lack of community awareness of environmental issues and conservation values	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low

 Table 11.2.
 Hastings River Risk Assessment Outcomes (Ranked Highest to Lowest Risk)

90

ORDINARY COUNCIL 17/02/2021

COASTAL MANAGEMENT PROGRAM - STAGE 1 91



17.2.3 CAMDEN HAVEN

Issue Description		Existing Risk 2019		Futu	re Risk - 20yrs (2	050)	Futu	re Risk - 50yrs (2	070)	Futur	e Risk - 100 yrs (2	2120)
	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk
Need for strategic land use planning and development controls to minimise impacts on the coastal zone	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High	L4 - Likely	C4 - Major	High
Inadequate / need for maintenance of public access and recreational infrastructure	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Declines in water quality	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Estuary / river bank erosion places natural and built assets at risk	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C4 - Major	Extreme
Impacts on estuarine macrophytes (e.g. seagrass) and wetlands	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C4 - Major	Extreme
Estuary sedimentation and/or shoaling negatively impacts navigation and recreational use	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Need for dredging strategy, plan and protocols to minimise conflict between recreational and commercial waterway users and coastal protection	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts of public access and recreational usage on the environment	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts on riparian zone due to recreational boating, agricultural practices and other land use practices	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Terrestrial weeds and pests	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Conflicts between recreational users of the foreshore and waterway areas / overcrowding	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Need for conservation and promotion of Indigenous and non-Indigenous cultural heritage	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impact of stormwater runoff from urban, rural, agricultural and industrial areas	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Estuary / river flooding and inundation places natural and built assets at risk	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C4 - Major	High	L5 - Almost certain	C4 - Major	Extreme
Acid sulfate soils have a range of impacts on built and natural assets	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	High
Need for sustainable management of commercial fisheries and oyster aquaculture that considers other waterway users	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Need for sustainable management / development of tourism	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Equity in distribution of costs and benefits from coastal management activities to ensure sustainable management of the coastal zone	L3 - Possible	C2 - Minor	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Need for conservation and promotion of scenic character/ views, visual impacts have occurred	L2 - Unlikely	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts of climate change and sea level rise on the coastal zone and estuaries	L2 - Unlikely	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C4 - Major	High	L5 - Almost certain	C4 - Major	Extreme
Uncertainty around land tenure and management responsibilities, need for coordinated strategic management	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Lack of appreciation of the value of native vegetation / clearing of native vegetation	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Need for compliance and regulatory enforcement (e.g. of antisocial behaviour, illegal dumping, fishing regulations, sewage disposal from vessels)	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Lack of community awareness of environmental issues and conservation values	L3 - Possible	C1 - Insignificant	Low	L4 - Likely	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low

Table 11.3. Camden Haven Risk Assessment Outcomes (Ranked Highest to Lowest Risk)

ORDINARY COUNCIL 17/02/2021

COASTAL MANAGEMENT PROGRAM - STAGE 1 93



17.2.1 OPEN COAST

Issue Description		Existing Risk 2019		Futu	re Risk - 20yrs (2	050)	Futu	re Risk - 50yrs (2	070)	Future Risk - 100 yrs (2120)		
	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk
Impacts of public access and recreational usage on the environment	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Inadequate / need for maintenance of public access and recreational infrastructure	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High	L5 - Almost certain	C3 - Moderate	High
Terrestrial weeds and pests	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Equity in distribution of costs and benefits from coastal management activities to ensure sustainable management of the coastal zone	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High	L4 - Likely	C3 - Moderate	High
Impacts of climate change and sea level rise on the coastal zone and estuaries	L2 - Unlikely	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High	L4 - Likely	C4 - Major	High
Need for conservation and promotion of scenic character/ views, visual impacts have occurred	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Declines in water quality	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Need for strategic land use planning and development controls to minimise impacts on the coastal zone	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Need for sustainable management / development of tourism	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Uncertainty around land tenure and management responsibilities, need for coordinated strategic management	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium	L3 - Possible	C3 - Moderate	Medium
Coastal cliff or slope instability places natural and built assets at risk	L2 - Unlikely	C4 - Major	Medium	L2 - Unlikely	C4 - Major	Medium	L3 - Possible	C4 - Major	High	L3 - Possible	C4 - Major	High
Conflicts between recreational users of the foreshore and waterway areas / overcrowding	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium
Impact of stormwater runoff from urban, rural, agricultural and industrial areas	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium
Need for compliance and regulatory enforcement (e.g. of antisocial behaviour, illegal dumping, fishing regulations, sewage disposal from vessels)	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium	L4 - Likely	C2 - Minor	Medium
Lack of appreciation of the value of native vegetation / clearing of native vegetation	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C2 - Minor	Medium
Need for conservation and promotion of Indigenous and non-Indigenous cultural heritage	L2 - Unlikely	C3 - Moderate	Medium	L2 - Unlikely	C3 - Moderate	Medium	L2 - Unlikely	C3 - Moderate	Medium	L2 - Unlikely	C3 - Moderate	Medium
Open coast erosion places natural and built assets at risk	L2 - Unlikely	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low	L3 - Possible	C3 - Moderate	Medium	L4 - Likely	C3 - Moderate	High
Lack of community awareness of environmental issues and conservation values	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low	L3 - Possible	C1 - Insignificant	Low
Coastal inundation places natural and built assets at risk	L1 - Rare	C2 - Minor	Low	L2 - Unlikely	C2 - Minor	Low	L3 - Possible	C2 - Minor	Medium	L3 - Possible	C3 - Moderate	Medium

Table 11.4. Open Coast Risk Assessment Outcomes (Ranked Highest to Lowest Risk)

ORDINARY COUNCIL 17/02/2021

95

17.3 FORWARD WORKS PROGRAM

OVERVIEW

As outlined in the Coastal Management Manual, preparation of the CMP is to be completed following a staged process [illustrated in Figure 1]. Guidance for this process along with key requirements are outlined in Part A and Part B of the Manual. The subsequent stages in this process after this Stage 1 Scoping Study are:

- Stage 2: Determine risks, vulnerabilities and opportunities (through further detailed studies).
- Stage 3: Identify and evaluate options (through risk assessment and cost, benefit analysis).
- Stage 4: Prepare, exhibit, finalise, certify and adopt a CMP (leading to implementation).
- Stage 5: Implement, monitor, evaluate and report (to feedback to the cycle).

This section provides:

- CMP Implementation obligations for Councils and public authorities.
- A summary of the requirements, process and expected outcomes for Stages 2 to 4 outlined from the Manual (Part B).

A section with considerations, analysis of options and recommendations related to governance of the CMP project going forward.

STAGE 2: DETERMINE RISKS, VULNERABILITIES AND OPPORTUNITIES

Stage 2 of the CMP process involves undertaking detailed studies that will help PMHC to identify, analyse and evaluate risks, vulnerabilities and opportunities in the study area. The studies conducted during Stage 2 are to provide information to support decision-making in the later stages of the CMP planning process.

A summary of the Coastal Management Manual identifies Stage 2 as including the following:

- Engaging with the community and stakeholders.
- Refining the understanding of key management issues.
- Identifying areas exposed to coastal hazards and threats to coastal values.
- · Analysing and evaluating current and future risks (detailed risk assessment).
- Identifying scenarios for social and economic change and related opportunities for coastal communities.
- · Preparing a planning proposal to amend maps of coastal management areas, to commence the Gateway process.
- · Identifying timing and priorities for responses, thresholds and lead times.

STAGE 3: IDENTIFY AND EVALUATE OPTIONS

Stage 3 of the CMP process requires PMHC to identify and evaluate possible management options in order to select preferred coastal management actions to address the issues identified as affecting the CMP study area. The aim of Stage 3 is to develop strategies and management actions that reduce exposure to coastal hazards, address coastal management issues and take advantage of opportunities, consistent with provisions in Section 14 and 15 of the Coastal Management Act 2016.

A summary of the Coastal Management Manual identifies Stage 3 as including the following:

- · Identifying and collating information on management options.
- · Evaluating management actions, considering:
- · Feasibility (is it an effective and sustainable way to treat the risks?).
- · Viability (economic assessment).
- · Acceptability to stakeholders.
- Engaging public authorities about implications for their assets and responsibilities.
- · Evaluating mapping options and implications if a planning proposal is being prepared.
- · Identifying pathways and timing of actions.
- · Preparing a business plan for implementation.

STAGE 4: PREPARE, EXHIBIT, FINALISE, CERTIFY AND ADOPT A CMP.

Stage 4 of the CMP process involves a draft coastal management program being prepared, exhibited and then submitted to the Minister for certification.

It is a mandatory requirement of the Coastal Management Manual that a draft CMP be exhibited for a period of at least 28 calendar days. It is also a requirement under Section 16 of the CM Act that consultation is carried out during the preparation of the draft CMP.

Once the Minister certifies the CMP PMHC must publish it in the Gazette. The CMP takes effect on the date on which it is published in the Gazette (or on a later date if specified in the CMP)

STAGE 5: IMPLEMENT, MONITOR, EVALUATE AND REPORT.

Stage 5 gives guidance to councils on how to implement and give effect to their CMP and the associated ongoing monitoring and reporting of the implementation of a CMP to meet the requirements of the Coastal Management Act 2016.

The Coastal Management Manual provides council with guidance on the following: Implementing actions in the published Coastal Management Program through the Integrated Planning and

- Reporting (IP&R) framework and Land Use Planning System.
- Implementing actions in partnership with adjoining councils and public authorities where relevant.
- · Implementing an effective Monitoring, Evaluation and Reporting (MER) program.
- Monitoring indicators, trigger points and thresholds.
- Amending, reviewing and updating the CMP.
- Reporting to stakeholders and the community on progress and outcomes through the IP&R framework.

CMP Stage	Lake Cathle & Bonny Hills	Hastings River	Camden Haven	Open Coastline
Stage 2	2021-2022	2022-2023	2023-2024	2023-2024
Stages 3-4	2023	2023-2024	2025	2025
Stage 5	2024+	2025+	2026+	2026+

Table 12. Forward plan stages and indicative timeframes



0	G	R	А	М	-	S	Т	А	G	Е	1	97



17.3.1 LAKE CATHIE AND BONNY HILLS

An indicative forward plan for Lake Cathie and Bonny Hills is provided in [Table 13.1]. It provides a list of activities to be undertaken, and details responsibility for implementation, preliminary cost estimates, and indicative timeframes. It is estimated that Stage 2 would cost around \$370,000 and take around 15 months to implement. Assuming the two stages are undertaken concurrently, it is estimated Stages 3-4 would cost around \$100,000 and take around 15 months to complete.

Item	Activities	Estimated costs (excl. GST)	Approximate Duration
STAGE 2			
Community and stakeholder engagement	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$30,000-40,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below
Further Study 1 - Digestion model of ASS study.	 Quantify the ASS risk of the lake system using ASS digestion and hydrodynamic modelling. Review the 2013 Lake Innes reversion study in light of the findings. Provide management options to address the ASS risk and review the preferred option under 2030 and 2070 climate change projections. 	\$185,000 Consultancy fee	3-6 months
Further Study 2 – Review of potential ASS containment options.	 Based on the findings of Further Study 1, consider possible ASS containment options. Recommend strategies. 	\$50,000 Consultancy fee	2-3 months
Further Study 3 – Ecological condition assessment of saltmarsh and seagrass communities.	 Field survey of saltmarsh and seagrass by suitably qualified ecologist. GIS mapping and data analysis. Modelling of potential distribution for different water levels. Report findings and recommendations. 	\$15,000 Consultancy fee	2 months
Further Study 4 – Review of Lake Innes Environmental Assessment (2013) (Lake Innes Reversion Study).	 Review legislative and management context. Literature review of previous studies, including hydrodynamic and water quality investigations Review relevant findings of Further Studies 1 and 3. Consider engineering feasibility. Evaluate potential costs and benefits. 	\$50,000 Consultancy fee	2-3 months
Develop first draft CMP – Stage 2 for consultation with key stakeholders.	 Synthesise outcomes of Stage 1 and further studies to better define risks, issues and opportunities. Analyse and evaluate current and future risks (updated risk assessment). Prepare planning proposal - if required Prepare draft CMP - Stage 2. 	\$15,000 Consultancy fee	2 months
Develop draft CMP – Stage 2 for public exhibition.	Prepare and final exhibit draft CMP	\$10,000 Consultancy fee Plus internal Council resources for public exhibition	2 months
Finalise CMP – Stage 2.	 Prepare submissions report as discussed (and costed) above. Finalise CMP. 	\$6,000 Consultancy fee Plus internal Council resources	2 months

STAGES 3 AND 4			
Community and stakeholder engagement	Refer to Communication, Education and Engagement Plan in [section 17.4]	\$45,000-55,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below
Develop and assess management options	 Review outcomes of Stages 1-2. Undertake community and stakeholder engagement to confirm the management objectives for the CMP and identify management options as discussed (and costed) above. Identify suite of management options to address identified risks. Establish a semi-quantitative options assessment framework in consultation with key stakeholders and undertake an analysis of the relative costs and benefits of the options. Investigate funding options and consider cost/resource sharing opportunities 	\$10,000 Consultancy fee Plus internal Council resources to support options development and assessment	8 months
Develop first draft CMP for consultation with key stakeholders	 Review outcomes of Stages 1-2. Undertake community and stakeholder engagement to confirm the management objectives for the CMP and identify management options as discussed (and costed) above. Identify suite of management options to address identified risks. Establish a semi-quantitative options assessment framework in consultation with key stakeholders and undertake an analysis of the relative costs and benefits of the options. Investigate funding options and consider cost/resource sharing opportunities. 	\$10,000 Consultancy fee Plus internal Council resources (e.g. to seek commitment from implementation partners)	2 months
Develop draft CMP for public exhibition	 Prepare business plan for preferred options to be adopted as actions in the Plan - clarify roles, responsibilities and financial commitments. Seek commitment to the Plan from implementation partners. Prepare a monitoring and evaluation plan that will enable tracking of implementation of the CMP and achievement of the management objectives. Prepare draft CMP for initial consultation with key stakeholders. 	\$15,000 Consultancy fee Plus internal Council resources for public exhibition	2 months
Finalise CMP	 Prepare and final exhibit draft CMP Prepare submissions report as discussed (and costed) above. Finalise CMP. Obtain certification of the CMP. 	\$12,500 Consultancy fee Plus internal Council resources for submissions collation and certification	3-4 months
STAGE 5			
Implement CMP, monitor, valuate and report	 Council to implement CMP for 5 to 10-year period through IP&R. Other organisations to implement CMP through work programs. Undertake monitoring and evaluation activities to measure success of implementation of the CMP. 	Unknown	N/A – until update of the CMP is required, likely 5-10 years.

Table 13.1. Forward Plan for Lake Cathie and Bonny Hills

ORDINARY COUNCIL 17/02/2021





17.3.2 HASTINGS RIVER

An indicative forward plan for the Hastings River is provided in [Table 13.2]. It provides a list of activities to be undertaken, and details responsibility for implementation, preliminary cost estimates, and indicative timeframes. It is estimated that Stage 2 would cost around \$370,000 and take around 15 months to implement. Assuming the two stages are undertaken concurrently, it is estimated Stages 3-4 would cost around \$100,000 and take around 15 months to complete.

ltem	Activities	Estimated costs (excl. GST)	Approximat Duration
STAGE 2			
Community and stakeholder engagement	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$30,000-40,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below
Further Study 1 – Bank condition assessment.			3-4 months
Further Study 2 – Recreational User Needs Analysis	 Assessment of recreational user groups and activities undertaken in the study area. Review of assets that support both foreshore-based and water-based recreational activities. The purpose of the study would be to identify key recreational activities undertaken in the coastal zone, patterns in usage and the suitability of existing infrastructure to support recreation. 	\$35,000 Consultancy fee	2 months
Further Study 3 – Assessment of estuarine flood/inundation hazard	 Being undertaken by Council under NSW Government Floodplain Management Program. 	15.3	27
Develop first draft CMP – Stage 2 for consultation with key stakeholders.	 Synthesise outcomes of Stage 1 and further studies to better define risks, issues and opportunities. Analyse and evaluate current and future risks (updated risk assessment). Prepare planning proposal if required Prepare draft CMP – Stage 2 	\$10,000 Consultancy fee	2 months
Develop draft CMP – Stage 2 for public exhibition.			2 months
Finalise CMP – Stage 2.	 Prepare submissions report as discussed (and costed) above. Finalise CMP 	\$5,000 Consultancy fee Plus internal Council resources	2 months
STAGES 3 AND 4			
	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$45,000-60,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below
	 Review outcomes of Stages 1-2. Undertake community and stakeholder engagement to confirm the management objectives for the CMP and identify management options as discussed (and costed) above. Identify suite of management options to address identified risks. Establish a semi-quantitative options assessment framework in consultation with key stakeholders and undertake an analysis of the relative costs and benefits of the options. Investigate funding options and consider cost/resource sharing opportunities. 	\$10,000 Consultancy fee Plus internal Council resources to support options development and assessment	8 months

	 Prepare business plan for preferred options to be adopted as actions in the Plan - clarify roles, responsibilities and financial commitments. Seek commitment to the Plan from implementation partners. Prepare a monitoring and evaluation plan that will enable tracking of implementation of the CMP and achievement of the management objectives. Prepare draft CMP for initial consultation with key stakeholders. 	\$10,000 Consultancy fee Plus internal Council resources (e.g. to seek commitment from implementation partners)	2 months	
	Prepare and final exhibit draft CMP	\$15,000 Consultancy fee Plus internal Council resources for public exhibition	2 months	
	 Prepare submissions report as discussed (and costed) above. Finalise CMP. Obtain certification of the CMP. 	\$12,500 Consultancy fee Plus internal Council resources for submissions collation and certification.	3-4 months	
STAGE 5				
mplement CMP, monitor, evaluate and report	 Council to implement CMP for 5 to 10-year period through IP&R. Other organisations to implement CMP through work programs. Undertake monitoring and evaluation activities to measure success of implementation of the CMP. 	Unknown	N/A – until update of the CMP is required, likely 5-10 years.	

Table 13.2. Forward Plan for the Hastings River

ORDINARY COUNCIL 17/02/2021



17.3.3 CAMDEN HAVEN

An indicative forward plan for the Camden Haven is provided in [Table 13.3]. It provides a list of activities to be undertaken, and details responsibility for implementation, preliminary cost estimates, and indicative timeframes. It is estimated that Stage 2 would cost around \$140,000 and take around 12 months to implement. Assuming the two stages are undertaken concurrently, it is estimated Stages 3-4 would cost around \$100,000 and take around 15 months to complete.

Item	Activities	Estimated costs (excl. GST)	Approximate Duration
STAGE 2			
Community and stakeholder engagement	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$30,000-40,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below
 Further Study 1 - Water Quality Intensive sampling campaign to assess water quality in river/creek systems to assess recovery following a major storm event in the local estuary catchment. Catchment modelling to develop pollutant export models (e.g. with Source). Integration of the catchment models with a 3-dimensional hydrodynamic modelling (e.g. with Delft-3D) to simulate and predict the fate of pollutants for a number of scenarios (e.g. wet/dry/average year, different land use scenarios). Study to be undertaken with reference to data collected as part of the Estuary Processes Study (1999). 		\$150,000-250,000 Consultancy fee	6 months (depending on rainfall)
Further Study 2 – Assessment of Public Access and Recreation	 Assessment of recreational user groups and activities undertaken in the study area. Review of existing public access to the foreshore and waterway to understand existing level of access and identify supporting infrastructure. Consider present day and future needs (taking into account potential impacts of climate change). Review existing Plans of Management to see what is already proposed and where there may be a need for new access points or infrastructure. 	\$30,000 Consultancy fee	2 months
Further Study 3 – Assessment of estuarine flood/inundation hazard	 Being undertaken by Council under NSW Government Floodplain Management Program. 	-	-
Develop first draft CMP – Stage 2 for consultation with key stakeholders.	 Synthesise outcomes of Stage 1 and further studies to better define risks, issues and opportunities. Analyse and evaluate current and future risks (updated risk assessment). Prepare planning proposal - if required Prepare draft CMP – Stage 2. 	\$10,000 Consultancy fee	2 months
Develop draft CMP – Stage 2 for public exhibition.	Prepare and final exhibit draft CMP	\$10,000 Consultancy fee Plus internal Council resources for public exhibition	2 months
Finalise CMP – Stage 2.	 Prepare submissions report as discussed (and costed) above. Finalise CMP. 	\$5,000 Consultancy fee Plus internal Council resources	2 months
STAGES 3 AND 4			
Community and stakeholder engagement	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$45,000-60,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below

Develop and assess management options	 Review outcomes of Stages 1-2. Undertake community and stakeholder engagement to confirm the management objectives for the CMP and identify management options as discussed (and costed) above. Identify suite of management options to address identified risks. Establish a semi-quantitative options assessment framework in consultation with key stakeholders and undertake an analysis of the relative costs and benefits of the options. Investigate funding options and consider cost/resource sharing opportunities. 	\$10,000 Consultancy fee Plus internal Council resources to support options development and assessment	8 months
Develop first draft CMP for consultation with key stakeholders	 Prepare business plan for preferred options to be adopted as actions in the Plan - clarify roles, responsibilities and financial commitments. Seek comm Itment to the Plan from implementation partners. Prepare a monitoring and evaluation plan that will enable tracking of implementation of the CMP and achievement of the management objectives. Prepare draft CMP for initial consultation with key stakeholders. 	\$10,000 Consultancy fee Plus internal Council resources (e.g. to seek commitment from implementation partners)	2 months
Develop draft CMP for public exhibition	Prepare and final exhibit draft CMP	\$15,000 Consultancy fee Plus internal Council resources for public exhibition	2 months
Finalise CMP	 Prepare submissions report as discussed (and costed) above. Finalise CMP. Obtain certification of the CMP. 	\$12,500 Consultancy fee Plus internal Council resources for submissions collation and certification.	3-4 months
STAGE 5			
Implement CMP, monitor, evaluate and report	 Council to implement CMP for 5 to 10-year period through IP&R. Other organisations to implement CMP through work programs. 	Unknown	N/A – until update of the CMP is required, likely 5-10 years.

Table 13.3. Forward Plan for the Camden Haven

ORDINARY COUNCIL 17/02/2021





17.3.4 OPEN COASTLINE

An indicative forward plan for Open Coastline is provided in [Table 13.4]. It provides a list of activities to be undertaken, and details responsibility for implementation, preliminary cost estimates, and indicative timeframes. It is estimated that Stage 2 would cost around \$200,000 and take around 15 months to implement. Assuming the two stages are undertaken concurrently, it is estimated Stages 3-4 would cost around \$100,000 and take around 15 months to complete.

Item	Activities	Estimated costs (excl. GST)	Approximate Duration
STAGE 2			
Community and stakeholder engagement	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$30,000-40,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below
		\$150,000-250,000 Consultancy fee	6 months (depending on rainfall)
Further Study 2 – Assessment of Public Access and Recreation	 Assessment of recreational user groups and activities undertaken in the study area. Review of existing public access to the foreshore and waterway to understand existing level of access and identify supporting infrastructure. Consider present day and future needs (taking into account potential impacts of climate change). Review existing Plans of Management to see what is already proposed and where there may be a need for new access points or infrastructure. 	\$30,000 Consultancy fee	2 months
Further Study 3 – Assessment of estuarine flood/inundation hazard	 Being undertaken by Council under NSW Government Floodplain Management Program. 	-	-
Develop first draft CMP – Stage 2 for consultation with key stakeholders.	 Synthesise outcomes of Stage 1 and further studies to better define risks, issues and opportunities. Analyse and evaluate current and future risks (updated risk assessment). Prepare planning proposal - if required Prepare draft CMP – Stage 2. 	\$10,000 Consultancy fee	2 months
Develop draft CMP – Stage 2 for public exhibition.	Prepare and final exhibit draft CMP	\$10,000 Consultancy fee Plus internal Council resources for public exhibition	2 months
Finalise CMP – Stage 2.	 Prepare submissions report as discussed (and costed) above. Finalise CMP. 	\$5,000 Consultancy fee Plus internal Council resources	2 months
STAGES 3 AND 4		·	
Community and stakeholder engagement	 Refer to Communication, Education and Engagement Plan in [section 17.4] 	\$45,000-60,000 Consultancy fee Plus internal Council resources (e.g. Council to support all activities, but to also implement public exhibition)	Included in tasks below

Develop and assess management options	 Review outcomes of Stages 1-2. Undertake community and stakeholder engagement to confirm the management objectives for the CMP and identify management options as discussed (and costed) above. Identify suite of management options to address identified risks. Establish a semi-quantitative options assessment framework in consultation with key stakeholders and undertake an analysis of the relative costs and benefits of the options. Investigate funding options and consider cost/resource sharing opportunities. 	\$10,000 Consultancy fee Plus internal Council resources to support options development and assessment	8 months
Develop first draft CMP for consultation with key stakeholders	 Prepare business plan for preferred options to be adopted as actions in the Plan - clarify roles, responsibilities and financial commitments. Seek comm Itment to the Plan from implementation partners. Prepare a monitoring and evaluation plan that will enable tracking of implementation of the CMP and achievement of the management objectives. Prepare draft CMP for initial consultation with key stakeholders. 	\$10,000 Consultancy fee Plus internal Council resources (e.g. to seek commitment from implementation partners)	2 months
Develop draft CMP for public exhibition	Prepare and final exhibit draft CMP	\$15,000 Consultancy fee Plus internal Council resources for public exhibition	2 months
Finalise CMP	 Prepare submissions report as discussed (and costed) above. Finalise CMP. Obtain certification of the CMP. 	\$12,500 Consultancy fee Plus internal Council resources for submissions collation and certification.	3-4 months
STAGE 5			
Implement CMP, monitor, evaluate and report	 Council to implement CMP for 5 to 10-year period through IP&R. Other organisations to implement CMP through work programs. 	Unknown	N/A – until update of the CMP is required, likely 5-10 years.

Table 13.4. Forward Plan for Open Coastline

ORDINARY COUNCIL 17/02/2021



FUNDING FOR THE CMP

It is Council's responsibility to lead the development of the four CMPs. The estimated costs of preparing the CMPs are estimated above. This cost may change if some stages of the CMP are combined, or if some further studies identified for different locations are combined into one larger study that would inform multiple CMPs (e.g. the recreational user needs studies). However, regardless of the approach adopted opportunities for receiving partial funding under the NSW Government Coastal Management Program are available.

The significant funding boost to both coastal management and marine estate management by the NSW Government (and the supporting State agencies who administer these programs) is expected to ease this financial and resource burden. Section 23 of the CM Act states, "Other public authorities to have regard to coastal management programs and coastal management manual". This also serves to improve collaboration between and ownership by local and state agencies for coastal management.

The NSW Government is committed to managing the coastal environment and marine estate of NSW. CMPs provide the framework for local councils to implement the government agenda and as such can apply for funding support. Council will be eligible to apply for 'dollar for dollar' funding to prepare each of the CMPs. Therefore, Council should budget for 50% of the CMP estimates provided in the forward plans to progress with CMP Stages 2 to 4 for each location. In addition, it may be prudent to allocate a contingency budget (say 20%).

CMP STRUCTURE AND PROJECT GOVERNANCE

The NSW Coastal Management Framework provides flexibility around the scope, structure and governance arrangements of a CMP.

A CMP provides a unique opportunity for Council, state government agencies and their

communities to achieve a strategic and coordinated approach to manage coastal risks and improve coastal habitats and environments, for both environmental and social (community) benefit within the PMH LGA.

PMHC will manage the CMP development, implementation and reporting processes. This includes the preparation, development and review of, and the contents of, the plans, strategies, programs and reports to which Part 2 of Chapter 13 of the Local Government Act 1993 applies, and the preparation of planning proposals (if required) and development control plans under the Environmental Planning and Assessment Act 1979.

Potential governance and management arrangement for the CMP are outlined in [Table 14].

Entity	Responsibility
Port Macquarie-Hastings Council	Lead agency, coordination and implementation.
State Agencies: Department of Planning Industry and Environment Department of Industry - Crown Lands and Water Department of Primary Industries - Fisheries National Parks and Wildlife Services NSW Environment Protection Authority Roads and Maritime Services Transport for NSW	Sign off on CMP, collaboration, action(s) and implementation (as defined).
Coast, Estuary & Floodplain Advisory Sub-Committee - Port Macquarie-Hastings Council - State Agencies - Industry Representatives - Community Representatives	Council adopted Sub-Committee, to assist Council in undertaking management and planning. To assist reviewing studies, plans and policies and to provide and receive feedback from the community.

106

PORT MACQUARIE-HASTINGS COUNCIL

17.4 PRELIMINARY BUSINESS CASE

OVERVIEW

A preliminary business case is provided herein to outline the benefits of and recommendation for, progressing with a CMP for the four main areas in the LGA: The Hastings River, Lake Cathie/Bonny Hills (including adjoining open coastline), Camden Haven River as well as the coastline from Point Plomer to Diamond Head (excluding coastline around Lake Cathie township).

Reforms to the NSW coastal management legislative and regulatory framework present a unique opportunity to build on the existing coastal management work considering lessons learnt, and improved engagement and collaboration with relevant stakeholders and agencies, preparing a holistic, inclusive CMP

This business case demonstrates the benefit of preparing a CMP to the economic, social and ecological values of the Port Macquarie-Hastings region. The business case aims to demonstrate the need to take a long-term, risk based approach to coastal management, which can be facilitated through the preparation of a CMP. There is a wealth of existing information and suitable management actions in former EMP's and CZMP's, and the CMP will provide an opportunity to build on these past studies and planning.

Considerations and context for collaboration and cost sharing arrangements are also provided. A preliminary business case is a requirement of the Stage 1 CMP Scoping Study.

Under the Coastal Management Act, Council may prepare a Coastal Management Program that covers its entire coastal zone. The current timeframe for transitioning older style plans to CMPs is the 31st December 2021. Additionally, the grants funding package which accompanied the coastal management reforms in NSW will only extend to the 2020-21 financial year. State government funding under the Coast & Estuary Grants program is not confirmed nor guaranteed after this time.

ECONOMIC, ENVIRONMENTAL AND SOCIAL BASIS

The Port Macquarie-Hastings area is a wonderfully biodiverse region and its natural environment is highly valued by the community. The biological and natural assets contribute to the cultural, lifestyle, aesthetic and recreational identity of the area.

The natural environment is also locally enriched by a long history and ongoing connection of Aboriginal people with the coast, post-European settlement heritage and a wide range of passive and recreational activities.

The waterways and coastline in the study area are highly utilised by the public for swimming, fishing, surfing and a variety of other recreational activities. The area also supports valuable aquaculture and commercial fishing industries.

As such the coastline supports many significant and important environmental, economic, sociocultural values and community benefits. These values and benefits are threatened by increasing pressures including coastal hazards, climate change, sea level rise, population and tourism growth and coastal development.

A CMP will provide a comprehensive strategic vision and action plan that is locally contextualised and enabled through a government supported process, for managing the priority issues affecting the study area.

ORDINARY COUNCIL 17/02/2021





PROGRAM RISKS AND RESPONSIBILITIES

Some key risks and challenges associated with the development of a CMP are:

Resourcing

 Ongoing allocation of resources. The preparation of a CMP could potentially result in conflict within Council and with other contributing stakeholders, in terms of competing needs for scarce resources (including but not limited to funding and staff).

Responsibility

· Co-ordination, ongoing involvement and meaningful commitment of multiple agencies during both the development and implementation of the CMP.

Funding

- · Grant funding is only available for existing CZMP's, developing a CMP or for action items contained within CMP's. For existing CZMP's only 1:1 funding is available, For development of CMPs' only 1:1 funding is available. For adopted items on CMP's 2:1 funding is available.
- · Council has limited funding, therefore its ability to development and implement actions for management of the coastline and estuaries is limited.
- · Coastal & Estuary grant funding applications are not always successful.
- Coastal and Estuary grant program funding is not guaranteed after 20-21 FY.
- For projects with significant costs they need to be accompanied by a CBA (it should be noted that the role CBAs play and how they are used is currently under review by the NSW Government).

Expectations

- Expectations of key stakeholders (agencies, authorities and community) not aligning with priorities. Preparation of the CMP is likely to create (or exacerbate) community expectations for the implementation of actions for coastal management. An inherent risk exists if the CMP process fails to deliver the actions, or if these actions fail to achieve the vision and objectives of the CMP.
- Negative community opinion of "yet another plan".
- · Outcomes of coastal hazard assessment not being palatable to some members of the community (insurance and a perceived decline in property values).
- Expectation that the NSW Government will not change the program again and result the CMP process being redundant.

EXISTING MANAGEMENT ARRANGEMENTS

The estuaries have been the subject of previous management investigations and as such, each had an EMP prepared under the former NSW planning frameworks. The existing plans vary in age and in the extent to which management actions have been implemented. Similarly, certain areas of the coastline (Town Beach, Lake Cathie) were the subject of previous investigations with Lake Cathie still having an active CZMP. However this plan will lapse in December 2021 unless the actions from this plan are incorporated in a new CMP.

COMMUNICATION, EDUCATION AND ENGAGEMENT PLAN

Overview

The Coastal Management Program will seek to inform, educate and engage with the community around all aspects of the CMP for each coastal chapter within the LGA following the IAP2 framework [See Figure 57].

These chapters include:

- Lake Cathie and Bonny Hills
- Hastings River Estuary
- · Camden Haven Estuary
- · Open coastline from Point Plomer to Diamond Head

The Communications, Education and Engagement processes will follow the below five stages of the CMP:

- Stage 1: Identify the scope of the CMP
- Stage 2: Determine risks, vulnerabilities and opportunities
- Stage 3: Identify and evaluate options
- Stage 4: Prepare, exhibit, finalise, certify and adopt the CMP
- Stage 5: Implement, monitor, evaluate and report

The strategy and tactical actions at each stage will be tailored to each audience segmentation within the geographic location outlined in the above four chapters.

Framework for CMP Communication, Education and Engagement

Purpose

The Communications, Education and Engagement Plan is to ensure our community is well informed, educated and provided the opportunity to be involved and engaged with throughout the CMP process.

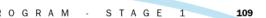
Goal

The aim of the Plan is to provide a framework for the best ways to inform, educate and engage with our community to ensure outcomes are customer focused and customer driven.

Objectives

- 1. Continue to build trust with the community measure by participation in the CMP process.
- 2. Ensure there are effective and productive engagement and education opportunities with the community
- 3. Provide clear and consistent communications and messaging to the community on a regular and as required basis

ORDINARY COUNCIL 17/02/2021





Stage 1 - Identify the scope of the CMP

Inform

To inform the community that Council is identifying the scope of the CMP, why Council is doing it, what this means, and what is involved. The community will be informed using a multi-channel approach, delivering tailored content to each segmented audience.

Consult

To inform and consult with the community in identifying the scope of the CMP and facilitating community awareness and involvement in the process.

Stage 2 - Determine risks, vulnerabilities and opportunities

Inform

To inform the community that Council has determined the scope of study and is now determining the risks. vulnerabilities, and opportunities. The community will be informed using a multi-channel approach, delivering tailored content to each segmented audience.

Educate

Our purpose will be to educate the community around the threats and issues we identify specific to each local chapter. Content will include:

a) How threats and vulnerabilities are identified

b) How each is ranked based on risk

c) How each is actioned and in what order of priority they will be actioned.

Stage 3 – Identify and Evaluate Options

Inform

To inform the community that Council is identifying and evaluating options to mitigate the risks and vulnerabilities that were further explored in stage 2 and to provide clarity to the community the proposed future plans management actions. The community will be informed using a multi-channel approach, delivering tailored content to each segmented audience.

Educate

Our purpose will be to educate the community around the solutions we have identified and why certain solutions / options have been chosen and prioritized.

Involve

We aim to consult and involve the community in encouraging their feedback on the proposed solutions and participation in identifying other appropriate options.

Stage 4 – Prepare, exhibit, finalise, certify and adopt the CMP

Inform

To inform the community of the process of finalizing and seeking certification of each chapter of the CMP. The community will be informed using a multi-channel approach, delivering tailored content to each segmented audience.

Consult

We consult with the community around the preferred solutions and priorities for implementing the actions of the CMP and seek feedback before certification of the CMP is sought.

Stage 5 – Implement, monitor, evaluate and report

Inform

To inform the community of the progress of the CMP and continue to update achievements, milestones, outcomes, and roadblocks accordingly. The community will be informed using a multi-channel approach, delivering tailored content to each segmented audience.

Educate

Our purpose will be to educate the community in regards to the preferred management actions, why they are being implemented and any changes or adjustments to actions based on feedback and data. The educational messages will be informed by the data that is gathered through monitoring and evaluating the management actions.

Consult

Our purpose is to inform the community about this stage of the process and to encourage open dialogue regarding community perspective on chosen solutions. Community feedback will be integrated into ongoing project delivery.

Delivery Mechanisms

Educational Methodology and Tools

Each stage of the education project will commence with collating existing assets then designing additional assets that are require for the desired outcomes of the project. This may include - but is not limited to:

Digital	Face to face
 Video interviews & vision from the area 	 Group presentations and ups
360° Video	Interactive
 Images / image slideshows 	Virtualised
Audio interviews	One-on-one discussion
 Ambient audio recordings 	
 Fact sheets 	
 External links (e.g water testing results) 	
PDF reports	
 Narrated presentations (e.g PowerPoint) 	



Printed Collateral d pop- Booklets and info / facts sheets · Signage supported by digital assets





Community Engagement Methodology and Tools

The following list is examples of participation activities which may be undertaken by the engagement team as part of the CMP process relative to the chapter areas. This is not an exhaustive list.

Inform

- Webpage updates
- Letter box drop
- Factsheets
- Frequently Asked Questions
- Onsite visual information displays with dynamic QR codes
- Community Engagement E-newsletter
- Emails to databases
- Public notices

112

EngagePMH Facebook Group

Consult

- Public Exhibition (28 days)
- · 'Have Your Say' survey, interactive maps, ideas board
- On-site pop-up sessions
- · Focus groups (face to face or online)
- Suggestion boxes
- Facebook survey

Involve

- · Workshop sessions (face to face or online)
- Public meeting
- Live Q&A session
- User/Stakeholder Meetings (face to face or online)
- Community forum

Collaborate

SPECTRUM		PARTICIPATION GOAL	LEVEL 1 High Impac PARTICIPATION ACTIVITY* on whole region	LEVEL 2 High Impact of local nature	LEVEL 3 Low Impact on whole region	LEVEL 4 Low Impact of local nature		
To provide the public with balanced and objective	Σ	Σ	Σ	To provide the public with balanced and objective	WEBSITE NOTIFICATION			
	INFORM	information to assist them in understanding the problem, alternatives, opportunities and/or	COMMUNITY NOW NOTICES					
	Ľ	solutions.	SOCIAL MEDIA NOTIFICATION					
			MEDIA RELEASE AND/OR ALERT					
			COMMUNITY DISPLAYS / NOTICES					
			FACTSHEET'S / FAQ'S					
			HOTLINE / PHONE-IN					
			LETTER BOX DROP					
			ON-SITE VISUAL INFORMATION DISPLAY					
			RATES NOTICES INCLUSION					
	н	ь.	To obtain public feedback on analysis,	PUBLIC EXHIBITION				
	SUI	alternatives and/or decisions. ENGAGEMENT POP-UP^ FOCUS GROUPS ^	ENGAGEMENT POP-UP^					
12	CONSUL:		FOCUS GROUPS ^					
		PERSONAL PHONE CONTACT						
		TELEPHONE SURVEY						
		SUGGESTION BOX						
	ш	To work directly with the public throughout the	USER/STAKEHOLDER GROUP MEETINGS^					
	process to ensure that public concerns and	PUBLIC MEETING ^						
120	N	aspirations are consistently understooid and considered.	MEETING WITH EXISITING GROUPA					
			WORKSHOP SESSIONS^					
			COMMUNITY FORUM / DEBATE^					
	ju	To partner with the public in each aspect	ONGOING ADVISORY GROUPS^					
	of the decision including the development	JOINT VENTURE						
311	BO	of alternatives and the identification of the preferred sol	TASKFORCE OR WORKING PARTY					
382	LLA		MANAGEMENT COMMITTEES					
	3		CO-DESIGN/ENQUIRY BE DESIGN					

PORT MACQUARIE-HASTINGS COUNCIL

ORDINARY COUNCIL 17/02/2021

 Ongoing advisory group Taskforce or working party Management Committees Co-Design/ Enquiry by Design Joint venture

Figure 57. IAP² Spectrum of Public Participation Framework



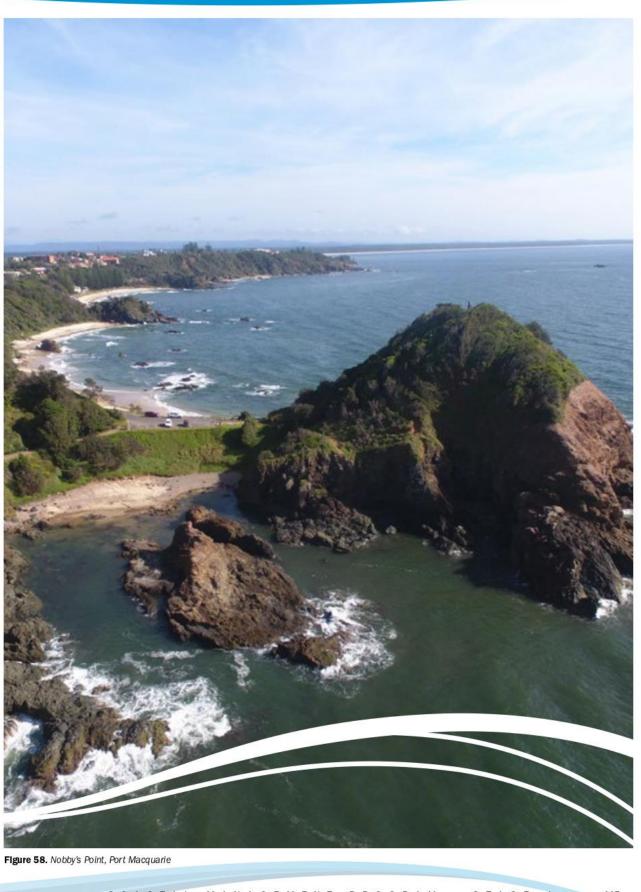
STAKEHOLDER MANAGEMENT

There are a broad spectrum of stakeholders involved in the CMP process given the complex and diverse nature of coastal management. These stakeholders range from State Government agencies to community groups. *[Table 15 below]* identifies known stakeholders. It is intended that the number of stakeholders will increase as well as the detail around their interests as the CMP process progresses. The exact timeframe of stakeholder has not yet been determined however it is likely to comprise of information sessions, surveys and meetings.

Consultation will be undertaken with both internal Council staff and key external stakeholders including the general community, and the Coast, Estuary & Floodplain Advisory Sub-Committee.

Stakeholders	Internal/ External	Role description (including role, responsibilities and authorities)	Engagement (participation level)	Engagement actions required	Engagement actions timeframe
Coast Estuary and Floodplain Advisory (CE&F) Sub-Committee	Internal and External	Review of the Scoping Study Members consisting of Councillors, Waterways User Reps, Community Reps, Development Industry Rep, Oyster Industry Rep, Council staff, Lands Department, DPI – fisheries, NPWS, OEH, TfNSW – Maritime division, SES.	Inform and Consult	Committee meeting – presentation of final draft Scoping Study	Upon receiving the final draft from DPIE.
Department of Planning, Industry & Environment (DPIE)	External	DPIE provides guidance , technical and policy advice and Coastal Management Program grant funding	Consult	Review of draft Scoping Study.	
Council staff	Internal	Natural Resources, Development and Strategic Planners, Recreation & Buildings, Community Place	Inform, consult & collaborate	Review of draft Scoping Study	Throughout development of CMP Community Place team to assist with community and industry engagement
Other Councils (KSC and MCC)	External	Consult if affected land falls in other LGAs. Shared Estuaries or Coastal Sediment Compartments	Inform, consult and collaborate	Meetings, emails, phone calls	Throughout development of CMP
Council and Counciliors	Internal	Approval required for adoption	Inform	Council meeting Councillor briefing	Council meeting for approval of CMP stages & reports. Briefing for further stages of CMP.
Community	External	Consultation and Engagement	Inform, consult and involve	Information sessions, mail outs, surveys	Throughout the entire process
Industry	External	Consultation and Engagement	Inform, consult and involve	Information sessions, mail outs, surveys	Throughout the entire process
NSW Coastal Council	External	Potential advice	Consult	Review of draft CMP	If required throughout process

Table 15. Program stakeholders and responsibilities



ORDINARY COUNCIL 17/02/2021

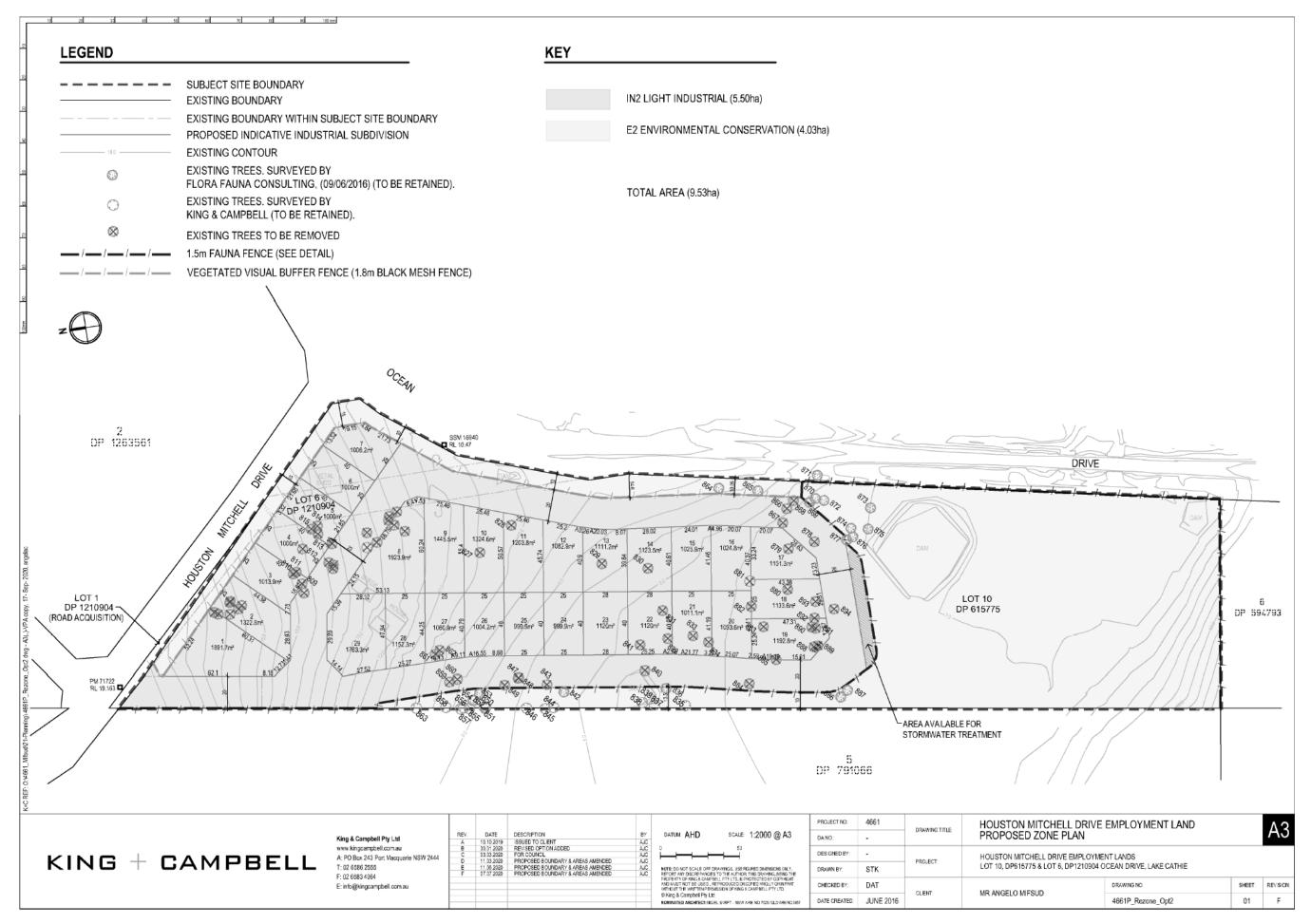
ORDINARY COUNCIL 17/02/2021

omhc.nsw.gov.au

REFERENCES

- .id. (2017, November). Port Macquarie-Hastings Council area. Retrieved from .id the population experts: <u>forecast.id.com.au/port-macquarie-hastings</u>
- ABS. (2016). Census of Population and Housing. Australian Bureau of Statistics.
- AGO. (2006). Climate Change Impacts and Risk management: A guide for business and government. Broadleef Internation a& MArsden Jacobs Associates for the Australian Greenhouse Office, Canberra.
- BMT WBM. (2014). Port Macquarie-Hastings Council Sea Level Rise Mapping Project.
 BMT WBM Pty Ltd.
- **BOM. (2019).** Retrieved July 3, 2019, from Australian Government Bureau of Meterology: <u>bom.gov.au/jsp/ncc/climate_averages/rainfall/index.jsp?period=an&area=ns</u>
- BOM, Manly Hydraulics Laboratory and OEH. (2016). NSW East Coast Low Event 3 to 7 June 2016 Wether, Wave and Water Level Matters. Retrieved November 2019, from <u>new.</u> <u>mhl.nsw.gov.au/data/realtime/wave/docs/2016NSWCoastalConferenceLouisCourieletal</u> <u>Final.pdf</u>
- Darren Ryder, S. M. (2017). Hastings Camden Haven Ecohealth Project 2015: Assessment of River and Estuarine Condition. Final Technical Report, University of New England, Aquatic Ecoloy and Restoration Reseach Group, Armidale.
- Geoscience Australia. (2016). Australian Coastal Sediment Compartments.
- Maddocks. (2015, March 13). Important changes to management of coastal hazards in New South Wales. Retrieved from Maddocks: <u>maddocks.com.au/important-changesmanagement-coastal-hazards-new-south-wales/</u>
- MEMA. (2017). NSW Marine Estate TARA.
- Nearmap. (n.d.). Nearmap. Retrieved from <u>nearmap.com.au</u>
- Northern Rivers Catchment Management Authority. (2010). Northern Rivers Biodiversity Management Plan. Department of Environment, Climate Change & Water.
- **NSW DPI. (2016).** NSW Oyster Industry Sustainable Aquaculture Strategy Third Edition 2016. Published by the NSW Department of Primary Industries.
- **OEH. (2017).** Coastal Erosion in New South Wales Statewise Exposure Assessment. Sydney: Office of Environment and Heritage.
- OEH. (2018). NSW Coastal Management Manual Part A. Office and Environment and Heritage.
- AdaptNSW. (n.d.) Retrieved May 12, 2020, from NSW Department of Planning, Industry
 and Environment
- OEH. (2018). NSW Coastal Management Manual Part B: Stage 1.
 - PMHC Urban Growth Management Strategy (2016). Port Macquarie-Hastings Council.
- Port Macquarie-Hastings Council. (2010). Coastal Zone Management Plan for the Town Beach Coastline. PMHC.
- **Port Macquarie-Hastings Council and SMEC. (2016).** Lake Cathie CZMP. Port Macquarie-Hastings Council.
- Port Maquarie-Hastings Council. (2017). Biodiversity Strategy 2017-2030.
- **REMPLAN. (n.d.).** Tourism estimates based on ABS 2016/207 Tourism Satelite Account. Retrieved from <u>economyprofile.com.au/portmacquariehastings/industries#bar-chart</u>
- SMEC. (2005). Town Beach Hazard Definition Study. SMEC.
- SMEC. (2008). Lake Cathie Coastal Hazard Study. North Sydney: SMEC Australia.
- Thom, B. (N.D.). COASTAL COMPARTMENTS PROJECT. Retrieved from Department of the Environment and Energy: <u>environment.gov.au/system/files/resources/4f288459-423f-43bb-8c20-87f91adc3e8e/files/coastal-compartments-project.pdf</u>
- Umwelt (Australia) Pty Ltd. (2001). Hastings Estuary Management Plan. Port Macquarie-Hastings Council.
- Webb, Mckeown & Associates. (1994). Lake Cathie/Lake Innes Estuary Management Plan.
- Webb, Mckeown & Associates. (1995). Lake Cathie/Lake Innes Entrance Opening Strategy Environmental Review.
- **OEH. (2014). North Coast Climate Change Snapshot.** Sydney: Office of Environment and Heritage.
- West RJ. (2006) Effect of climate and human induced changes on seagrasses in Lake Illawarra. Wetlands Australia 21:2 127-141





ORDINARY COUNCIL 17/02/2021

(FUTURE) PUBLIC EXHIBITION DATES

TBA 2021

Revised Planning Proposal under section 3.33 of the **EP&A** Act

Port Macquarie-Hastings LEP 2011 (Amendment No 54)



Ccl ref:PP2014-14.1 Version 2.1DP&E ref:PP_2018_PORTM_001_00Date:1 February 2021



Version: V2.1

Planning Proposal status (for this copy)

Stage	Version Date (blank until achieved)
Draft	1 April 2019
Reported to Council (section 3.33)	17 April 2019
Referred to Dept of Planning & Environment (sec 3.34 (1))	17 June 2019
Gateway Panel determination (sec 3.34 (2))	19 July 2019
Revisions required: Yes / No.	5 November 2019
Public/Agency Exhibition (Sch 1 cl 4)	20 Nov - 18 Dec 2019
Alteration of Gateway Determination - (sec. 3.34(7)) - Time frame for completion revised to 9 January 2021	4 March 2020
Alteration of Gateway Determination - (sec 3.34(7)) - Time frame for completion revised to 30 June 2021	27 November 2020
Revised Draft Planning Proposal	1 February 2021
Reported to Council (S3.33) - 2 nd Report	17 February 2021
Public Exhibition - Proposed exhibition to start on Wed so 24 Feb - 24	
March 2021.	
For Council review (sec 3.35 (1))	
Adopted by Council for submission to Minister's delegate (sec 3.36 (2))	

Council reference:	PP2014-14.1
	Port Macquarie-Hastings LEP 2011 (Amendment No 54)
Department of Planning &	PP_2018_PORTM_001_00
Environment reference:	

Council Address	Contact Officer
Port Macquarie-Hastings Council	Vanessa Penfold
PO Box 84	Land Use Planner
PORT MACQUARIE NSW 2444	Email: vanessa.penfold@pmhc.nsw.gov.au Phone: (02) 6581 8111

Adoption of the Planning Proposal

1. For initial Gateway determination

The undersigned Council delegate endorsed this Planning Proposal on [XX] [XXX] 2021:

Signed _____

Name Dan Croft

Position Group Manager Development Assessment

2. For section 3.36 finalisation

3

Revised Planning Proposal under sec 3.33 of the EP&A Act Houston Mitchell Drive Employment Lands	
Table of Contents	
Background	5
Planning Proposal	9
Part 1 - Objectives or Intended Outcomes	9
Part 2 - Explanation of Provisions	9
Part 3 - Justification	11
A - Need for the planning proposal	
B - Relationship to strategic planning framework.	
C - Environmental, social and economic impact	
D - State and Commonwealth interests.	
Part 4 – Mapping	
Part 5 – Community Consultation	
Part 6 - Project Timeline	38
Appendix A – Gateway Determination	
Appendix B – Draft Site Specific Development Control Plan provisions	40
Appendix C – Draft DCP Update - Part B3 Hazards Management, 18 Bushfir	e Hazard
Management	41
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation	Principles
-	Principles 42
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation	Principles 42 43
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions	Principles 42 43 44
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions Attachment 1 - Concept Plan	Principles 42 43 44 45
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010	Principles 42 43 43 44 45 46
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010 Attachment 3 - Flood Impact Assessment 2019	Principles 42 43 44 44 45 46 46 47
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010 Attachment 3 - Flood Impact Assessment 2019 Attachment 4 - Ecological Assessment	Principles 42 43 44 44 45 45 46 47 48
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions. Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010 Attachment 3 - Flood Impact Assessment 2019 Attachment 4 - Ecological Assessment Attachment 5 - Addendum to the Ecological Report	Principles 42 43 44 44 45 46 46 47 48 49
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions. Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010 Attachment 3 - Flood Impact Assessment 2019 Attachment 4 - Ecological Assessment Attachment 5 - Addendum to the Ecological Report Attachment 6 - Ecological Assessment as per BAM methodology.	Principles 42 43 44 45 46 46 47 48 49 50
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions. Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010 Attachment 3 - Flood Impact Assessment 2019 Attachment 4 - Ecological Assessment Attachment 5 - Addendum to the Ecological Report Attachment 6 - Ecological Assessment as per BAM methodology. Attachment 7 - Email relating to ecological assessment	Principles 42 43 44 45 46 46 47 48 49 50 51
Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Appendix E - State Agency Submissions. Attachment 1 - Concept Plan Attachment 2 - Flood Impact Assessment 2010 Attachment 3 - Flood Impact Assessment 2019 Attachment 4 - Ecological Assessment Attachment 5 - Addendum to the Ecological Report Attachment 6 - Ecological Assessment as per BAM methodology. Attachment 7 - Email relating to ecological assessment Attachment 8 - Bushfire Hazard Assessment	Principles 42 43 44 45 46 46 47 48 49 50 51 52

Background

This Planning Proposal has been prepared under section 3.33 of the *Environmental Planning and Assessment Act* 1979 and the Department of Planning and Environment's *A Guide to Preparing Planning Proposals.*

The Planning Proposal explains the intended effects of a proposed amendment to the Port Macquarie-Hastings Local Environmental Plan 2011 (LEP) to rezone rural land in Bonny Hills for light industrial and environmental purposes.

The site is identified in the Port Macquarie-Hastings Urban Growth Management Strategy (UGMS) 2017 – 2036 for investigation in the immediate/short-term for service industrial development.

The site (refer to **Figure 1**) includes private land comprising Lot 10 DP 615775 (8.96ha) and Lot 6 DP 1210904 (0.62ha, being part of former Lot 1 DP 1117908), corner Ocean Drive and Houston Mitchell Drive, Bonny Hills. The Proposal also includes rezoning of the adjoining public road reserves. Refer to **Figures 2 - 5** site images.

The site adjoins environmental living zoned land to the north (separated by Houston Mitchell Drive) and residential zoned land to the east (separated by Ocean Drive). The adjoining lands to the east are currently undergoing development as part of the Lake Cathie/Bonny Hills Urban Release Area and include the Lake Cathie Primary School, PMHC district sports fields and residential subdivision. Queens Lake State Conservation Area (SCA) adjoins the site to the west. The rural zoned lands adjoining the site to the south are identified in the UGMS for further investigation for light industry or school uses.

Public exhibition of the Planning Proposal, which included State agency consultation with NSW Roads and Maritime Services (RMS), NSW Rural Fire Service (RFS) and Office of Environment and Heritage (OEH), took place from 20 November to 18 December 2019. A total of 28 submissions were received to the exhibition. A meeting was held with the proponent, Council staff and Office of Environment and Heritage - Biodiversity Conservation Division on 24 January 2020 to discuss biodiversity matters raised by their submission.

Since the time of the public exhibition, the Proponent undertook further work including a revised concept plan and traffic impact assessment in response to the submissions. The work was submitted on 28 September 2020 and reviewed by Council staff.

The Planning Proposal has been identified as part of the NSW Public Spaces Legacy *Program* and scheduled for completion by 30 June 2021. A number of amendments have been made to the Planning Proposal to respond to submissions from the community and State agencies, and therefore a revised Planning Proposal (together with associated Development Control Plan provisions) is being re-exhibited for 28 days.

PP2014-14.1 Version 2.1 February 2021

5

The Subject Site

The site is currently zoned RU1 Primary Production under the LEP 2011 and has a minimum subdivision lot size requirement of 40ha.

Site features include:

- Four dams
- One dwelling house
- Sheds
- · A patch of core Koala habitat in the northern part of the site
- Four hollow bearing trees.

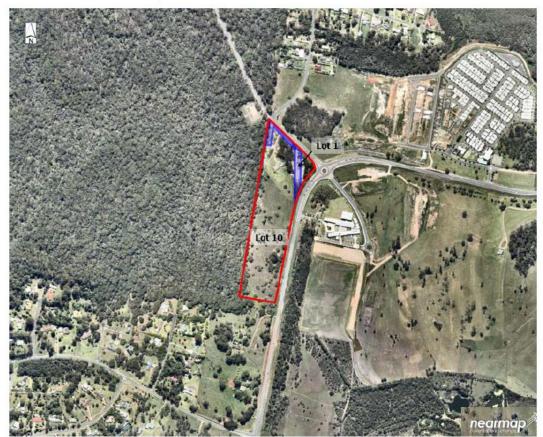


Figure. 1 Subject site and locality context

ATTACHMENT

Revised Planning Proposal under sec 3.33 of the EP&A Act Houston Mitchell Drive Employment Lands



Figures 2 - 5: Site Photos

The Proposal involves an amendment to the Port Macquarie-Hastings LEP 2011 to enable future development for approximately 29 light industrial lots, including a residue that is proposed as environmental lands.

The Proponent, King & Campbell, has submitted a revised subdivision concept plan (at **Attachment 1**) to demonstrate a possible future subdivision layout.

Specialist studies in support of the Proposal include ecological, bushfire, traffic, flooding, and heritage. These studies, which are based on an earlier concept, indicate that the Proposal can be accommodated on the subject site.

There is currently an area in the north of the site which is considered to be core Koala habitat, there are four large hollow bearing trees on the property and the site is potentially subject to flooding in storm surge events. These matters are key considerations of this Planning Proposal.

Summary of Changes to Planning Proposal

There have been a number of changes made to the Planning Proposal since the public exhibition and agency consultation took place from 20 November to 18 December 2019.

The changes reflect the feedback received from the community, state agencies and Council staff and further supporting information provided by the proponent.

9/02/2021

Changes include:

Figure 7 -<u>Land Zoning Map</u> - the proposed map has been replaced with a revised zone layout. The IN2 Industrial zone has been increased in area at the north- eastern part of the site and reduced at the southern end compared with the previous map. A strip of E2 Environmental Conservation land extends along part of the western boundary. The E3 zone that was proposed along Ocean Drive boundary has been replaced by an E2 zoning. The E3 zone is no longer used.

- Figure 8 Lot Size Map the proposed map has been replaced with a revised map to reflect change to the zone layout.
- Figure 9 -<u>Height of Buildings Map</u> the proposed map has been replaced with a revised map to reflect the zone layout and the maximum height of buildings for the IN2 zone has been changed from 11.5m to 10m.

This Planning Proposal is accompanied by draft site specific development control (DCP) provisions for future development of the land (refer to **Appendix B**) and an update to Section B3 - 18 Bushfire Hazard management of the general provisions of PMH DCP 2013 (at **Appendix C**). The draft provisions will go on public exhibition for community consultation in conjunction with the revised Planning Proposal.

8

Part 1 - Objectives or Intended Outcomes

Planning Proposal

Part 1 - Objectives or Intended Outcomes

This Planning Proposal seeks to amend the *Port Macquarie Hastings Local Environmental Plan 2011* to rezone the subject land to enable development for light industrial purposes, to conserve areas of environmental significance and to maintain a landscaped buffer to prevent the visual prominence of future development from the road.

Part 2 - Explanation of Provisions

The Planning Proposal seeks to amend the LEP by:

- Amending the Land Zoning map, as described in this Planning Proposal, from RU1 Primary Production to:
 - o Part IN2 Light Industrial
 - Part E2 Environmental Conservation
- Amending the Lot Size map to permit a minimum lot size of:
 - o 1000 m2 on the part of the site proposed to be IN2 Light Industrial
- Amending the Height of Building map to introduce a maximum building height of:
 - o 10m for the proposed IN2 Light Industrial land

Note 1: The existing 40ha minimum lot size applying to the size is proposed to remain on the section of the land identified as future E2 Environmental Management.

Note 2 : The amendments incorporate the rezoning and associated map updates to the road sections of Houston Mitchell and Ocean Drive that abut the boundaries of the subject site to the north and east.

Extracts from PMHC LEP 2011 Land Use Table

Zone IN2 Light Industrial

- 1 Objectives of zone
- To provide a wide range of light industrial, warehouse and related land uses.
- To encourage employment opportunities and to support the viability of centres.
- To minimise any adverse effect of industry on other land uses.
- To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.
- To support and protect industrial land for industrial uses
- 2 Permitted without consent

Nil

3 Permitted with consent

Depots; Garden centres; Hardware and building supplies; Industrial training facilities; Landscaping material supplies; Light industries; Medical centres; Neighbourhood shops; Oyster aquaculture; Places of public worship; Plant nurseries; Pubs; Roads; Rural supplies; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4

PP2014-14.1 Version 2.1 February 2021

9

Part 2 - Explanation of Provisions

4 Prohibited

Advertising structures; Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Camping grounds; Caravan parks; Cemeteries; Centre-based child care facilities; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Farm buildings; Forestry; Freight transport facilities; Function centres; Hazardous storage establishments; Health services facilities; Helipads; Highway service centres; Home-based child care; Home businesses; Home occupations; Home occupations (sex services); Industries; Information and education facilities; Marinas; Mooring pens; Offensive storage establishments; Passenger transport facilities; Places of public worship; Pond-based aquaculture Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Respite day care centres; Rural industries; Schools; Sewerage systems; Tourist and visitor accommodation; Waste disposal facilities; Water recreation structures; Water storage facilities; Wharf or boating facilities

Zone E2 Environmental Conservation

- 1 Objectives of zone
- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.
- To protect coastal wetlands and littoral rainforests.
- To protect land affected by coastal processes and environmentally sensitive land.
- To prevent development that adversely affects, or would be adversely affected by, coastal processes.
- To enable development of public works and environmental facilities where such development would not have an overall detrimental impact on ecological, scientific, cultural or aesthetic values.
- 2 Permitted without consent

Nil

3 Permitted with consent

Environmental facilities; Environmental protection works; Oyster aquaculture; Recreation areas; Research stations; Roads

4 Prohibited

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pondbased aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Tank-based **aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 3**

Part 3 - Justification

Part 3 – Justification

In accordance with the Department of Planning and Environment's *Guide to Preparing Planning Proposals,* this section provides a response to the following issues:

- Section A: Need for the Planning Proposal
- Section B: Relationship to strategic planning framework
- Section C: Environmental, social and economic impact, and
- Section D: State and Commonwealth interests

A - Need for the planning proposal.

1. Is the planning proposal a result of any strategic study or report?

The site has been identified for investigation in the North Coast Regional Plan (NCRP) 2036 as an investigation area for employment lands.

The site has also been identified as an investigation area for light industry in Council's UGMS since 2011, noting that the site presents an opportunity to meet the future local service based industrial needs of the Lake Cathie/Bonny Hills Urban Release Area population.

2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The aim of Council's UGMS is 'to achieve well-planned growth in the right places, to create a more diverse and prosperous economy and maintain a healthy environment and great places to live' (Vol 2:7).

Action 17 of the UGMS 2017 identifies this site for investigation in Year 1-5:

'Investigate the capacity of land at the intersections of Ocean Drive with Houston Mitchell Drive and Bonny View Drive for service industrial development' (Vol 1:25).

The site is recognised in the UGMS as being a suitable industrial investigation area as it is centrally located in terms of access to planned development in Lake Cathie and Bonny Hills Urban Release Area. The subject site is likely to yield approximately 5.5ha of light industrial land, which is around 70% of the required industrial land supply in the UGMS in this locality. This is strategically important as there is no certainty that any other land in the Lake Cathie/Bonny Hills area will be suitable for light industrial development.

The site specific investigations carried out to date support the use of the land for future industrial use, which will also include the rezoning of approximately 4ha for future environmental conservation. This ensures that the rezoning achieves the aim of the UGMS to avoid significant environmental impacts. The Planning Proposal achieves the avoidance of significant ecological impacts and will allow appropriate development that will manage environmental hazards. The site is capable of connection to existing water and sewerage services without significant costs.

It is considered the Planning Proposal is the best way to achieve the objectives of the UGMS 2017- 3036.

Part 3 – Justification

B - Relationship to strategic planning framework.

3. Will the planning proposal give effect to the objectives and actions of the North Coast Regional Plan 2036?

Consideration of the Planning Proposal in the context of the relevant goals, directions and actions of the State Government Regional Plan is provided below:

Goal 1 - The most stunning environment in NSW

Direction 2: Enhance biodiversity, coastal and aquatic habitats, and water catchments

Action 2.1: Focus development to areas of least biodiversity sensitivity in the region and implement the "avoid, minimise, offset" hierarchy to biodiversity, including areas of high environmental value.

This Proposal is to protect approximately one third of the most valuable areas of the site for regeneration and future preservation. This will be achieved by applying an E2 Environmental Conservation zone to these areas.

The proponent's 2018 ecological assessment confirms that any vegetation within the proposed IN2 Light Industrial zone, which is proposed to be cleared, can be offset within the E2 Environmental Conservation zoned areas of the site. Through the DA process, the clearing is to be offset using the Biodiversity Offset Scheme and the retirement of biodiversity credits.

Direction 3: Manage natural hazards and climate change

Action 3.1: Reduce the risk from natural hazards, including the projected effects of climate change, by identifying, avoiding and managing vulnerable areas and hazards.

An assessment of bushfire hazard and flooding hazard has been undertaken. Future development is required to comply with Planning for Bushfire Protection 2019 and satisfy Council's adopted flood policy.

Goal 2 - A thriving, interconnected economy

Direction 6: Develop successful centres of employment

Action 6.6 Deliver an adequate supply of employment land through local growth management strategies and local environmental plans to support growth.

The subject site has been identified in Council strategies for light industry for many years because it is:

- · Easily accessible from main roads
- In proximity to an urban release area to the east of Ocean Drive, currently
 undergoing development, which will result in significant population growth
 generating demand for new local business services and employment over time
- In proximity to another possible light industrial area or school to the south of the site (as identified in UGMS).

Goal 3 - Vibrant and engaged communities

Direction 16: Collaborate and partner with Aboriginal communities

Action 16.2: Ensure Aboriginal communities are engaged throughout the preparation of local growth management strategies and local environmental plans.

Part 3 – Justification

The Planning Proposal is supported by an Aboriginal Cultural Heritage Assessment (**Attachment 9**) prepared by the Birpai Local Aboriginal Land Council, who have advised that there is no reason that the rezoning cannot proceed in respect to Aboriginal Cultural Heritage issues.

Direction 21: Coordinate local infrastructure delivery

Action 21.2: Maximise the cost-effective and efficient use of infrastructure by directing development towards existing infrastructure or promoting the co-location of new infrastructure

The site is identified for employment purposes and can be connected to reticulated services by way of an existing sewer stub, which will need to be extended to reach the subject site for future connection. Further, there is opportunity to connect to the existing water main off Ocean Drive with a link through to the water main located on Houston Mitchell Drive.

By way of road connections, the corner location of the site will enable the future use to utilise the existing road infrastructure.

Urban Growth Area Maps

The Regional Plan identifies the site on the Urban Growth Area Map for Port Macquarie-Hastings as Investigation Area - Employment Lands

- The site is identified as Investigation Area Employment Lands.
- It will rezone the least sensitive areas of the site for industrial development, and protect the valuable areas of the site by applying an environmental management zone. In addition, the site will provide for offsetting of some tree removal within the future environmental zone, achieving both the minimise and the offset hierarchy to biodiversity.
- An assessment of bushfire hazard and flooding hazard has been undertaken. Future development is required to comply with Planning for Bushfire Protection 2019 and satisfy Council's adopted flood policy.
- It will allow development of land that will make use of existing infrastructure.

4. Will the planning proposal give effect to Council's endorsed local strategic planning statement, or another endorsed local strategic plan?

The Proposal will give effect to the following endorsed Council strategies:

Local Strategic Planning Statement 2020 - Shaping Our Future 2040

Council adopted a local strategic planning statement (LSPS) in November 2020. The LSPS will be used by Council to assess planning proposals within a strategic framework as part of the strategic merit test as outlined in the NSW DPIE guidelines for preparing planning proposals and LEPs. The LSPS includes 19 Planning priorities across the themes of: Our Environment, Places, Connections, Economy, and Enabled by Infrastructure.

The following Planning Priorities relate to the subject site and/or its proposed land use:

Part 3 – Justification

Priority 1 - Protect, conserve and enhance our biodiversity areas of high environmental value and our scenic and cultural landscapes while cultivating sustainable growth and development.

The Planning Proposal provides for the restoration of a habitat corridor in the southern part of the site by application of an E2 Environmental Conservation zoning to the site. The preservation of the environmental land is balanced with the provision of employment land in the northern part of the site.

Priority 2 - Manage Growth sustainably

The site is identified as Investigation Area, Employment Lands in the NCREP 2036. The site is located at the western edge of the Rainbow Beach (Area 14) Urban Growth Area that provides for a new residential development, town centre, primary school, sports fields and an environmental corridor. The site is expected to cater for 70% of the employment lands needs for the broader Lake Cathie and Bonny Hills urban area through to 2036.

Priority 16 - Plan for a future economy which is diverse, resilient and inclusive.

The proposed employment land is located at the intersection of the Ocean Drive and Houston Mitchell Drive between Lake Cathie and Bonny Hills and has access to the Pacific Highway via Houston Mitchell Drive. The Planning Proposal will provide for a range of light industrial land uses, service industries and employment opportunities for the residents of the adjacent neighbourhoods.

Urban Growth Management Strategy 2017

The UGMS is the local response to the NCRP and is closely integrated with Council's *Towards* 2030 *Community Strategic Plan* (discussed below).

The site is identified in this Strategy for investigation in the immediate/short-term for service industrial development.

A key aim of the UGMS for Economic Development and Employment is:

... to promote economic development and employment to create a prosperous and diversified economy.

The UGMS recognises that there is currently no zoned land for local service industry in the Lake Cathie/Bonny Hills locality and that the site will provide approximately half of the required land area to satisfy this existing shortfall.

The current Proposal has approximately 5.5ha of proposed industrial zone, which represents around 70% of the required industrial land supply in the UGMS in this locality. This is strategically important as there is no certainty that any other land in the Lake Cathie/Bonny Hills area will be suitable for light industrial development.

Towards 2030 Community Strategic Plan

The Proposal for the subject site satisfies the key strategies of this Plan for both business and industry and natural and built environment. The Planning Proposal will:

 Provide for industrial zoned lands in close proximity to existing urban areas, assisting residents to live and work in close proximity

Part 3 - Justification

- Attract investment to create jobs
- Provide for effective management and maintenance of urban services (water, sewer)
- Assist in minimising the impact of natural events and climate change (floods, bushfires), through appropriate environmental zoning and mitigation measures; and
- Facilitate development that is compatible with the natural and built environment.

Bonny Hills Community Plan 2018

The Draft Bonny Hills Community Plan, which was endorsed by Council on 19 August 2018 and has been subject to community consultation, acknowledges that the village will experience significant population growth over the next 20 years; and that this growth will generate demand and opportunities for a range of new local business services and employment.

There are a number of goals identified, by the community, in the plan with supporting statements relating to the subject site and/or its proposed use:

Goal 1 - Maintain and enhance the village character of Bonny Hills

Supporting Statement: Ocean Drive recognised as a scenic landscaped route, not a light industry corridor with appropriate landscaping planned for the villages of Bonny Hills and Lake Cathie.

Goal 2 – Maintain the natural environment – including beaches, coastline, bushland and hinterland

Supporting Statement: Consider 'Habitat Protection' zonings in the Local Environment Plan to ensure long term viability of corridors.

Goal 4 - Manage future growth and development to be consistent with the above

Supporting Statement: Create an area for local light industry area that is discreet and out of sight, possibly off Houston Mitchell

The Planning Proposal is considered to satisfy these goals as follows:

- Provides a landscaped buffer along Ocean Drive and Houston Mitchell Drive within the subject site - the intent of the environmental strip is as a buffer to mitigate the visual prominence of the future development from the road. It is proposed that the strip will be planted with suitable vegetation to ensure that this buffer is effectively achieved. It is considered that the buffer should have a minimum depth of five metres to provide sufficient space for trees and shrubs of varying sizes and densities. This will provide effective landscaping to mitigate the visual prominence of any future development.
- A draft DCP has been prepared (at **Appendix B**), which includes development provisions to ensure that the landscaped buffer within the subject site is planted to effectively shield future development from the road.
- Maintains and restores the habitat corridor in the southern part of the site by way
 of an E2 Environmental Conservation zoning. In accordance with Part B2
 Environmental Management 8(c) of the Port Macquarie-Hastings DCP 2013, A

Part 3 – Justification

Vegetation Management Plan (VMP) will be required to outline how the environmental lands are to be protected and managed. The intention is for the VMP to be required to be prepared prior to any clearing works and before issuing the construction certificate.

2017 - 2021 Delivery Program and 2020 - 2021 Operational Plan

The subject rezoning is identified in Council's Delivery Program to 2021. Operational Plan Action 4.5.1.11 includes to 'Investigate the capacity of land at the intersection of Ocean Drive and Houston Mitchell Drive for light industrial use..'.

5. Is the planning proposal consistent with applicable State Environmental Planning Policies?

Table 1 considers the relevant SEPPs that apply to this Planning Proposal.

SEPP	Relevance	Reason for inconsistency or comment
44 Koala Habitat Protection	Encourages the conservation and management of natural vegetation areas that provide habitat for koalas to ensure permanent free-living populations will be maintained over their present range.	Consistent During the field survey undertaken in 2016 (to support the Ecological Assessment by Flora Fauna at Attachment 4), 22 Koala Food Trees were recorded. The assessment identified that several trees showed signs of Koala activity (p.6). The assessment howeve concluded that the site would be unlikely to comprise core koala habitat due to the lack of evidence of a resident koala population or breeding females. Further, a federal referral assessment was undertaken as part of the abovementioned Ecological Assessment, which determined that a federal referra would not be required. The Biodiversity Australia ecological assessment, prepared in 2018 (Attachment 6) to comply with the changes to the Biodiversity Conservation Act 2016, recognised that species surveys for Koalas (amongst other things) were undertaken during previous ecological studies. During the Koala surveys 'none of these species were confidently recorded on the site and as such, there is no species credit requirement for the development site' (p.23). Correspondence with Biodiversity Australia dated 28 November 2018 (Attachment 7) confirmed that 'core Koala habitat may be present' and that a Koala Plan of Management will be prepared at a future DA stage Considering the above information, Council has worked closely with the proponent and BCD to ensur the best possible concept layout for the site that allows the proposed use. Subsequently, it is considered that the Proposal is consistent with this direction.

Table 1 – Assessment of the Planning Proposal against relevant SEPPs

PP2014-14.1 Version 2.1 February 2021

Part 3 – Justification

PP	Relevance	Reason for inconsistency or comment
Remediation of Land	Introduces state-wide planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated.	 Consistent The site is not registered on Councils contaminated lands register nor does it have a history that includes a use that would preclude a future industrial use. The Gateway determination required that a preliminary contamination assessment be undertaken. The Assessment, prepared by Regional Geotechnical Solutions (refer to Attachment 10) concluded that 'the site is likely to be suitable for the proposed industrial and environmental land use with regard to the presence of soil contamination provide the recommendations and advice of the report are adopted, and site preparation works are conducted in accordance with appropriate site management protocols and legislative requirements' (RGS 2019:12) The following recommendations were included in the assessment: Collection of domestic and miscellaneous waste and disposal of it in accordance with Council and NSW EPA requirements. Undertake a hazardous Material Inspection prior to site demolition works associated wit the existing dwelling and sheds to determine if hazardous materials including asbestos and present. Collection of the various containers of chemicals present within the sheds and disposal of those containers in accordance with Council and NSW EPA requirements. Following completion of the above actions undertake a Stage 2 Contamination Assessment.
(Coastal Management) 2018	The aim of this Policy is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016	Consistent The site is not mapped as being in the Coastal Wetlands or the Proximity Area for Coastal Wetlands.
(Infrastructure) 2007		Consistent

PP2014-14.1 Version 2.1 February 2021

17

Part 3 – Justification

SEPP	Relevance	Reason for inconsistency or comment
	delivery of infrastructure across the State	The site has frontage to Ocean Drive, which is a classified road. However, access to the site is proposed to be via Houston Mitchell Drive. Draft site specific DCP provisions have been prepared for public exhibition with this Proposal that make special provision for site access to be from Houston Mitchell and not Ocean Drive (refer to Appendix B). Subsequently, it is considered that the future industrial use will be compliant with this Direction.
(Primary Production and Rural Development) 2019	A key aim of this policy is to facilitate the orderly and economic use and development of lands for primary production and to reduce land use conflict	 Consistent The Proposal to rezone the land to IN2 Light Industry is justified as follows: The land is not mapped as regionally significant farmland The location of the site is not suitable agricultural land with residential development to the north and east, a possible light industry/school site to the south and a nature reserve to the west The subject land is identified as 'future industrial lands' in the UGMS The subject land is identified in the NCRP as being an investigation area for light industry

6. Is the planning proposal consistent with applicable (s.9.1 directions) Ministerial Directions?

Table 2 below considers the relevant s9.1 Directions that apply to this Planning Proposal.

Table 2 - assessment of the pro	posal against relevant s9.1 Directions
---------------------------------	--

Secti	on 9.1 (2) Directions	
	and Objectives	Reason for inconsistency or comment
1	Employment and Resources	
1.1 Zones	Business and Industrial	Consistent
		The location of the site for the proposed industrial lands is in accordance with an approved strategy, being Council's UGMS
1.2	Rural Zones	Inconsistent The Proposal is inconsistent with this Direction as it seeks to rezone land from RU1 Primary Production to IN2 Light Industrial. The inconsistency is considered justifiable on the basis that the site is identified in Councils UGMS for investigation in the next 1-5 years for service industrial development (Action 17, Vol: 1: 25). Further, due to the size of the site, it is not economically or environmentally sustainable to use the land for primary production now or in the future.

PP2014-14.1 Version 2.1 February 2021

Part 3 – Justification

Secti	on 9.1 (2) Directions and Objectives	Reason for inconsistency or comment
1.5	Rural Lands	Inconsistent
		Commentary regarding the consistency of the Proposal in relation to SEPP (Rural Lands) is provided in Table 1 above.
		The inconsistency is considered justifiable as the land is identified as 'proposed employment lands' in the NCRP. This is in addition to its identification for service industrial development in the UGMS, as mentioned above.
2	Environment and Heritage	
2.1	Environmental Protection Zones	Consistent
	20105	The Proposal seeks to preserve approximately 4ha of the land for environmental conservation/management. Part B2 Environmental Management 8(c) of the Port Macquarie-Hastings Council DCP 2013 requires environmental areas to be appropriately protected and managed. The intention is to achieve this through a VMP, which will be required to be prepared prior to any clearing works and before issuing the construction certificate.
		Further, site specific DCP provisions have been prepared to support this Planning Proposal, which outlines requirements for landscaping of the E2 Environmental Conservation vegetated buffer along Houston Mitchell Drive and Ocean Drive.
2.2	Coastal Management	Consistent
		The site is not mapped as being within Coastal Wetlands or the Proximity Area for Coastal Wetlands under the <i>Coastal Management Act 2016</i> .
2.3	Heritage Conservation	Consistent
		The Proposal is consistent with this Direction as the Birpai Local Aboriginal Land Council, in their 2018 Assessment, did not identify any evidence of Aboriginal occupation and confirmed that the rezoning Proposal can continue, subject to monitoring of any future earthworks during development of the site (refer to Attachment 9 for the Aboriginal Cultural Heritage Assessment report).
3	Housing, Infrastructure and Urban Development	
3.4	Integrating Land Use and Transport	Consistent The site is located on the corner of Ocean Drive (a classified road) and Houston Mitchell Drive, making it a location that is easily accessible to the regional and State road network, a key consideration for industrial areas. A Traffic Impact Assessment has been prepared by the Proponent to support the Planning Proposal and a copy is provided at Attachment 11 . The TIA includes details of estimated traffic generation and access and servicing arrangements for the largest vehicles requiring access to the

PP2014-14.1 Version 2.1 February 2021

Part 3 – Justification

Sect	ion 9.1 (2) Directions	
	and Objectives	Reason for inconsistency or comment
		site. The report includes detailed analysis for a proposed 4-way priority- controlled intersection at Forest Parkway and Houston Mitchell Drive to serve the industrial land. Council staff consider the proposed 45 ° angle approach to Houston Mitchell Drive from the site would result in an unsafe intersection and that a roundabout is the appropriate intersection type for the location. The proponent has agreed to undertake further to resolve the matter.
4	Hazard and Risk	
4.1	Acid Sulfate Soils	Consistent
		Part of the site is mapped as Class 5 Land. Under cl 7.1 of PMH LEP 2011, works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land will require consent.
		In this regard, the adjacent Class 4 lands are located to the east of the Ocean Drive road corridor and for a distance of 500m, are currently above 5m AHD. These adjoining lands have been approved to be finished to a level of approximately 6m AHD, to provide district sporting fields and residential lots. Therefore, it is considered that the Proposal is consistent with this Direction.
4.3	Flood Prone Land	Consistent
		The Proposal is supported by a 2010 Flood Impact Assessment (Worley Parsons, 2010) (Attachment 2) and an updated 2019 Flood Impact Assessment (Advision, 2019) (Attachment 3), which established the peak 100-year recurrence flood level at the site. The information was used to inform the initial indicative layout for the site, including the extent of proposed fill to support the future industrial subdivision and use of the land. Given the increase in potential storm-water runoff and the possible reduction in flood storage as a result of the required fill, the draft site specific DCP (Appendix B) has been prepared to include development provisions, which will ensure appropriate management of stormwater.
4.4	Planning for Bushfire	Inconsistent
	Protection	The site is mapped bushfire prone. Consistency with this Direction cannot be resolved until consultation with the Commissioner of the NSW Rural Fire Service (RFS) has occurred. Subsequently, RFS has been consulted as part of the public exhibition period and their views will be taken into consideration. Notwithstanding, a site specific Bushfire Hazard Assessment (Attachment 8) has been prepared. The report concluded that 'subject to the implementation of the bushfire threat reduction measures and consideration of the recommendations in the report, bushfire risk is manageable' (p.31). The assessment also indicates that requirements for future Asset Protection Zones can be adequately provided within the site to mitigate bushfire threats.

PP2014-14.1 Version 2.1 February 2021

Part 3 – Justification

Secti	on 9.1 (2) Directions	
	and Objectives	Reason for inconsistency or comment
		 It is considered that this Proposal: a) Has regard to Planning for Bushfire Protection 2006, and b) Achieves an outcome whereby all bushfire protection measures will be managed within the future IN2 zone & E2 zone adjacent to Queens Lake State Conservation Area. c) Will provide a sufficient space within the IN2 zone for a perimeter road to be provided around the future lots; and d) Reasonably minimises the perimeter of the area of land and the hazard interface
		A draft site specific DCP has been prepared (Appendix B) and an update to Part B3 Hazards Management 18 (Bushfire hazard management) of the General provisions in DCP 2013 (Appendix C) . Both of these DCP updates include development provisions to ensure the above outcomes are achieved at a future DA stage. The NSW RFS will be consulted as part of the exhibition period and their comments will be reported to a future Council meeting. Prior to finalising the Planning Proposal, Council will seek to obtain the agreement of the Secretary to comply with this Direction.
5	Regional Planning	
5.10	Implementation of Regional Plans	Consistent The planning proposal is consistent with the North Coast Regional Plan 2036. The majority of the site is within the mapped urban growth area (Investigation Area - Employment Lands), and the small variation is consistent with the Urban Growth Area Variation Principles contained in Appendix A of the North Coast Regional Plan 2036. Refer to Appendix D for justification of this inconsistency.
6	Local Plan Making	
6.1	Approval and Referral Requirements	Consistent None of the provisions in the Proposal will create excessive concurrence, consultation or referral requirements. Further, the Proposal does not identify any development as designated development.

Part 3 – Justification

C - Environmental, social and economic impact.

7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

A detailed ecological assessment and addendum assessment relating to this Proposal were prepared by FloraFauna Consulting in 2016 and 2017 (**Attachments 4** and **5**).

A subsequent Ecological Assessment (Biodiversity Australia, 2018) (Attachment 6) was prepared to meet the principles of the *Biodiversity Conservation Act 2016* and in accordance with stage 1 and 2 of the Biodiversity Assessment Method. The assessment confirms that there are no endangered ecological communities on site. A credit summary report was calculated, which concludes that approximately 3.73 ha of lands will be required to offset the loss of vegetation and habitat. The credit summary report calculated that there is likely to be sufficient land to provide the necessary offsets onsite.

Native vegetation and species habitat

The abovementioned 2016 assessment notes that most of the land has been cleared of native vegetation and is maintained as managed grassland with retained 'paddock' trees. The report also acknowledges the two areas of mapped vegetation, being a 'disjunct remnant patch in the north part of the site and a patch in the southwest corner of the site that forms part of the eastern margin of a large area of vegetation within the Queens Lake State Conservation Area that extends into the Queens Lake Nature Reserve' (p. 68).

Prior to public exhibition of the original Planning Proposal in 2019, Council had been working to develop a draft Coastal Koala Plan of Management (CKPoM), which is one of a suite of proposed policy changes to provide a comprehensive set of planning controls to manage the impacts of development on Koala habitat in the Port Macquarie Hastings area, and is designed to help reduce the overall impact of habitat loss.

The draft CKPoM was publically exhibited in April – May 2018 and reported to Council at Item 12.04 on 19 September 2018. At the meeting, this item was deferred pending further consideration. At that time, the abovementioned 'remnant patch' of vegetation in the north part of the site was identified as core Koala habitat (refer to **Figure 6**).

The CKPOM was considered at the Council meeting of 12 August 2020 (Item 13.05) Council determined to not proceed with to finalisation of the draft document.

Part 3 - Justification



Figure. 6 Mapping from Draft CKPoM (Feb 2018, p. 31). Subject site highlighted red.

It is considered that further assessment pursuant to SEPP 44 should be undertaken at the subsequent development application stage, which may determine the need for a Koala Plan of Management to be prepared for the subject site.

The ecological assessment reports submitted in support the proposal, recommended a number or ameliorative measures to mitigate potential impacts. These include pre-tree removal inspections, nest boxes, compensatory plantings of Koala food trees and non-koala food trees, regeneration of the native groundcover and understorey layers, retention of three dams and weed management.

While it is acknowledged that the reports are based on the previous development concept, it is considered that the current concept provides a suitable balance for the future development and protection of some of the Koala food trees on the site.

Hollow bearing trees

Four hollow bearing trees have been recorded on the site, which are between 12m - 25m in height.

There have been a number of iterations of the concept to try to achieve the best outcome in terms of a useable industrial footprint, while achieving the avoid and minimise principles of the *Biodiversity Conservation Act 2016*. The current concept plan supporting this revised Planning Proposal retains three of the four hollow bearing trees (Trees 835, 872 & 873).

It is considered that a further hollow bearing tree assessment can be undertaken, as required, in a subsequent ecological assessment with a future DA.

Part 3 – Justification

Consultation with Office of Environment & Heritage - Biodiversity Conservation Division

The Gateway determination requires consultation with the Office of Environment & Heritage (OEH) of the NSW Department of Planning, Industry and Environment for a minimum of 21 days. OEH (the Biodiversity and Conservation division) were consulted as part of the exhibition of the Planning Proposal in 2019 and a copy of their submission is provided at **Appendix E**.

The BCD did not raise issues in connection with flood risk management or Aboriginal cultural heritage at the rezoning stage. BCD did recommend that prior to determining a development application that a more thorough Aboriginal cultural heritage investigation be carried out, and that the impacts arising from changes to the location of floodwaters and frequency of inundation on endangered ecological communities, including the adjoining SCA, as a result of filling be addressed.

Several issues were raised in connection with biodiversity including threatened species and ecological communities or their habitats and the adjacent NPWS estate (Queens Lake SCA). BCD requested that before configuration of the E2 and IN2 zones in the north were finalised that further consideration be given to the following matters:

- The viability of the proposed E-zoned land in the north and its connectivity with other vegetated areas
- Retaining more of the mature important remnant trees in these parts of the planning area
- · Potential impacts on koalas and locations for fauna exclusion fencing
- The need to ensure that direct impacts on the adjoining State Conservation Area of future development in the planning area can be adequately mitigated and buffered
- Possible dedication of the E-zoned land to NSW NPWS or Council after it has been revegetated. Note: Council staff have recommended against dedication of the Ezoned land to Council.
- Once the footprint is resolved, biodiversity credits should be determined applying Stage 1 of the Biodiversity Assessment Method (BAM)
- A planning agreement is recommended that commits the landowner to providing the biodiversity offsets and preparation of a vegetation management plan (VMP) for the E-zoned land and any vegetated buffers to the SCA with the plan prepared prior to any clearing works or issue of a construction certificate.

Note: Council staff have declined an offer by the proponent to enter into a VPA.

The Proponent met with BCD and Council representatives in January 2020 to discuss the above matters. It was agreed that it was preferable to consolidate the areas of high environmental value land and that existing vegetation surrounding the existing shed near the intersection of Houston Mitchell Drive would be isolated from other areas, and as such was less desirable to be retained between the proposed employment lands and the intersection.

As a result the following changes have been made to the Planning Proposal:

• The area of E2 zoned land adjacent to the existing shed has been reduced and is proposed as IN2.

Part 3 – Justification

- The southern E2 land area has been enlarged (near the larger dam) that provides for retention of additional trees and will reduce the extent of fill required for future development and reduces need for retaining walls.
- An E2 zoned landscape/visual buffer minimum 10m wide to the Houston Mitchell and Ocean Drive frontages, excepting the proposed access point at the north-west corner of the site, that provides for retention of trees.
- An increased E2 zoned landscaped splay width to the Ocean Drive and Houston Mitchell Drive corner to provide for a wider vegetated buffer at the intersection.
- An E2 zoned 10m wide landscaped buffer on part of the western boundary with the SCA that varies up to 13.5m to ensure retention of two hollow bearing trees.
- The proposed location of the fauna fence has been changed to exclude fauna from the employment lands and avoid fauna being directed onto roads.

<u>Summary</u>

As identified, there have been a number of variations to the Proposal since it was submitted in June 2018 to ensure that the natural environment, including significant values and hazards have been sufficiently considered. While this has resulted in inconsistencies between the final concept plan and the specialist studies prepared to support this Proposal, it is considered that the studies are of sufficient detail for the purposes of a rezoning. The Proposal has taken considerable steps to ensure a balanced approach that achieves the strategic objectives of the site for light industry with consideration of the environmental values and hazards on the land as follows:

- Approximately 4ha is included for future environmental conservation by way of an E2 Environmental Conservation zoning.
- Retaining three of the four hollow bearing trees in the E2 Environmental Conservation zone.
- Including a draft site specific DCP (refer to **Appendix B**), which provides objectives and development provisions including the provision of a fauna fence located to discourage Koalas from crossing the adjacent busy roads, entering the employment lands or landscape buffer area adjacent to Ocean Drive.
- It may be appropriate for the developer to use the proposed E2 Environment Conservation zoned land in the south of the site to meet their DCP offsetting obligations. The proposed E2 zoned landscape buffer along Ocean Drive and Houston Mitchell Drive should not be used for Koala food tree offset planting. Any biodiversity credits will have to be retired prior to vegetation clearing or issue of a construction certificate, whichever occurs first.

BCD will be consulted again as part of the exhibition of the revised Planning Proposal.

25

Part 3 – Justification

8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

<u>Flood</u>

A Flood Impact Assessment was initially prepared by Worley Parsons in 2010 (Attachment 2) to establish the peak 100-year recurrence flood level at the site. This level was estimated to be 7.6 m AHD. The information contained in this initial report was then used to develop an indicative layout for the site, including an indicative extent of proposed fill to support the future industrial subdivision and use of the land.

The approximate extent of land to be filled is noted on the attached concept layout. The required volume of fill equates to approximately 5,000m³. This will lead to an increase in potential storm-water runoff and the likelihood of reduced flood storage as a result of the required fill. Subsequently, Worley Parsons were engaged to carry out additional investigations to characterise the existing flood conditions and to document the magnitude and extent of the impact as a result of the necessary fill.

The 2010 assessment concludes the following:

The results of the modelling indicate that filling for the proposed development will have minimal impact on the peak 100 year ARI flood level. The peak 100 year ARI flood level at the site is predicted to increase by 10mm due to the filling and will lead to no increase in the reported 100 year ARI flood level for the site. A minor increase in the peak flood discharge through the culvert system is predicted to occur. However, this increase is less than 2% of the pre-development flow and is not considered to present any concerns for the site located downstream.

Worley Parsons conclude that Council can be satisfied that the 2010 assessment provides satisfactory demonstration that the site is suitable for development for industrial purposes.

An updated Flood Impact Assessment has recently been prepared (Attachment 3). As a result of the findings, the draft site specific DCP provisions, which have been prepared to support this Proposal, include water quality development provisions relating to stormwater. (Appendix B).

<u>Bushfire</u>

The accompanying Bushfire Hazard Assessment (Pensini, 2018) **(Attachment 8)** concludes that subject to the implementation of appropriate bushfire threat reduction measures, bushfire risk is manageable.

The recommended measures, including adequate defendable space, appropriate road design and access have been accommodated within the indicative industrial subdivision layout to support the Planning Proposal. Detailed design will be dealt with at a future development application stage.

Subsequently any future development in the proposed industrial zone is capable of satisfying *Planning for Bushfire Protection 2006*. The Rural Fire Service (RFS) was consulted as part of the exhibition of the Planning Proposal in 2019 and a copy of their submission is provided at **Appendix E**.

As an extra precaution, draft site specific DCP provisions (see **Appendix B**) have been prepared, which include, amongst other things, provisions for a perimeter road around

Part 3 – Justification

the industrial interface. Further, it is proposed to update the bushfire provisions of Part B3 Hazards Management 18 of the General Provisions of DCP 2013 (refer to **Appendix C**), to ensure that this clause is applicable to industrial development, not just residential development.

The RFS and will be consulted again as part of the exhibition of the revised Planning Proposal.

<u>Summary</u>

The Proposal has considered the site in the context of bushfire risk and flood hazard by:

- Reasonably minimising the perimeter of the area of land and the hazard interface.
- Providing sufficient space within the proposed IN2 Light Industrial zone for a
 perimeter road to be provided around the majority of future lots.
- The Proposal is supported by a Flood Impact Assessment, which established the peak 100-year recurrence flood level at the site. The information from the assessment was used to inform the initial indicative layout for the site, including the extent of proposed fill to support the future industrial subdivision and use of the land.

9. How has the planning proposal adequately addressed any social and economic effects?

<u>Social</u>

The applicant's Aboriginal Cultural Heritage Assessment (**Attachment 9**) provides an assessment of cultural heritage values on the site and concludes that there is no reason for the rezoning not to proceed.

The proposed environmental zones and DCP provisions will ensure that there is an effective buffer to screen the future light industrial development from view. This addresses community concerns and mitigates social effects.

<u>Economic</u>

The subject site is expected to yield approximately 5.5ha of light industrial land, which is around 70% of the required industrial land supply nominated in the UGMS for this locality. This is strategically important as there is no certainty that any other land in the Lake Cathie/Bonny Hills area will be suitable for light industrial development.

The rezoning of the site will be consistent with a key economic and employment aim of Council's UGMS, to provide industrial/employment lands in close proximity to the Area 14 Urban Growth Area, at a location that is well serviced and accessible and where there is currently no zoned land for local service industry. The site will provide approximately half of the land area recognised as being needed in the Lake Cathie Bonny Hills locality.

<u>Summary</u>

The proposed rezoning will:

 more appropriately reflect the local planning strategies for the area and complement the existing land uses in the locality;

Part 3 – Justification

- provide employment opportunities for existing and future residents within walking distance to their place of residence (given proximity of the Lake Cathie/Bonny Hills Urban Release Area)
- manage the environmental constraints (flooding, bushfire, ecological)
- create an opportunity to facilitate a wildlife linkage; and
- provide landscaping treatments to buffer future development from Ocean Drive.

Accordingly, social impacts are expected to be negligible and economic impacts will be positive.

D - State and Commonwealth interests.

10. Is there adequate public infrastructure for the planning proposal?

Access and Traffic

This site is well located from an accessibility point of view, being located on the corner of Houston Mitchell Drive and Ocean Drive. In this regard, the light industrial area can be established in a manner that ensures that there will be a minimal number of trips generated by industrial based traffic through future residential areas. The proposed access to and from the site is via Houston Mitchell Drive. Direct entry/exit via Ocean Drive will not be permitted.

Houston Mitchell Drive provides a direct link to the Pacific Highway, and Ocean Drive provides a direct link to the southern end of Port Macquarie and Laurieton to the south.

It is considered that this site, for future light industry, takes advantage of the road accessibility to both the surrounding area and beyond.

The Roads & Maritime Service (RMS) now known as Transport for NSW (TfNSW) was consulted as part of the exhibition of the Planning Proposal in 2019 and a copy of the TfNSW submission is provided at **Appendix E**.

TfNSW suggested that the Planning Proposal include a Traffic Impact Assessment (TIA) to identify the likely traffic impacts on the classified road network. A TIA is required to be prepared in accordance with the Austroads Guide to Traffic Management Part 12 and complementary TfNSW and RTA guidelines. TfNSW also advised that a strategic design drawing be prepared to demonstrate access can be safely achieved to the employment lands at the location proposed including any environmental constraints or constructability issues and identify any portion of the adjoining land is needed to achieve the access proposed.

TfNSW supports the DCP amendment to restrict access from Ocean Drive.

A TIA has been prepared by the Proponent to support the Planning Proposal and a copy is provided at **Attachment 11**. The TIA includes details of estimated traffic generation and access and servicing arrangements for the largest vehicles requiring access to the site.

The report includes detailed analysis for a proposed 4-way priority-controlled intersection at Forest Parkway and Houston Mitchell Drive to serve the industrial land. Council staff consider the proposed 45° angle approach to Houston Mitchell Drive from the site would result in an unsafe intersection. Intersections with severe skew angles (i.e. less than 75°) often experience operational or safety problems. The constraints of the site make it very difficult to achieve a much safer 90° approach. It is also important the intersection be as

Part 3 – Justification

far away from the Ocean Drive intersection as possible. The Proponent has advised that the prospect of acquiring part of the adjoining State Conservation Area to the west for road widening is limited.

Council staff consider a roundabout the preferred layout for an intersection in this situation where a right-angle approach cannot be achieved. This may require the slight realignment of Forest Parkway to achieve better geometry and may also involve land acquisition of Lot 2 DP1263561.

It is noted that TfNSW has an interest in any works that are proposed in connection with Houston Mitchell Drive. TfNSW will be consulted again as part of the exhibition of the revised Planning Proposal.

An opportunity to provide improved connectivity for active transport modes such as walking and cycling has been identified. A direct walking/cycling link to Ocean Drive could now be incorporated because the fauna exclusion fence does not extend along the whole boundary of the site with Ocean Drive.

<u>Stormwater</u>

The Proposal is for a stormwater drainage system which incorporates the following:

- End-of-line stormwater detention and water quality treatment facilities to treat runoff from proposed road reserve areas within the subdivision, and
- Privately owned/maintained on-site water quality treatment and detention within each of the individual industrial allotments to treat site stormwater discharge from each of these lots.

It is considered that stormwater facilities generally in accordance with the above can be accommodated within the development site subject to the submission of modelling and concept plans, which support a future DA. The draft site specific DCP has been prepared to include development provisions, which will ensure appropriate future management of stormwater (Appendix B).

<u>Sewer</u>

An Infrastructure Construction Certificate (ICC) has been approved for a sewer pump station on the adjoining property. This provides a 225mm sewer stub, which will need to be extended to reach the subject site for future connection, at the cost of the developer.

The site can be serviced with a connection to the existing 300mm water main off Ocean Drive with a link through to the 200mm water main located on Houston Mitchell Drive.

On this basis, the infrastructure is considered satisfactory to service future light industrial development of the site.

11. What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

The Gateway Determination requires consultation with the following public authorities/organisations under section 3.34 (2)(d) of the Act and/or to comply with the requirements of relevant section 9.1 Directions:

Part 3 - Justification

- NSW Roads and Maritime Services (RMS)
- NSW Rural Fire Service (RFS)
- Biodiversity and Conservation division of the NSW Department of Planning, Industry and Environment (previously Office of Environment and Heritage)

The above agencies were consulted as part of the exhibition period from 20 November to 18 December 2019. A copy of agency feedback is provided at **Appendix E**.

The three agencies will be consulted again as part of the exhibition of the revised Planning Proposal. Any additional agency feedback will be reported to a future Council meeting.

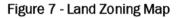
30

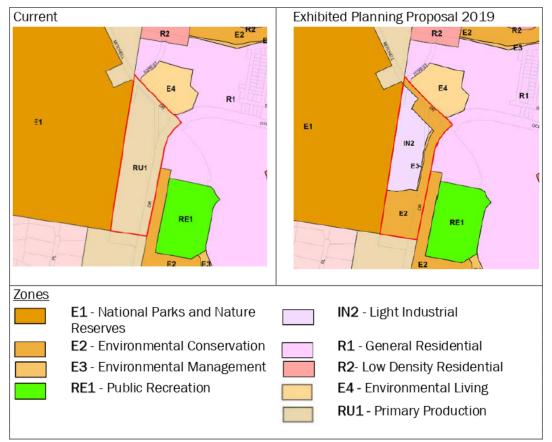
Part 4 - Mapping

Part 4 - Mapping

Proposed map amendments to the PMH LEP 2011, as outlined in Part 2 of this Planning Proposal, are illustrated in **Figures 8 - 10** below. The subject land is shown in red outline.

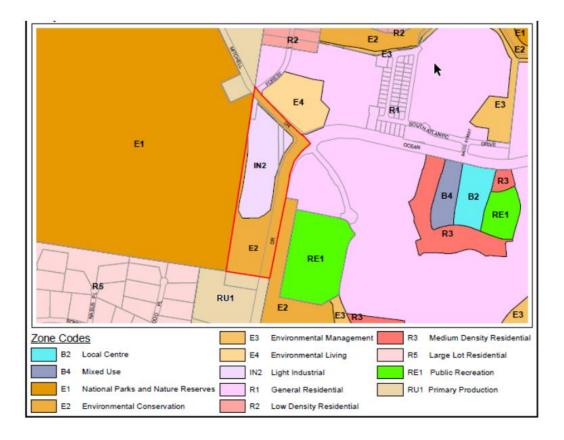
To ensure consistency with the proposed land zoning, the recommendation incorporates the rezoning and associated map updates to the road sections of Houston Mitchell and Ocean Drive (refer to **Figures 7 - 9** for recommended zoning map) that abut the boundaries of the subject site to the north and east. These road sections are currently zoned RU1 Primary Production and are proposed to be zoned E2 Environmental Conservation in the Planning Proposal. This is in line with Principle 1.3 of the *Zoning for infrastructure in LEPs* practice note issued by the NSW Department of Planning in 2008.





Part 4 - Mapping

Revised Land Zone Map



Part 4 - Mapping

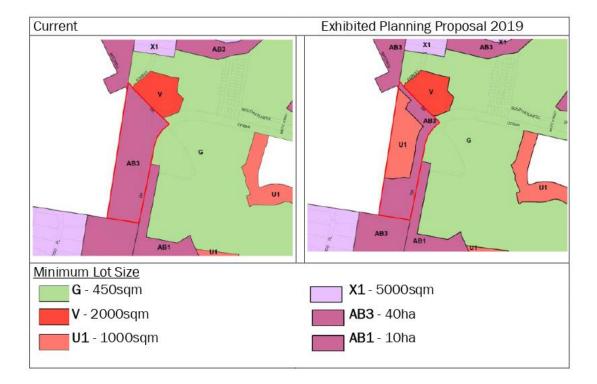
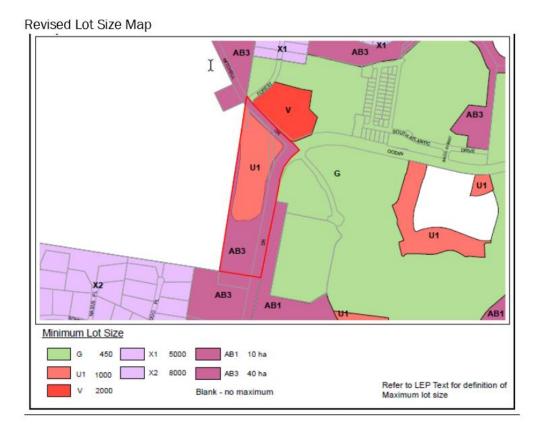


Figure 8 - Lot Size Map

PP2014-14.1 Version 2.1 February 2021

33

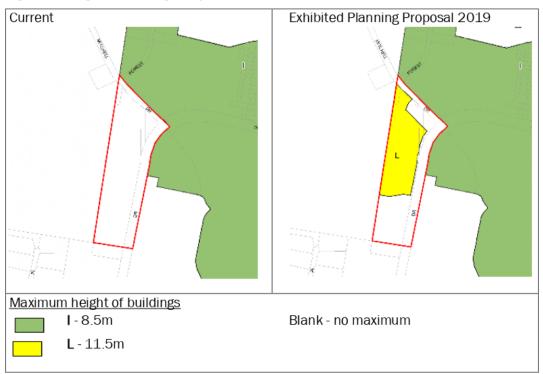
Part 4 - Mapping



PP2014-14.1 Version 2.1 February 2021

34

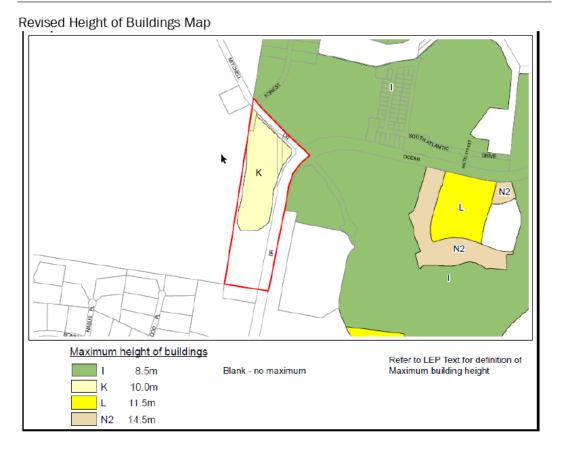
Part 4 - Mapping



PP2014-14.1 Version 2.1 February 2021

35

Part 4 – Mapping



PP2014-14.1 Version 2.1 February 2021

36

Part 5 - Community Consultation

Part 5 – Community Consultation

The Gateway specifies that the Planning Proposal be exhibited for at least 14 days with a minimum of 21 days provided for consultation with state agencies. The original Planning Proposal and draft DCP provisions were placed on public exhibition from 20 November to 18 December 2019. Due to the community interest in this matter, Council staff consider a 28 day consultation period to be more appropriate for the revised Planning Proposal.

It is proposed that the exhibition will include:

Advertisement via Council On-Line Public Notices

Due to Covid-19, public notices, including notice of planning proposals, are published on Council's Community Now web page at https://www.pmhc.nsw.gov.au/About-Us/News-Hub/Public-Notices

Consultation with affected owners and adjoining landowners

A letter was sent to the landowner and adjoining landowners as part of the public exhibition in 2019. Opportunities for one-on-one consultations to discuss the proposals were is also available upon request. Those people who have made a written submission as part of the first exhibition will be advised of the public exhibition of the revised Planning Proposal and associated documents.

Consultation with Stage Agencies

Consultation with TfNSW (formerly RMS), NSW Rural Fire Service (RFS) and Office of Environment and Heritage (OEH) will be undertaken in accordance with the Gateway Determination.

Displays at the Council Head Quarters

The Planning Proposal will be available is displayed at the Port Macquarie (17 Burrawan Street), Wauchope (49 High Street) and Laurieton (9 Laurie Street) Council Head Quarters.

Exhibition on the Council website

The Planning Proposal is exhibited on the Council *haveyoursay* website (<u>https://haveyoursay.pmhc.nsw.gov.au/</u>)

Direct Contact

The contact officer for this Proposal is Vanessa Penfold (Land Use Planner).

Part 6 - Project Timeline

Part 6 - Project Timeline

This project timeline is based on anticipated dates and timeframes, though there can be unexpected delays. In accordance with the Gateway, Council has authorisation to carry out certain plan-making functions. This authorisation will be exercised by Council's General Manager or the Director of Development & Environment.

Action	Timeframe
Commencement (date of Gateway determination)	June 2019
Timeframe for completion of required technical information	Oct 2019
First Public exhibition and government agency consultation period	Nov - Dec 2019
Timeframe for the consideration of submissions	Dec - Jan 10/20
Timeframe for the consideration of a proposal post (1st) exhibition	Feb 2020
Timeframe for completion of further technical information	Jan 2020 - Jan 2021
Second Public exhibition and government agency consultation period	Feb-March 2021
Timeframe for consideration of submissions	April 2021
Timeframe for consideration of proposal post (2 nd) exhibition	April 2021
Date of submission to the Department for Parliamentary Counsel Opinion	Early May 2021
Anticipated date Council will make the Plan	June 2021
Anticipated date Council will forward to the Department for notification	June 2021

38

Planning Proposal under sec 3.33 of the EP&A Act

Appendix A – Gateway Determination

A copy of the Gateway Determination for this Planning Proposal is included in this Appendix.

The Section 3.34 Gateway Determination addresses processing requirements are as follows:

- 1. Prior to public exhibition, the planning proposal shall be amended to:
 - (a) include a preliminary contaminated land assessment
 - (b) include specific justification for the variation to the urban growth area boundary detailed in the North Coast Regional Plan 2036 in accordance with Appendix A of the Plan
 - (c) update Figure 7 to:
 - i. correctly reference land zoned to the south of the subject site as RU1 rather than R1; and
 - ii. include E4 Environmental Management in the key
 - 1. A minimum 14 day exhibition period
 - Consultation with NSW Roads and Maritime Services (RMS), NSW Rural Fire Service (RFS) and Office of Environment and Heritage (OEH) and provide at least 21 days to comment
 - 3. Council is authorised as the local plan-making authority
 - 4. The timeframe for completion is 9 April 2020

On 27 November 2020, the Department of Planning, Industry & Environment issued an Alteration to Gateway that provides for completion of the LEP by 30 June 2021.

Planning Proposal under sec 3.33 of the EP&A Act Rezoning to Light Industry Appendix B – Draft Site Specific Development Control Plan provisions

Appendix B – Draft Site Specific Development Control Plan provisions

Refer to Council Report 17 February 2021 - Attachment 4

PP2014-14.1 Version 2.1 February 2021

40

Appendix C – Draft DCP Update - Part B3 Hazards Management, 18 Bushfire Hazard Management

Refer to Council Report 17 February 2021 - Attachment 3

PP2014-14.1 Version 2.1 February 2021

41

Appendix D - North Coast Regional Plan 2036 Urban Growth Area Variation Principles

North Coast Regional Plan 2036 Urban Growth Area Variation Principles

A small area proposed to be zoned IN2 Light Industrial is outside the boundary of the Urban Growth Area adopted by the North Coast Regional Plan 2036. This area is shown in the Figure below.

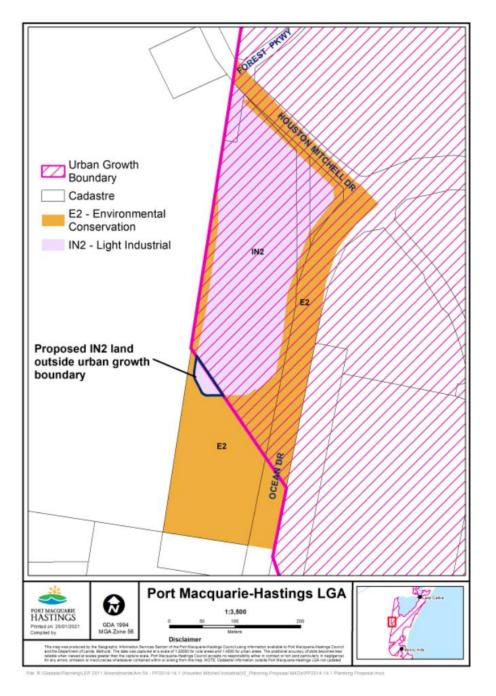


Figure - Proposed zoning relative to the NCRP Urban Growth Boundary

The table below provides an assessment of the variation in accordance with the Urban Growth Area Variation Principles contained within Appendix A of the North Coast Regional Plan (NCRP).

Urban Growth Are	ea Variation Principles	
Policy	The variation needs to be considered with the objectives and outcomes in the North Coast Regional Plan 2036 and any relevant Section 9.1 Directions and State Environmental Planning Policies, and should consider the intent of any applicable local growth management strategy.	As identified above, the variation is minor, with the majority of the site located inside the growth boundary. The site is designated as employment lands in the Department's Mid North Coast Regional Strategy 2009, and continues to be identified in the NCRP. The site has also been designated as an investigation area for light industry in Council's Urban Growth Management Strategy 2017 - 2036, which identified the need for approximately 8 hectares of light industrial land in the Bonny Hills/North Haven area to 2036. The subject land is likely to yield approximately 5.5 hectares for the purposes of light industrial use.
Infrastructure	The variation needs to consider the use of committed and planned major transport, water and sewerage infrastructure, and have no cost to government. The variation should only be permitted if adequate and cost-effective infrastructure can be provided to match the expected population.	The site is identified for employment purposes and can be connected to reticulated services by way of an existing sewer stub, which will need to be extended to reach the subject site for future connection. Further, there is opportunity to connect to the existing water main off Ocean Drive with a link through to the water main located on Houston Mitchell Drive. By way of road connections, future access is proposed from Houston Mitchell Drive. This corner location of the site will enable the future use to utilise the existing road infrastructure.
Environmental and farmland protection	 The variation should avoid areas: Of high environmental value or heritage value. Mapped as important farmland, unless consistent with the interim variation criteria prior to finalising the 	The intended outcomes of this proposal are to enable future development for light industrial purposes; and to protect ecological values on the site. Rezoning approximately 4ha of the land in the south of the site from RU1 Primary Production to E2 Environmental Conservation introduces a greater protection of the land for future environmental purposes and

	farmland mapping review.	ensures that a habitat link is provided through the site from east to west. The small parcel of land being proposed for IN2 Light Industrial Development, which is outside the growth boundary (identified in the Figure above), is balanced by introducing E2 Environmental Conservation Zone land within the urban growth area boundary. The land is not mapped as important farmland.
Land use conflict	The variation must be appropriately separated from incompatible land uses, including agricultural activities, sewage treatment plants, waste facilities and productive resource lands.	There are no significant land use conflicts arising from the proposal.
Avoiding risk	The variation must avoid physically constrained land identified as: • Flood prone • Bushfire prone • Highly erodible • Having a severe slope • Having acid sulfate soils	 Flooding and bushfire hazards are demonstrated in the Planning Proposal as being able to be managed. In relation to acid sulfate soils, part of the site is mapped as class 5 land. Under cl 7.1 of PMH LEP 2011, works within 500 metres of adjacent class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water table is likely to be lowered below 1 metre Australian Height Datum on adjacent class 1, 2, 3 or 4 land so the east of the Ocean Drive road corridor and for a distance of 500m, are currently above 5m AHD. These adjoining lands have been approved to be finished to a level of approximately 6m AHD, to provide district sporting fields and residential lots.
Heritage	The variation must protect and manage Aboriginal and non-Aboriginal heritage.	No items of heritage value have been identified within the site.

Coastal area Only minor and contiguous variations to urban growth areas in the coastal area will be considered due to its environmental sensitivity and the range of land uses competing for this limited area.	The site is not mapped as being in the Coastal Wetlands or the Proximity Area for Coastal Wetlands.
---	---

Rezoning to Light Industry Appendix E - State Agency Submissions

Appendix E - State Agency Submissions



18 December 2019

File No: NTH19/00293/01 Your Ref: PP2014-14.1

The General Manager Port Macquarie Hastings Council PO Box 84 PORT MACQUARIE NSW 2444

Attention: Stephanie Baker council@pmhc.nsw.gov.au

Dear Madam,

Re: Planning Proposal – Lot 10 DP615776 & Lot 1 DP 1117908 - Corner of Ocean Drive & Houston Mitchell Drive, Bonney Hills – Proposed Light Industry & Environmental Rezoning.

I refer to your letter dated 18 November 2019 requesting comment from Transport for NSW (TfNSW) in relation to the abovementioned planning proposal.

Roles and Responsibilities

The key interests for TfNSW are the safety and efficiency of the transport network, the integrity of State infrastructure and the integration of land use and transport in accordance with *Future Transport Strategy 2056.*

Ocean Drive is a classified (Regional) road (MR600). In accordance with Section 7 of the *Roads Act 1993* (the Act) Port Macquarie Hastings Council is the Roads Authority for this road and all other public roads in the subject area. TfNSW's concurrence is required prior to Council's approval of works on this road under Section 138 of the *Roads Act 1993*.

In accordance with Clause 101 of the *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) the Consent Authority is to have consideration for the safety, efficiency and ongoing operation of the classified road as the development has frontage to a classified road. TfNSW is given the opportunity under Clause 104 to comment on traffic generating developments listed under Schedule 3. The proposed use of the land (industrial) is a Schedule 3 use.

Transport for NSW Response

TfNSW has reviewed the information provided and suggests that the Planning Proposal include a Traffic Impact Assessment (TIA) prepared by a suitably qualified person to identify likely traffic impacts on the classified road network.

While is acknowledged that more detail will be provided at the subdivision stage, it is important that Council understands the number and types of trips generated by this type

Transport for NSW 76 Victoria Street, Grafton, NSW 2460 | PO Box 576, Grafton NSW 2460 W transport.nsw.gov.au of development when considering the rezoning. No detail of projected traffic impacts has been provided in the current documentation.

The TIA should be prepared in accordance with the current Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and the RTA Guide to Traffic Generating Developments. The TIA should include, but not be limited, to the following;

- The impact of the proposed development on the road network with consideration for a 10 year design horizon.
- The volume and distribution of traffic generated by the proposed development.
- Background traffic data, including current traffic counts and relevant growth rates. The data should take account of surrounding development; both present and future.
- Sight distance measurements at site access locations and affected intersections.
- Proposed site access arrangements and details of proposed improvements to any affected intersections.
- Details of servicing and parking arrangements, including swept paths for the largest vehicle requiring access to the site.
- Impact on public transport (public and school bus routes).
- Connectivity for active transport modes such as walking and cycling.

Details of the proposed intersection treatment are required. It is suggested that Council obtain a strategic design drawing to demonstrate that access can be safely achieved at the location proposed. This should include identification of any environmental constraints or constructability issues, and if any portion of adjoining land is needed to achieve the access proposed. It is recommended that Part 4 of Austroads be used to identify any necessary improvements to the cross-intersection.

It is noted that the proposed DCP amendment will restrict access to Ocean Drive. This is supported. However, it is pointed out that any new access or works proposed on the classified (Regional) road should be designed in accordance with the current Austroads Guidelines, Australian Standards and TfNSW Supplements, to the satisfaction of Council, prior to referral to TfNSW for concurrence under Section 138 of the Roads Act.

If you have any further enquiries regarding the above comments please do not hesitate to contact Cheryl Sisson, Development Assessment Officer on (02) 6640 1362 or via email at: <u>development.northern@rms.nsw.gov.au</u>

Yours faithfully,



Matt Adams Manager Land Use Assessment, Northern

Transport for NSW 76 Victoria Street, Grafton, NSW 2460 | PO Box 576, Grafton NSW 2460 W transport.nsw.gov.au



NSW RURAL FIRE SERVICE

Port Macquarie-Hastings Council PO Box 84 PORT MACQUARIE NSW 2444

Your reference: PP-2014-14.1 (Amendment 54) Our reference: SPI20191123000147

ATTENTION: Stephanie Baker

Date: Tuesday 11 February 2020

Dear Sir/Madam,

Strategic Planning Instrument

LEP Amendment - Planning Proposal

Port Macquarie LEP 2011 - Rezone lot 1 DP 1177908 & lot 10 DP 615775 Houston Mitchell Drive Bonny Hills from RU1 Primary Production to part IN2 Light Industrial, part E2 Environmental Conservation and part E3 Environmental Management and associated amendments to the Height of Buildings, Floor Space Ratio and Minimum Lot Size maps

I refer to your correspondence dated 19/11/2019 inviting the NSW Rural Fire Service (NSW RFS) to comment on the above Strategic Planning document.

The NSW RFS has considered the information submitted and provides the following comments.

1. Future subdivision applications are to comply with the requirements of Planning for Bush Fire Protection 2019. all building envelopes shall not be in flame contact and constructed to an appropriate radiant heat constructions standard.

For any queries regarding this correspondence, please contact Alan Bawden on 1300 NSW RFS.

Yours sincerely,

Timothy Carroll Manager Planning & Environment Services Planning and Environment Services

Postal address

NSW Rural Fire Service Locked Bag 17 GRANVILLE NSW 2142 Street address NSW Rural Fire Service 4 Murray Rose Ave SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555 F (02) 8741 5550



Item 13.13 Attachment 2 Page 691

1



Your Ref: PP2014 – 14.1	HASTINGS
General Manager Port Macquarie Hastings Council PO Box 84 Port Macquarie NSW 2444	TRIM No CRM No 1 , JAN 2020 Keyword
Attention: Ms Stephanie Baker	Subject Folder PP 2014 - 14-1

Dear Mr Swift McNair

RE: Planning Proposal Lot 10 DP 615775 and Lot 1 DP 1117908, corner Ocean Drive and Houston Mitchell Drive, Bonny Hills - proposed Light Industrial and Environmental rezoning

Thank you for your letter dated 18 November 2019 about the Planning Proposal at the corner of Ocean Drive and Houston Mitchell Drive, Bonny Hills seeking comments from the Biodiversity and Conservation Division (BCD) of the Environment, Energy and Science Group in the NSW Department of Planning, Industry and Environment. I appreciate the opportunity to provide input.

The BCD was formerly part of the Office of Environment and Heritage, but now forms part of a Group that has responsibilities relating to biodiversity (including threatened species and ecological communities, or their habitats), Aboriginal cultural heritage, National Parks and Wildlife Service estate, climate change, sustainability, flooding, coastal and estuary matters.

We have reviewed the documents supplied and advise that we have no issues to raise in relation to flood risk management and Aboriginal cultural heritage at this rezoning stage. However, several issues are apparent for biodiversity (including threatened species and ecological communities, or their habitats) and National Parks and Wildlife Service estate. These issues are discussed in detail in **Attachment 1** to this letter.

The BCD provided a recommended approach to Planning Proposals in our submission on the Port Macquarie Hastings Council's Planning Proposal Policy in November 2019. This advice described how Planning Proposals should demonstrate consistency with the strategic planning framework including the North Coast Regional Plan 2036. Action 2.1 under Direction 2 of the Regional Plan requires development to be focused to areas of least biodiversity sensitivity in the region and the implementation of the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value (Attachments 2 and 3). We have applied this advice in our response on this Planning Proposal.

In summary, the BCD strongly supports the proposed rezoning of the southern portion of the planning area as E2 Environmental Conservation and restoration of the area under a Vegetation Management Plan in accordance with a planning agreement. Rezoning and rehabilitation of the southern portion will provide an opportunity to create an east-west habitat link between E2 and E3 zoned land to the east and the Queens Lake State Conservation Area (SCA) to the west. In time, following restoration,

Level 8, 24 Moonee Street, Coffs Harbour, NSW 2450 | Locked Bag 914, Coffs Harbour Ph (02) 6659 8200 | dpie.nsw.gov.au |

Page 2

this part of the planning area could be considered for addition to the Queens Lake SCA/Nature Reserve system.

The land in the northern portion of the site proposed to be zoned E2 contains koala feed trees and has been mapped as Core Koala habitat in the Port Macquarie Hastings Council's draft Coastal Koala Plan of Management (KPoM). However, this area will become isolated due to the need for road access to the industrial estate from Mitchell Houston Drive. It is also at the intersection of two major roads, so attracting koalas to this area is likely to exacerbate the road safety risks already faced by the species, as evidenced by the number of dead and euthanised koalas impacted by motor vehicle strike recorded at this location on BioNet. The vegetation is also not a threatened ecological community (TEC) or one that is highly cleared and is in a degraded state. There may be merit in reconfiguring this proposed E2 area, so that it is better connected to other areas of habitat in the west with a view to reducing the risk of future koala motor vehicle fatalities or injuries.

We consider that the narrow linkage of land along the east of the planning area to be zoned E3 Environmental Management offers some limited environmental value, but it would be desirable that it not include planting of koala feed trees as this could encourage movement of koalas into a high-risk area. Safer passage for koalas and other fauna should be facilitated by koala-friendly fencing that directs animals away from road crossings and into the existing culverts under Ocean Drive. These could be retrofitted to assist faunal movement.

The BCD has identified issues regarding the impacts (visual, odour, noise, vibration, air quality, amenity and biodiversity impacts) on the adjacent Queens Lake SCA arising from the future industrial use of the planning area enabled through the rezoning. To address these issues, a fully vegetated buffer could be established along the western boundary between the industrial zoned land and the SCA. This would enable more of the existing trees to be retained and protected and would buffer the SCA from the impacts arising from the future industrial development, including filling.

In summary, the BCD recommends that:

- 1. Before the configuration of E2 and IN2 zones in the north of the planning area is finalised, further consideration needs to be given to:
 - the viability of the proposed E-zoned land in the north and its connectivity with other vegetated areas,
 - b. retaining more of the mature and important remnant trees in these parts of the planning area,
 - c. the potential impacts on koalas and locations for fauna exclusion fencing,
 - d. the need to ensure that the indirect impacts on the adjoining SCA of future development in the planning area can be adequately mitigated and buffered, and
 - e. possible future dedication of E-zoned land to the NSW National Parks and Wildlife Service or the council after it has been revegetated.
- 2. Once the development footprint is resolved, the biodiversity credits required to offset future development impacts should be determined by applying Stage 1 of the Biodiversity Assessment Method (BAM) to areas of land proposed for land use intensification, including areas subject to indirect impacts, after addressing the issues raised in section 1.3 of Attachment 1 to this letter, and entering the Stage 1 data into the BAM Calculator.
- A planning agreement should be prepared as part of the Planning Proposal that commits the landowner to:
 - a. providing the biodiversity offsets identified in recommendation 2 above unless the future development application for the land triggers entry into the Biodiversity Offsets Scheme

Page 3

(BOS) under the *Biodiversity Conservation Act 2016* and the biodiversity credits required by the BOS are greater than those required by the planning agreement.

- b. preparing and implementing a vegetation management plan for the E-zoned land in the planning area and any vegetated buffers to the SCA. The plan should be prepared to the satisfaction of the council prior to any clearing works and before issuing a construction certificate.
- 4. Prior to determining a future development application for the land, including for subdivision the council should require:
 - a. A more thorough Aboriginal cultural heritage investigation to be carried out to ensure compliance with the legislative requirements relevant to Aboriginal objects in NSW.
 - b. Impacts arising from any changes to the location of floodwaters and the frequency of inundation on endangered ecological communities, including in the adjoining SCA land, as a result of changes to flooding behaviour and proposed fill to be addressed.

We request a meeting with the council and the proponent to discuss these matters and the options available to resolve them.

If you have any questions about this advice, please do not hesitate to contact Ms Rachel Lonie, Senior Conservation Planning Officer, at rachel.lonie@environment.nsw.gov.au or 6650 7130.

Yours sincerely

DIMITRI YOUNG

Senior Team Leader Planning, North East Branch Biodiversity and Conservation

Enclosures: Attachment 1: Detailed BCD Comments – Planning Proposal for land at Lot 10 DP 615775 and Lot 1 DP 1117908, corner Ocean Drive and Houston Mitchell Drive, Bonny Hills; Attachment 2: HEV Criteria and Verification Methods – North Coast Regional Plan Attachment; 3: Avoiding and Minimising Impacts on Confirmed HEV Lands

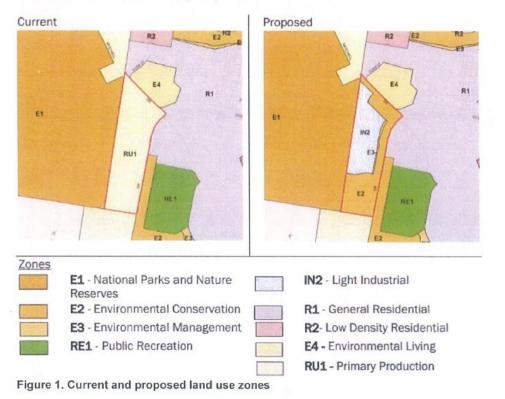
The Planning Proposal applies to Lot 10 DP 615775 (8.96 ha) and Lot 1 DP 1117908 (0.62 ha) hereafter referred to as the planning area.

The planning area was identified as an investigation area for employment lands in the North Coast Regional Plan (NCRP) 2036 and in the Port Macquarie-Hastings Urban Growth Management Strategy (UGMS) 2017 – 2036 for investigation in the immediate/short-term for service industrial development.

The Planning Proposal seeks to rezone the planning area from Zone RU1 Primary Production to part IN2 Light Industrial, part E2 Environmental Conservation and part E3 Environmental Management and includes associated amendments to the Height of Buildings, Floor Space Ratio and Minimum Lot Size (MLS) maps. The area to be zoned IN2 will have a MLS of 1000 m².

The land proposed for rezoning to IN2 is in the northern half of the planning area as shown in Figure 1 below and covers 5.81 ha. The remaining 3.73 ha of the planning area is proposed as a conservation area with the majority to be zoned E2 Environmental Conservation. A small area along Ocean Drive is to be zoned E3 Environmental Management and will be planted to screen the industrial development. The adjacent sections of Mitchell Houston Drive and Ocean Drive are also proposed to be zoned E2.

The planning area contains Core koala habitat in the north along Mitchell Houston Drive, four hollow bearing trees, numerous koala feed trees, and is flood affected in the south. It adjoins the Queens Lake State Conservation Area (SCA) in the west.



Page 1 of 12

1. Biodiversity

1.1 Direction 2 Regional Plan - avoid, minimise and offset biodiversity impacts

Planning Proposals need to demonstrate consistency with the strategic planning framework including the North Coast Regional Plan 2036. Action 2.1 under Direction 2 of the Regional Plan requires development to be focused to areas of least biodiversity sensitivity in the region and the implementation of the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value.

This action should be considered and implemented at the Planning Proposal stage. High environmental value (HEV) land should be identified at the site scale and the current land uses on such areas should not be intensified. Ideally, such areas would be better protected through an appropriate zone which has strong conservation objectives, limited land uses and an appropriate minimum lot size, so the land cannot be subdivided.

In general, the BCD recommends that Planning Proposals:

- a. Include site investigations of the planning area undertaken by a suitably qualified ecological consultant for the presence of HEV land as per the criteria for HEV land set out in the North Coast Regional Plan (The investigation of HEV lands at the site scale must be fully documented in the Planning Proposal report. The HEV criteria from the North Coast Regional Plan are provided in Attachment 2), and
- b. Maximise avoiding land use intensification in confirmed areas of HEV land and protect HEV land with a suitable zone (either E2 Environmental Conservation or E3 Environmental Management) and other planning controls, such as minimum lot sizes that prevent future subdivision, as part of the Planning Proposal, and
- c. Justify why land use intensification in some areas of confirmed HEV land cannot be avoided and be designed to minimise the impacts of future development on HEV land. Information on avoiding and minimising impacts on HEV is provided in Attachment 2 to this letter, and
- d. Determine the biodiversity credits required to offset future development impacts by applying Stage 1 of the Biodiversity Assessment Method (BAM) to areas of confirmed HEV land proposed for land use intensification, including areas subject to indirect impacts, and enter the Stage 1 data into the BAM Calculator (the BAM must be applied by a suitably qualified ecological consultant and areas of directly impacted HEV must be treated as 100% biodiversity loss), and
- e. Include a Planning Agreement that commits to providing the biodiversity offsets identified in d. above unless the future development application for the land triggers entry into the Biodiversity Offsets Scheme (BOS) under the *Biodiversity Conservation Act 2016* and the biodiversity credits required by the BOS are greater than those required by the planning agreement.

1.2 Identification of HEV land

A detailed ecological assessment and addendum prepared by FloraFauna Consulting in 2016 and 2017 (EA 2016 and EA 2017) are provided in support of the Planning Proposal as Attachments 4 and 5. A subsequent Ecological Assessment (Biodiversity Australia, 2018) (EA 2018) was prepared to meet the principles of the *Biodiversity Conservation Act 2016* and this is stated to have been prepared in accordance with stages 1 and 2 of the Biodiversity Assessment Method (BAM).

Whilst the BCD supports the approach to assess the biodiversity values of the planning area in accordance with stage 1 of the BAM, the EA 2018 does not conform with the BAM in several

a set a statement of a

Attachment 1: Detailed BCD Comments – Planning Proposal for land at Lot 10 DP 615775 and Lot 1 DP 1117908, corner Ocean Drive and Houston Mitchell Drive, Bonny Hills

important ways: These are discussed in detail later in this submission. It also does not identify HEV land in accordance with the Regional Plan.

The BCD has reviewed the information provided in the ecological assessments and we have considered whether HEV has been adequately avoided. We note the planning area does not contain the following HEV:

- Littoral Rainforest, Coastal Wetlands and proximity areas for these mapped by the SEPP (Coastal Management)
- Areas of Outstanding Biodiversity Value under the Biodiversity Conservation Act 2016
- Nationally Important Wetlands
- Native vegetation in over-cleared (Mitchell) landscapes (the Mitchell landscapes for the planning area are Port Macquarie Coastal Ramp (49% cleared) and Manning Macleay Coastal Alluvial Plains (57% cleared)

However, the planning area does contain the following potential HEV:

- A mapped third order stream (this may no longer be present on the site)
- An over cleared vegetation type (PCT 1230 is more than 70% cleared)
- A threatened ecological community (TEC) (PCT 1230 is a TEC)
- Key habitats for threatened species potential Core Koala habitat (vegetation in the north is identified as Core koala habitat in the draft Port Macquarie Coastal Koala Plan of Management (February 2018)
- Known habitat for populations of species-credit species (species-credit species are identified in the Threatened Biodiversity Data Collection) – from existing BioNET records and/or field work. (this can only be determined through survey work).

Areas of HEV appear to be widespread across the planning area in degraded condition. Whilst the Planning Proposal has not strictly followed the approach set out in section 1.1 above, the proposed E2 zones in the north and south and the E3 zone along the eastern boundary of the planning area capture some areas of HEV. The proposed E zones and the vegetation management plan required by the council's Development Control Plan will also protect and manage those areas for conservation.

The remaining areas of HEV lie on land where land uses will be intensified. The proponent does not directly justify why this HEV land was not avoided, but the socio-economic benefits of a viable future industrial subdivision on strategically located proposed industrial land may provide an acceptable argument.

However, before the configuration of E2 and IN2 zones is finalised, further consideration needs to be given to the viability of the proposed E-zoned land in the north, its connectivity with other vegetated areas, the potential impacts on koalas of attracting them to that land, and the need to ensure that the indirect impacts on the adjoining SCA of future development in the planning area can be adequately mitigated.

1.3 Applying Stage 1 of the BAM

The EA 2018 partially conforms to a Biodiversity Development Assessment Report (BDAR) prepared in accordance with the BAM, however it does not meet all the BAM requirements (including surveys) and does not present all the required information. Some of the issues identified are discussed below.

Use of the small development area assessment module

The EA 2018 states the proposal qualifies for the small area development streamlined assessment module as per Section 3.2 of the Biodiversity Assessment Method (BAM). The Planning Proposal will result in a minimum lot size of 1,000 m². The maximum area limit for application of the small area development module is \leq 1 ha.

The EA 2018 identifies vegetation communities on the site as being PCT 1262 Tallowwood – Small-fruited Grey Gum dry grassy open forest of the foothills of the NSW North Coast and PCT 1230 is Swamp Mahogany swamp forest on coastal lowlands of the NSW North Coast Bioregion and northern Sydney Basin Bioregion. The EA 2018 justifies only assessing the dominant PCT (PCT 1262) because the small development area assessment module has been used. Therefore, no areas of loss have been quantified for PCT 1230 and no Vegetation Integrity scores are provided in Table 3 for the two plots that were done in PCT 1230 in the future development area.

The mapping and quantification of areas to be impacted within the development area will need to be redone once the final zone configuration is determined. We note however that the EA 2018 identified a loss greater than 1 ha for the PCT 1262 alone and that this would not enable the application of the small development assessment module in this instance.

Endangered ecological communities

The EA 2018 does not justify why the patches of PCT 1230 within the future development footprint are not likely to qualify as the endangered ecological community (EEC) Swamp sclerophyll Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions. The determination does not distinguish between degraded or non-degraded condition states of the EEC. The consultant should justify this finding as to why it does not qualify as a threatened ecological community.

Fauna surveys

Despite claiming the EA has been prepared in accordance with the BAM, the EA 2018 states that a full fauna survey of the site was not conducted but that "opportunistic fauna sightings and secondary evidence of fauna were recorded whilst conducting vegetation and habitat tree surveys".

A BDAR prepared in accordance with the BAM requires targeted surveys or an expert report for candidate species credits species unless the assessor determines that after carrying out a field assessment of the habitat constraints or microhabitats, that the habitat is substantially degraded such that the species is unlikely to utilise the subject land. The EA 2018 does not discuss why the habitat is not suitable for the 34 species credit species listed in Appendix 5 and the 60 species credit species listed in Appendix 6.

The EA 2018 relies on previous surveys to conclude that no further targeted survey is required. The 2016 field survey was conducted between 7 and 8 June 2016 and involved a habitat search, diurnal bird survey, scats and signs of disturbance search, Koala habitat assessment and survey, ultrasonic echolocation detection survey for bats, a stag watch, spotlighting and diurnal and nocturnal amphibian survey.

Species credit species that the EA 2018 identifies as not being on site includes the southern myotis (*Myotis macropus*). The habitat constraint for the species is hollow bearing trees within 200 metres of a riparian area. All habitat on the subject land where the subject land is within 200m of a waterbody with pools/ stretches 3m or wider, including dams, must be mapped as potential habitat. The species can be detected via survey using harp traps and mist nets as described in the Threatened Bat Survey Guide between October and March. As the planning area contains suitable habitat it is not clear why this species has been removed from the need to survey. The 2016 survey

Page 4 of 12

used ultrasonic echolocation detection survey and therefore was not appropriate for identifying this species.

For the species credit species in the development site, the EA 2018 only identifies square-tailed kite, squirrel glider, brush-tailed phascogale and koala as requiring survey. It states these species have been surveyed during previous surveys and hence no further targeted survey is required. Also, it states that none of these species were confidently recorded on the site. This is not correct for the koala as discussed below. Also, the 2016 survey did not involve the use of baited cameras as is required for the brush-tailed phascogale.

As the site contains hollow bearing trees (including tree hollows greater than 50 mm in diameter) several threatened species could potentially forage or nest in these. It is therefore not clear why some species have been excluded from the need for survey. For example, there are Squirrel Glider records in the adjoining SCA and in land to the south of the SCA less than 500 m from the centre of the planning area.

For the offset site, the EA 2018 lists the above four species and also includes *Melaleuca biconvexa* and *Maundia triglochinoides* as requiring survey. It also states that these species have been surveyed during previous surveys and hence no further targeted survey is required. Also, it states that none of these species were confidently recorded on the site. This is also not correct for the above reasons for brush-tailed phascogale and koala and for the threatened plants *M. biconvexa* and *M. triglochinoides* as these were not targeted in the 2016 threatened plant survey.

Flora and fauna surveys are required in accordance with the BAM unless a BDAR provides a justification of why the habitat is not considered suitable for the species following a site survey.

Koalas

The EA 2018 states the koala was considered highly likely to occur on the site, although no direct evidence was found. It concludes that because "none of these species were confidently recorded on the site and as such, there is no species credit requirement for the development site" (p.23).

The EA 2016 stated "No Koala scats were found; however, it was impossible to draw any conclusions from this alone given the recent heavy rain associated with the intense east coast low pressure system and extent of surface water within the site at the time of the assessment. Several trees showed signs of Koala activity, including scratches consistent with those made by Koalas on the trunk of a Forest Red Gum tree (tag no. 873) located near the eastern boundary adjacent to the larger dam within the site and disturbed bark on the trunks of four (4) Tallowwood trees (tag nos. 853, 854, 857 and 858) located adjacent to the western boundary of the site. Given the evidence recorded during the Koala survey there seems little doubt that on occasion the habitat within the study area is utilised by the species." (p.69).

There are three koala BioNet records at the intersection of Mitchell Houston Drive and Ocean Drive. These are identified as follows:

- 3/11/2005 Motor vehicle accident DEAD
- 9/8/2007 Motor vehicle accident EUTHANASIA
- 4/12/2015 Motor vehicle accident EUTHANASIA.

The locations for these records appear to be within the planning area. There is also one record just south of the planning area on Ocean Drive dated 29/04/2002 which is also identified as "motor vehicle accident DEAD".

The majority of trees identified to be removed are primary koala browse trees (*E microcorys, E robusta, E tereticornis* and *E. patentinervis* being a hybrid of *E. robusta* and *E. tereticornis*) or secondary browse trees (*E. siderophloia, E. globoidea and Melaleuca quinquenervia*).

Page 5 of 12

The EA 2018 states that a total of 22 koala feed trees were recorded. This appears to be a significant underestimate based on the information in the EA 2016 Appendix C which lists 66 trees as koala feed trees, with 29 that would be required to be removed based on an earlier development footprint. The discrepancy between the reports should be justified and the number and location of koala feed trees identified in the revised EA 2018.

The EA 2018 conclusion that koalas have not been confidently recorded on the site, and therefore that no species credits will be required, is not correct. For the above reasons, koalas should be assumed to be present on site, and an appropriate offset should be calculated and secured for the species. The accredited assessor must use a species polygon, as per Step 5 of Section 6.3 of the BAM to identify the area and location of the suitable habitat for the koala on the development site. Information relating to the koala polygon/s must be described in full in the BDAR and entered into the BAM-C so that a suitable koala species credit species offset requirement can be determined.

Tree removal

The Concept Plan provided in support of the Planning Proposal indicates 68 mature native trees will be removed as a result of the future development. However, this does not include all the trees that were identified by FloraFauna Consulting (2016). Although the Concept Plan shows many retained trees, we question if these can be satisfactorily retained given the earthworks that will be required and the bushfire asset protection requirements.

For example, it is unlikely that the stated tree retention of the 12m high *E. robusta* identified in the Concept Plan along the western boundary can be achieved given this area will require fill to ensure the development is above the flood level as identified in Figure 2 below, and other trees along this boundary are also unlikely to be retained.

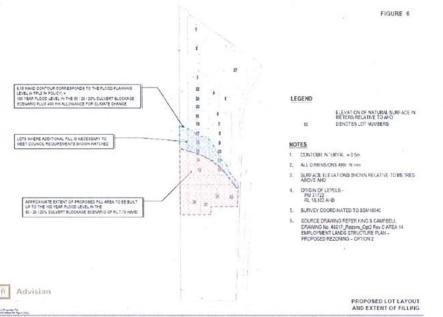


Figure 2. Proposed lot layout and extent of fill in Advision 2019 report

In other locations, the Concept Plan shows trees to be retained but the BCD questions if these can be achieved given the locations within pathways or on boundaries and the impacts of construction and disturbance to their root zones and canopy. For example, in Figure 3 below there are two large eucalypts that should be retained, but this appears unachievable given their root zones are within the 20m road and road verge areas.

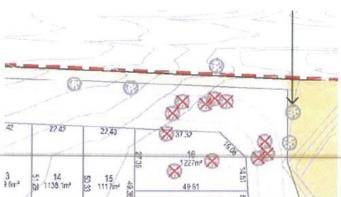


Figure 3. Detail of the Concept Plan where trees have been mapped as being retained but are within the 20m road and road verge area.

The location of tree trunks within the development footprint and on the site boundary to the SCA creates a connected canopy that would overhang the inner protection area of the development. The retention of these trees appears to not be compatible with requirements for bushfire protection as shown in Appendix 4 of the Bushfire Assessment. Also, the retention of many of these trees appears to be unachievable given the requirements for fill to raise the flood level of the development land.

The council's DCP has a minimum width of 20m and a minimum depth of 40m for any industrial allotments created by Torrens title subdivision. It should be possible to accommodate the industrial subdivision with these minimum requirements whilst achieving more tree retention and a vegetated buffer to the SCA. The BCD recommends the council consider whether the industrial area could be better configured to retain more of the mature and important remnant trees within the development area.

For trees left in-situ it is important that they are not impacted by any buildings/infrastructure and are not compromised during and post development. For example, if they are too close to buildings, then they may be removed later due to limb fall risk. Buildings/infrastructure should be outside the tree drip lines, and not impact tree bases and root systems.

Offset area

The EA 2018 states that the credit calculations found that a credit match between the development site and the offset site had been achieved. This is not correct. Under the Biodiversity Offset Scheme (BOS) onsite offsets can be provided if:

- the proposed offset area provides the required number and type of biodiversity credits, and
- . the area is protected in perpetuity through a Biodiversity Stewardship Agreement (BSA).

Table 1 describes the ecosystem credits as calculated in the EA 2018. This identifies there will be no loss of PCT 1230 based on the use of the small development area module, which, as discussed above, is not appropriate.

Plant Community Type (PCT)	Development site	Offset site
PCT 695 Blackbutt-Turpentine-Tallowwood shrubby open forest of the coastal foothills of the central NSW North Coast Bioregion	0	1
PCT 1230 Swamp Mahogany swamp forest on coastal lowlands of the NSW North Coast Bioregion and northern Sydney Basin Bioregion	0	9
PCT 1262 Tallowwood-Small-fruited Grey Gum dry open forest of the foothills of the NSW North Coast	12	2

As demonstrated in the table above, the credits do not match. Also, there is no commitment to establish the site as a Biodiversity Stewardship Site.

There is also an inconsistency with how the EA 2018 maps vegetation in the development site versus the offset site. Despite both areas being managed in the same way (i.e. mown/slashed), only isolated patches are mapped as PCT 1230 within the development footprint while the same isolated patches are mapped as an entire area of PCT within the offset site (Figures 4 and 5 below).



Figure 4 (on left) Isolated areas are mapped in the development area while in Figure 5 (on right) the entire area is mapped as vegetated despite the area being managed in the same way.

Management of E2 zoned land and habitat linkage

The BCD strongly supports the rezoning of approximately one third of the site to E2 for regeneration and future preservation. The rezoning of the southern part of the site to E2 will provide an important opportunity to link habitat via existing culverts under Ocean Drive in an east-west direction. This will connect to the E2 and E3 zoned land east of the planning area.

The BCD notes there are numerous koala BioNet records in the vicinity, including along Ocean Drive, at the intersection of Mitchell Houston Drive and to the south of the planning area. The fact that several of these were dead or injured indicates the need for a safe passage to be created. While it would be preferable to create large culverts under Ocean Drive there is an opportunity to retrofit the existing triple cell culvert system to enable a safer passage for koalas and other fauna under the roadway.

It is noted that Clause 2.3.3.5 of the DCP requires environmental areas to be appropriately protected and managed. The intention is to achieve this through the implementation of a Vegetation Management Plan (VMP), which should be required to be prepared prior to any clearing works and before issuing the construction certificate.

As this land is degraded and largely consists of remnant native trees with no understorey it will require considerable regeneration and ongoing maintenance over a long period. It would be preferable that in time, once the restoration has been completed, that the E2 land be transferred to NPWS or the council. This may require a ten (10) year or more restoration and management plan.

Page 8 of 12

ORDINARY COUNCIL 17/02/2021

Attachment 1: Detailed BCD Comments – Planning Proposal for land at Lot 10 DP 615775 and Lot 1 DP 1117908, corner Ocean Drive and Houston Mitchell Drive, Bonny Hills

The Concept Plan indicates there will be an area available for stormwater management adjacent to the E2 land. No stormwater management infrastructure or servicing should be permitted within the E2 land. It is recommended this be included in the Planning Agreement and VMP.

The BCD recommends that a Planning Agreement be made between the council and the landholder that commits the landholder to providing the biodiversity offsets that will be calculated in the revised EA 2018. This would be required unless the future development application for the land triggers entry into the Biodiversity Offsets Scheme (BOS) under the *Biodiversity Conservation Act 2016* and the biodiversity credits required by the BOS are greater than those required by the planning agreement.

Summary of BAM issues

Once the development footprint is resolved, to fulfil the requirements for the Stage 1 Biodiversity Assessment Method (BAM) assessment of the agreed development footprint it is recommended the EA 2018 be revised to:

- a. Provide a full biodiversity assessment in accordance with Stage 1 of the BAM, noting the small development area assessment module is not applicable in this instance.
- b. Document why the patches of PCT 1230 are not an endangered ecological community.
- c. Include flora and fauna surveys undertaken in accordance with the BAM unless a justification is provided as per 6.4 of the BAM as to why the habitat is not considered suitable for the species.
- Quantify the areas of PCT 1230 and provide Vegetation Integrity scores for the relevant plots.
- e. Koalas should be assumed to be present on site, and an appropriate offset should be calculated and secured for the species. The accredited assessor must use a species polygon, as per Step 5 of Section 6.3 of the BAM to identify the area and location of the suitable habitat for the koala on the development site. Information relating to the koala polygon/s must be described in full in the BDAR and entered in the BAM-C so that a suitable koala species credit species offset requirement can be determined.

2. Adjoining park issues

The planning area adjoins the Queens Lake State Conservation Area (SCA) which is owned and managed by the National Parks and Wildlife Service (NPWS). The area can flood and has laminar surface flows so any constrained drainage will impact the adjacent SCA and existing vegetation in the southern portion of the planning area. The vegetation includes *Eucalyptus robusta*, melaleucas and she-oaks which are components of the Swamp Sclerophyll Forest EEC that prefer wetter soils. Consideration must be given to whether the area in the SCA will be impacted as a result of the future development to be enabled by the Planning Proposal.

This vegetation has high fauna values including for koala, swift parrot, southern emu wren, squirrel glider, phascogales and masked owl. The reserve has significant recreational interest for birdwatching, mountain bike riding and bushwalking. The NPWS identifies the importance of retaining large hollow bearing trees, especially close to the boundary of the SCA and along the road verges to provide habitat, road side visual screening and buffers to the development.

The guidelines for developments adjoining NPWS land (https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Developmentguidelines/guidelines-for-developments-adjoining-land-managed-by-OEH-130122.pdf) recommend

consent authorities consider the types of impacts associated with development adjoining land managed by NPWS to avoid and then minimise and mitigate any adverse environmental impacts. Issues that are relevant to the proposed industrial development are discussed below.

Visual, odour, noise, vibration, air quality and amenity impacts

Section 2.7 of the adjoining park guidelines relate to visual, odour, noise, vibration, air quality and amenity impacts. They aim for there to be no reduction of amenity on NPWS land due to adjacent development. These impacts may particularly affect native fauna species (for example, noise, vibration and lighting may disrupt foraging and breeding habits). They may also adversely affect the use and public enjoyment of walking trails, camping and picnic areas.

The recommended approach is for the planning authority to take into account the visual (including lighting), noise, odour and air quality impacts of development adjacent to the NPWS land to ensure that it is sympathetic with natural and cultural heritage values, and does not impact upon amenity or public enjoyment of the land. Planning authorities should consider whether it is appropriate to apply control measures, such as landscaping with local native plant species, implementing buffer areas, limiting hours of operation, and use of appropriate colours, building materials, lighting and height controls.

Filled area along SCA boundary

The Planning Proposal is supported by a 2010 Flood Impact Assessment (Pensini, 2010) and an updated 2019 Flood Impact Assessment (Advision, 2019) which established the peak 100-year recurrence flood level at the site. The information was used to inform the initial indicative layout for the site, including the extent of proposed fill to support the future industrial subdivision and use of the land.

The council report states that approximately 5,000 cubic metres of fill will be required, leading to an increase in potential storm-water runoff and the likelihood of reduced flood storage as a result of the required fill. A subsequent report was prepared by Worley Parsons were engaged to carry out additional to characterise the existing flood conditions and to document the magnitude and extent of the impact as a result of the necessary fill. The extent of the proposed and additional fill required as a result of these studies is shown in Figure 2 above. This shows fill will be required along the SCA boundary northward of the small dam. This would be expected to require a retaining wall along the SCA boundary.

The BCD does not support this development hard up against the SCA boundary and requests that there be a buffer established to protect the park values.

Buffer to the SCA

The adjoining park guidelines encourage consideration of an appropriate buffer, vegetated where possible, or set-back between any development and the NPWS land. Where managed effectively, a buffer may minimise the impact to the natural and cultural values of the NPWS land, and increase the resilience of the area to counter potential impacts of climate change.

The BCD considers a landscaped buffer is required to screen and buffer the impacts arising from the future development on the reserve land. We note that the council's Development Control Plan (DCP) includes an objective under section 3.5.3.4 to provide a natural buffer between development on industrial and adjoining or adjacent non-industrial land uses.

The DCP also has a requirement for buffers to EECs. The western boundary of the planning area adjoins Swamp Mahogany forest which is likely to qualify as an EEC. The DCP requires a fully vegetated buffer of 35m for coastal floodplain EECs and 50m for other EECs. Fully vegetated buffers cannot contain road infrastructure or an asset protection zone.

Page 10 of 12

Location of bushfire asset protection zones

Section 2.5 of the adjoining park guidelines state that councils and other planning authorities should not grant approvals that involve the undertaking of bush fire hazard reduction works within NPWS land, including the establishment of asset protection zones, or include conditions requiring such an outcome. The Bushfire Assessment has identified the need for a 20 m asset protection zone to the SCA and that this can be provided by the roadway.

The consent authority should ensure that there are adequate measures in place to protect their assets and not rely upon NPWS or other agencies providing bushfire protection. The onus should be on developers to be proactive with their own fire protection measures and not to rely on fire agencies to do fire mitigation works.

No additional clearing or other measures is to be required in the NPWS land to achieve bushfire asset protection for the industrial zoned land. NPWS will not construct/upgrade fire trails for this development and will not undertake specific hazard reductions.

The consent authority should ensure that there are sufficient distances provided to the areas of bushfire risk and that future tenants or owners of lots in the industrial park will be safe and their assets can be defended from bushfire attack. Following the recent bushfires, there may be a need to reconsider appropriate buffers for fire mitigation purposes as the distances prescribed in bushfire guidelines may not be adequate on a site-by site basis. Consideration should also be given to building construction/fire hydrant points, fire hoses, and safe egress to and from the site.

Stormwater impacts on EECs

The predicted 100 year ARI flood extent as a result of the proposed development (Figure 6) shows that the predicted peak 100 year ARI will increase within the park boundary. As the report describes, the Ocean Drive roadway embankment presents as a barrier to the easterly discharge of floodwaters and the culvert systems concentrate runoff and discharge it east of the site.

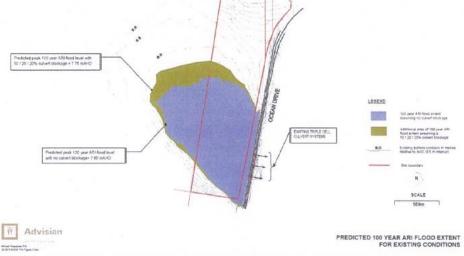


Figure 6. Extract from Advisian report showing the predicted 100 year ARI flood extent

However, there does not appear to be any assessment of the impacts on coastal wetland vegetation communities both upstream of the culverts and downstream (i.e. in the area proposed to be rezoned E2) and the SCA, including the impact of 5,000 cubic metres of fill to create lots that are above the flood level. Such impacts should be considered as part of the assessment of a future subdivision development application.

Page 11 of 12

Fencing to SCA

The proponent has included Appendix B which is a proposed draft amendment to the DCP. This identifies the location of fauna exclusion fencing along the southern, eastern and northern perimeters of the industrial zone portion of the site (shown as the development footprint). Fauna exclusion fencing is also required along the boundary of the IN2 zoned land and the SCA to exclude fauna from the development site. If this is included in the council DCP, it is recommended the diagram be updated to reflect a requirement for fauna exclusion fencing along the western boundary to the SCA.

As discussed above the BCD is recommending a vegetated buffer along the western boundary to the SCA. This would preferably be set back with a vegetated buffer in a similar way to the proposed eastern boundary setback. For proposals involving boundary fencing, NPWS has established policies and procedures to guide the choice of suitable fencing and cost-sharing arrangements. Consent authorities should refer development proponents to the Boundary Fencing Policy.

3. Aboriginal cultural heritage

The BCD has reviewed the supporting documentation for the proposal from the perspective of Aboriginal cultural heritage (ACH) and has the following comments to make.

We note that the Birpai Local Aboriginal Land Council (BLALC) has conducted a basic background review and on-site inspection of the planning area and did not identify any significant ACH values or Aboriginal objects that would form a constraint for the proposed rezoning. Based on this understanding the Department does not have any specific ACH issues to raise for the proposal.

However, we also note that Aboriginal Cultural Heritage Assessment supplied to inform the proposal is not comprehensive enough to inform any determination on future projects, within the planning area, that would involve any ground disturbing works. Prior to determining a future development application including for subdivision a more thorough ACH investigation would need to be carried out to ensure compliance with the legislative requirements relevant to Aboriginal objects in NSW.

4. Flood risk management

The site is traversed by an ephemeral water course which is drained under Ocean Drive by three culverts. Ocean Drive and the culverts act as a hydraulic control. A flood impact assessment completed by Worley Parsons (2010) estimates that ponding will occur on the site up to 7.8mAHD during a 1%AEP event allowing for a 35% culvert blockage. Filling is proposed to meet PMHC flood policy freeboard requirements. The Worley Parsons (2010) Flood Impact Assessment found that this filling would have negligible impact on the 1% AEP flood height or peak discharge through the culvert. This is primarily because the culverts have a large capacity in proportion to the peak discharge generated by the catchment.

The methodology, parameters used, considerations and ultimate conclusions of Worley Parsons (2010) are in accordance the Floodplain Development Manual. Flooding has been adequately considered and should not preclude the proposed rezoning. Details around minimum floor levels and filling can be resolved at Development Application stage.

Based on the above information, the BCD does not raise any issues in relation to flood risk for people and property.

Verification Approach	High Environmental Value Criterion	Verification Method
A. Desktop Analysis	1. Littoral Rainforest, Coastal Wetlands and proximity areas for these mapped by the SEPP (Coastal Management)	Check the maps of coastal wetlands, littoral rainforests and their proximity areas in the SEPP: (Coastal Management) to identify whether any of these attributes occur on the site. The maps are available at http://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer =SEPP_CoastalManagement.
	2. Areas of Outstanding Biodiversity Value declared under the Biodiversity Conservation Act 2016	Check the list of declared Areas of Outstanding Biodiversity Value to identify whether any occur on the site. The list is available at
		https://www.environment.nsw.gov.au/criticalhabitat/CriticalHabitatProte ctionByDoctype.htm. As at November 2019, for the NE region the only declared areas of outstanding biodiversity value are for the Mitchell's Rainforest Snail in the Stotts Island Nature Reserve.
	3. Nationally Important Wetlands listed in the Directory of Important Wetlands, including a 50 m wide buffer	Check the map of Nationally Important Wetlands to identify whether any occur on the site and/or whether a 50m wide buffer to those wetlands intersects the site. The map is available at http://www.environment.gov.au/webgis- framework/apps/pmst/pmst.jsf and the map data can be downloaded from the SEED portal at https://datasets.seed.nsw.gov.au/dataset/directory-of-important- wetlands-in-australia.
	4. Riparian zones of third order streams and above including a buffer consistent with Appendix 3 of the Biodiversity Assessment Method	Refer to Appendix 3 of the Biodiversity Assessment Method available at https://www.environment.nsw.gov.au/biodiversity/assessmentmethod.h tm and use this information to analyse the site for the presence of such riparian zones and their buffers.
	5. Native vegetation in over-cleared (Mitchell) landscapes (i.e. more than 70% cleared)	 a. Identify the Mitchell Landscape in which the site occurs from the SEED portal at https://datasets.seed.nsw.gov.au/dataset/nsw-mitchell-landscapes-version-3-1. b. Register and visit the VIS database at vis@environment.nsw.gov.au. c. Use the VIS to determine whether the % cleared status of the Mitchell Landscape in which the site occurs is above 70%.
B. Fieldwork and analysis	1. Over-cleared vegetation types identified in the OEH Vegetation Information System Database as more than 70% cleared	 a. Identify Plant Community Types (PCTs) on the site through fieldwork. b. Register and visit the VIS database at vis@environment.nsw.gov.au. c. Use the VIS to determine whether the % cleared status of the PCTs identified through fieldwork on the site is above 70%.

Attachment 2: HEV Criteria and Verification Methods – North Coast Regional Plan

Page 1of 3

Verification Approach	High Environmental Value Criterion	Verification Method
	2. Threatened Ecological Communities (TECs) identified in the DPIE Vegetation Information System database or by comparison with the NSW Threatened Species Scientific Committee's Final Determinations	 a. Identify Plant Community Types (PCTs) on the site through fieldwork. b. Register and visit the VIS database at vis@environment.nsw.gov.au. c. Use the VIS to determine whether the PCTs have TEC Status d. If not identified as a TEC from steps a - c above, then refer to the NSW Threatened Species Scientific Committee determinations to consider whether the PCT accords with the determinations.
	 3. Key habitats for threatened species including: a. Breeding habitats of both species credit species and ecosystem credit species with known breeding occurrence – from existing BioNET records and/or field work 	Refer to BioNET records and undertake field work
	b. Core Koala Habitat - from existing mapping and/or field work	 a. Check existing Core Koala Habitat mapping in DPE approved Koala Plans of Management and, where necessary, follow any processes set out in these plans for identifying Core Koala Habitat. b. If the site is not in the area covered by a DPE approved Koala Plan of Management, then undertake fieldwork in accordance with SEPP 44 to determine whether Core Koala Habitat is present on the site.
	c. Important habitat of migratory and vagrant species mapped for the Biodiversity Offsets Scheme – from existing mapping	Check Important Area Mapping (IAM) to identify whether any of these mapped areas occur on the site. IAM is being developed by DPIE and expected to be made available on an online portal when completed. DPIE will provide links when available.
	d. Breeding, foraging and/or congregation habitats for migratory shorebird species with known occurrence – from existing BioNET records and/or field work.	Refer to BioNET records and undertake fieldwork.
	e. Known habitat for populations of species-credit species (species- credit species are identified in the Threatened Biodiversity Data Collection) – from existing BioNET records and/or field work.	Refer to BioNET records and undertake fieldwork.

Page 2 of 3

Attachment 2: HEV Criteria and Verification Methods - North Coast Regional Plan

Verification Approach	High Environmental Value Criterion	Verification Method
	4. Old Growth Forest defined in accordance with a code of practice under Part 5 of the (repealed) Native Vegetation Regulation 2013	View Old Growth Mapping at the SEED portal for Upper North East (https://datasets.seed.nsw.gov.au/dataset/successional stages-on-freehold-land-for-cra-upper-north-east-nsw-vis_id- 3889202cf) and Lower North East (https://datasets.seed.nsw.gov.au/dataset/successional-stages-on- freehold-land-for-cra-lower-north-east-nsw-vis_id-3888aee14) to identify whether old growth is mapped on site. If the proponent disagrees with the mapping, or the site i not mapped as old growth, then use fieldwork to asses the site for the presence of old growth.

Page 3 of 3

ORDINARY COUNCIL 17/02/2021

Attachment 3: Avoiding and Minimising Impacts on Confirmed HEV Lands

Decisions about the location of land use intensification should be informed by knowledge of biodiversity values. Final selection of these areas may be an iterative process. Location decisions may need to be revisited when all field surveys have been completed.

Locating land use intensification to avoid and minimise impacts on native vegetation and habitat

- 1. Direct impacts on clearing of native vegetation and habitat can be avoided and minimised by:
 - (a) locating land use intensification in areas where there are no biodiversity values
 - (b) locating land use intensification in areas where the native vegetation or threatened species habitat is in the poorest condition (i.e. areas that have a lower vegetation integrity score)
 - (c) locating land use intensification in areas that avoid habitat for species that have a high biodiversity risk weighting or native vegetation that is a critically endangered ecological community (CEEC) or an endangered ecological community (EEC)
 - (d) locating land use intensification such that connectivity enabling movement of species and genetic material between areas of adjacent or nearby habitat is maintained.
- 2. In selecting locations for land use intensification, the following should be addressed, as they apply to the Planning Proposal:
 - (a) an analysis of alternative modes or technologies that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed mode or technology
 - (b) an analysis of alternative routes that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed route
 - (c) an analysis of alternative locations that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed location
 - (d) an analysis of alternative sites within a property on which land use intensification is proposed that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed site.
- Justifications for decisions on the location of land use intensification should identify any other site constraints that the proponent has considered in determining the location and design of these areas, e.g. bushfire protection requirements including clearing for asset protection zones, flood planning levels, servicing constraints.
- 4. Actions taken to avoid and minimise impacts through locating areas for land use intensification must be documented and justified in the Planning Proposal.

Designing a planning proposal to avoid and minimise impacts on native vegetation and habitat

- Planning Proposal design, including the potential location of future temporary and permanent ancillary construction and maintenance facilities, should avoid and minimise clearing of native vegetation and habitat by:
 - (a) reducing the clearing footprint of future development
 - (b) locating ancillary facilities in areas where there are no biodiversity values
 - (c) locating ancillary facilities in areas where the native vegetation or threatened species habitat is in the poorest condition (i.e. areas that have a lower vegetation integrity score)

Page 1 of 3

Item 13.13 Attachment 2 Page 710

. . .

Attachment 3: Avoiding and Minimising Impacts on Confirmed HEV Lands

- (d) locating ancillary facilities in areas that avoid habitat for species and vegetation in high threat status categories (e.g. an EEC or CEEC)
- (e) providing structures to enable species and genetic material to move across barriers or hostile gaps
- (f) making provision for the demarcation, ecological restoration, rehabilitation and/or ongoing maintenance of retained native vegetation habitat on the development site.
- Efforts to avoid and minimise impacts through design must be documented and justified in the Planning Proposal.

Other Impacts on HEV

Some future development to be enabled by a Planning Proposal may have other impacts on HEV in addition to, or instead of, impacts from clearing vegetation and/or loss of habitat. For many of these impacts, HEV may be difficult to quantify, replace or offset, making avoiding and minimising impacts critical.

Other impacts on HEV can include:

- (a) impacts of future development on the habitat of threatened species or ecological communities associated with:
 - i. karst, caves, crevices, cliffs and other geological features of significance, or
 - ii. rocks, or
 - iii. human made structures, or
 - iv. non-native vegetation
- (b) impacts of future development on the connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range
- (c) impacts of future development on movement of threatened species that maintains their life cycle
- (d) impacts of future development on water quality, water bodies and hydrological processes that sustain threatened species and threatened ecological communities (including from subsidence or upsidence resulting from underground mining)
- (e) impacts of wind turbine strikes on protected animals
- (f) impacts of vehicle strikes on threatened species or on animals that are part of a Threatened Ecological Community.

Locating a planning proposal to avoid and minimise other impacts on HEV

- 1. Other impacts on HEV can be avoided and minimised by:
 - locating areas of land use intensification to avoid direct impacts on such habitat features
 - (b) locating areas of land use intensification to avoid and minimise future operations beneath such habitat features, e.g. locating future development away from geological features of significance or water dependent plant communities and their supporting aquifers
 - (c) locating areas of land use intensification to avoid severing or interfering with corridors connecting different areas of habitat, migratory flight paths to important habitat or local movement pathways
 - (d) optimising the locations of land use intensification to minimise future interactions with threatened species and ecological communities, e.g. allowing for buffers around

Page 2 of 3

Attachment 3: Avoiding and Minimising Impacts on Confirmed HEV Lands

features that attract and support aerial species, such as forest edges, riparian corridors and wetlands, ridgetops and gullies

- (e) locating areas of land use intensification to avoid direct impacts on water bodies.
- 2. In selecting areas of land use intensification, the following should be addressed, as they apply to the Planning Proposal:
 - (a) an analysis of alternative modes or technologies that would avoid or minimise such impacts and justification for selecting the proposed mode or technology
 - (b) an analysis of alternative routes that would avoid or minimise such impacts and justification for selecting the proposed route
 - (c) an analysis of alternative locations that would avoid or minimise such impacts and justification for selecting the proposed location
 - (d) an analysis of alternative sites within a planning area that would avoid or minimise such impacts and justification for selecting the proposed site.
- 3. Justifications for decisions about areas of land use intensification should identify any other site constraints that the proponent has considered in determining the locations of such areas and design of the Planning Proposal, e.g. bushfire protection requirements including clearing for asset protection zones, flood planning levels, servicing constraints.
- 4. Efforts to avoid and minimise impacts through locating areas of land use intensification must be documented and justified in the Planning Proposal.

Designing a Planning Proposal to avoid and minimise other impacts on HEV

- 1. Other impacts on HEV can be avoided and minimised by:
 - engineering solutions, e.g. proven techniques to minimise fracturing of bedrock underlying features of geological significance, water dependent communities and their supporting aquifers, proven engineering solutions to restore connectivity and favoured movement pathways
 - (b) design of project elements to minimise interactions with threatened and protected species and ecological communities, e.g. designing turbines to dissuade perching and minimise the diameter of the rotor swept area, designing fencing to prevent animal entry to transport corridors
 - (c) design of the project to maintain environmental processes critical to the formation and persistence of habitat features not associated with native vegetation
 - (d) design of the project to maintain hydrological processes that sustain threatened species and TECs
 - (e) design of the project to avoid and minimise downstream impacts on rivers, wetlands and estuaries by control of the quality of water released from the site.
- Efforts to avoid and minimise other impacts on HEV through design must be documented and justified in the Planning Proposal.

Rezoning to Light Industry Attachment 1 - Concept Plan

Attachment 1 - Concept Plan

Refer to Council Report 17 February 2021 - Attachment 1

44

Rezoning to Light Industry Attachment 2 - Flood Impact Assessment 2010

Attachment 2 - Flood Impact Assessment 2010

Worley Parsons, 2010 - As previously exhibited

PP2014-14.1 Version 2.1 February 2021

45

9/02/2021

Rezoning to Light Industry Attachment 3 - Flood Impact Assessment 2019

Attachment 3 - Flood Impact Assessment 2019

Advision, 2019 - As previously exhibited

PP2014-14.1 Version 2.1 February 2021

46

Rezoning to Light Industry Attachment 4 - Ecological Assessment

Attachment 4 - Ecological Assessment

FloraFauna Consulting, 2016 - As previously exhibited

PP2014-14.1 Version 2.1 February 2021

47

9/02/2021

Rezoning to Light Industry Attachment 5 - Addendum to the Ecological Report

Attachment 5 - Addendum to the Ecological Report

FloraFauna Consulting, 2017 - As previously exhibited

Planning Proposal under sec 3.33 of the EP&A Act Rezoning to Light Industry Attachment 6 - Ecological Assessment as per BAM methodology

Attachment 6 - Ecological Assessment as per BAM methodology

Biodiversity Australia, 2018 - As previously exhibited.

Rezoning to Light Industry Attachment 7 - Email relating to ecological assessment

Attachment 7 - Email relating to ecological assessment

Biodiversity Australia, 28/11/18 - As previously exhibited.

Rezoning to Light Industry Attachment 8 - Bushfire Hazard Assessment

Attachment 8 - Bushfire Hazard Assessment

David Pensini, 2018 - As previously exhibited.

Planning Proposal under sec 3.33 of the EP&A Act

Rezoning to Light Industry Attachment 9 - Aboriginal Cultural Heritage Assessment

Attachment 9 - Aboriginal Cultural Heritage Assessment

Birpai Local Aboriginal Land Council, 2018 - As previously exhibited.

Planning Proposal under sec 3.33 of the EP&A Act

Rezoning to Light Industry Attachment 10 - Stage 1 Site Contamination Assessment

Attachment 10 - Stage 1 Site Contamination Assessment

Regional Geotechnical Solutions, 2019 - As previously exhibited.

Planning Proposal under sec 3.33 of the EP&A Act Rezoning to Light Industry Attachment 10 - Stage 1 Site Contamination Assessment

9/02/2021

Planning Proposal under sec 3.33 of the EP&A Act

Rezoning to Light Industry Attachment 11 - Traffic Impact Assessment

Attachment 11 - Traffic Impact Assessment

King and Campbell 2020

PP2014-14.1 Version 2.1 February 2021

55

KING + CAMPBELL

Traffic Impact Assessment Houston Mitchell Drive Employment Lands Planning Proposal (Amendment No.54) Proposed Light Industrial Rezoning Lot 10 DP615775 & Lot 6 DP1210904 19 Houston Mitchell Drive, Bonny Hills

Prepared for:

Port Macquarie-Hastings Council

Prepared by:

King & Campbell Pty Ltd

1st Floor, Colonial Arcade 25-27 Hay Street Port Macquarie PO Box 243 Port Macquarie 2444 Ph: (02) 6586 2555 Fax: (02) 6583 4064 info@kingcampbell.com.au

Date: August 2020 (version 1)

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Table of Contents

	Execu	utive Summary	1
	Site a	nd Context	5
	2.1	Study Area	5
	2.1.1	Existing Land Uses	5
	2.1.2	Existing zoning	6
	2.1.3	Anticipated future development	7
	2.2	Site Accessibility	7
	2.2.1	Existing road system	7
	2.2.2	Future road system	9
	2.2.3	Traffic Volumes and conditions	10
	2.3	Transit service	11
	2.3.1	Public	11
	2.3.2	Pedestrians and Cyclists	12
	Proje	cted Traffic	14
	3.1	Site Traffic	14
	3.2	Trip generation	14
	3.3	Trip distribution	15
	3.4	Modal split	16
	3.5	Trip assignment	16
	3.6	Through traffic	16
	3.6	Method projection	16
	3.7	Non-site traffic for anticipated development in study area	16
	3.8	Method of projections	17
	3.9	Trip generation	17
	3.10	Trip distribution and assignment	18
	3.11	Modal split	18
	3.12	Through traffic	18
	3.13	Estimated volumes	18
	3.14	Total traffic	19
	Trans	portation Analysis	20
	4.1	Site access	20
	4.2	Capacity and Level of Service (LOS)	23
	4.2.1	Existing conditions	23
	4.2.2	Background conditions (existing plus growth) (2030)	24
	4.2.3	Total traffic (existing, background and site) (2030)	25
SURVEYING	D	ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIG	N

4.3

Transportation safety.

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

4.4	Traffic signals	28
4.5	Site circulation and parking	28
Improv	vement analysis	30
5.1	Improvements to accommodate existing traffic	30
5.2	Improvements to accommodate background traffic	30
5.3	Additional improvements to accommodate site traffic	30
5.4	Alternative improvements	36
Concl	usion	37

List of Appendices

Appendix A – Concept Intersection Design – Houston Mitchell Drive/Proposed Employment Road/Forest Parkway

- Appendix B Swept Path Analysis Houston Mitchell Drive/Proposed Employment Road/Forest Parkway
- Appendix C –Sight Distance Analysis Houston Mitchell Drive/Proposed Employment Road/Forest Parkway
- Appendix D –SIDRA Analysis Houston Mitchell Drive/Proposed Employment Road/Forest Parkway
- Appendix E -SIDRA Analysis Ocean Drive and Houston Mitchell Drive
- Appendix F Transport for NSW Correspondence TIA Requirements

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

ORDINARY COUNCIL 17/02/2021

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Section 1 Executive Summary

Purpose of Report and Study Objectives

This Traffic Impact Assessment (TIA) has been prepared in relation to the subject Planning Proposal (Amendment No. 54), which seeks to rezone the subject property from its current RU1 Primary Production zone to part IN2 Light industrial and part E2 Environmental Conservation.

This TIA has been prepared in response to a submission made by Transport for NSW during the public exhibition of the Planning Proposal. The TIA is consistent with the current Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and the RTA Guide to Traffic Generating Developments and includes consideration of:

- The impact of the proposed development on the road network with consideration for a 10 year design horizon.
- The volume and distribution of traffic generated by the proposed development.
- Background traffic data, including current traffic counts and relevant growth rates. The data should take account of surrounding development; both present and future.
- Sight distance measurements at site access locations and affected intersections.
- Proposed site access arrangements and details of proposed improvements to any affected intersections.
- Details of servicing and parking arrangements, including swept paths for the largest vehicle requiring access to the site.
- Impact on public transport (public and school bus routes).
- Connectivity for active transport modes such as walking and cycling.

Site Location and Study Area

The subject site is identified as Lot 10 DP 615775 (8.96ha) and Lot 6 DP 1210904 (0.62ha), corner Ocean Drive and Houston Mitchell Drive, Bonny Hills.

The site adjoins residentially zoned land to the north (separated by Houston Mitchell Drive) and east (separated by Ocean Drive) that are currently undergoing development as part of the Lake Cathie/Bonny Hills Urban Release Area. The site adjoins Queens Lake State Conservation Area to the west and rural zoned lands to the south that have been identified for further investigation for light industry or school uses.

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Proposed zone provisions and preliminary concept

Amendment No. 54 proposes the following changes to the Port Macquarie-Hastings Local Environmental Plan (PMHLEP) 2011:

- Amendment to the PMHLEP 2011 Land Zoning Map to change the zoning of the site from RU1 Primary Production to part IN2 Light Industrial and part E2 Environmental Conservation;
- Amendment to the PMHLEP 2011 Lot Size Map to allow a minimum lot size of 1000 m² for the proposed industrial zoned land and a minimum 3 hectare lot size for the proposed environmental zoned lands; and
- Amendment to the PMHLEP 2011 Height of Building Map to allow a maximum height of 10m for the proposed industrial zoned land.

The preliminary concept subdivision layout for which this TIA has been prepared provides for:

- Approximately 5.5ha of future light industrial lands;
- Approximately 4.03ha of future environmental lands;
- All vehicular access from Houston Mitchell Drive;
- An internal loop edge road; and
- Approximately 29 future light industrial lots.

Existing studies referenced in the preparation of this TIA

- Proposed Manufacturing Housing Estate Traffic Impact Assessment - Lot 638 DP1248149 Cnr Ocean Drive & Forest Parkway, Lake Cathie – Streetwise Road Safety & Traffic Services Pty. Ltd. (March 2020)
- Traffic Impact and Access Management Assessment Lot 6 DP1193553, Lot 6,2,3 & 4 DP1150758 and Lot 5 DP25886, Ocean Drive, Lake Cathie – King & Campbell Pty Ltd (June 2016)
- Hastings River Drive / Boundary Street Intersection Proposed Intersection Management – TTM Consulting (GC) Pty Ltd (December 2011)
- Sancrox Enterprise Zone Port Macquarie, NSW Traffic Report – TTM Consulting (GC) Pty Ltd (August 2009)

Findings

The assessment has considered:

- The expected traffic generation from the future development of the proposed light industrial land,
- The capacity of the existing Forest Parkway/Houston Mitchell Drive intersection and
- The proposed site access/Houston Mitchell Drive intersection and

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 2

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

 The impact on the surrounding road network, specifically the impact on the existing roundabout at the intersection of Ocean Drive and Houston Mitchell Drive.

The TIA has found:

- The site is accessible to the surrounding locality and region due to its location on Houston Mitchell Drive (being a distributor road) and near the intersection of Houston Mitchell Drive and Ocean Drive (being a Classified Regional ArterialRoad);
- Access will be available via the construction of an additional southern leg on the existing Houston Michell Drive / Forest Parkway intersection;
- The proposed future light industrial use will generate a total of 198 trips for each peak hour, with inbound and outbound trips assigned as follows:
 - 20% out of the site and 80% into the site for the AM Peak; and
 - 80% out of the site and 20% into the site for the PM Peak;
- The gravity model confirms that trip distribution and assignment is anticipated as follows:
 - o 65% towards Ocean Drive; and
 - 35% towards Pacific Highway;
- An intersection configuration of opposing CHR(s) / BAL combination is best suited to service the proposed future light industrial use;
- Sight distance at the access location is adequate given the relatively flat vertical alignment and gentle curved horizontal alignment of Houston Mitchell Drive;
- The anticipated traffic volumes generated by the proposed future light industrial use are within the expected capacity of the proposed site access intersection;
- Pedestrian and cyclist access to the development is in accordance with the provisions of Port Macquarie Hastings Council's DCP;
- Circulation within the proposed future light industrial development is proposed via the provision of a public roadway constructed as a loop circuit to provide access for the future Torrens title allotments; and
- No impact on the existing roundabout at the intersection of Ocean Drive and Houston Michell Drive has been identified within SIDRA modelling for either the AM or PM 2029 scenarios.

This TIA has confirmed that the potential traffic volume impact can

				Page 3				
SURVEYING	0	ARCHITECTURE	0	PLANNING	0	CIVIL ENGINEERING	0	URBAN DESIGN

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

be accommodated within the existing road network and that the concept access arrangement will provide appropriate access to the future light industrial development of the site.

SURVEYING D ARCHITECTURE D PLANNING D CIVIL ENGINEERING D URBAN DESIGN

Page 4

ORDINARY COUNCIL 17/02/2021

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

> Section 2 Site and Context

2.1 Study Area

The subject site is identified as Lot 10 DP 615775 (8.96ha) and Lot 6 DP 1210904 (0.62ha), corner Ocean Drive and Houston Mitchell Drive, Bonny Hills.

The site adjoins residentially zoned land to the north (separated by Houston Mitchell Drive) and east (separated by Ocean Drive) that are currently undergoing development as part of the Lake Cathie/Bonny Hills Urban Release Area. The site adjoins Queens Lake State Conservation Area to the west and rural zoned lands to the south that have been identified for further investigation for light industry or school uses.



Figure 1 - Extract from Planning Proposal

2.1.1 Existing Land Uses

The site has a mixed use history and currently includes a dwelling with outbuildings and large machinery shed, both of which are sited on the northern extent of the site. The southern extent of the site is vacant.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 5

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

2.1.2 Existing zoning

The site is zoned RU1 Primary Production pursuant to the Port Macquarie Hastings Local Environmental Plan 2011 (PMH LEP 2011). The existing zone in context with the Bonny Hills – Lake Cathie Urban Release Area is shown on the zone extract below:



Figure 2: Site context (source: PMHC LEP 2011 Map LZN 13E)

The site is identified in the Port Macquarie-Hastings Urban Growth Management Strategy (UGMS) 2017 – 2036 for investigation in the immediate/short-term for service industrial development.

The current Planning Proposal (Amendment No.54) proposes the following changes to PMH LEP 2011, consistent with the UGMS:

- Amendment to the PMH LEP 2011 Land Zoning Map to change the zoning of the site from RU1 Primary Production to part IN2 Light Industrial and part E2 Environmental Conservation;
- Amendment to the PMHLEP 2011 Lot Size Map to allow a minimum lot size of 1000 m² for the proposed industrial zoned land and a minimum 3 hectare lot size for the proposed environmental zoned lands; and
- Amendment to the PMH LEP 2011 Height of Building Map to allow a maximum height of 10m for the proposed industrial zoned land.

The proposed rezoning will:

- more appropriately reflect the local planning strategies for the area and complement the existing land uses in the locality;
- provide employment opportunities for existing and future residents within the Lake Cathie/Bonny Hills Urban Release Area. The UGMS 2019 confirms that the population of the Lake

```
SURVEYING & ARCHITECTURE I PLANNING & CIVIL ENGINEERING & URBAN DESIGN
```

Page 6

King & Campbell Pty Ltd Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Cathie URA will increase to approximately 10,000 persons by 2036;

- manage the environmental constraints (flooding, bushfire, ecological); and
- create an opportunity to facilitate a wildlife linkage.

2.1.3 Anticipated future development

The preliminary concept subdivision layout for which this TIA has been prepared provides for:

- Approximately 5.5ha of future light industrial lands;
- Approximately 4.03ha of future environmental lands;
- All vehicular access from Houston Mitchell Drive;
- An internal loop edge road; and
- Approximately 29 future light industrial lots.

2.2 Site Accessibility

2.2.1 Existing road system

The site is located on the south-west corner of the intersection of Ocean Drive and Houston Mitchell Drive, opposite the intersection of Houston Mitchell Drive and Forest Parkway.

Ocean Drive is the Classified Regional Arterial Road being the northsouth connection between Port Macquarie and the Camden Haven. The townships of Lake Cathie and Bonny Hills are accessed from Ocean Drive.

Ocean Drive immediately adjacent the site has a single travel lane in each direction and incorporates wide sealed shoulders and a posted speed limit of 70 km/hr during non-school hours. A 40 km/hr schools speed zone operates during the arrival and departure times for the nearby Lake Cathie Public School, located to the east of Ocean Drive and south of the extension of Houston Mitchell Drive.

Houston Mitchell Drive is a non-urban distributor road providing an east-west connection between the Lake Cathie/Bonny Hills Urban Release Area and the Pacific Highway. The road provides a single carriageway Incorporating sealed shoulders and a posted speed limit of 80 km/hr.

Forest Parkway is classified as a local minor rural road, which currently services approximately 32 rural residential properties. The road is a single carriageway in each direction with kerb and gutter and a posted speed limit of 50 km/hr.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

The site is immediately adjacent two (2) existing intersections, including;

1. Ocean Drive and Houston Mitchell Drive:



This intersection is a roundabout that comprises the following configuration:

North leg - Ocean Drive;

- 2 travel lanes on entry; and
- 2 travel lanes on exit.
- South leg Ocean Drive; 0
 - 2 travel lanes on entry; and .
 - 2 travel lanes on exit incorporating a merge to a single lane immediately south.
- West leg Houston Mitchell Drive; 0
 - 2 travel lanes on entry; and .
 - 1 travel lane on exit.
- East leg unnamed road (extension of Houston Mitchell 0 Drive);
 - 1 travel lane on entry; and
 - 1 travel lane on exit.
- 2. Houston Mitchell Drive and Forest Parkway:



Figure 4 - Houston Mitchell Drive and Forest Parkway intersection

ARCHITECTURE CIVIL ENGINEERING 1

Page 8

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

This intersection is a Type BAR / BAL "T" configuration, comprising:

- Houston Mitchell Drive east;
 - 1 travel lane on entry; and
 - 1 travel lane on exit.
- Houston Mitchell Drive west;
 - 1 travel lane on entry; and
 - 1 travel lane on exit.
- Forest Parkway;
 - 1 travel lane on entry; and
 - 1 travel lane on exit.

2.2.2 Future road system

The site is located within the Lake Cathie/Bonny Hills Urban Release Area (URA) for which Council has undertaken extensive strategic planning in relation to connectivity, culminating in specific development provisions in the PMH DCP 2013.

The DCP includes provisions for future roads, intersections, footpaths and bike paths. Development of the Lake Cathie/Bonny Hills URA is currently underway and several of the upgrades to the road and pedestrian system have been undertaken.

The DCP provisions for the Lake Cathie/Bonny Hills URA provide for the following ultimate road design:

- Upgrade of Ocean Drive to a 4 lane dual carriageway for its length;
- Roundabout at the intersection of Ocean Drive and Houston Mitchell Drive as an interim measure prior to its signalisation;
- Signalised intersection at Ocean Drive and Baltic Street;
- Roundabout intersection at Ocean Drive and Solomon Drive; and
- Signalised intersection at Ocean Drive, Abel Tasman Drive and Seaside Drive.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 9

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands



Figure 5 - Extract from PMHC DCP 2013 - Transport & Movement

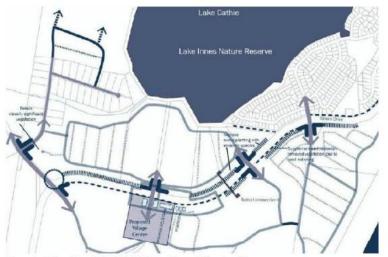


Figure 6 - Extract from PMHC DCP 2013 - Ocean Drive Corridor

2.2.3 Traffic Volumes and conditions

Due to impacts associated with COVID-19 and the associated reduction in existing traffic volumes to normal conditions, traffic counts at the intersection of Houston Mitchell Drive and Forest Parkway were not undertaken as part of this TIA.

The traffic count that was undertaken by Streetwise Road Safety & Traffic Services to inform their report Traffic Impact Assessment – Lot 638 DP1248149 cnr Ocean Drive and Forest Parkway, Lake Cathie (Streetwise) has been utilised. This report undertook a manual intersection count on 26 September 2019 ...to determine the AM and PM peak traffic periods at the intersection of Houston Mitchell Drive and Forest Parkway. This traffic count is considered to better represent the existing normal traffic volumes at the existing

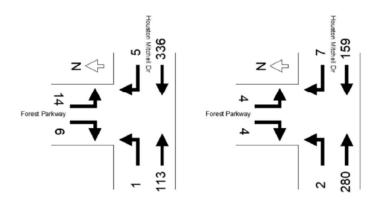
SURVEYING & ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 10

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

intersection than a furteh traffic count during the current COVID 19 conditions.

A summary of the AM and PM peak period traffic flows for the Houston Mitchell Drive and Forest Parkway intersection is provided as Figure 3.10 in the Streetwise report. The Streetwise report confirmed that the AM peak to be between 7:30am and 9:30am with the PM peak being between 3:00pm and 4:00pm, which confirms the influence of school times on the peak traffic periods:



Existing AM Peak Existing PM Peak Figure 3.10 - EXISTING AM & PM PEAK PERIOD TRAFFIC FLOWS

Figure 7- Extract from Streetwise Traffic Impact Assessment Existing AM and PM Peak Period Traffic Flows.

The traffic volumes provided within the Streetwise TIA have been adopted as the existing traffic environment for this report.

2.3 Transit service

2.3.1 Public

Public transport options include the Busways route 334K to Kendall and Port Macquarie. The nearest bus-stop is located approximately 750m south of the site, adjacent to the intersection with Bonny View Drive and Ocean Drive.

This route provides connectivity to the surrounding towns of Lake Cathie and Port Macquarie to the north, and Bonny Hills, North Haven, Laurieton and Kew/Kendall to the south, with connections to the network to neighbouring towns of Wauchope and Kempsey. The network also provides connections to access inter-city services via rail at Wauchope and air at Port Macquarie.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands



Figure 8- Extract from Transport for NSW "Trip Planner" website showing the 334K Kendal to Port Macquarie via Laurieton bus route. The location of the site is shown in pink highlight.

Port Macquarie Hastings Council's current planning policies provide for the provision of additional future public transport routes within the adjoining residential development to the north, with the construction of bus bays on Solomon Drive and South Atlantic Drive to be constructed as part of future residential subdivisions.

2.3.2 Pedestrians and Cyclists

Pedestrian access to the site is available via the extension of the existing pedestrian footpaths from the Ocean Drive / Houston Mitchell Drive roundabout. This intersection currently provides pedestrian connectivity to the Ocean Drive corridor and areas to the north of Houston Mitchell Drive, via an existing pedestrian refuge on the western leg of the roundabout, and to the existing Lake Cathie Public School.

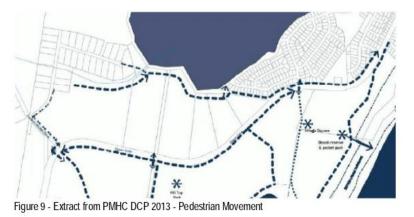
Additional opportunities for connectivity will be provided along Ocean Drive as that road is progressively upgraded to a 4 lane arterial road with signalised intersections and within adjoining residential subdivisions as construction proceeds in accordance with the provisions of Port Macquarie Hastings Council's Development Control Plan 2013.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 12

.

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands



SURVEYING & ARCHITECTURE & PLANNING & CIVIL ENGINEERING & URBAN DESIGN

Page 13

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Section 3 Projected Traffic

3.1 Site Traffic

The proposed rezoning will provide for 5.5ha of light industrial zoned land. The RTA Guide to Traffic Generating Developments notes that traffic generation for light industrial areas is based on the gross floor area (GFA), as opposed to total site.

The Sancrox Enterprise Zone Port Macquarie, NSW Traffic Report (TTM Group, August 2009) has been used to determine the potential GFA for the site, with TTM noting that:

As a guide, GFA is typically about 45% of the site for industrial uses, as considerable space has to be devoted to parking, servicing and manoeuvring.

Based on the TTM report and consideration of the Queensland Department of Main Roads (DMR), this TIA has assumed a GFA of approximately 40% of the total development area.

3.2 Trip generation

Two methodologies have been reviewed to determine future trip generation associated with the proposed light industrial use:

1. Utilising the Gross Floor Area method:

Total development area	5.5ha
Estimated GFA	2.2ha
(40% of the total development area)	
Daily Traffic Generation	1,100 vpd
At 5 trips per 100m2 of GFA	
Peak Hour Traffic Generation	198 vpd
At 0.9 trips per 100m2 of GFA	-

2. RTA Guide to Traffic Generating Developments, based on employment density:

Anticipated employment	165 jobs
At 30 jobs/ha (VPA)	
Customers and deliveries	33 trips (vph)
At 20% of anticipated employment	
Peak hour traffic generation	198 vph
(sum of anticipated employment and	
customers/deliveries)	

Given the above, 198 vph has been adopted by this TIA as the peak hour trip generation.

Page 14

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

3.3 Trip distribution

A gravity model was constructed to determine the likely origin/destination for trips generated by the future light industrial use, based on the relative populations of the surrounding area and travel times to each of those areas.

The following table sets out the likely destination for each trip generated from the proposed development.

Traffic Flow Gravity Model								
Destination	Population	Travel Time (mins)	Population/ Trave Time ²	Destination Percentage				
Port Macquarie	45000	19	124.7	21%				
Wauchope	7500	20	18.8	3%				
Camden Haven	7000	15	31.1	5%				
Kew/Kendall	2500	16	8.8	2%				
Kempsey	8000	43	4.3	1%				
Taree	18000	50	7.2	1%				
Bonny Hills	2900	3	322.2	54%				
Lake Cathie	2000	5	0.08	13%				
Total			598.0	100%				

Table 1 - Destination Gravity Model

Table 2 - Route Probability Table

	H	ouston M	itchell	Oce	ean Driv	e South	Ocean Drive north			
Destination	T-Time (mins)	Percentage	Population-Distance Weighted Percentage	T-Time (mins)	Percentage	Population-Distance Weighted Percentage	T-Time (mins)	Percentage	Population-Distance Weighted Percentage	
Port Macquarie	19	50%	10%	44	9%	2%	21	41%	9%	
Wauchope	20	63%	2%	38	17%	1%	36	19%	1%	
Camden Haven	23	28%	1%	15	66%	3%	48	6%	0%	
Kew/Kendall	16	61%	1%	23	30%	0%	41	9%	0%	
Kempsey	43	51%	0%	67	21%	0%	59	27%	0%	
Taree	50	45%	1%	57	35%	0%	76	20%	0%	
Bonny Hills	32	2%	1%	4	97%	53%	39	1%	1%	
Lake Cathie	37	2%	0%	38	2%	0%	5	97%	13%	
Total Weighted Route Usage			17%			60%			24%	

The above probabilities have been applied to each major route for the destinations, being Ocean Drive south (via Laurieton), Houston Mitchell Drive and Ocean Drive north (via Port Macquarie), to determine the probability of each trip taking a route to their respective

King & C	Campbell Pty Ltd	Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands					
		destination. The route probabilities have been calculated on a similar basis to the above destination routing, and are presented above in Table 2					
3.4	Modal split						
		 20% heavy vehicle traffic, entering and exiting the site; and 5% heavy vehicles for all other traffic. 					
3.5	Trip assignment						
		Trip assignment for the intersection between Houston Mitchell Drive and Forest Parkway has been based on the traffic generation tables and the destination and route gravity model probabilities. These tables have been used to calculate both the expected peak hour volumes leaving the development and the direction in which they choose to take.					
		For modelling purposes, the following inbound and outbound traffic splits have been adopted:					
		 20% out of the site and 80% into the site for the AM peak; and 80% out of the site and 20% into the site for the PM peak. 					
3.6	Through traffic						
		The indicative concept layout for the future light industrial subdivision includes a single access road (at the Houston Mitchell Drive / Forest Way intersection) and accordingly consideration of through traffic is not relevant.					
		For the purposes of this TIA 2.5% was used as the traffic growth for the through traffic movements on Houston Mitchell Drive, to account for traffic influences outside the area and to maintain consistency with the Streetwise TIA.					
3.6	Method projection						
		Traffic volumes for the development have been determined based on full development of the site within a 10 year timeframe (i.e. In the years to 2030). Accordingly, 100% of the traffic generation for the proposed development has been applied to the modelling.					
3.7	Non-site traffic for antic	ipated development in study area					
		Non-site traffic for the locality was considered in the Streetwise TIA, where the traffic generation impacts on Forest Parkway were calculated on the following basis:					
		 Existing development traffic determined as part of the traffic counts referred to above (Section 3.2); 					
SURVEYI	NG I ARCHITECTURE	I PLANNING I CIVIL ENGINEERING I URBAN DESIGN					
		Page 16					

King & Campbell Pty Ltd Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

- Existing approved development contributing to additional traffic on Forest Parkway, being a 70 lot residential subdivision and a 17 lot rural residential subdivision under DA 2016/87; and
- Proposed Manufactured Housing Estate (166 sites / dwellings) within part of the land previously approved for a 151 lot residential subdivision (of which the report notes 51 lots are currently developed and 17 lots are to be developed as part of DA 2016/87).

3.8 Method of projections

As above, the Streetwise TIA adopted a full development scenario for the proposed Manufactured Housing Development within the 2019 - 2029 service period as the basis for their modelling.

3.9 Trip generation

Total Development Trip Generation

The Streetwise (March 2020) report provides extensive consideration of the trip generation for proposed development contributing to traffic on Forest Parkway. The adopted trip generation by Streetwise is summarised as follows:

1242

128

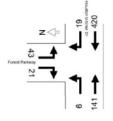
Table 3 - Summary of future tra			ay (Streetwise, M Peak Hour Trip		Peak Hour Tr
		,	Rate	Generation	Generation
Proposed MHE Site	166	3.6	0.37	598	62
Rural Residential	17	7.4	0.75	126	13
Residential (End of Forest Parkway (DA2016/87)	70	7.4	0.75	518	53

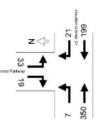
SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

King & Campbell Pty Ltd		Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands				
3.10	Trip distribution and as	signment				
		The Streetwise TIA provides the following assumptions on traffic generation for traffic exiting the Houston Mitchell Drive and Forest Parkway intersection:				
		 65% towards Ocean Drive; and 35% towards Pacific Highway. 				
		To maintain consistency with this TIA and the Streetwise TIA, the trip distribution specified above has been adopted.				
3.11	Modal split					
		The Streetwise TIA has assumed 5% Heavy Vehicle traffic on all legs of the existing Houston Mitchell Drive / Forest Parkway intersection.				
3.12	Through traffic					
		Houston Michell Drive is the primary corridor for through traffic that has the potential to affect the future light industrial development of the site.				
		Based on the Community Profile on Port Macquarie Hastings Council's website, the population growth figures for the Lake Cathie / Bonny Hills area is approximately 2.5% to the year 2036.				

The Streetwise TIA adopted a traffic growth rate of 2.5% for traffic influences outside the area. For consistency a 2.5% growth rate for Houston Mitchell Drive has been similarly adopted for this TIA.

3.13 Estimated volumes





AM Peak Hour (plus Full Development - 10yrs & PM Peak Hour (plus Full Development - 10yrs & Traffic Growth on Houston Mitchell Dr through traffic)

Figure 10- Extract from Streetwise TIA - Figure 5.10 - Future AM & PM Peak Period Traffic Flows (MHE development, remainder of Forest Parkway developments and 10 yrs traffic growth on Houston Mitchell Drive through movements).

ARCHITECTURE I CIVIL ENGINEERING I URBAN DESIGN SURVEYING PLANNING

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

3.14 Total traffic

Through applying the trip generation and distributions for the proposed future light industrial subdivision within the site, as detailed above, combined with the traffic generation adopted from the Streetwise TIA, this TIA has determined the following 2029 traffic volumes for the SIDRA modelling for the intersection performance.

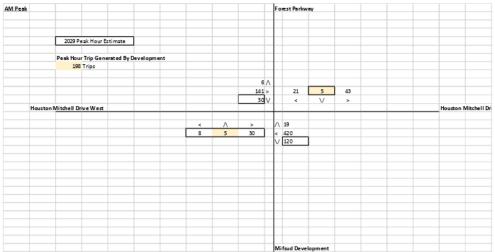


Figure 11 - 2029 AM Peak Hour Traffic Flow - Houston Mitchell Drive / Forest Parkway/Mifsud Intersection

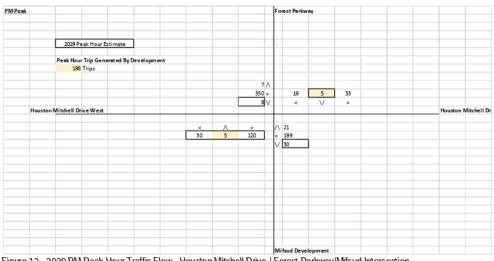


Figure 12 - 2029 PM Peak Hour Traffic Flow - Houston Mitchell Drive / Forest Parkway/Mifsud Intersection

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 19

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Section 4 Transportation Analysis

4.1 Site access

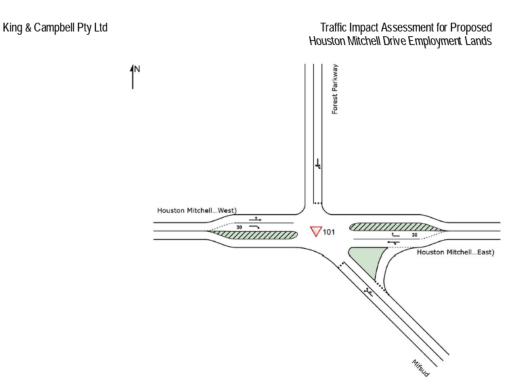
The site is located at the intersection of Houston Mitchell Drive (distributor road) and Ocean Drive (Classified Regional Arterial Road). This location provides for connectivity to the Pacific Highway (to the west), the Lake Cathie/Bonny Hills URA in all directions, Port Macquarie to the north and the coastal villages within the Camden Haven to the south.

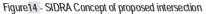
The site is well located from an accessibility point of view, being located at the intersection of 2 major roads, providing connectivity to the wider area. This connectivity ensures that trips generated by the future industrial area will avoid existing and future residential areas.



Figure 13 - The site (yellow hatching with red outline) and locality.

The conceptual future access to the site is proposed as a single location via a new southern leg on the existing Houston Mitchell Drive / Forest Parkway intersection, as illustrated on the SIDRA schematic and in the extract below:





The location of the site can make use of the existing road network connectivity and accessibility to both the surrounding area and general locality.

SURVEYING © ARCHITECTURE © PLANNING © CIVIL ENGINEERING © URBAN DESIGN

Page 21

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

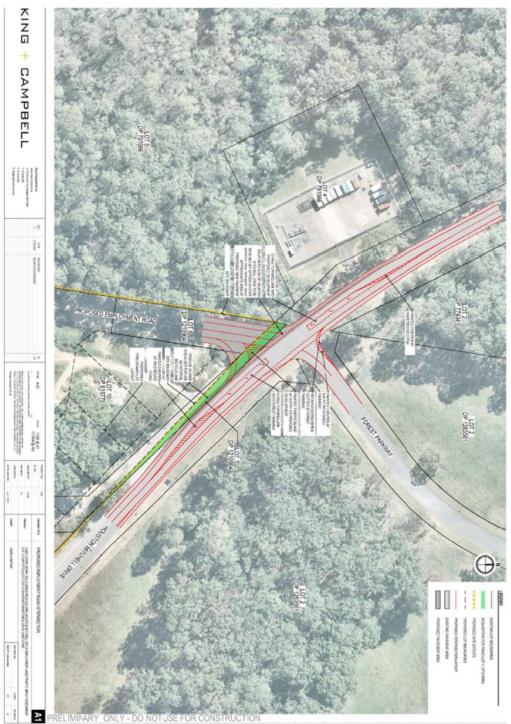


Figure 15 - Concept design showing proposed reconfiguration of the existing intersection between Forest Parkway and Houston Mitchell Drive, to include a new southern approach.

The proposed site access is located on a long sweeping bend on Houston Mitchell Drive, opposite Forest Parkway, which provides suitable sight distance from all legs of the proposed intersection.

```
SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN
```

Page 22

4.2 Capacity and Level of Service (LOS)

4.2.1 Existing conditions

The intersection count undertaken by Streetwise in September 2019 recorded approximately 479 peak hour trips in both directions on Houston Mitchell Drive, equating to an Annual Average Daily Traffic (AADT) count of 4790.

Houston Mitchell Drive is currently classified as a Collector Road under Port Macquarie Hastings Council's AUS-SPEC-1 D01-Geometric Road Design – Table D1, with an AADT less than 6000 vpd.

The existing Houston Mitchell Drive / Forest Parkway intersection was upgraded as part of the Houston Mitchell Drive upgrade project by Port Macquarie Hastings Council. The project was completed in September 2017 and included the realignment and construction of the road and improvement to safety standards of the road users, cyclists and pedestrians. The works involved the construction of a 3.25m travel lane with 2m sealed shoulder and 1m verge in each direction, together with the reconstruction of existing intersections along the route (i.e.; Houston Mitchell Drive / Forest Parkway).

Based on the existing peak period traffic volumes, the Streetwise TIA considered the warrants for the intersection treatment of Houston Mitchell Drive and Forest Parkway in accordance with Figure 2.26c of the Austroads Guide to Traffic Management, Part 6 – Intersections, Interchanges and Crossings by Streetwise in their TIA. An extract from the Streetwise TIA is reproduced below:

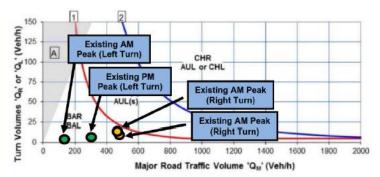


Figure 3.11 – WARRANTS FOR TURN TREATMENTS FOR THE MAJOR ROAD AT UNSIGNALISED INTERSECTIONS (AM & PM PEAK AT HOUSTON MITCHELL DR & FOREST PARKWAY INTERSECTION)

Figure 16 - Extract from Streetwise TIA - Warrants for Turn Treatments - Existing scenario.

The assessment by Streetwise determined that the existing intersection configuration is consistent with the existing BAR/BAL intersection treatment as constructed.

The existing road construction conditions are therefore considered appropriate to the existing traffic environment.

SURVEYING & ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 23

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

4.2.2 Background conditions (existing plus growth) (2030)

The Streetwise TIA confirms that ...full development of Forest Parkway will cater for approximately 89 peak hour trips (890 per day) in both directions, and Houston Mitchell Drive [catering for] approximately 650 peak hour trips (6500 per day).

Based on the existing background conditions plus the expected growth in traffic generation the Streetwise TIA considered the warrants for the intersection treatment of Houston Mitchell Drive and Forest Parkway, in accordance with Figure 2.26c of the Austroads Guide to Traffic Management, Part 6 – Intersections, Interchanges and Crossings. An extract from the Streetwise TIA is reproduced below:

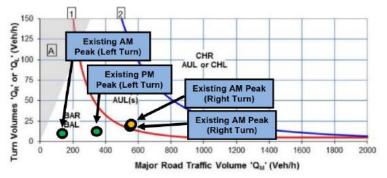


Figure 5.11 - WARRANTS FOR TURN TREATMENTS FOR THE MAJOR ROAD AT UNSIGNALISED INTERSECTIONS (FUTURE AM & PM PEAKS AT HOUSTON MITCHELL DR & FOREST PARKWAY INTERSECTION)

Figure 17 - Extract from Streetwise TIA - Intersection Capacity and Warrants for Turn Treatments

The assessment by Streetwise determined that the existing intersection configuration will require upgrading to a CHR(s) right turn from Houston Mitchell Drive into Forest Parkway as development on Forest Parkway proceeds.

The Streetwise TIA proposed an indicative CHR(s) intersection layout for Houston Mitchell Drive as follows:



Figure 18 – StreetwiseTIA indicative intersection layout

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 24

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

4.2.3 Total traffic (existing, background and site) (2030)

At full development of both Forest Parkway and the subject site, and including 10 years background traffic growth, Houston Mitchell Drive will achieve an AADT of 8,480, this being classified as a Distributor under Port Macquarie Hastings Council's AUS-SPEC-1 D01.

Based on the existing background conditions plus the expected growth in traffic generation through new developments, an assessment for the warrant for intersection treatment for Houston Mitchell Drive and Forest Parkway was considered as part of this TIA, in accordance with Figure 2.26c of the Austroads Guide to Traffic Management, Part 6 – Intersections, Interchanges and Crossings. The result of the investigations is shown below:

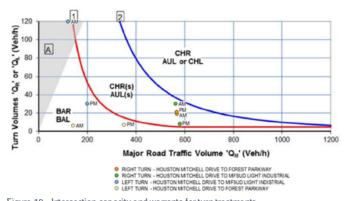


Figure 19 - Intersection capacity and warrants for turn treatments.

The assessment determined that the existing intersection configuration will require upgrading to CHR(s) right turns for right turn movements for both Houston Mitchell Drive into Forest Parkway and Houston Mitchell Drive into the new southern intersection leg.

The assessment determined that left turn arrangements do not warrant the provision of an auxiliary left turn lane for either turn movement.

See Figure 15 above for the proposed concept intersection configuration to service the proposed light industrial subdivision.

SIDRA software modelling has been undertaken for the intersection of Houston Mitchell Drive and Forest Parkway and incorporating the additional southern leg that provides access to the site to determine the Level of Service.

The following parameters were adopted for the intersection model.

- Speed limits:
 - Houston Mitchell Drive = 80 km/hr; and
 - Forest Parkway = 50 km/hr.
- SIDRA Default Values for NSW (unless noted otherwise); and
 GAP Acceptance for sign controlled intersections (refer

SURVEYING	0	ARCHITECTURE	0	PLANNING	0	CIVIL ENGINEERING	1	URBAN DESIGN
-----------	---	--------------	---	----------	---	-------------------	---	--------------

Page 25

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix E of RMS Traffic Modelling Guidelines v1.0 (2013) summarised below:

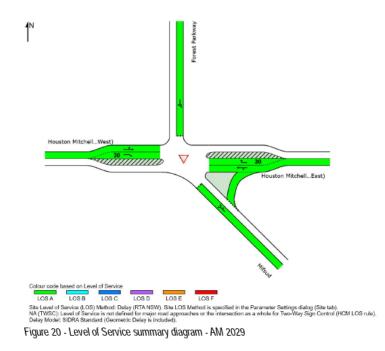
Movement	Gap Acceptance	Follow Up
	(s)	Headway (s)
Right Turn from Major Road	4.0	2.0
Left Turn from Minor Road	4.5	2.5
Right Turn from Minor Road	5.5	3.5

5% Heavy Vehicles for all non-industrial legs (i.e. all intersection legs apart from the southern leg servicing the subject site).

The modelling was undertaken based on the proposed intersection configuration with opposing CHR(s) right turn lanes on Houston Mitchell Drive (see Figure 15) for both morning and afternoon peak hour traffic volumes.

The results of the modelling are summarised in the table below and include the intersection overall and the worst movement scenario for AM and PM:

	Intersection		Worst Movement	
	2029 (AM)	2029 (PM)	2029 (AM)	2029 (PM)
Average Delay (sec)	2.7	3.5	14.5	14.3
LOS	A	A	Α	Α
95% Percentile Queue	< 10m	<10m	<10m	<10m
Degree of Saturation	0.318	0.330	0.318	0.330



SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 26

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

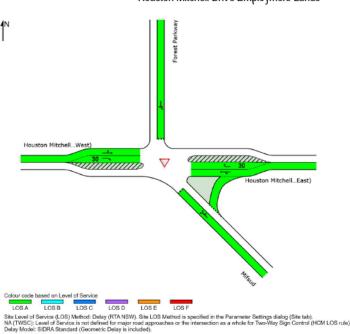


Figure 21 - Level of Service summary diagram - PM 2029

The modelling of the proposed intersection arrangement confirmed a LOS A, being a:

...condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of comfort and convenience provided is excellent.

The proposed intersection treatment with opposing CHR(s) turn lands and BAL treatment for the left turns as shown in Figure 15 is therefore confirmed as the most appropriate to service the future light industrial development of the site.

4.3 Transportation safety

The location of the site adjacent at the intersection of Houston Mitchell Drive and Ocean Drive provides direct connection to the Pacific Highway and the Ocean Drive corridor, thereby avoiding residential areas

The future public roads will be designed to the requirements of Port Macquarie Hastings Council's AUS-SPEC-1 specifications and the requirements of the relevant AUSTROADS standards, to ensure safe access to and from the site.

King & Campbell Pty Ltd		Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands	
4.4	Traffic signals		

The intersection capacity analysis has confirmed that the proposed access to the site can be accommodated via the provision of CHR(s) right turn treatments for traffic exiting Houston Mitchell Drive. Traffic signals are therefore not warranted.

4.5 Site circulation and parking

Traffic circulation within the site is proposed to be managed with the provision of a loop road from a single point of access off Houston Mitchell Drive.

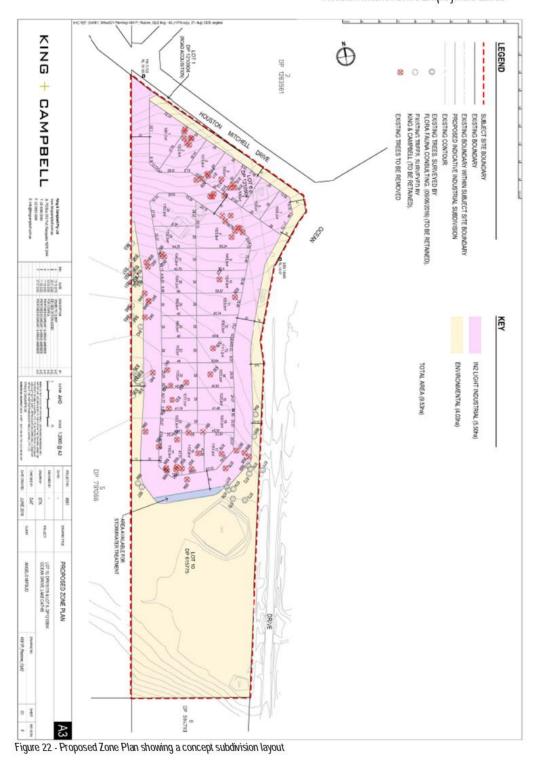
Internal road will be designed to the requirements of Port Macquarie Hastings Council's AUS-SPEC-1 specifications for commercial and industrial subdivision developments to ensure adequate provision for large and heavy vehicle turning movements.

An extract of the concept layout for the proposed light industrial subdivision is provided below.

Parking within the proposed development will be subject to the requirements of each individual industrial lot.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands



SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 29

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Section 5 Improvement analysis

5.1 Improvements to accommodate existing traffic

Existing traffic can be accommodated within the existing road configuration following the recent reconstruction of Houston Mitchell Drive and the upgrading of the Intersection between Ocean Drive and Houston Mitchell Drive to a roundabout.

5.2 Improvements to accommodate background traffic

The improvements recommended within the Streetwise TIA for the upgrade of the intersection between Forest Parkway and Houston Mitchell Drive to a CHR(S) / BAL configuration have been adopted to accommodate the increases in background traffic and expected development on Forest Parkway.

The incremental upgrade of Ocean Drive to an ultimate configuration of a 4 lane divided carriageway configuration is occurring as development proceeds within the Lake Cathie/Bonny Hills URA, with the construction of intersections and roadway upgrades being provided in accordance with the provisions of Port Macquarie Hastings Council's DCP.

5.3 Additional improvements to accommodate site traffic

The potential impact of the additional traffic generation as a result of the proposed light industrial rezoning on the operation of the existing Ocean Drive / Houston Mitchell Drive roundabout has been reviewed and SIDRA Modelling has been undertaken.

Due to the reduction in existing traffic volumes from normal conditions during the COVID-19 restrictions, the traffic volumes from previous traffic studies in the locality (Ocean Drive) have been adopted.

To assess the impact of the proposed light industrial development on the existing roundabout, traffic volume information was obtained from Traffic Impact and Access Management Assessment, Lot 6 DP1193553, Lot 6,2,3 & 4 DP1150758 and Lot 5 DP25886, Ocean Drive, Lake Cathie (King + Campbell, June 2016).

An annual growth rate of 2.4%, as specified within the King + Campbell TIA, has been applied and the existing traffic volume for the 2029 AM and PM peaks have been calculated as follows:

Page 30

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

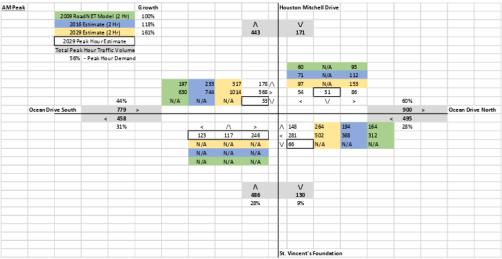
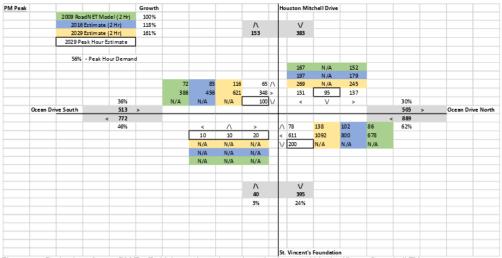


Figure 23- Derivation of 2029 AM Traffic Volumes based on adopted volumes within the King + Campbell TIA

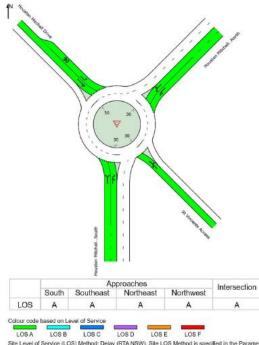


st. Vincent's Foundation Figure 24 - Derivation of 2029 PM Traffic Volumes based on adopted volumes within the King + Campbell TIA

In addition to the calculation of expected traffic volumes for each leg of the roundabout, probabilities for each incoming and outgoing roundabout leg was calculated to assist in trip assignment for the post-development model case.

The results for the SIDRA modelling of the Houston Mitchell Drive / Ocean Drive roundabout for existing development plus traffic growth for the AM and PM 2029 scenarios are as follows:

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands



Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Parameter Settings dialog (Site lab). NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule). Delay Model: SIDRA Standard (Geometric Delay is included).

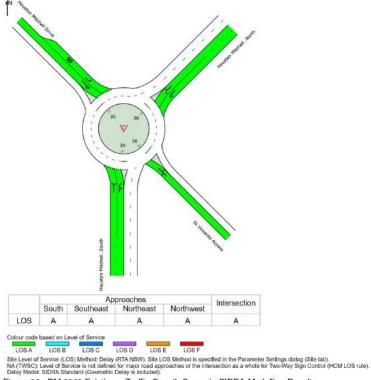


Figure 25 - AM 2029 Existing + Traffic Growth Scenario SIDRA Modelling Results

Figure 26 - PM 2029 Existing + Traffic Growth Scenario SIDRA Modelling Results

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

T

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Utilising the traffic generation calculated at Section 3.2 together with the destination probabilities calculated via the destination gravity model and the trip assignment probabilities calculated for the existing Ocean Drive / Houston Mitchell Drive roundabout, the potential site generation trips for the proposed light industrial use were assigned to each intersection leg as follows:

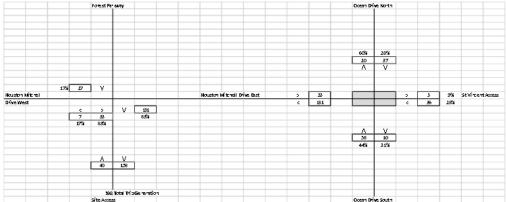
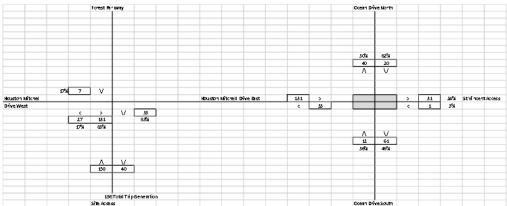
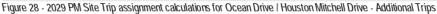


Figure 27 - 2029 AM Site Trip assignment calculations for Ocean Drive / Houston Mitchell Drive - Additional Trips





The additional trips calculated in Figures 27 and 28 above have been added to the 2029 existing + background growth traffic volumes to determine the existing + growth + site traffic volumes. The volume results are as follows:

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

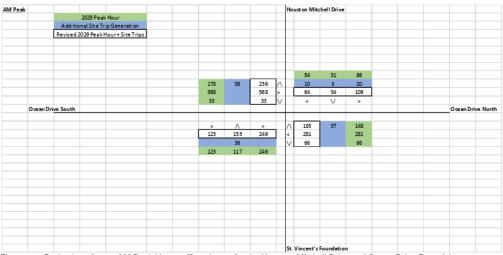
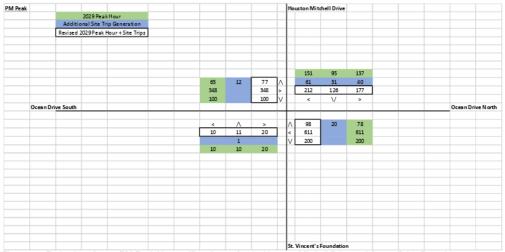
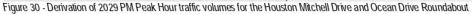


Figure 29 - Derivation of 2029 AM Peak Hour traffic volumes for the Houston Mitchell Drive and Ocean Drive Roundabout

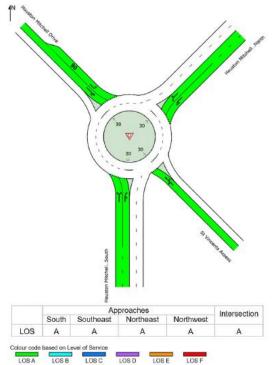




SIDRA Modelling of the intersection was then undertaken to determine the changes to theLevel of Service (LoS) for the AM and PM peak hour intersection performance. Results of the modelling are as follows:

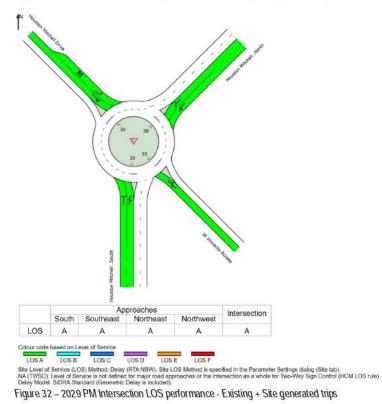
SURVEYING D ARCHITECTURE D PLANNING D CIVIL ENGINEERING D URBAN DESIGN

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands



Colour code based on Level of Service
LOS A LOS B LOS C LOS D LOS E LOS F
Stile Level of Service (LOS) Method: Delay (RTA NSW), Site LOS Method is specified in the Parameter Settings dialog (Site tab).
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Delay Model: SIDRA Standard (Geometric Delay is included).





SURVEYING ARCHITECTURE PLANNING 1 CIVIL ENGINEERING 1 URBAN DESIGN

Page 35

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

The results of the SIDRA modelling confirm that the capacity and performance of the existing roundabout at the intersection of Houston Mitchell Drive and Ocean Drive will not be impacted by the additional traffic generated by the proposed light industrial development for either the AM or PM peak hours, with no change to the existing LOS.

5.4 Alternative improvements

By email correspondence from Council's Traffic Engineer dated 3 April 2017, the proponent was advised that the future access to the subject site should be as close as is feasible to Forest Parkway to avoid potential impacts with the Ocean Drive / Houston Mitchell Drive roundabout. Accordingly no alternate location for the intersection has been considered in this assessment.

Additionally, Council's preference is for a loop road within the site, which provides an opportunity to separate future light industrial development and the adjoining Queens Lake State Conservation Area. This preference has been adopted into the concept layout for the future development of the employment lands.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 36

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Section 6 Conclusion

This TIA has considered the proposed future light industrial use of the subject site, following its rezoning from RU1 Primary Production to part IN2 Light Industrial and part E2 Environmental Conservation.

The assessment has considered the expected traffic generation for the proposed future light industrial development, the capacity of the existing intersection and proposed site access and the impact on the surrounding road network, specifically the impact on the existing roundabout at the intersection of Ocean Drive and Houston Mitchell Drive.

The TIA has found the following:

The site is located at the intersection of Houston Mitchell Drive (distributor road) and Ocean Drive (Classified Regional Arterial Road). This location provides for connectivity to the Pacific Highway (to the west), the Lake Cathie/Bonny Hills URA in all directions, Port Macquarie to the north and the coastal villages within the Camden Haven to the south.

- Access will be available via the construction of an additional southern leg on the existing Houston Michell Drive / Forest Parkway intersection;
- The proposed future light industrial use will generate a total of 198 trips for each peak hour, with inbound and outbound trips assigned as follows:
 - 20% out of the site and 80% into the site for the AM Peak; and
 - 80% out of the site and 20% into the site for the PM Peak;
- The gravity model confirms that trip distribution and assignment is anticipated as follows:
 - o 65% towards Ocean Drive; and
 - 35% towards Pacific Highway;
- An intersection configuration of opposing CHR(s) / BAL combination is best suited to service the proposed future light industrial use;
- Sight distance at the access location is adequate given the relatively flat vertical alignment and gentle curved horizontal alignment of Houston Mitchell Drive;
- The anticipated traffic volumes generated by the proposed future light industrial use are within the expected capacity of the proposed site access intersection;

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 37

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

- Pedestrian and cyclist access to the development is in accordance with the provisions of Port Macquarie Hastings Council's DCP;
- Circulation within the proposed future light industrial development is proposed via the provision of a public roadway constructed as a loop circuit to provide access for the future Torrens title allotments; and
- No impact on the existing roundabout at the intersection of Ocean Drive and Houston Michell Drive has been identified within SIDRA modelling for either the AM or PM 2029 scenarios.

This TIA has confirmed that the potential traffic volume impact can be accommodated within the existing road network and that the concept access arrangement will provide appropriate access to the future light industrial development of the site.

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

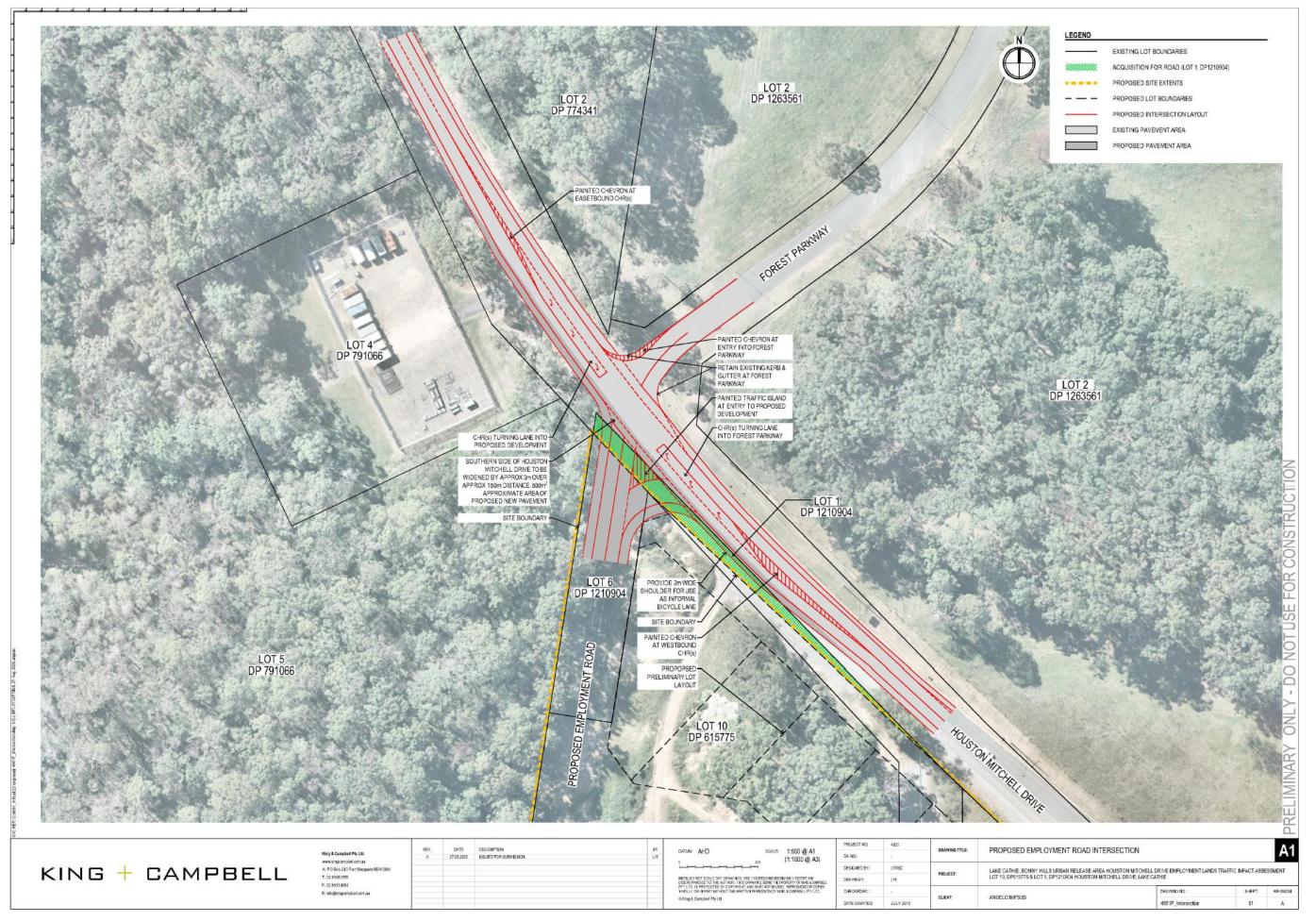
Page 38

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix A Concept Intersection Design – Houston Mitchell Drive / Proposed Employment Road / Forest Parkway

SURVEYING D ARCHITECTURE D PLANNING D CIVIL ENGINEERING D URBAN DESIGN

Page 39

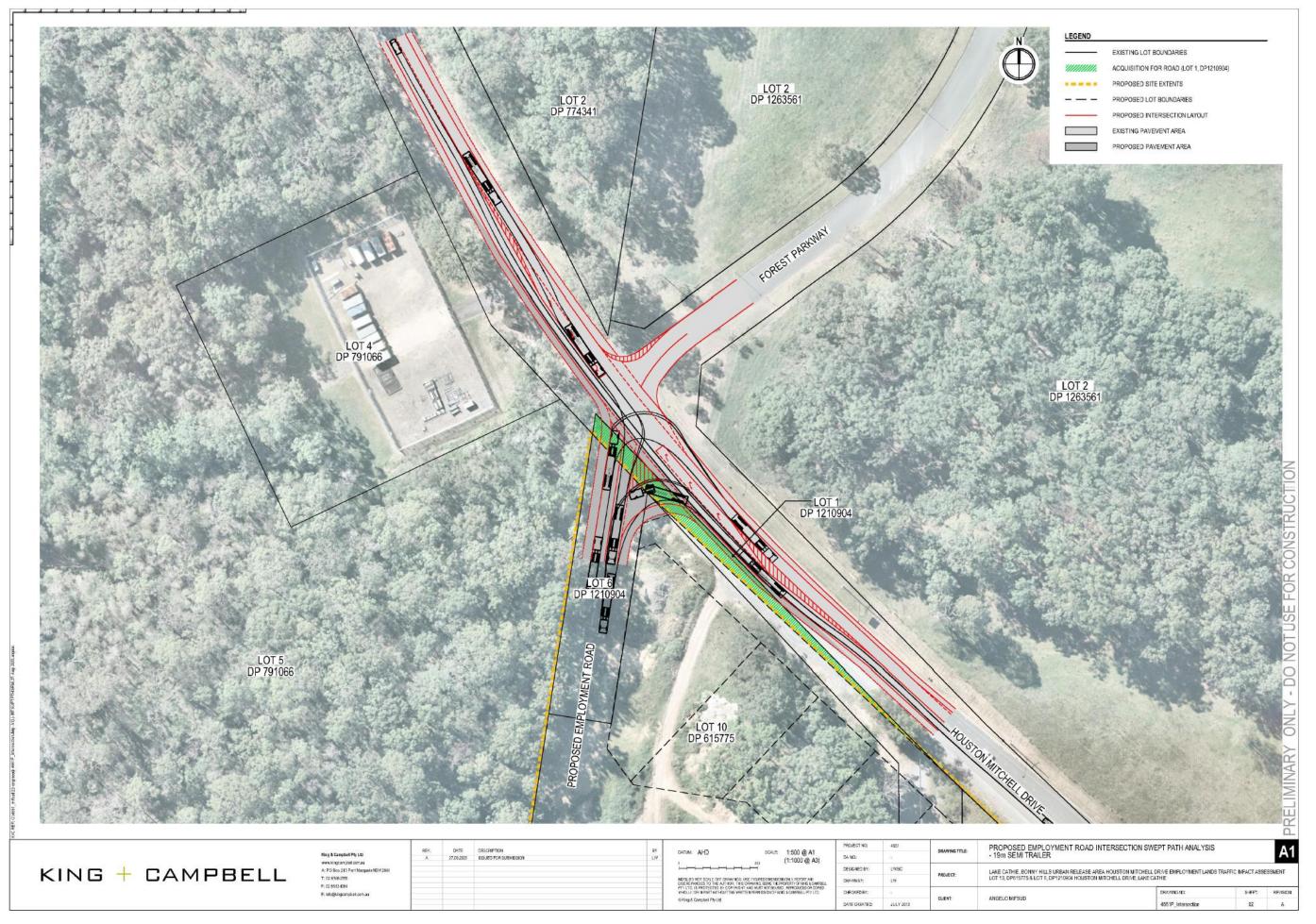


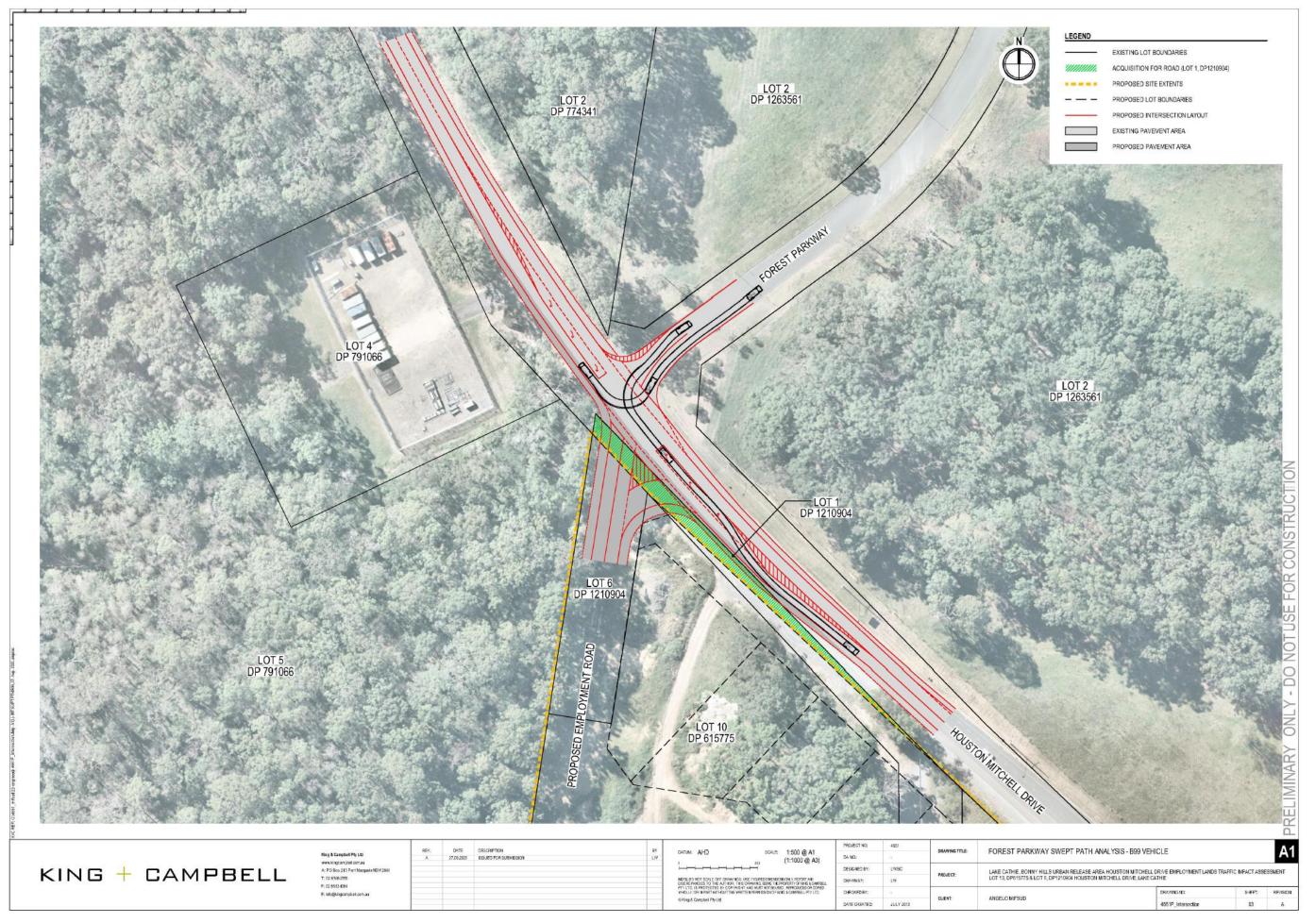
Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix B Swept Path Analysis – Houston Mitchell Drive / Proposed Employment Road / Forest Parkway

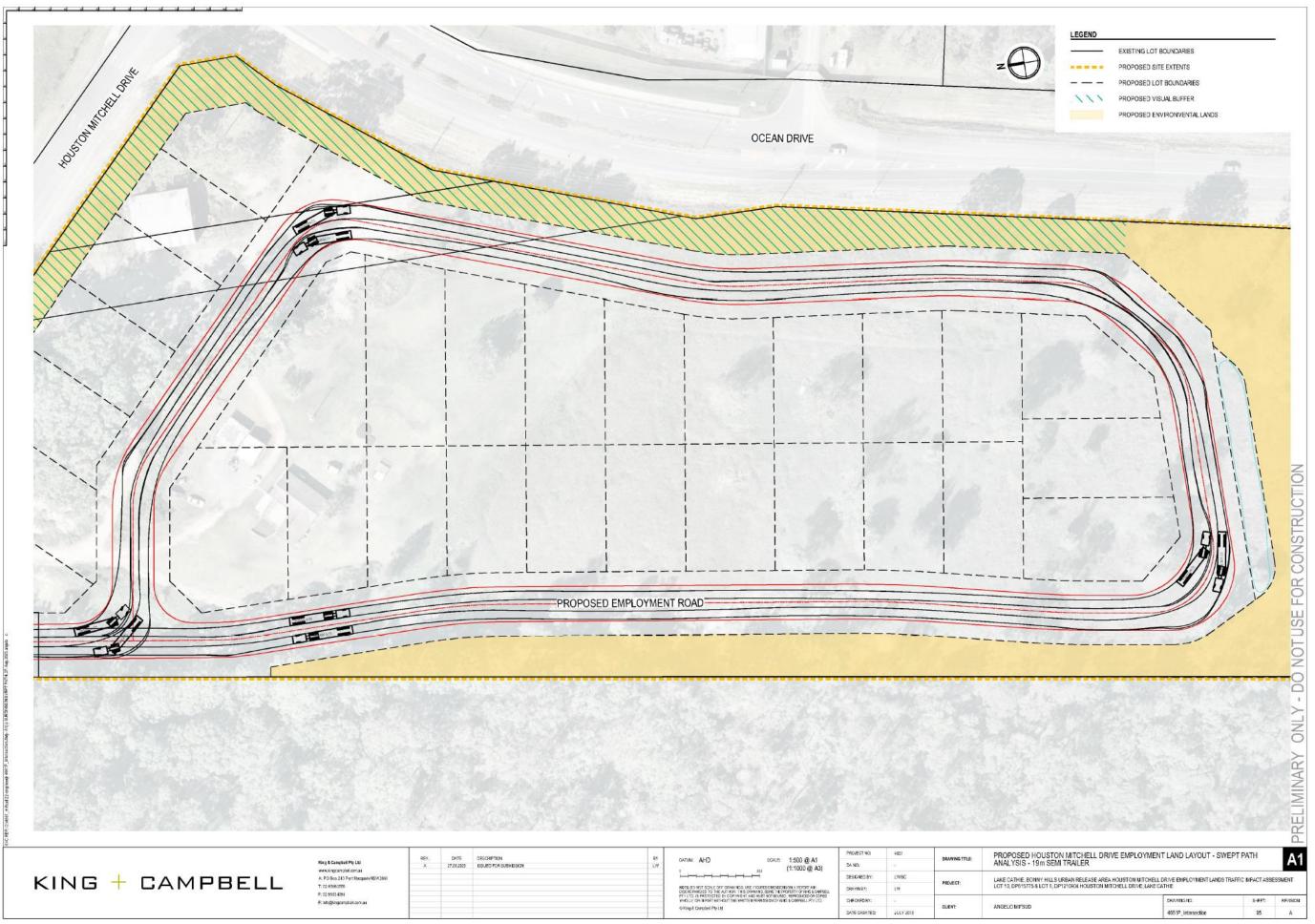
SURVEYING D ARCHITECTURE D PLANNING D CIVIL ENGINEERING D URBAN DESIGN

Page 40





ATTACHMENT

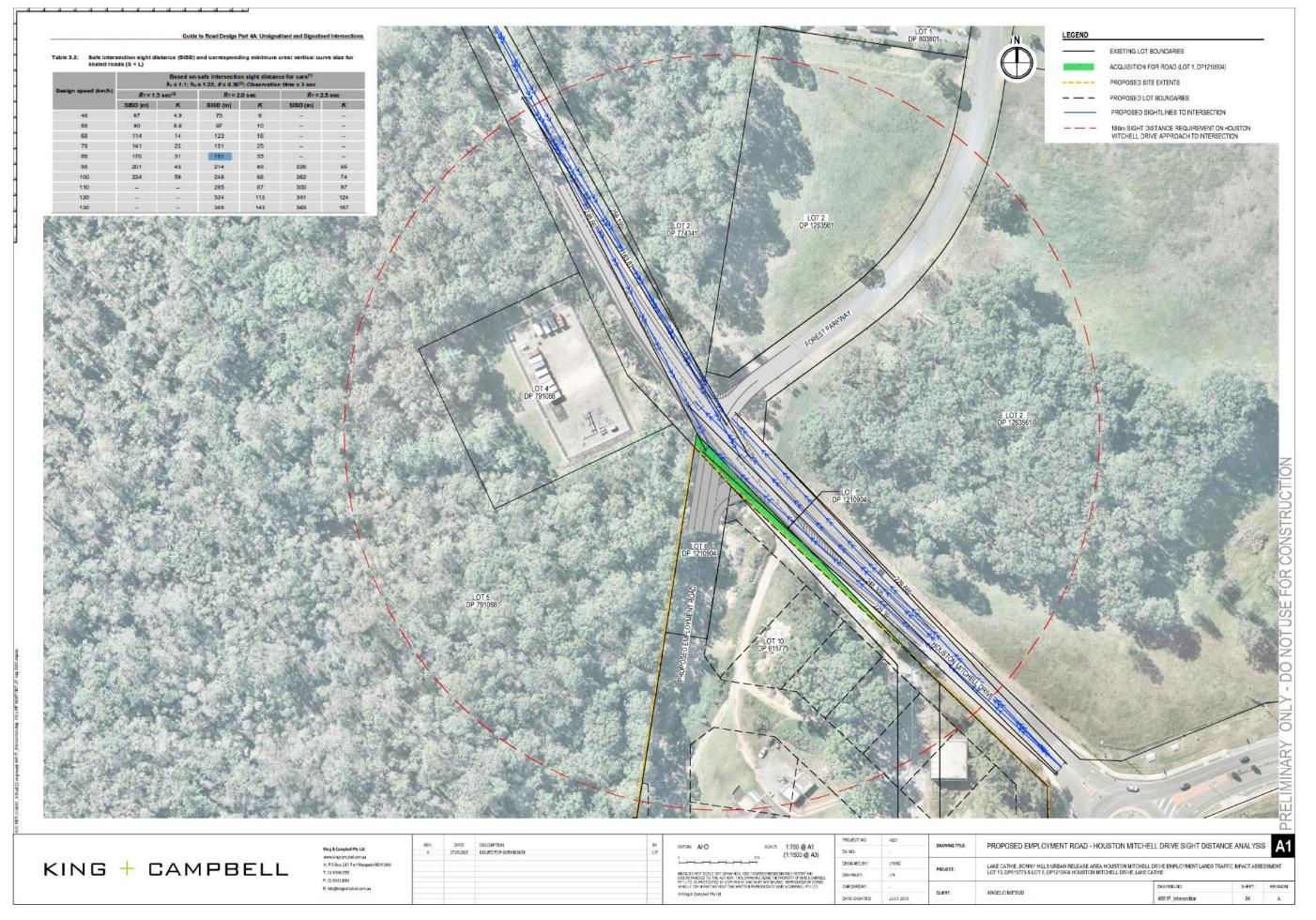


Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix C Sight Distance Analysis – Houston Mitchell Drive / Proposed Employment Road / Forest Parkway

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 41



Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix D SIDRA Analysis – Houston Mitchell Drive / Proposed Employment Road / Forest Parkway

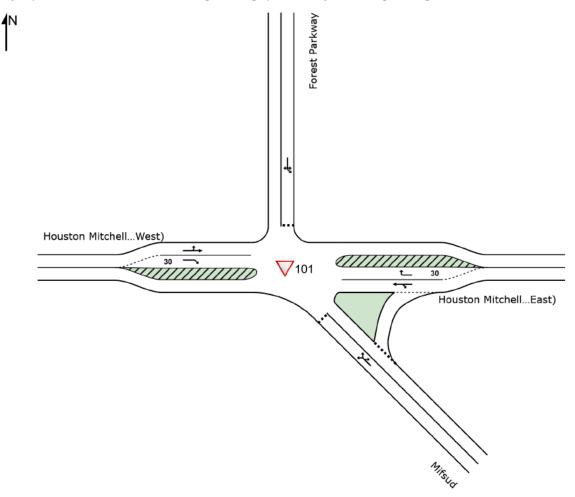
SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 42

SITE LAYOUT V Site: 101 [F-P / H-M-D AM Peak 2029 - Y (Site Folder: General)]

New Site Site Category: (None) Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



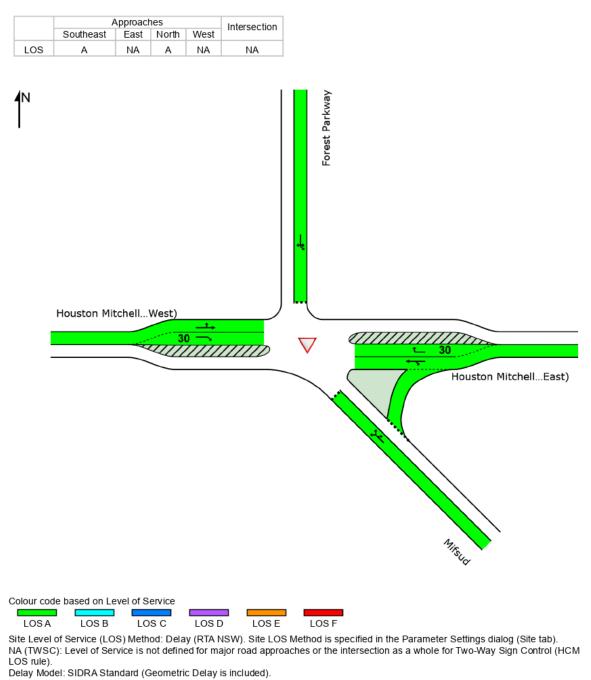
SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Created: Thursday, 6 August 2020 9:42:38 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

LEVEL OF SERVICE

Lane Level of Service

V Site: 101 [F-P / H-M-D AM Peak 2029 - Y (Site Folder: General)] New Site

Site Category: (None) Give-Way (Two-Way)



SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 4 August 2020 1:48:47 PM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

INTERSECTION SUMMARY

▼ Site: 101 [F-P / H-M-D AM Peak 2029 - Y (Site Folder:

General)]

New Site Site Category: (None)

Give-Way (Two-Way)

Intersection Performance - Hourly Values Performance Measure	Vehicles	Persons
Travel Speed (Average) Travel Distance (Total) Travel Time (Total) Desired Speed (Program) Speed Efficiency Travel Time Index	56.9 km/h 905.0 veh-km/h 15.9 veh-h/h 60.0 km/h 0.95 9.42	56.9 km/h 1086.0 pers-km/h 19.1 pers-h/h
Congestion Coefficient	1.05	
Demand Flows (Total) Percent Heavy Vehicles (Demand) Degree of Saturation Practical Spare Capacity Effective Intersection Capacity	893 veh/h 8.3 % 0.318 151.4 % 2805 veh/h	1071 pers/h
Control Delay (Total) Control Delay (Average) Control Delay (Worst Lane) Control Delay (Worst Movement) Geometric Delay (Average) Stop-Line Delay (Average) Idling Time (Average) Intersection Level of Service (LOS)	0.67 veh-h/h 2.7 sec 12.7 sec 14.5 sec 2.1 sec 0.6 sec 0.3 sec NA	0.80 pers-h/h 2.7 sec 14.5 sec
95% Back of Queue - Vehicles (Worst Lane) 95% Back of Queue - Distance (Worst Lane) Ave. Queue Storage Ratio (Worst Lane) Total Effective Stops Effective Stop Rate Proportion Queued Performance Index	0.9 veh 6.7 m 0.01 192 veh/h 0.21 0.13 20.0	230 pers/h 0.21 0.13 20.0
Cost (Total) Fuel Consumption (Total) Carbon Dioxide (Total) Hydrocarbons (Total) Carbon Monoxide (Total) NOx (Total)	718.37 \$/h 85.1 L/h 204.3 kg/h 0.015 kg/h 0.217 kg/h 0.599 kg/h	718.37 \$/h

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements. Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard (Geometric De

Site Model Variability Index (Iterations 3 to N): 2.3 %

Number of Iterations: 6 (Maximum: 10)

Largest change in Lane Degrees of Saturation for the last three Flow-Capacity Iterations: 2.4% 1.2% 0.6%

Intersection Performance - Annual Values						
Performance Measure	Vehicles	Persons				
Demand Flows (Total)	428,463 veh/y	514,156 pers/y				
Delay	320 veh-h/y	385 pers-h/y				
Effective Stops	92,033 veh/y	110,439 pers/y				
Travel Distance	434,417 veh-km/y	521,300 pers-km/y				
Travel Time	7,638 veh-h/y	9,165 pers-h/y				
Cost	344,817 \$/y	344,817 \$/y				
Fuel Consumption	40,826 L/y					
Carbon Dioxide	98,047 kg/y					
Hydrocarbons	7 kg/y					
Carbon Monoxide	104 kg/y					

ATTACHMENT

ORDINARY COUNCIL 17/02/2021

NOx

287 kg/y

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 4 August 2020 1:48:47 PM Project: 0:44661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

MOVEMENT SUMMARY

∇ Site: 101 [F-P / H-M-D AM Peak 2029 - Y (Site Folder: General)]

New Site

Site Category: (None) Give-Way (Two-Way)

Vehi	cle M	ovemen	t Perfo	rmance										
Mov ID	Tum	INP VOLL [Total veh/h		DEM, FLO [Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist] m	Prop. I Que	Effective Stop Rate	Aver. No. Cycles	Aver Speec km/h
South	SouthEast: Mifsud													
21a	L1	8	20.0	8	20.0	0.109	7.3	LOS A	0.4	2.9	0.63	0.84	0.63	47.7
23a	R1	5	5.0	5	5.0	0.109	10.9	LOS A	0.4	2.9	0.63	0.84	0.63	48.
23b	R3	30	20.0	32	20.0	0.109	14.5	LOS A	0.4	2.9	0.63	0.84	0.63	47.
Appro	bach	43	18.3	45	18.3	0.109	12.7	LOS A	0.4	2.9	0.63	0.84	0.63	47.8
East:	Hous	ton Mitch	ell Drive	(East)										
4b	L3	120	20.0	126	20.0	0.318	7.1	LOS A	0.9	6.7	0.07	0.14	0.07	57.
5	T1	420	5.0	442	5.0	0.318	0.0	LOS A	0.9	6.7	0.07	0.14	0.07	58.
6	R2	19	5.0	20	5.0	0.010	5.9	LOS A	0.1	0.4	0.27	0.54	0.27	52.
Appro	bach	559	8.2	588	8.2	0.318	1.8	NA	0.9	6.7	0.08	0.15	0.08	58.
North	: Fore	est Parkwa	ay											
7	L2	43	5.0	45	5.0	0.088	6.1	LOS A	0.3	2.3	0.31	0.61	0.31	51.8
7a	L1	5	5.0	5	5.0	0.088	9.6	LOS A	0.3	2.3	0.31	0.61	0.31	52.3
9	R2	21	5.0	22	5.0	0.088	10.8	LOS A	0.3	2.3	0.31	0.61	0.31	51.
Appro	bach	69	5.0	73	5.0	0.088	7.8	LOS A	0.3	2.3	0.31	0.61	0.31	51.
West	: Hous	ston Mitch	ell Drive	e (West)										
10	L2	6	5.0	6	5.0	0.083	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.
11	T1	141	5.0	148	5.0	0.083	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.
12a	R1	30	20.0	32	20.0	0.023	6.2	LOS A	0.1	0.9	0.50	0.57	0.50	52.4
Appro	bach	177	7.5	186	7.5	0.083	1.2	NA	0.1	0.9	0.08	0.12	0.08	58.3
All Vehic	les	848	8.3	893	8.3	0.318	2.7	NA	0.9	6.7	0.13	0.21	0.13	56.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

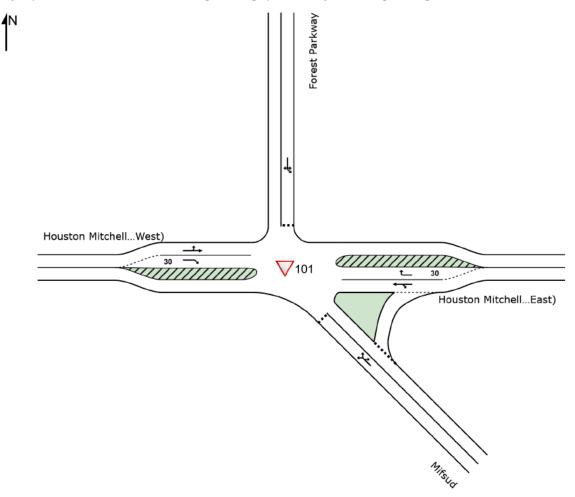
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 4 August 2020 1:48:47 PM Project: 0:14661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

SITE LAYOUT V Site: 101 [F-P / H-M-D PM Peak 2029 - Y (Site Folder:

General)] New Site Site Category: (None) Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



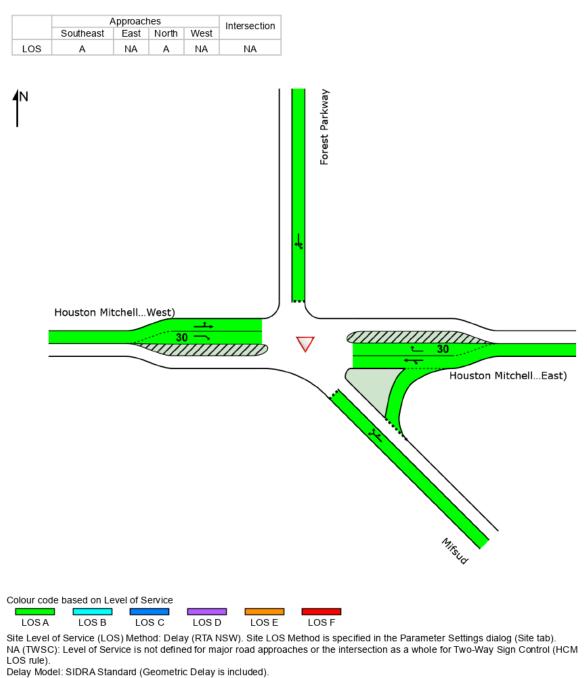
SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Created: Thursday, 6 August 2020 9:47:35 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

LEVEL OF SERVICE

Lane Level of Service

V Site: 101 [F-P / H-M-D PM Peak 2029 - Y (Site Folder: General)] New Site

Site Category: (None) Give-Way (Two-Way)



SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 4 August 2020 1:48:48 PM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

INTERSECTION SUMMARY

▽ Site: 101 [F-P / H-M-D PM Peak 2029 - Y (Site Folder:

General)]

New Site Site Category: (None)

Give-Way (Two-Way)

Intersection Performance - Hourly Values		
Performance Measure	Vehicles	Persons
Travel Speed (Average) Travel Distance (Total) Travel Time (Total) Desired Speed (Program) Speed Efficiency Travel Time Index Congestion Coefficient	56.0 km/h 881.0 veh-km/h 15.7 veh-h/h 60.0 km/h 0.93 9.25 1.07	56.0 km/h 1057.1 pers-km/h 18.9 pers-h/h
Demand Flows (Total) Percent Heavy Vehicles (Demand) Degree of Saturation Practical Spare Capacity Effective Intersection Capacity	871 veh/h 8.4 % 0.330 142.7 % 2641 veh/h	1045 pers/h
Control Delay (Total) Control Delay (Average) Control Delay (Worst Lane) Control Delay (Worst Movement) Geometric Delay (Average) Stop-Line Delay (Average) Idling Time (Average) Intersection Level of Service (LOS)	0.85 veh-h/h 3.5 sec 12.8 sec 14.3 sec 2.0 sec 1.5 sec 0.8 sec NA	1.02 pers-h/h 3.5 sec 14.3 sec
95% Back of Queue - Vehicles (Worst Lane) 95% Back of Queue - Distance (Worst Lane) Ave. Queue Storage Ratio (Worst Lane) Total Effective Stops Effective Stop Rate Proportion Queued Performance Index	1.4 veh 11.4 m 0.01 220 veh/h 0.25 0.16 21.2	264 pers/h 0.25 0.16 21.2
Cost (Total) Fuel Consumption (Total) Carbon Dioxide (Total) Hydrocarbons (Total) Carbon Monoxide (Total) NOx (Total)	708.13 \$/h 83.0 L/h 199.7 kg/h 0.015 kg/h 0.212 kg/h 0.592 kg/h	708.13 \$/h

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). NA: Intersection LOS for Vehicles is Not Applicable for two-way sign control since the average intersection delay is not a good LOS measure due to zero delays associated with major road movements. Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard (Geometric Do

Site Model Variability Index (Iterations 3 to N): 0.3 %

Number of Iterations: 3 (Maximum: 10)

Largest change in Lane Degrees of Saturation for the last three Flow-Capacity Iterations: 66.8% 7.7% 0.3%

Intersection Performance - Annual Values						
Performance Measure	Vehicles	Persons				
Demand Flows (Total)	417,853 veh/y	501,423 pers/y				
Delay	407 veh-h/y	489 pers-h/y				
Effective Stops	105,671 veh/y	126,805 pers/y				
Travel Distance	422,858 veh-km/y	507,429 pers-km/y				
Travel Time	7,555 veh-h/y	9,066 pers-h/y				
Cost	339,901 \$/y	339,901 \$/y				
Fuel Consumption	39,853 L/y					
Carbon Dioxide	95,852 kg/y					
Hydrocarbons	7 kg/y					
Carbon Monoxide	102 kg/y					

ATTACHMENT

ORDINARY COUNCIL 17/02/2021

NOx

284 kg/y

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 4 August 2020 1:48:48 PM Project: 0:44661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

MOVEMENT SUMMARY

▽ Site: 101 [F-P / H-M-D PM Peak 2029 - Y (Site Folder: General)]

New Site

Site Category: (None) Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Tum	INP VOLL [Total veh/h		DEM, FLO [Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist] m	Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	nEast:	Mifsud												
21a	L1	30	20.0	32	20.0	0.330	6.9	LOS A	1.4	11.4	0.57	0.84	0.70	47.7
23a	R1	5	5.0	5	5.0	0.330	11.1	LOS A	1.4	11.4	0.57	0.84	0.70	48.7
23b	R3	120	20.0	126	20.0	0.330	14.3	LOS A	1.4	11.4	0.57	0.84	0.70	47.6
Appro	bach	155	19.5	163	19.5	0.330	12.8	LOS A	1.4	11.4	0.57	0.84	0.70	47.7
East:	Hous	ton Mitch	ell Drive	(East)										
4b	L3	30	20.0	32	20.0	0.132	7.0	LOS A	0.2	1.4	0.02	0.08	0.02	58.1
5	T1	199	5.0	209	5.0	0.132	0.0	LOS A	0.2	1.4	0.02	0.08	0.02	59.2
6	R2	21	5.0	22	5.0	0.013	6.5	LOS A	0.1	0.5	0.44	0.57	0.44	51.7
Appro	bach	250	6.8	263	6.8	0.132	1.4	NA	0.2	1.4	0.06	0.12	0.06	58.3
North	: Fore	st Parkwa	ау											
7	L2	33	5.0	35	5.0	0.081	7.0	LOS A	0.3	2.1	0.48	0.70	0.48	51.3
7a	L1	5	5.0	5	5.0	0.081	9.0	LOS A	0.3	2.1	0.48	0.70	0.48	51.7
9	R2	19	5.0	20	5.0	0.081	10.5	LOS A	0.3	2.1	0.48	0.70	0.48	51.1
Appro	bach	57	5.0	60	5.0	0.081	8.3	LOS A	0.3	2.1	0.48	0.70	0.48	51.3
West	: Hous	ton Mitch	ell Drive	e (West)										
10	L2	7	5.0	7	5.0	0.200	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.9
11	T1	350	5.0	368	5.0	0.200	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
12a	R1	8	20.0	8	20.0	0.005	5.2	LOS A	0.0	0.2	0.33	0.48	0.33	52.9
Appro	bach	365	5.3	384	5.3	0.200	0.3	NA	0.0	0.2	0.01	0.02	0.01	59.6
All Vehic	les	827	8.4	871	8.4	0.330	3.5	NA	1.4	11.4	0.16	0.25	0.18	56.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Tuesday, 4 August 2020 1:48:48 PM Project: 0:14661_Mifsud\21-Planning\SIDRA\4661 - HMD and FP.sip9

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix E SIDRA Analysis – Ocean Drive and Houston Mitchell Drive

SURVEYING © ARCHITECTURE © PLANNING © CIVIL ENGINEERING © URBAN DESIGN

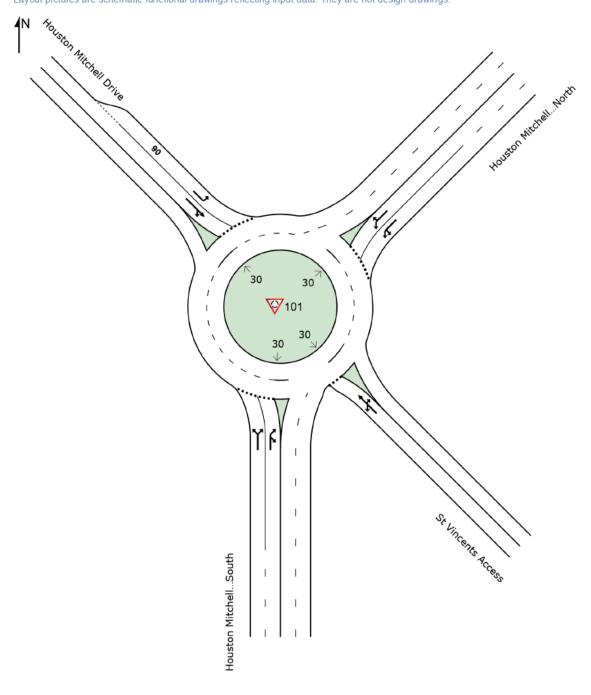
Page 43

SITE LAYOUT

♥ Site: 101 [2029 AM Developed + Site Trips (Site Folder: General)]

Houston Mitchell Drive Site Category: (None) Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Created: Thursday, 6 August 2020 9:49:03 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

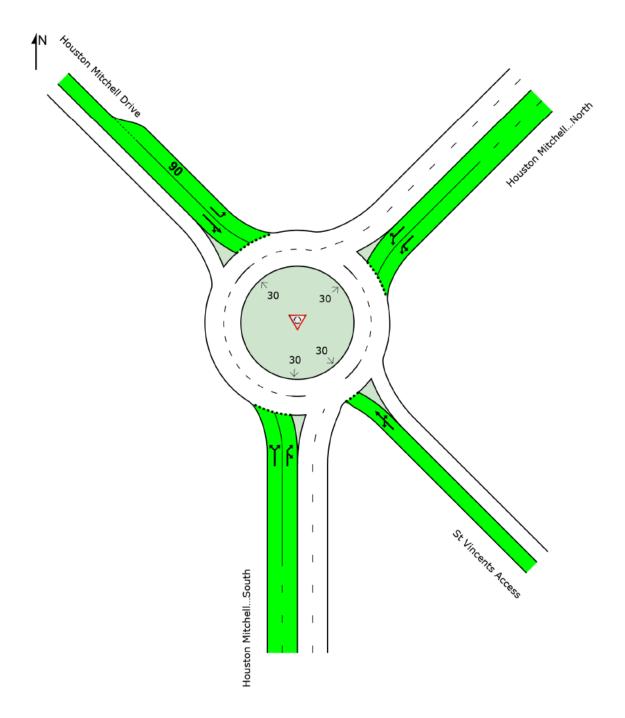
LEVEL OF SERVICE

Lane Level of Service

V Site: 101 [2029 AM Developed + Site Trips (Site Folder: General)]

Houston Mitchell Drive Site Category: (None) Roundabout

		Ар	proaches		Intersection
	South	Southeast	Northeast	Northwest	Intersection
LOS	A	А	A	A	A



Colour code	based on Lev	el of Service			
LOSA	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Delay Model: SIDRA Standard (Geometric Delay is included).

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 5 August 2020 11:08:33 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

INTERSECTION SUMMARY

♥ Site: 101 [2029 AM Developed + Site Trips (Site Folder: General)]

Houston Mitchell Drive Site Category: (None) Roundabout

erformance Measure	Vehicles	Persons
ravel Speed (Average) ravel Distance (Total) ravel Time (Total) esired Speed (Program) peed Efficiency ravel Time Index ongestion Coefficient	52.9 km/h 2315.3 veh-km/h 43.7 veh-h/h 60.0 km/h 0.88 8.69 1.13	52.9 km/h 2778.3 pers-km/h 52.5 pers-h/h
emand Flows (Total) rrcent Heavy Vehicles (Demand) egree of Saturation actical Spare Capacity fective Intersection Capacity	2205 veh/h 5.0 % 0.611 39.1 % 3610 veh/h	2646 pers/h
ontrol Delay (Total) ontrol Delay (Average) ontrol Delay (Worst Lane) ontrol Delay (Worst Movement) eometric Delay (Average) top-Line Delay (Average) ling Time (Average) tersection Level of Service (LOS)	5.70 veh-h/h 9.3 sec 13.1 sec 15.2 sec 6.1 sec 3.2 sec 0.2 sec LOS A	6.84 pers-h/h 9.3 sec 15.2 sec
% Back of Queue - Vehicles (Worst Lane) % Back of Queue - Distance (Worst Lane) e. Queue Storage Ratio (Worst Lane) ial Effective Stops ective Stop Rate oportion Queued rformance Index	4.3 veh 31.3 m 0.03 1711 veh/h 0.78 0.62 77.5	2053 pers/h 0.78 0.62 77.5
est (Total) el Consumption (Total) irbon Dioxide (Total) irbon Monoxide (Total) or Monoxide (Total) Dx (Total)	1813.79 \$/h 240.4 L/h 571.9 kg/h 0.047 kg/h 0.606 kg/h 1.198 kg/h	1813.79 \$/h

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Intersection LOS value for Vehicles is based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Site Model Variability Index (Iterations 3 to N): 2.7 %

Number of Iterations: 7 (Maximum: 10)

Largest change in Lane Degrees of Saturation for the last three Flow-Capacity Iterations: 2.2% 1.1% 0.6%

Intersection Performance - Annual Values						
Performance Measure	Vehicles	Persons				
Demand Flows (Total)	1,058,526 veh/y	1,270,232 pers/y				
Delay	2,737 veh-h/y	3,285 pers-h/y				
Effective Stops	821,213 veh/y	985,455 pers/y				
Travel Distance	1,111,325 veh-km/y	1,333,590 pers-km/y				
Travel Time	20,989 veh-h/y	25,187 pers-h/y				
Cost	870,617 \$/y	870,617 \$/y				
Fuel Consumption	115,414 L/y					
Carbon Dioxide	274,507 kg/y					
Hydrocarbons	22 kg/y					
Carbon Monoxide	291 kg/y					

ATTACHMENT

ORDINARY COUNCIL 17/02/2021

NOx

575 kg/y

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 5 August 2020 11:08:33 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

> Item 13.13 Attachment 2 Page 793

MOVEMENT SUMMARY

Houston Mitchell Drive Site Category: (None) Roundabout

Vehi	cle M	ovement	t Perfo	rmance										
Mov ID	Tum	INP VOLU [Total		DEMA FLOV [Total		Deg. Satn		Level of Service		ACK OF EUE Dist]	Prop. E Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		veh/h	%	veh/h	%	V/C	sec		veh	mʻ			,	km/h
South	h: Hou	ston Mitch	nell Driv	e South										
1a	L1	236	5.0	248	5.0	0.504	7.2	LOS A	3.9	28.2	0.77	0.84	0.85	52.8
3a	R1	568	5.0	598	5.0	0.504	12.5	LOS A	3.9	28.2	0.78	0.88	0.86	51.5
3b	R3	33	5.0	35	5.0	0.504	15.2	LOS B	3.7	27.0	0.78	0.91	0.88	51.9
Appro	bach	837	5.0	881	5.0	0.504	11.1	LOS A	3.9	28.2	0.78	0.87	0.86	51.9
South	hEast:	St Vincer	nts Acce	SS										
21b	L3	123	5.0	129	5.0	0.611	7.8	LOS A	4.3	31.3	0.70	0.91	0.86	50.6
22	T1	153	5.0	161	5.0	0.611	7.8	LOS A	4.3	31.3	0.70	0.91	0.86	52.8
23	R2	246	5.0	259	5.0	0.611	13.5	LOS A	4.3	31.3	0.70	0.91	0.86	53.0
Appro	bach	522	5.0	549	5.0	0.611	10.5	LOS A	4.3	31.3	0.70	0.91	0.86	52.3
North	East:	Houston I	Mitchell	Drive Nort	h									
24	L2	66	5.0	69	5.0	0.226	4.2	LOS A	1.1	8.2	0.30	0.42	0.30	55.3
24a	L1	281	5.0	296	5.0	0.226	3.7	LOS A	1.1	8.2	0.30	0.46	0.30	55.8
26	R2	185	5.0	195	5.0	0.226	9.8	LOS A	1.1	8.1	0.31	0.59	0.31	54.3
Appro	bach	532	5.0	560	5.0	0.226	5.9	LOS A	1.1	8.2	0.30	0.50	0.30	55.2
North	West:	Houston	Mitchell	Drive										
27	L2	106	5.0	112	5.0	0.128	6.1	LOS A	0.6	4.7	0.65	0.73	0.65	53.8
28	T1	34	5.0	36	5.0	0.144	6.7	LOS A	0.7	5.0	0.66	0.77	0.66	53.2
29a	R1	64	5.0	67	5.0	0.144	11.2	LOS A	0.7	5.0	0.66	0.77	0.66	52.8
Appro	bach	204	5.0	215	5.0	0.144	7.8	LOS A	0.7	5.0	0.66	0.75	0.66	53.4
All Vehic	les	2095	5.0	2205	5.0	0.611	9.3	LOS A	4.3	31.3	0.62	0.78	0.70	52.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

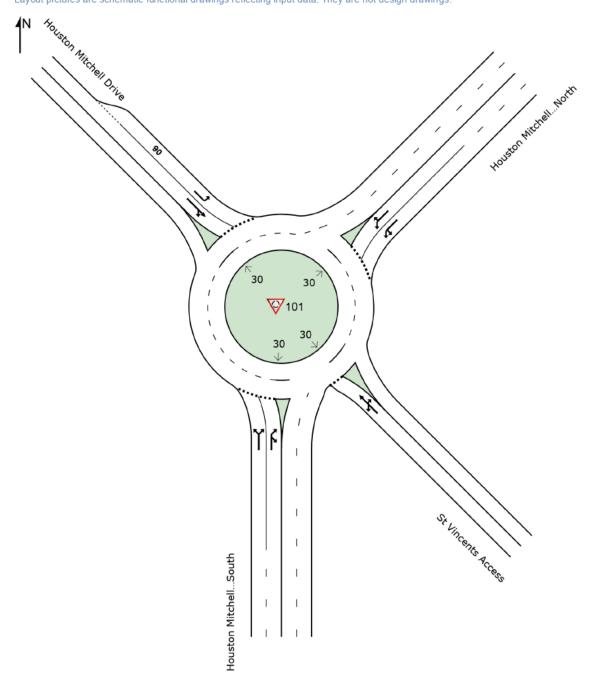
SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 5 August 2020 11:08:33 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

SITE LAYOUT

♥ Site: 101 [2029 PM Developed + Site Trips (Site Folder: General)]

Houston Mitchell Drive Site Category: (None) Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Created: Thursday, 6 August 2020 9:50:35 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

Item 13.13 Attachment 2 Page 796

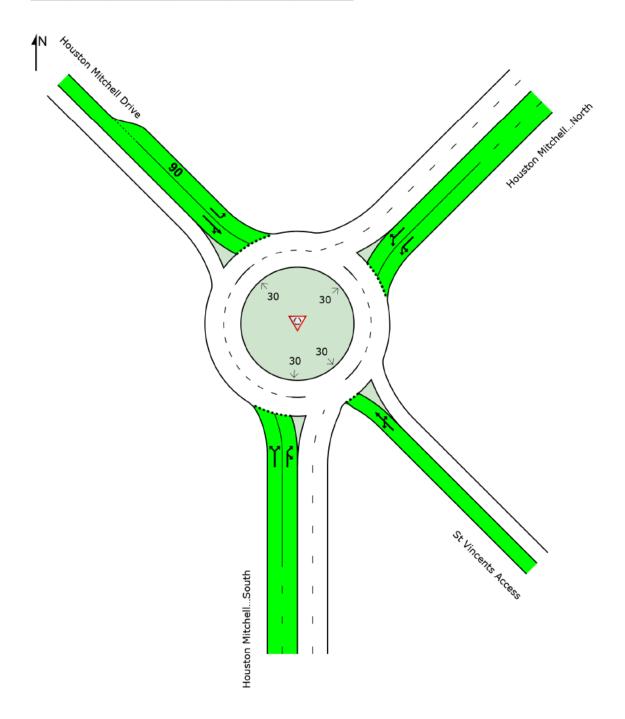
LEVEL OF SERVICE

Lane Level of Service

♥ Site: 101 [2029 PM Developed + Site Trips (Site Folder: General)]

Houston Mitchell Drive Site Category: (None) Roundabout

		Approaches						
	South	Southeast	Northeast	Northwest	Intersection			
LOS	Α	А	А	А	А			



Item 13.13 Attachment 2 Page 797

Colour code	based on Lev	el of Service			
LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Delay Model: SIDRA Standard (Geometric Delay is included).

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 5 August 2020 11:09:16 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

INTERSECTION SUMMARY

♥ Site: 101 [2029 PM Developed + Site Trips (Site Folder: General)]

Houston Mitchell Drive Site Category: (None) Roundabout

erformance Measure	Vehio	cles	Pers	ons
avel Speed (Average)	54.0	km/h	54.0	km/h
avel Distance (Total)	2188.8	veh-km/h	2626.6	pers-km/h
I Time (Total)	40.5	veh-h/h	48.6	pers-h/h
red Speed (Program)	60.0	km/h		
eed Efficiency	0.90			
avel Time Index	8.89			
gestion Coefficient	1.11			
and Flows (Total)	2095	veh/h	2514	pers/h
rcent Heavy Vehicles (Demand)	5.0		2014	polo/li
gree of Saturation	0.487			
ictical Spare Capacity	74.6	%		
ective Intersection Capacity	4303			
ntrol Delay (Total)	4.24	veh-h/h	5.00	pers-h/h
ontrol Delay (Average)	4.24			sec
ntrol Delay (Worst Lane)	9.6		7.5	300
ntrol Delay (Worst Movement)	12.4		12.4	sec
ometric Delay (Average)	5.4		12.4	300
p-Line Delay (Average)	1.9			
ng Time (Average)	0.1			
rsection Level of Service (LOS)	LOS A	000		
Paak of Quoue, Mahieles (Mamt Lana)	0.0	vob		
6 Back of Queue - Vehicles (Worst Lane)	3.2 23.3			
% Back of Queue - Distance (Worst Lane) e. Queue Storage Ratio (Worst Lane)	23.3			
tal Effective Stops		veh/h	1656	pers/h
ective Stop Rate	0.66	ven/II	0.66	persiti
oportion Queued	0.52		0.52	
formance Index	62.4		62.4	
	4074.07	¢ /h	4074.07	¢ /h
st (Total)	1671.87	*	1671.87	ъ/n
I Consumption (Total)	218.6			
oon Dioxide (Total) rocarbons (Total)	520.1 0.042			
bon Monoxide (Total)		0		
Dx (Total)	0.555 1.097			

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Intersection LOS value for Vehicles is based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Site Model Variability Index (Iterations 3 to N): 2.8 %

Number of Iterations: 7 (Maximum: 10)

Largest change in Lane Degrees of Saturation for the last three Flow-Capacity Iterations: 2.2% 1.1% 0.6%

Intersection Performance - Annual Values						
Performance Measure	Vehicles	Persons				
Demand Flows (Total)	1,005,474 veh/y	1,206,569 pers/y				
Delay	2,035 veh-h/y	2,442 pers-h/y				
Effective Stops	662,205 veh/y	794,646 pers/y				
Travel Distance	1,050,633 veh-km/y	1,260,759 pers-km/y				
Travel Time	19,454 veh-h/y	23,344 pers-h/y				
Cost	802,498 \$/y	802,498 \$/y				
Fuel Consumption	104,931 L/y					
Carbon Dioxide	249,641 kg/y					
Hydrocarbons	20 kg/y					
Carbon Monoxide	267 kg/y					

ATTACHMENT

ORDINARY COUNCIL 17/02/2021

NOx

527 kg/y

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 5 August 2020 11:09:16 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9

> Item 13.13 Attachment 2 Page 800

MOVEMENT SUMMARY

Houston Mitchell Drive Site Category: (None) Roundabout

Vehi	cle M	ovemen	t Perfo	rmance										
Mov ID	Tum	INP VOLU [Total	IMES HV]	DEMA FLOV [Total	WS HV]	Deg. Satn	Delay	Level of Service	QUI [Veh.	ACK OF EUE Dist]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver Speed
Sout	h: Hou	veh/h ston Mitcl	% hell Driv	veh/h	%	V/C	sec	_	veh	m		_		km/h
1a	L1	77	5.0	81	5.0	0.221	3.6	LOS A	1.1	8.0	0.30	0.55	0.30	54.1
3a	R1	348	5.0	366	5.0	0.221	8.5	LOS A	1.1	8.0	0.30	0.58	0.30	53.5
3b	R3	100	5.0	105	5.0	0.221	11.0	LOS A	1.1	7.8	0.31	0.61	0.31	53.9
Appr	oach	525	5.0	553	5.0	0.221	8.3	LOS A	1.1	8.0	0.30	0.58	0.30	53.7
Sout	hEast:	St Vincer	nts Acce	SS										
21b	L3	10	5.0	11	5.0	0.064	6.7	LOS A	0.3	2.1	0.64	0.76	0.64	51.1
22	T1	11	5.0	12	5.0	0.064	6.7	LOS A	0.3	2.1	0.64	0.76	0.64	53.4
23	R2	20	5.0	21	5.0	0.064	12.4	LOS A	0.3	2.1	0.64	0.76	0.64	53.6
Appr	oach	41	5.0	43	5.0	0.064	9.5	LOS A	0.3	2.1	0.64	0.76	0.64	52.9
North	nEast:	Houston I	Mitchell	Drive Nort	h									
24	L2	200	5.0	211	5.0	0.487	6.2	LOS A	3.2	23.3	0.66	0.66	0.67	53.7
24a	L1	611	5.0	643	5.0	0.487	6.0	LOS A	3.2	23.3	0.66	0.70	0.69	54.4
26	R2	98	5.0	103	5.0	0.487	12.3	LOS A	3.2	23.0	0.67	0.74	0.70	54.7
Appr	oach	909	5.0	957	5.0	0.487	6.7	LOS A	3.2	23.3	0.66	0.70	0.68	54.3
North	West:	Houston	Mitchell	Drive										
27	L2	177	5.0	186	5.0	0.215	5.6	LOS A	0.9	6.3	0.50	0.66	0.50	54.4
28	T1	126	5.0	133	5.0	0.323	5.1	LOS A	1.5	10.6	0.50	0.66	0.50	54.1
29a	R1	212	5.0	223	5.0	0.323	9.6	LOS A	1.5	10.6	0.50	0.66	0.50	53.6
Appr	oach	515	5.0	542	5.0	0.323	7.1	LOS A	1.5	10.6	0.50	0.66	0.50	54.0
All Vehic	cles	1990	5.0	2095	5.0	0.487	7.3	LOS A	3.2	23.3	0.52	0.66	0.53	54.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com Organisation: KING & CAMPBELL PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 5 August 2020 11:09:16 AM Project: 0:\4661_Mifsud\21-Planning\SIDRA\4661_HoustonMitchellDrive.sip9 King & Campbell Pty Ltd

Traffic Impact Assessment for Proposed Houston Mitchell Drive Employment Lands

Appendix F Transport for NSW Correspondence – TIA Requirements

SURVEYING I ARCHITECTURE I PLANNING I CIVIL ENGINEERING I URBAN DESIGN

Page 44

Item 13.13 Attachment 2 Page 802



submission 22

18 December 2019

File No: NTH19/00293/01 Your Ref: PP2014-14.1

The General Manager Port Macquarie Hastings Council PO Box 84 PORT MACQUARIE NSW 2444

Attention: Stephanie Baker <u>council@pmhc.nsw.gov.au</u>

Dear Madam,

Re: Planning Proposal – Lot 10 DP615776 & Lot 1 DP 1117908 - Corner of Ocean Drive & Houston Mitchell Drive, Bonney Hills – Proposed Light Industry & Environmental Rezoning.

I refer to your letter dated 18 November 2019 requesting comment from Transport for NSW (TfNSW) in relation to the abovementioned planning proposal.

Roles and Responsibilities

The key interests for TfNSW are the safety and efficiency of the transport network, the integrity of State infrastructure and the integration of land use and transport in accordance with *Future Transport Strategy 2056*.

Ocean Drive is a classified (Regional) road (MR600). In accordance with Section 7 of the *Roads Act 1993* (the Act) Port Macquarie Hastings Council is the Roads Authority for this road and all other public roads in the subject area. TfNSW's concurrence is required prior to Council's approval of works on this road under Section 138 of the *Roads Act 1993*.

In accordance with Clause 101 of the *State Environmental Planning Policy (Infrastructure)* 2007 (ISEPP) the Consent Authority is to have consideration for the safety, efficiency and ongoing operation of the classified road as the development has frontage to a classified road. TfNSW is given the opportunity under Clause 104 to comment on traffic generating developments listed under Schedule 3. The proposed use of the land (industrial) is a Schedule 3 use.

Transport for NSW Response

TfNSW has reviewed the information provided and suggests that the Planning Proposal include a Traffic Impact Assessment (TIA) prepared by a suitably qualified person to identify likely traffic impacts on the classified road network.

While is acknowledged that more detail will be provided at the subdivision stage, it is important that Council understands the number and types of trips generated by this type

Transport for NSW

Item 13.13 Attachment 2 Page 803 of development when considering the rezoning. No detail of projected traffic impacts has been provided in the current documentation.

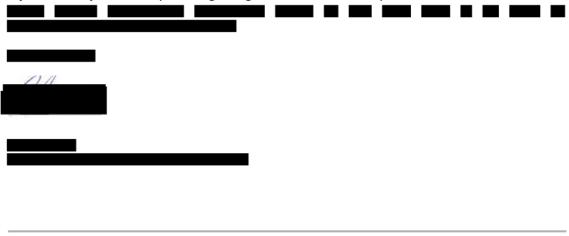
The TIA should be prepared in accordance with the current Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and the RTA Guide to Traffic Generating Developments. The TIA should include, but not be limited, to the following;

- The impact of the proposed development on the road network with consideration for a 10 year design horizon.
- The volume and distribution of traffic generated by the proposed development.
- Background traffic data, including current traffic counts and relevant growth rates. The data should take account of surrounding development; both present and future.
- Sight distance measurements at site access locations and affected intersections.
- Proposed site access arrangements and details of proposed improvements to any affected intersections.
- Details of servicing and parking arrangements, including swept paths for the largest vehicle requiring access to the site.
- Impact on public transport (public and school bus routes).
- Connectivity for active transport modes such as walking and cycling.

Details of the proposed intersection treatment are required. It is suggested that Council obtain a strategic design drawing to demonstrate that access can be safely achieved at the location proposed. This should include identification of any environmental constraints or constructability issues, and if any portion of adjoining land is needed to achieve the access proposed. It is recommended that Part 4 of Austroads be used to identify any necessary improvements to the cross-intersection.

It is noted that the proposed DCP amendment will restrict access to Ocean Drive. This is supported. However, it is pointed out that any new access or works proposed on the classified (Regional) road should be designed in accordance with the current Austroads Guidelines, Australian Standards and TfNSW Supplements, to the satisfaction of Council, prior to referral to TfNSW for concurrence under Section 138 of the Roads Act.

If you have any further enquiries regarding the above comments please do not hesitate to contact



Transport for NSW

Bushfire Hazard management

Objective

To ensure bushfire management measures do not result in the loss of important habitat areas.

To ensure that Council is not burdened with the ongoing costs associated with the maintenance of Asset Protection Zones.

To provide a public interface to environmental assets.

Development Provisions

Asset Protection Zones are to be located outside of environmental protection zones and wholly provided within private land. Note perimeter roads provided as part of a residential subdivision are classified as being part of the subdivision and not a separate permissible land use within environment protection zones.

Perimeter roads are to be provided to all urban areas adjoining environmental management areas and their buffers.

Refer to Figure 1.

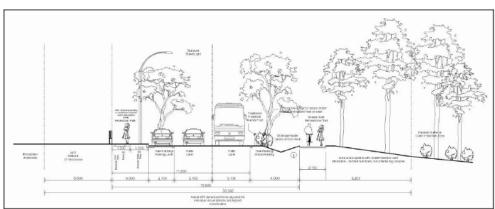


Figure 1. Road Section - Indicative Bushland or Riparian Edge Street. Source: Anterra Design Pty Ltd, 2007

Draft Amendment to Port Macquarie-Hastings Development Control Plan 2013 (Part 4 Houston Mitchell Drive Employment Lands)

Area Context

Land to which this section applies

This section applies to the land shown below in Figure 1.



Figure 1: Land to which this section applie

Strategic Context

The site is recognised in Council's Urban Growth Management Strategy 2017 - 2036 as being a suitable investigation area for light industry. It is centrally located in terms of access to planned development in Lake Cathie and Bonny Hills Urban Release Area.

The site has the capacity to provide approximately half 5.5ha of the land area needed for industrial development in Lake Cathie and Bonny Hills to- required to meet the projected demand from Lake Cathie and Bonny Hills communities for service industry by 2036.

Port Macquarie-Hastings Development Control Plan 2013 1 v20210103

Item 13.13 Attachment 4 Page 806

The Bonny Hills community has expressed (through the Bonny Hills Community Plan 2018) a strong desire for any industrial development on the site to be buffered from Ocean Drive and for access to be from Houston Mitchell Drive, not Ocean Drive.

The following development controls are predominantly designed to reduce the visibility of future light industrial development from Ocean Drive through the provision of a landscaped buffer.

Purpose

The purpose of these provisions is to minimise the potential for visual and amenity impacts as a result of future development and to provide for an internal perimeter road layout.

These provisions supplement the relevant provisions in Parts 2 and 3 of the Port Macquarie Development Control Plan. Where there is inconsistency between these Area Based Provisions and the provisions in Parts 2 and 3, for the extent of the inconsistency these Area Based Provisions prevail.

Note: The figures in this plan are conceptual, not to scale and show indicative locations only.

Development Guide

Visual amenity

Objective

- To screen industrial development as viewed by the travelling public along Ocean Drive and Houston Mitchell Drive.
- To ensure an attractive site boundary is achieved that retains the landscape character of the area and is of high scenic quality.
- To provide a fauna fence which moulds into the vegetated landscape.

Development Provisions

- a) Landscaping within the site and along Houston Mitchell Drive is to include plantings which are in scale with the height and bulk of industrial development.
- b) A minimum 5m wide strip of E2 Environmental Conservation Management-zoned land adjacent to Ocean Drive and Houston Mitchell Drive is to be provided and densely vegetated and fenced to provide a robust natural buffer to screen buildings, parking areas, loading areas and any other associated uses of the site from the adjoining street frontages. Refer to Figure 2 for details.

Trees are to be selected from those that are on Council's Indigenous Street and Open Space Planting list and be planted at the time of subdividing development approval is given to subdivide the land or approval to use the land, whichever occurs first.

Each 10 metre buffered section should comprise:

- Four medium trees (5-15m high and 25 litre stock)
- Eight large shrubs (2-4m high and 200mm stock)
- 24 medium shrubs (1-2m high and 140mm stock)
- 60 groundcovers (tube stock)

Planting notes:

- The buffer to be planted should be cultivated to a 300mm depth with a 300mm mound of topsoil and 100mm forest mulch.
- Allow breaks in mounding for overland drainage.
- Provide at least three species of each plant for tree, large shrub, and groundcover in alternating groupings.
- Maintenance during the establishment period to include watering during dry periods, periodical weeding and replacement of failed stock.

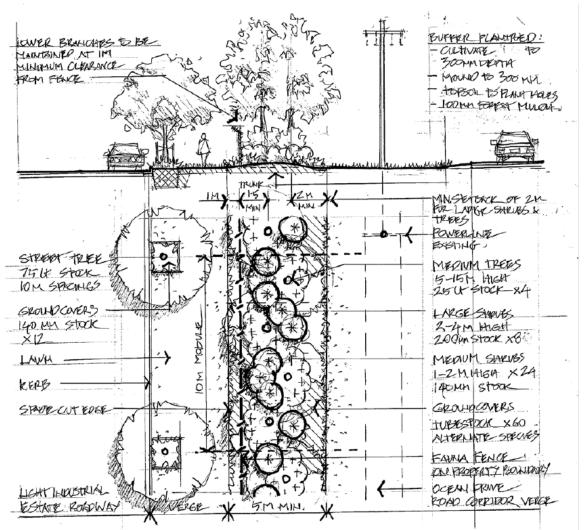


Figure 2: Landscape buffer to Ocean Drive frontage

Koala protection

Objective

To discourage Koalas from crossing Houston Mitchell Drive and Ocean Drive.

Development Provisions

a) Provide a fauna fence which moulds into the vegetated landscape. The fence should not be visually intrusive. and should be constructed using PVC coated black chain mesh. The indicative location of this fence is provided in Figure 3. Note: The fauna fence must provide access to the environmental lands in the north and south to enable its future management and allow fauna to use the existing culverts under Ocean Drive to move between environmental land in the east and west. The fauna fence should be offset from the Queens Lake State Conservation Area boundary.

Port Macquarie-Hastings Development Control Plan 2013 3 v20210103

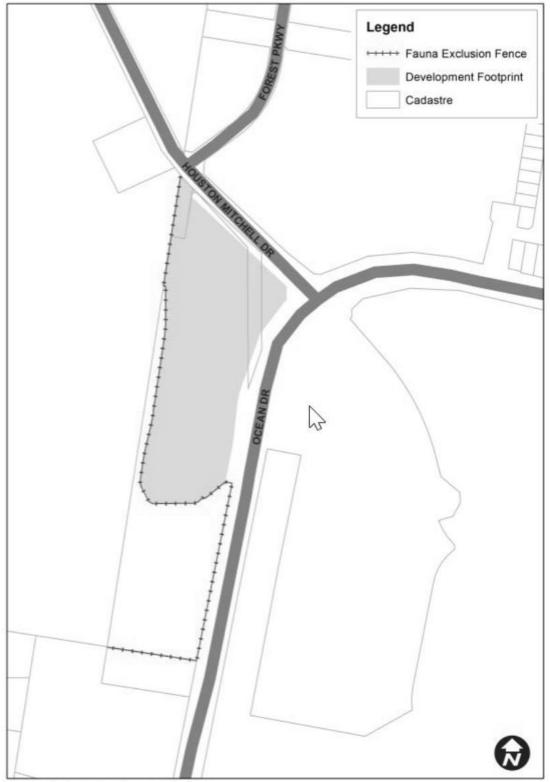


Figure 3: Indicative location of fauna exclusion fence

Port Macquarie-Hastings Development Control Plan 2013 4 v20210103

Roads, access and transport

Objective

- To mitigate against the potential for environmental conflict and degradation at the industrial interface.
- To ensure safe and appropriate access to the site.

Development Provisions

- A perimeter road between the industrial footprint and environmental lands is to be designed to control the industrial interface and manage potential conflicts of bushfire hazard and environmental conservation.
- b) All access is to be provided from Houston Mitchell Drive. Access is not permitted via Ocean Drive, other than pedestrian or cycleway access.

Water Quality

Objective

· To control and manage all stormwater generated as a result of land development.

Development Provisions

- a) Each individual industrial lot is to be provided with on-site stormwater detention facilities. Sufficient detention storage must be provided within each lot to ensure that peak flow rates and/or flood levels at any point within the downstream drainage system do not increase as a result of the development from the 50% Annual Exceedance Probability (AEP) storm to the 1% AEP storm events (for all relevant storm durations).
- b) For modelling purposes, pre-development conditions shall be assumed to be 'greenfields'.

Objective

 To ensure incorporation of Water Sensitive Urban Design techniques on-site and building design to minimise reliance on reticulated water.

Development Provisions

- c) All industrial lots are to be provided with on-site stormwater water quality control facilities designed and constructed to achieve the pollutant reduction targets specified within Council's Aus-Spec D7 specification.
- d) All public road pit and pipe drainage is to be designed to drain to trash racks followed by a vegetated water quality control facility sized to achieve the pollutant reduction targets specified within Council's Aus-Spec D7 specification.
- e) End-of-line water quality controls designed to treat stormwater runoff from the road reserves are to be provided prior to discharge.

Attachment: Summary of Submissions Planning Proposal PP2014-14.1 Houston Mitchell Drive, Bonny Hills received. Public Exhibition 20 November to 18 December 2019

Sub	mission -		Issue -				
	014-14.1 Hous hell Drive, Bor		Note: Key issues have been summarised.				
1.	1. Tony Robertson		 a) Proposal is likely to increase in traffic using Ocean Drive. Consideration should be given to upkeep and maintenance of Ocean Drive. Already many repairs & alterations, noting work between Panorama & McGilvray Roads. b) Planned removal of approx. 70 existing and established trees. Recommends these be replaced at the rate of at least two for every one - to be planted in future Environmental Conservation zoned area. c) Investigate wildlife corridors to link existing trees and bushland on eastern side of Ocean Drive. d) Looking forward to working with Council to implement recommendations of Bonny Hills Community Action Plan. 				
	Response/ Comment:	b) c)	No specific roadworks are proposed on Ocean Drive in connection with the Planning Proposal. Council is currently undertaking planning for whole Ocean Drive Corridor that will identify priorities for upgrades. DCP 2013 requires removal of Koala food trees to be compensated at a ratio of two to one. There may be opportunity to undertake compensatory planting within the proposed E2 zoned land in the south. The planning proposal maintains and restores the habitat corridor in the southern part of the site by way of an E2 Environmental Conservation zoning. This provides a habitat link between the Queens Lake State Conservation Area (SCA) to the west. Existing culverts under Ocean Drive provide a potential fauna link to the eastern side of Ocean Drive. Consideration will be given to the directional fencing as part of the proposed fauna exclusion fence. Noted.				
2.	2. Steven Neuss		 a) Not a suitable site for industry of any type. b) Industrial areas increase traffic and transport movement. Lake Cathie/Bonny Hills not equipped to safely accommodate traffic movement. c) Expanding primary school across the road - safety first. d) Not against progress but needs to be carefully planned, this proposal is not e) Reference to a Land Use Safety Planning document 				
	Response/ Comment:	b)	The site is identified in Council's adopted Urban Growth Management Strategy 2017-2036 (UGMS) and the State Government's North Coast Regional Plan (NCRP) as being suitable for light industry. This will also provide employment opportunities. Both of these documents have been through a number of community consultation processes. There is adequate capacity in the road network to cater for the 5.5ha of industrial (IN2) land.				

3.	John O'Raffe	d) e)	A traffic assessment has been prepared to that considers safety and continued operation of the local road network and intersections. Comment noted. Council officers are not aware of a Land Use Safety Planning document, however, road safety aspects are considered as part of the traffic assessment. a) Accept need for light industrial land but not in this location.
			 b) This will be the first thing people see when entering Bonny Hills and Lake Cathie villages due to its location on main roads - aesthetically displeasing. c) Acknowledges that it is a handy location from transport and access perspective. d) Property has been an eyesore for many years. e) Opportunity to create a gateway - needs to be done with best interest of community in mind.
	Response/ Comment:	a)	The site is identified in Council's adopted Urban Growth Management Strategy (UGMS) and the State Government's North Coast Regional (NCRP) plan as being suitable for light industry.
		b) c)	The proposal provides for a landscaped buffer along Houston Mitchell Drive and Ocean Drive that will assist to mitigate the visual prominence of future development. Comment noted.
		d) e)	Comment noted. Comment noted. Draft site specific DCP provisions contain a landscape planting concept that will assist to screen buildings and storage areas.
4.	Lindsay and ⁻ Hobson	Teresa	 a) Objects to the proposal. Not a good fit with primary school, homes, lifestyle village, day care, wildlife corridors or rural blocks. b) Questions whether the local population has been surveyed to determine the desire/need for such a development in this location. c) Houston Mitchell Drive is a gateway for visitors to lake Cathie/Bonny Hills and an industrial area at the entry
			 may deter holiday makers. d) Industrial areas should be located in close proximity to other industrial areas e.g. Port Macquarie, Wauchope and/or Laurieton - these are close enough for local residents to utilise. e) Suggest that Council explore alternative proposals such as churches/community spaces that can be used for community events. Opportunity for community to
			gather. f) Two local churches regularly meet at the school.
	Response/ Comment:	a) b)	The new industrial area will provide opportunities for jobs and services located near a growing residential area. The local community has not been surveyed. There have been opportunities to provide comments to Council as part of
		c)	consultation for the UGMS and the Planning Proposal and a further public exhibition is proposed. The proposal provides for a landscaped buffer with a minimum width of 5m along Houston Mitchell Drive and Ocean Drive that
		d)	aims to mitigate the visual prominence of future development. Opportunities for jobs and services should also be available close to neighbourhoods.

 e) A number of land uses are permitted within the IN2 zone that would serve the local community including places of public worship. A new community facility is proposed for Rainbow Beach - likely to be part of the new town centre. f) Comment noted. 	t
 a) Concerns about building height of 11.5m - difficult t screen. Questioning what light industrial uses would require that height and whether heavier industries would be permitted. b) Questions whether 5m vegetated buffer sufficient to shield area from view. c) What industries will be permitted? This is relevant t management of spills of chemicals, fertilisers, fuels lubricants etc. No reference to containment of any industrial spillage to be contained on the site to avor contamination within and adjacent to the site. d) Concerned that stormwater arrangements are inadequate given low lying nature of much of the si and drainage down towards Bonny Hills and Duche Creek. e) Questions how environmental lands will be establis managed and maintained and who will manage the area. f) Soil compaction will be an issue in re-establishing vegetation in the north where existing trucks and st are. There may be other issues associated with the current use. Considers that the environmental land (closest to Bonny Hills) will require a different treatr because of its low lying nature. g) Koala corridors are discussed but no information at western boundary and connectivity between curren habitats. h) Traffic management arrangements are unclear on a off Houston Mitchell Drive. i) Site to supply 70% light industry but questions whe the remaining 30% will go. 	d o o o o d te o o d te o s s hed s heds ment t t and re
 a) Due to the community concern, the proponent has proposed reduce the 11.5m height limit to 10m. Buildings up to 11.5m a permissible at the proposed Rainbow Beach town centre to the east and buildings up to 14.5m are permissible in the R3 Medium Density Residential zone adjacent to the town centre land. Heavy industries are not permitted in the proposed IN2 zone. b) Draft site specific DCP provisions include a landscape plantin concept. Implementation will assist to screen buildings and storage areas. A 5 m buffer is considered a sufficient width to cater for screen planting including tree species with a mature height of 15m. c) Refer to the Port Macquarie - Hastings Local Environmental I (LEP) 2011 for a list of land uses that are permitted within the IN2 Light Industrial zone. Future development will be subject approval. d) Site specific DCP provisions are proposed that require on-sit detention of stormwater. Detailed stormwater servicing plans be determined as part of the development application process 	are he e ng o e Ylan e to e will ss. e
d) Site specifi detention o be determi e) Establishm	of stormwater. Detailed stormwater servicing plans ned as part of the development application proces

	f) g) h)	process at the DA stage and will consider different vegetation types and parts of the site. The landowner will manage the land. Soil compaction and revegetation techniques may vary across the site and this would be considered as part of a VMP. Potential contamination due to previous use will be considered. Part of the western boundary adjacent to the IN2 land will be fenced to exclude fauna from entering the industrial land and adjacent roads. Refer to the site specific DCP provisions. Directional fencing will be considered to direct fauna through existing culverts (under Ocean Drive) to the environmental land on the eastern side. Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment (TIA) that assesses the location and design of the intersection. The TIA will be placed on public exhibition with the amended Planning Proposal. The location of the additional employment lands is not determined at this stage noting that this is the estimated demand through to 2036.
6.	Penny Smith and Alison Wilson	 a) Questions safety of light industry with trucks and constant traffic turning off Ocean Drive/Houston Mitchell Drive, particularly in light of its proximity to schools and residences. b) Asks what traffic management plans will be placed to ensure safety. c) Question the length of time it will take for the vegetated buffer to grow to fully screen the industrial area and whether it is sufficient to shield the area from view and noise. d) Questions the types of industry that will be allowed. e) Questions the suitability of stormwater given the low-lying nature of much of the site and drainage down towards Bonny Hills and Duchess Creek. Already concern over run off to this area. f) Questions the arrangements for koalas crossing driveways and entry and whether there are safe fauna crossing points. g) One of the ecology reports indicates little evidence of site being used by koalas and questions whether any research been done into why this is the case. Questions whether this means that the vegetation being proposed for retention might be used for industry in the future. h) Growing new food trees without creating, fostering and expanding the area is not likely to enable the continued growth of a Koala population. i) If each lot is being sold privately, will there be strict guidelines as to being environmentally conscious of the surrounding land. j) Questions who will be maintaining and establishing the environmental lands. Questions whether Council will be monitoring this. k) The attachments are not visible on this report so people are not getting the full information.
	Response/ a. Comment:	A traffic impact assessment has been prepared. The local road network has adequate capacity for additional traffic, including

	 heavy vehicles. The TIA also considers the location and type of intersection off Houston Mitchell Drive to serve the site. b. Final traffic management plans will be determined as part of the development application process. c. Agree that the vegetation will take time to mature. d. Refer to the Port Macquarie - Hastings LEP 2011 for a list of the permitted land uses within the IN2 Light Industrial zone. Future development will be subject to approval. e. Site specific DCP provisions are proposed that require on-site detention of stomwater. Detailed stomwater servicing plans will be determined as part of the development application process. f. Where possible fauna will be excluded from the industrial land by way of a fauna fence that will allow east-west movement from the conservation area in the west to the environmental land on the other side of Ocean Drive in the east. g. Evidence of the presence of Koalas may have been affected by the timing of the survey after a period of rain which meant that scats were potentially not detected. h. Planting of Koala food trees within the E2 land at the southern end of the site will assist to offset loss of trees at the northern end. i. Guidelines for environmental management are contained in Council's DCP 2013. A VMP will be required as part of the development assessment process that addresses ongoing management of E2 land. j. Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) at the development application stage. The landowner will be responsible for establishment and management of the environmental land.
7. John Drinan	 k. The attachments were available on Council's Haveyoursay web page as part of the public exhibition of the Planning Proposal. a) Do not object in general but have a specific objection regarding proposal to allow buildings of 11.5m in height and some other concerns. Height out of character within a residential environment and is in contrast to the light industrial precinct in Laurieton. Buildings of this height cannot be screened from view. Request height reduced to 8.5m. b) Pleased to see significant portion of site dedicated to environmental conservation and hopes that that improving the environmental quality will improve the visual appeal, which would be an improvement to the existing appearance on the corner that greets visitors and residents. c) Technical issues will be associated with effective remediation and revegetation of the site. Soil compaction and potential contamination will be an issue. d) Potential contamination requires independent assessment. e) There is no information on the plans to design, plant and maintain appropriate species for the environmental areas (north and south). f) No details on how spills of chemical, physical and biological consequence will be kept on site, and the proposal is not convincing about the adequacy of

		from the site will end up in Saltwater Creek and the intervening lands.
	nment:	 a. Several industrial areas in the local government area have a 14.5m or no height limit. This provides flexibility as to the possible future uses. Due to the community concern, the proponent has proposed to reduce the proposed 11.5m height limit to 10m. The site is separated from neighbourhoods to the north and east by major roads. Buildings up to 11.5m are permissible at the proposed Rainbow Beach town centre to the east and buildings up to 14.5m are permissible in the R3 zone adjacent to the town centre land. While existing residential development at Forest Parkway and east along Ocean Drive is generally 1 to 2 stories. Taller buildings can be expected as the growth area develops. b. Comment noted. c. Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage. Soil compaction and revegetation techniques may vary across the site and this would be considered as part of a VMP. d. A Stage 1 contamination assessment has been prepared by a suitably qualified consultant. a. Refer to c above. The operation of industrial land uses is governed by legislation to reduce risks and hazards. DCP provisions have been prepared related to stormwater including a requirement for on-site developed.
8. Kim I	Madden	 a) Proposed light industrial area is in the wrong place. Council has consulted widely and changed nothing. b) Bonny Hills residents have consistently stated that their primary concern for Bonny Hills is to retain village atmosphere and natural environment. A large industrial estate leading up to the northern gateway of Bonny Hills is not in keeping with this vision. It is not in keeping with the surrounding residential and educational land uses. c) Industrial sites are necessary, should not be intrusive and should not be integrated into residential/ educational zones. d) Tourists and residents are drawn to Bonny Hills for its beaches and natural environment. There is money to be made in protecting, not destroying the environment. This should be a distinguishing feature of Port Macquarie - as opposed to Coffs Harbour. e) A site further west along Houston Mitchell Drive would be more appropriate in terms of planning logic and traffic management. An industrial complex on a roundabout, such as Bunnings in Port Macquarie, is a failsafe way of increasing traffic congestion. f) Part of this corner site is already degraded with parking for large trucks and machinery and areas cleared. Questions the approval process for this. Allowing an area to degrade and then rezoning it is negligent. Similar approach allowed Koala habitat to be cleared at Beach Street, Bonny Hills. g) The area of land for the proposed industrial site is

			suitable for much else than cattle and to act as an environmental corridor.
	Response/ Comment:		The subject site is well located to accommodate future employment lands to serve the local community at the intersection of two major roads. The site is considered an appropriate location for light industrial development and is supported by two strategic planning documents being the NCRP 2036 and Council's Urban Growth Management Strategy. It is acknowledged that some residents do not agree with the location. Land for light industries and services is required nearby the Rainbow Beach urban growth area. The site also provides good access to major roads. A landscape buffer is proposed to reduce the appearance of the
		0)	site when viewed form adjoining roads.
		d) e)	Comment noted Land to the west forms part of Queens Lake State Conservation
		f)	Area and is not suitable for investigation for urban development The site has been selected for its superior location at the intersection of two major roads and adjacent to a growing urban
		g)	area, not due to past or present land uses. The southern part of the site that is low lying will be subject to an environmental conservation zoning and will form part of an important habitat corridor that links the State Conservation Area in the west with an environmental corridor in the east.
9.	Terri Maddock		 a) There have been community workshops organised by the Council, numerous meetings with working groups about the future planning for Bonny Hills - all voicing that the reason Bonny Hills is such a beautiful place to live or holiday in, is because of the village atmosphere the beach & the semi-rural area giving some feeling of space - especially when the Rainbow Beach Estate is completed with the additional 700+ houses. None of these community meetings came up with the brilliant idea of "let's have a light industrial area".
			 b) Taller height of the buildings compared to the industrial area in Laurieton - an existing ugly zone. c) The 5m vegetation buffer between Ocean Drive & the buildings - not sufficient to screen the industrial area from Ocean Drive - needs to be a lot wider - at least 10m to reduce noise, odour & visual prominence
			 d) Questions the safeguards to the natural watercourse and soil from polluted industrial runoff from the site. Questions the noise level & air pollution safeguards to protect the schools, playing fields & larg area of future residential development.
			 e) Land on north western corner of Bonny View Drive & Ocean Drive has a boundary with the subject site. Suggests the site is planned for a high school or primary school, or an aged care facility. These uses
			 are not compatible with a light industrial area. f) Surprised with the minimum asset protection required (Bushfire assessment report) considering that some of the businesses will have flammable &/or hazardous materials. As a nearby resident, feel uncomfortable with the minimum bushfire asset protection standards that will apply to the new industrial estate. Potential fo a fire to start in the industrial area spread to the

			 surrounding bushland is a risk. Burning hazardous materials causing a dangerous & toxic air pollution to threaten the schools. g) With the large Lake Road industrial area in Port and existing Laurieton area, questions what type of businesses will be viable. Only the landowner will benefit from the rezoning. h) This land has gradually become a light industrial block - apparently without approval (& ignored by council). A substantial area at the northern end of the block has been cleared, large sheds & heavy vehicle trucks coming/going/parking at the site - it does not appear to be complying with the current zoning.
	Response/ Comment:		Comment noted. It is acknowledged that some residents do not support the location of the proposed light industrial zoning. The Planning Proposal was prepared with a maximum building height of 11.5m. This has been reduced to 10m based on
		c)	concerns raised in submissions. The revised PP provides for a buffer land along the Houston Mitchell Drive frontages varies from 10 to 15m with a minimum landscaped area of 5 metres proposed. This buffer is considered sufficient.
			The operation of industrial land uses is governed by legislation to reduce hazards and risks. Development will need to comply with the NSW Industrial Noise Policy (EPA 2000). Potential development to the south of the site would be
		f)	separated by the proposed habitat corridor. A bushfire assessment has been prepared to support the PP and was referred to the RFS for comment. The RFS will be consulted again as part of the re-exhibition of the planning
		g)	proposal. There are limited sites to accommodate new or expanding light industrial land uses between Port Macquarie and Laurieton. Refer to Port Macquarie- Hastings LEP for a list of land uses permissible with consent within the IN2 Light Industrial zone. An
		h)	extract from the LEP has been including in the revised PP. The site has been investigated for future employment land uses due to its superior location at the intersection of two major roads and proximity to a growing residential area, not due to past or present land use.
10.	Meredith Pisa	ani	 a) Strongly opposes the industrial development. Ridiculous to approve more development when there is 141 listed unoccupied commercial/industrial properties (counting Wauchope, Kew, Port Macquarie, Laurieton and Lake Cathie).
			 b) There are no immediate gaps in available services. Proposal will affect existing businesses in Laurieton. c) Roads already at capacity/in poor repair - not suitable for heavier traffic.
			d) The site has areas of low-lying land that industrial runoff will seep into.e) People chose this area for its bushland and ambiance
			 not for businesses and services. f) Sewage and infrastructure will be over-used and undersized with odour issues - cites St Agnes Village/McKillop area example. g) Not provided sufficient notice to object.

			h) The site may look tidy initially. Over time it will become
			 dirty, noisy, unsightly and half empty. i) Developers are assuming the future use - building waste is already being dumped there. j) Laurieton height limit is 8.5 metres; this development is over 11 metres. Don't want large trucks in this area.
	Response/ Comment:	b) c) d) e) f) g) h)	over 11 metres. Don't want large trucks in this area. There are currently limited opportunities to set up or expand industrial businesses between Port Macquarie and Laurieton. There is a need for employment lands to serve the growing population of Lake Cathie & Bonny Hills and provide opportunities for services and jobs nearby residential development. A traffic impact assessment has been prepared that demonstrates adequate capacity in the road network. Stormwater will be managed on site where possible in accordance with proposed draft Development Control Plan Provisions. Comment noted. Sewerage infrastructure for Rainbow Beach has been designed with capacity to serve the subject site. The Planning Proposal was notified between 20 November and 18 December 2019 (28 days). A further opportunity to comment on the revised PP will be provided as part of another public exhibition. The objective of the proposed IN2 zone is to allow land use that do not adversely affect adjoining development. The proposed landscaped buffer will assist to screen development when viewed form the roads. Dumping of building waste is not acceptable in any zone.
		j)	Due to the community concern, the proponent has proposed to reduce the proposed 11.5m height limit to 10 m. The site is separated from neighbourhoods to the north and east by major roads.
11.	Tracey O'Dea		 a) There has always been primary production in the area. The change to light industrial increase in traffic - where is the access going to be? b) Will detract from natural habitat that should remain. Development in Bonny Hills-Lake Cathie over several years and has wrecked the environment. Proposal will impact on Koala habitats. Habitat should be kept. Consider loss of bushland due to bushfires. c) Concerned over the 11.5m building height - difficult to screen adequately and questions what kind of industries need that height. Does this mean heavier industries will be permitted? d) Concerned that 5m vegetated buffer is not sufficient to hide the use. e) Asks what type of industry will be allowed. f) Need to manage contamination and spillage to ensure protection of environmental lands. Stormwater arrangements may be inadequate - site is low lying and drains towards Duchess Creek. g) How will environmental land be managed and maintained? Soil compaction and previous use of the site will be an issue for revegetation. North and southern environmental areas are very different and

			b) This site provides for 70% supply where will the
			h) This site provides for 70% supply, where will the remaining 30% be located.i) Traffic, noise and pollution may impact on school.
	Response/ Comment:	a)	Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection.
		b)	Urban growth is being balanced where possible with the retention of natural areas including the habitat corridor in the southern part of the site that provides an important link between the State Conservation Area to the west and environmental land in the east.
		c)	Due to the community concern, the proponent has proposed to to reduce the proposed 11.5m height limit to 10 m. Buildings up to 11.5m are permissible at the proposed Rainbow Beach town centre to the east and buildings up to 14.5m are permissible in the R3 zone adjacent to the town centre land. Heavy industries
		d)	are not permitted in the proposed IN2 Light Industrial zone. Draft site specific DCP provisions contain a landscape planting concept. Implementation will assist to screen buildings and storage areas. A 5m buffer is considered a sufficient width to cater for screen planting including tree species with a mature
		e)	height of 15m. Refer to the Port Macquarie - Hastings Local Environmental Plan (LEP) 2011 for a list of land uses that are permitted within the IN2 Light Industrial zone. Future development of the site will be subject to approval.
		f)	Site specific DCP provisions are proposed that require on-site detention of stormwater. Detailed stormwater servicing plans will be determined as part of the development approval process.
		g)	Establishment as part of averagement of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage and will consider different vegetation types and parts of the site. The landowner will manage the land. Soil compaction and revegetation techniques may vary across the site and this would be considered as part of a VMP.
		h)	The location of the additional employment lands is not determined at this stage noting that this is the estimated demand through to 2036.
		i)	The operation of industrial land uses is governed by legislation to reduce risks and hazards. Industrial development must comply with the provisions of the NSW Industrial Noise Policy (EPA, 2000).
12.	Philip Chaplin		 a) No information of the impact of this development on the Lake Cathie Public School or the planned residential estate in terms of traffic, noise odour, nuisance or amenity. b) Questions the rules for minimum distances between light industry and schools. c) Proposed light industry is too close to Ocean Drive and the school and oppose the development.
	Response/ Comment:	a)	The school site is separated from the subject site by the Ocean Drive road reserve corridor that is 60m wide and a proposed landscape buffer with a minimum width of 10m. There is separation between the land uses. Future development would also be subject to DCP 2013 provisions for industrial

13.	Judi Jenkins	 development aimed at minimising potential impact on adjoining sensitive land uses. b) Certain land uses are not permitted nearby schools or places of public worship but there is no minimum distance required between the IN2 zone and a school. c) There is adequate separation from Ocean Drive to the proposed industrial land.
13.		 a) Proposal is out of character for the area. Will create an inappropriate gateway site to Lake Cathie and Bonny Hills due to height of building and industrial land use. b) The height and size of development would create an eyesore and poor impression for visitors. c) A search of possible industrial units available for lease suggests that there are dozens of unoccupied industrial units available. d) At least 60 trees destroyed - not acceptable. Adds to the loss of habitat during bushfires. Proposal would dispossess native wildlife from habitat. Unacceptable to lose Koala habitat.
	Response/ Comment:	 a) The site is located at the western edge of the Rainbow Beach Urban Growth Area and opposite urban development. The maximum height of buildings has been reduced from 11.5m to 10m under the revised Planning Proposal. It is noted that taller buildings are permissible at the future Rainbow Beach town centre to the east. b) A landscape buffer is proposed along Houston Mitchell Drive and Ocean Drive frontages to reduce the visibility of buildings and storage areas. A maximum height of buildings of 10m will apply. c) There are currently limited opportunities for light industry land uses between Port Macquarie and Laurieton. The PP will provide employment land and employment opportunities close to a growing population. d) The proposal balances the loss of vegetation in the north of the site with preservation of environmental land in the south. There will be opportunity for offset planting of Koala food trees to occur.
14.	(Pearl) Odette Counsell	 a) Questions where the remaining 30% industrial supply will be located. b) Questions how environmental lands will be established and maintained - low lying areas require different treatment to higher areas. c) Koalas and other native species have lost habitat after recent fires - plan is vague about habitat corridors and connections to current habitats. d) Not pleasant for visitors to be greeted with an industrial area with buildings that could be 11.5m high. Industry may be necessary but why 3m higher than surrounding heights. e) 5m buffer may not be sufficient screening. f) Questions what type of industries will be allowed. g) No reference to industrial spills and how they will be contained on site. Dangerous for children attending school. h) Questions taffic management from site onto Houston Mitchell Drive.

	Response/ Comment:	a)	The location of the additional employment lands is not determined at this stage noting that this is the estimated demand
		b)	through to 2036. Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage and will consider different vegetation types and parts of the site. The landowner will manage the land. Soil compaction and revegetation techniques may vary across the site and this would be considered as part of a VMP. Potential contamination due to previous use will be considered.
		c)	Part of the western boundary adjacent to the IN2 land will be fenced to exclude fauna from entering the industrial land and adjacent roads. Refer to the site specific DCP provisions - Figure 3. Directional fencing will be considered to direct fauna through existing culverts (under Ocean Drive) to the environmental land on the eastern side.
		d)	Due to the community concern, the proponent has suggested to reduce the proposed 11.5m height limit to 10m. Buildings up to 11.5m are permissible at the proposed Rainbow Beach town centre to the east and buildings up to 14.5m are permissible in the R3 zone adjacent to the town centre land. Heavy industries are not permitted in the proposed IN2 Light Industrial zone.
		e)	Draft site specific DCP provisions contain a landscape planting concept. Implementation will assist to screen buildings and storage areas. A 5m buffer is considered a sufficient width to cater for screen planting including tree species with a mature height of 15m.
		f)	Refer to the Port Macquarie Local Environmental Plan (LEP) 2011 for a list of land uses that are permitted within the IN2 Light Industrial zone. Future development of the site would be subject to approval.
		g)	The operation of industrial land uses including storage of chemicals, insecticides, fertilisers is governed by legislation to reduce risks and hazards.
		h)	Site specific DCP provisions are proposed that require on-site detention of stormwater. Detailed stormwater servicing plans will be determined as part of the development application process.
		i)	Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection and he report will be attached to the revised.
15.	Vic Pisani		 a. Object to the development. No rationale for the development given the amount of existing vacant industrial lots in Laurieton, Wauchope and Port Macquarie. b. This development goes against the existing character. c. The area attracts people due to its forest/residential interface.
	Response/ Comment:	a.	There are limited sites available for light industrial development between Port Macquarie and Laurieton. The proposed IN2 zone is well located to serve the local community and provide opportunity for businesses to expand or establish adjacent to the Rainbow Beach residential area.
		b.	The character of the growth area is evolving with new residential development, a new town centre, including potential for taller buildings, and district sporting fields planned for delivery in the short term. The proponent has proposed maximum height limit of

			10 metre	es and landscaped buffers to reduce the visual
				nce of new development.
		C.		nities for jobs and services should also be available
				neighbourhoods and will potentially serve visitors to the
			area also).
16.	Jason Berriga	an	a)	Ecological reports are flawed - include contradictions
				and misunderstandings of legislation.
			b)	The 2016 ecological assessment should have
				considered on the local flora/fauna populations. This
				may exceed the area of the actual site.
			(c)	Fauna survey does not address: trapping or call
				playback for predicted threatened species such as
				Yellow-bellied Glider or Squirrel Glider. Seasonal
				limitations are acknowledged for bats, but not frogs.
				Microchirpoteren bat survey is considered inadequate. Some Koala food trees may not have been counted
				because trees did not meet definition under Council's
				DCP. The impact of rainfall on Koala scat detection
				was acknowledged, but no follow up survey
				undertaken.
			d)	Habitat evaluation did not support objective
				assessment of potential for threatened species. eg. it is
				not known if hollows would be large enough for a forest
				owl. There is no clear map showing hollow bearing
				trees. Notes that Council's DCP 2013 requires
				retention of HBT with a buffer and no justification to
				variation of the DCP is provided.
			e)	Assessment of whether the site forms Core Koala Habitat under SEPP 44 is a major issue. Future
				development requires a KPOM if the consultants
				statements of fact about the use of the site by Koalas
				are upheld.
			f)	Appendix F of ecological assessment - there are
				various discrepancies between Table F.1 and F.2
				regarding the possible occurance of species at the site
				There is no justification for elimination of species that
				are recorded adjacent to the site. Powerful Owl and
				Masked owl should be assessed
			g)	Assessment of the Koala under the EPBC is not in line
				with 2014 Guidelines. Furthermore there is no assessment of Green and Golden Bell Frog. Swift
				Parrot, Grey Headed Flying Fox or other migratory
				species.
			h)	The Biodiversity Australia report 2018 uses a small
			,	area development streamlined assessment under the
				Biodiversity Assessment Method (BAM) but there is no
				justification for this. The site exceeds the threshold for
				the the BAM assessment provided. There are several
				other discrepancies an omissions identified.
			i)	BAM assessment includes some discrepancies in
				recording the number of plots undertaken. All plant
				community types and all vegetation zones must be
				sampled.
			j)	A targeted survey of species is required if the sirte
				contains suitable habitat and is in a predicted range of the species - however several species were not
				included.
			k)	Impact avoidance - the proposal does not demonstrate
			,	how it has minimised impact.

	Response/	 I) The Credit Assessment computations are incorrect because the incorrect BAM has been applied. Summary Points: m) Rezoning and regeneration of the swamp forest in the southern half of the site is supported, as it fills the "missing link" within the identified corridor linking to the approved masterplan for the land holding to the east, which includes major habitat augmentation works to support the Common Planigale, Eastern Chestnut Mouse, Wallum Froglet, Koala, Squirrel Glider, and Coastal Floodplain EECs. This corridor needs to be wide enough to buffer edge effects. n) The extent of potential development needs to be refined by an adequate SEPP 44 assessment to ensure the needs of the local Koala population are met. o) The value of any HBT within the development footprint needs to be precisely determined given the limitations on its use and reduced longevity if retained within a development area. p) Further survey is required to determine if habitat critical to the survival of Species Credit species esp the Green and Golden Bell Frog. This would generate an automatic referral under EPBC Act.
	Comment:	 The biodiversity Conservation Division of Department of Panning, Industry & Environment have recommended that once the development footprint is resolved, the biodiversity credits required to offset future development impacts should be determined by applying Stage 1 of the Biodiversity Assessment Method (BAM) to areas of land that proposed for land use intensification, including areas subject to indirect impacts. The BAM is required to address several matters referred to in the submission. The detailed information provided in this submission has been provided to the proponent. The proponent has engaged an ecological consultant to undertake an updated Stage 1 BAM assessment. It is anticipated that the updated report will be available for exhibition with the revised Planning Proposal.
17.	Peter Rodger	 a) Proposed 11.5m height limit is too high - it would not be possible to screen buildings of this height from the road, therefore creating an eyesore in what is a semi-rural environment. b) The plan gives no indication of what forms of industry will be allowed. So it appears there would be no restrictions on the industry in terms of noise, possible environmental pollution, etc. c) This is low lying land which has poor drainage. d) Approximately one-third of the area is designated as environmental lands. Questions how this be established and maintained. e) Soil compaction will be an issue in re-establishing vegetation and not clear whether there are other issues associated with the current use. The proposed environmental areas will require very different treatment because of its low-lying nature. f) Traffic management arrangements are unclear on and off Houston Mitchell Drive; the road infrastructure is currently inadequate and will become more so as the

		residential population grows. The Pacific Highway
		 g) If this site is to supply only 70% of the Bonny Hills-Lake Cathie need for light industry, questions where the other 30% will go.
	Response/ Comment:	 a) Due to the community concern, the proposed maximum height of buildings has been reduced from 11.5m as exhibited in 2019 to 10m as part of the revised PP. Buildings up to 11.5m are permissible at the proposed Rainbow Beach town centre to the east and buildings up to 14.5m are permissible in the R3 zone adjacent to the town centre land. Heavy industries are not permitted in the proposed IN2 zone. Future industrial development would be subject to development provisions contained in DCP 2013 aimed at minimising impact on adjoining sensitive land uses. b) Refer to the Port Macquarie - Hastings Local Environmental Plan (LEP) 2011 for a list of land uses that are permitted within the IN2 Light Industrial zone. Future development will be subject to approval. c) Site specific DCP provisions are proposed that require onsite detention of stormwater. Detailed stormwater servicing plans will be determined as part of the development
		 application process. d) Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage and will consider different vegetation types and parts of the site. The landowner will manage the land.
		 e) Soil compaction and revegetation techniques may vary across the site and this would be considered as part of a VMP. Potential contamination due to previous use will be considered.
		 f) Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection.
		g) The location of the additional employment lands is not determined at this stage noting that this is the estimated demand through to 2036.
18.	Kathy Regan	 a) Questions where the intended entry and exit points are and notes that this is a busy area with the roundabout and school traffic. b) Questions whether there is a limit on the noise that can be made by any one industry. c) Concern over allowable forms of industry. Industries that have the potential to contaminate through spills or
		 chemicals are not appropriate with low-lying land which has drainage towards creeks. d) The proposed vegetation screen seems inadequate. e) The height of 11.5 suggests significant industries. Compared to the Laurieton area this is 3m higher. f) Questions how the environmental land will be established and maintained. More detail is required.
	Response/ Comment:	 Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection. A Traffic Impact Assessment submitted by the

19.	Mike Trotter	 proponent in response to submissions confirms that there is adequate capacity in the road network to cater for the 5.5ha of additional industrial (IN2) land. b) Industrial development must comply with the provisions of the NSW Industrial Noise Policy (EPA, 2000). c) Refer to the Port Macquarie LEP 2011 for a list of the permitted land uses within the IN2 Light Industrial zone. The operation of industrial land uses is governed by legislation to reduce risks and hazards. d) Implementation of the landscaped buffer will assist to screen buildings and storage areas. A 5m planted buffer is considered a sufficient, noting that the width of the E2 land proposed along the interface with Houston Mitchell Drive and Ocean Drive is actually wider and varies between a minimum 10m up to 15m at the corner of the two roads. e) Several industrial areas in the local government area have a 14.5m or no height limit. This provides flexibility as to the possible future uses. Due to the community concern, the proponent has agreed to reduce the proposed 11.5m height limit to 10 m. f) Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage. a) Building height limit of 11.5 metres is not appropriate for the gateway location. Buildings would be visually imposible. Site is
		 imposing and the screening virtually impossible. Site is at the gateway to Lake Cathie and Bonny Hills. b) Questions what constitutes light industry. c) Noise, hazards and safety issues need to be considered, particularly in light of adjacent school. d) The potential for the production and control of contaminants needs to be addressed, and the potential for waterways to spread pollutants to areas east of Ocean Drive considered in this assessment. e) Questions what provisions there are for the establishment and maintenance of the environmental lands. Noting the southern area is low lying and would require extra attention in terms of management. f) The intersection already deals with significant traffic movements complicated by the school safety zone and the increased use of Houston Mitchell Drive by heavy transport. Access to and from this proposed area will further complicate traffic flow.
	Response/ Comment:	 a) Several industrial areas in the local government area have a 14.5m or no height limit. This provides flexibility as to the possible future uses. Due to the community concern, the proposed maximum height of buildings has been reduced from 11.5m as exhibited in 2019 to 10m as part of the revised PP. b) Refer to the Port Macquarie-Hastings LEP 2011 for a list of the permitted land uses within the IN2 Light Industrial zone. The operation of industrial land uses is governed by legislation to reduce risks and hazards. c) Industrial development must comply with the provisions of the NSW Industrial Noise Policy (EPA, 2000). d) The operation of industrial land uses is governed by legislation to reduce risks and hazards. On- site stormwater management provisions are included in the draft DCP prepared for the site.

		 Detailed stormwater management plans will be determined as part of the development application process. e) Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage. f) Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection. A Traffic Impact Assessment submitted by the proponent in response to submissions confirms that there is adequate capacity in the road network to cater for the 5.5ha of additional industrial (IN2) land.
20.	Roger Barlow	 a) Questions where the remaining 30% industrial land supply will be located. b) Building height should be restricted to 8.5m. c) Screening from the roadways d) Management of chemical and fuel spillage. Stormwater infrastructure has to be able to cope with increasingly more volatile storm events. Control of dust and noise. e) Details on how the environmental areas will be established and maintained. f) Details on traffic management arrangements on and off Houston Mitchell Drive.
	Response/ Comment:	 a) The location of the additional employment lands is not determined at this stage noting that this is the estimated demand through to 2036. b) Several industrial areas in the local government area have a 14.5m or no height limit. This provides flexibility as to the possible future uses. Due to the community concern, the proponent has proposed to reduce the proposed 11.5m height limit to 10 m. c) A landscaped buffer will be provided along Ocean Drive and Houston Mitchell Drive to assist to screen the site when viewe from the road. d) The operation of industrial land uses is governed by legislation to reduce risks and hazards.Industrial development must comply with the provisions of the NSW Industrial Noise Policy (EPA, 2000). e) Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage. f) Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection.
21.	William Howe	 a) Requests further consideration of issues including Proposed building height that would allow buildings 3m higher than Laurieton. b) Effective screening of buildings. c) Provide information on permissible industries - relevant to potential future contamination issues. d) Adequacy of stormwater arrangements. e) Establishment and maintenance of environmental lands. Re-establishment of vegetation in north may be an issue due to soil compaction. f) Connectivity of koala habitat on western boundary.

			 g) Traffic management arrangements on and off Houston Mitchell Drive. h) Questions where the remaining 30% industrial land supply will be located.
	Response/ Comment:	b) c) d) e) f) g)	Several industrial areas in the local government area have a 14.5m or no height limit. This provides flexibility as to the possible future uses. Due to the community concern, the proposed max height of buildings has been reduced form 11.5m to 10 m as part of the amended PP. A landscape buffer is proposed along Houston Mitchell Drive and Ocean Drive. Port Macquarie Hastings LEP 2011 provides information about permissible land uses in the IN2 Light Industrial zone. Stormwater management will be considered as part of the development application process. Site specific stormwater provisions will apply to the site, if adopted. Establishment and management of environmental land will be determined as part of a Vegetation Management Plan (VMP) process at the DA stage. The southern part of the site will provide a habitat link between the conservation area to the west and environmental land on the eastern side of Ocean Drive. Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and design of the intersection. The location of the additional employment lands is not determined at this stage noting that this is the estimated demand through to 2036.
22.	Pam Barlow		 a) The sheds will be difficult to screen because of their height and insufficient area allowed to plant a decent screen. b) Proximity of schools and residences to industry contaminants. There are no details as to the type of businesses allowed. c) Added competition for existing light industrial area in Laurieton. d) Consider a large open park where residents and visitors can walk, play and enjoy open spaces.
	Response/ Comment:	b. c.	A landscape buffer is proposed along Houston Mitchell Drive and Ocean Drive and the area provided is considered sufficient to achieve an effective screen. The operation of industrial land uses is governed by legislation to reduce risks and hazards. There are currently limited opportunities for light industrial uses between Port Macquarie and Laurieton. The PP would provide employment land close to a growing population. A significant amount open space will be provided for local residents. Planning is underway for the district sports fields and local parks as part of the development of the growth area.
23.	King & Camp Ltd	bell Pty	 a) Submission made on behalf of the landowner. Supports the Planning Proposal and draft DCP provisions. b) Proposed zoning is consistent with the UGMS adopted in 2010 and 2018.

			c)	Proposal recognises need for employment land
				between Port Macquarie and Laurieton - none currently.
			d)	The site is well serviced and sits centrally between
				Lake Cathie and Bonny Hills.
			e)	The proposed zoning provides a suitable habitat
				linkage east-west between Queens Lake nature
				reserve and proposed open space corridor on St
			f)	Vincent's Foundation land to the east. A suitable buffer is proposed between the site and the
			f)	adjacent major roads. Future development will be
				subject to a VMP that will address establishment and
				management of the visual screen.
				Proposal is supported by specialist studies
			h)	11.5m is a suitable height limit even though 14.5m or
				no height limit is more typical for industrial areas.
	Response/	Commen	nts noted	l.
	Comment:	Note: Iter	m h) Du	e to the community concern, the proponent has
				ice the proposed 11.5m building height limit to 10m.
24.	Bonny Hills P	rogress	a)	There is a range of opinions about the need for such
	Association (,	development and a general lack of awareness that the
				UGMS includes this land for light industry.
			b)	Feedback (to the Chamber) against the Proposal has
				included that there is 100 vacant light industrial sites in the LGA, Laurieton is less than 10 minutes away,
				additional development would increase competition in a
				struggling market and it would be an ugly development
				on a gateway site.
			c)	BHPA is opposed to buildings in the area exceeding
			d)	8.5m. It is impossible to screen buildings of 11.5m in height.
			u)	The vegetation screen between the industrial area and
				Ocean Drive is barely adequate and should be
				expanded with plantings expertly designed and well
				maintained.
			e)	The plan does not describe forms of industry that will be allowed. This is relevant to management of spills of
				chemicals, fertilisers, fuels, lubricants etc. No reference
				to bunding to ensure industrial spills are contained on
				site.
			f)	Concerned that stormwater arrangements are
				inadequate.
			g)	Questions how the environmental lands will be established and maintained. Sothern end will require a
				different treatment because of its low lying nature. Soil
				compaction & contamination will be an issue for
				revegetation.
			h)	Questions what is to happen on the western boundary
				and connectivity of koala habitat and corridors on
			i)	western boundary Traffic management arrangements are unclear from
			''	Houston Mitchell Drive.
			j)	Where the remaining 30% light industrial land will be
				located
	Response/	a	a) Note	that a range of opinions were provided.
	-			

	Comment:		 b) There are currently limited opportunities for light industrial uses between Port Macquarie and Laurieton. The PP would provide employment land close to a growing population. c) Due to the community concern, the proponent has offered to reduce the proposed 11.5m height limit to 10m. Buildings up to 11.5m are permissible at the proposed Rainbow Beach town centre to the east and buildings up to 14.5m are permissible in the R3 zone adjacent to the town centre land. Heavy industries are not permitted in the proposed IN2 zone. d) Draft site specific DCP provisions contain a landscape planting concept. Implementation will assist to screen buildings and storage areas. A 5m buffer is considered a sufficient width to cater for screen planting including tree species with a mature height of 15m. e) Refer to the Port Macquarie - Hastings Local Environmental Plan (LEP) 2011 for a list of land uses that are permitted within the IN2 Light Industrial zone. f) Site specific DCP provisions are proposed that require onsite detention of stormwater. Detailed stormwater servicing plans will be determined as part of the development application process. g) Establishment and management of environmental land will be determined as part of the site. The landowner will manage the land. Soil compaction and revegetation techniques may vary across the site and this would be considered as part of a VMP. Potential contamination due to previous use will be considered. h) Part of the western boundary adjacent to the IN2 land will be fenced to exclude fauna from entering the industrial land and adjacent roads. Refer to the site specific DCP provisions - Figure 3. Directional fencing will be considered to direct fauna through existing culverts (under Ocean Drive) to the environmental land on the eastern side. i) Vehicle access from Houston Mitchell Drive is proposed opposite Forest Parkway. The proponent has prepared a traffic impact assessment that considers location and des
25.	Wauchope C of Commerce		 demand through to 2036. a) Applaud Council's efforts in future planning and recognise growth in this location. b) Land becoming available to the market too soon would negatively impact other/existing areas in the region. c) Wauchope industrial area has lots of vacant lots - would like to see these filled first. d) Would like to see Council identify employment hubs and match these to the location e.g. Wauchope for industry but coastal areas focus on other economic sectors.
	Response/ Comment:	a. b. c. d.	Comments noted. Lead in time is necessary to produce lots/industrial premises. Forward planning for employment lands supports opportunity for development in a variety of locations. Providing opportunities for light industry in a variety of locations across the LGA means potential for jobs and services nearby

		growing neighbourhoods. This assists to reduce travel, and encourage walking & cycling.
26.	Transport for (RMS)	 A) Suggest that the Planning Proposal include a Traffic Impact Assessment to identify likely traffic impacts on the classified road network. b) Access to the classified road (Houston Mitchell Drive) should be designed in accordance with current guidelines. c) Proposed DCP update to restrict access to Ocean Drive is supported.
	Response/ Comment:	 a) A TIA has been prepared and includes analysis of access to the site from Houston Mitchell Drive. b) TfNSW will be consulted as part of the exhibition of the revised Planning Proposal and consulted as part of the approval process for access to Houston Mitchell Road c) Noted.
27.	NSW RFS	 a) Future subdivision applications are to comply with the requirements of Planning for Bush Fire Protection 2019. b) All building envelopes shall not be in flame contact and constructed to an appropriate radiant heat constructions standard.
	Response/ Comment:	 a) Noted. Future development applications to be accompanied by Bushfire Assessment and referred to RFS. b) Noted. As above. The RFS will be consulted as part of the exhibition of a revised planning proposal.
28.	Planning Indu Environment Biodiversity Conservation Division	

		 The potential impacts on koalas and locations for fauna exclusion fencing. The need to ensure that the indirect impacts on the adjoining SCA of future development in the planning area can be adequately mitigated and buffered, and Possible future dedication of E-zoned land to the NSW National Parks and Wildlife Service or the council after it has been revegetated. Apply stage 1 BAM when development footprint is resolved. f) Once the development footprint is resolved, the biodiversity credits required to offset future development impacts should be determined by applying Stage 1 of the Biodiversity Assessment Method (BAM) to areas of land that proposed for land use intensification, including areas subject to indirect impacts. g) Recommend the preparation of a planning agreement that commits the landowner to: Providing biodiversity offsets identified above Prepare and implement a vegetation management plan for E zoned land and vegetated buffers to the state conservation area.
-		Comments noted - consider at DA stage. Comments noted The location of E2 zone has been amended. Propose landscape buffer land along Ocean Drive and Houston Mitchell Drive will not include Koala Feed trees.
	g)	the revised Planning Proposal. Council staff have recommended that the planning agreement offer received by the proponent to address these matters be declined in this case because the matters can be addressed as part of the development application assessment process.
		D will be consulted as part of the exhibition of a revised Planning oposal.

AJT 4661 Please quote our ref no: 4661_130_RevPlanning Agreement Offer

28 September 2020

The General Manager Port Macquarie Hastings Council (PMHC) P O Box 84 PORT MACQUARIE NSW 2444

ATTENTION: Ms Stephanie Baker

Dear Stephanie

RE: HOUSTON MITCHELL DRIVE EMPLOYMENT LANDS PLANNING AGREEMENT OFFER LOT 10 DP 615775 & LOT 6 DP 1210904 (THE LAND) 19 HOUSTON MITCHELL DRIVE, BONNY HILLS

Reference is made to our meeting with PMHC staff on 28 October 2019 and to our previous offer of 29 October 2019 to negotiate a Planning Agreement (VPA) with PMHC regarding the Houston Mitchell Drive Employment Lands.

Reference is also made to our meeting with PMHC and BCD staff in January 2020 and the BCD preference for a Planning Agreement. This preference was noted in the PMHC email of 29 January 2020 (Refer **Attachment 7**) that provided details of the potential clauses to be incorporated into a Planning Agreement. This email also provided confirmation that PMHC's preferred position with respect to the Planning Agreement was:

 A Planning agreement to facilitate land dedication would not be the preferred approach.

Response: It is confirmed that the Landowners do not propose to dedicate the Environmental Management Land to PMHC. The land in the proposed E2 Environmental Conservation zone will therefore remain in its current ownership. As outlined below in the Updated Offer to negotiate a planning agreement, the Landowner proposes to manage the Environmental Management Land in accordance with the proposed Planning Agreement and the Vegetation Management Plan that is ultimately approved with the industrial subdivision of the land.

The option of a Planning Agreement still stands.

Response: Based on the advice from PMHC on 29 January 2020, the Landowner (Mr Angelo Mifsud) seeks to provide an Updated Offer to negotiate a Planning Agreement as follows:

UPDATED PLANNING AGREEMENT OFFER (VPA)

The Landowner offers to negotiate a Planning Agreement with PMHC, to be finalised in conjunction with the completion of the Planning Proposal rezoning process in accordance with the following Heads of Agreement:

integrated solutions | enhancing community

KING + CAMPBELL

urban design civil engineering architecture town planning landscape architecture

surveying

directors

Anthony Thorne B Surv, MIS Aust Grad Dip Planning (UTS) Registered Surveyor

David Tooby B L Arch, AAILA Registered Landscape Architect

Scott Marchant B Surv (Hons) Registered Surveyor

Nigel Swift B Arch, BA Arch, AIA Nominated Architect NSW Architects Registration Board No 7025 QLD Architects Registration Board No 3957

Craig Campbell B Eng (Civil) MBA MIEAust CPEng NER

Scott Kahler B SST Surv. (USO) & B Nat Res Hons. (UNE)

King & Campbell Pty Ltd 1st Floor, Colonial Arcade 25-27 Hay Street Port Macquarie

PO Box 243 Port Macquarie, NSW, 2444

ABN 44 564 476 716

T: 02 6586 2555 F: 02 6583 4064

info@kingcampbell.com.au

www.kingcampbell.com.au

Item 13.13 Attachment 6 Page 833

28 September 2020

 Fauna Fence means the fence as shown on the land in the enclosed Attachment 1 -Proposed Employment Lands - Planning Agreement Offer. Attachment 1 shows the extent of the Fauna Fence that is proposed to be a 1.5m Floppy Top Chain Mesh koala proof fence (shown in blue on Attachment 1). The Fauna Fence will consolidate the proposed Environmental Management Land with the adjoining Queens Lake State Conservation Area and separate Environmental Management Land from Ocean Drive, the associated Vegetated Visual Buffer Lands and the future employment lands.

The remainder of the Vegetated Visual Buffer Fence is proposed to be 1800mm high black mesh fence associated with the vegetated visual buffer to Ocean Drive and Houston Mitchell Drive (shown in orange on **Attachment 1**).

The Landowner offers to include full detail of the Fauna Fence and the Vegetated Visual Buffer Fence in the Vegetation Management Plan to be approved by the Council in conjunction with the first Development Application for the Industrial Subdivision of the Land.

The Landowner offers to construct the Fauna Fence and the Vegetated Visual Buffer Fence prior to the release of the first Subdivision Certificate for the Development of the Employment Lands. The Vegetation Management Plan will also include details of the proposed temporary construction fencing to be in place to protect fauna/flora during the civil works associated with the first stage of the development of the Employment Lands.

 Environmental Management Land means the land identified as such on the enclosed Attachment 1 - Proposed Employment Lands - Planning Agreement Offer being the land proposed to be zoned E2 Environmental Conservation.

The Landowner offers to establish and manage the Environmental Management Land and Vegetated Visual Buffer Land in perpetuity in accordance with the Establishment Obligation and the Management Obligation to be detailed in the Vegetation Management Plan, to be approved by Council in conjunction with the first Development Application for the Industrial Subdivision of the Land.

- 2.1 The Establishment Obligation will include provisions dealing with:
 - Primary weeding of the Environmental Management Land;
 - Compensatory planting as may be required by the Development Consent for the first Industrial Subdivision of the Land;
 - Vegetation planting within the Vegetated Visual Buffer Land required to establish the visual buffer along the frontages to Ocean Drive and Houston Mitchell Drive prior to the release of the first subdivision certificate for industrial development of the Employment Lands;
 - Construction of the Fauna Fence and
 - Establishment of Environmental Management monitoring points and regime.

4661_130_UpdatedVPAoffer

Page 3 of 4

28 September 2020

2.2 The Management Obligation will include provisions dealing with:

• Annual Environmental Management obligations with respect to the Environmental Management Land and the Vegetated Visual Buffer Land. It is anticipated that typically the Environmental Management obligations in the first 3 years of the Management Period will be more intensive. Details of the Management work to be undertaken in the initial phases of the Management Period will be included in the Vegetation Management Plan.

The Vegetation Management Plan will also include the ongoing management obligations to be undertaken on an annual basis by the Landowner.

- Audit and reporting obligations of the Landowner
- Security details for the Management Obligation
- 3. The Landowner offers to:
 - a) Retire 25 Ecosystem Credits and 28 Species Credits prior to the commencement of any Work that is able to be lawfully undertaken without the preparation of a Biodiversity Development Assessment Report (BDAR) prior to the commencement of any Works that impact any part of the High Environmental Value Areas on the Land.

or

b) Retire the required Ecosystem Credits and Species Credits determined by a Biodiversity Development Assessment Report prepared in relation to any future Development of the proposed Employment Lands or any works that may impact any part of the High Environmental Value areas on the land,

For the avoidance of doubt such Work will include any Work that is able to be undertaken on the Land without development consent in the current RU1 Primary Production zone that may impact any part of the High Environmental Value areas on the land.

- c) The Biodiversity Credits will be retired by either
 - i. Paying into the Biodiversity Conservation Fund (BCF) to fulfil the offset obligation; and/or
 - ii. Purchasing the credits in the market; and or
 - iii. Developing a Biodiversity Stewardship Agreement for a suitable offset site.
- d) Should a future development application for the land trigger the Biodiversity Offset Scheme and the Biodiversity Development Assessment Report requires a larger credit requirement than that specified in this planning agreement, then the larger credit requirement will form part of any development consent conditions. The retirement of this larger credit requirement will be taken to satisfy the credit retirement requirements of this planning agreement.

Item 13.13 Attachment 6 Page 835 4661_130_UpdatedVPAoffer

Page 4 of 4

28 September 2020

Please advise a suitable time to meet with PMHC Planning and Development Contribution staff to progress the negotiations associated with the proposed Planning Agreement.

Should you require any further information regarding this matter please contact Kylie Moore or the writer.

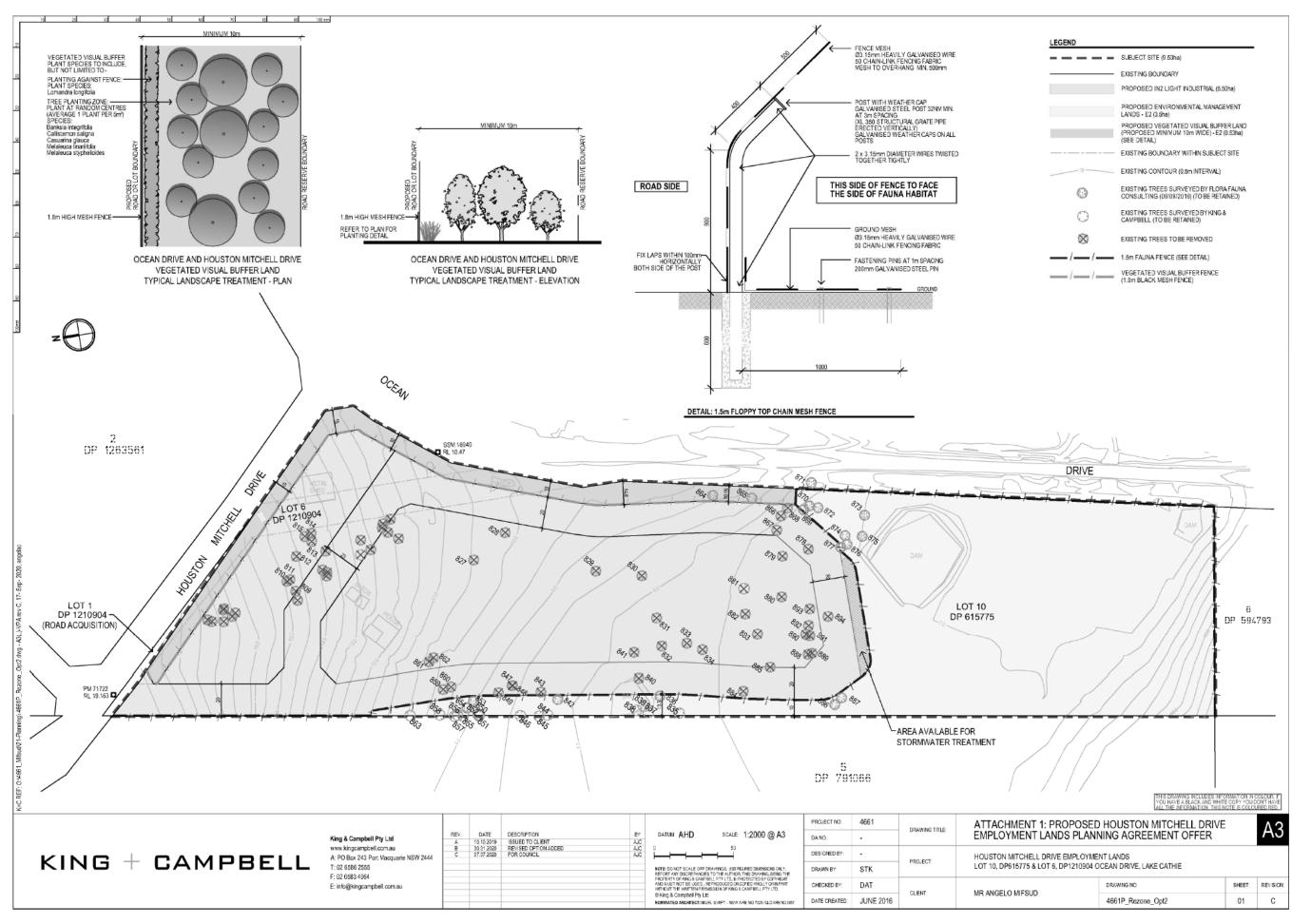
Yours faithfully King & Campbell Pty Ltd

Artley Theme

Anthony Thorne

cc Clients Clint Tink, Carina Gregory, PMHC encl. As listed

> Item 13.13 Attachment 6 Page 836



ORDINARY COUNCIL 17/02/2021



Deed

Brierley Hill Environmental Land East Planning Agreement

Under s7.4 of the Environmental Planning and Assessment Act 1979

Port Macquarie-Hastings Council Brierley Hill Pty Ltd

Date:

© Lindsay Taylor Lawyers

lindsaytaylorlawyers Level 9, Suite 3, 420 George Street, Sydney NSW 2000, Australia T 02 8235 9700 • W www.lindsaytaylorlawyers.com.au ABN 29 682 671 304

Liability limited by a scheme approved under Professional Standards Legislation

Item 13.14 Attachment 1 Page 838

ורו

Brierley Hill Environmental Land East Planning Agreement Port Macquarie-Hastings Council Brierley Hill Pty Ltd

Brierley Hill Environmental Land East Planning Agreement

Table of Contents

Summar	y Sheet	4
Parties		6
Backgro	und	6
Operativ	e provisions	7
Part 1	- Preliminary	7
1	Interpretation	7
2	Status of this Deed	9
3	Commencement	9
4	Application of this Deed	9
5	Warranties	9
6	Further agreements	10
7	Surrender of right of appeal, etc.	10
8	Application of s7.11, s7.12 and s7.24 of the Act to the Development	10
Part 2	– Development Contributions	10
9	Payment of monetary Development Contributions	10
10	Return of security provided under Development Consent	11
Part 3	– Dispute Resolution	11
11	Dispute Resolution - mediation	11
Part 4	- Enforcement	12
12	Enforcement in a court of competent jurisdiction	12
Part 5	-Restriction on Dealings	12
13	Restriction on dealings	12
Part 7	– Other Provisions	13
14	Review of Deed	13
15	Notices	13
16	Approvals and Consent	14
17	Costs	14
18	Entire Deed	14
19	Further Acts	14
20	Governing Law and Jurisdiction	14
21	Joint and Individual Liability and Benefits	15

2



22	No Fetter	15
23	Illegality	15
24	Severability	15
25	Amendment	15
26	Waiver	15
27	GST	16
28	Explanatory Note	17
Executio	on	18
Appendi	х	19

D2020 198183 HAS_HAS19050_011(7)

Item 13.14 Attachment 1 Page 840



Brierley Hill Environmental Land East Planning Agreement

Summary Sheet

Council:

Name: Port Macquarie-Hastings Council Address: Corner Lord and Burrawan Streets, Port Macquarie, New South Wales, 2444 Telephone: (02) 6581 8111 Facsimile: (02) 6581 8123 Email: council@pmhc.nsw.gov.au Representative: Clinton Tink

Developer:

Name: Brierley Hill Pty Ltd ABN 79 090 846 923

Address: PO Box 166, Port Macquarie NSW 2444

Telephone: 0418611 168

Email: hatherlym@northcorp.com.au

Representative: C/o Lyndel Rose, Brett Scott Solicitor, PO Box 5040, Port Macquarie NSW 2444

Land:

See definition of Environmental Management Land in clause 1.1.

Development:

See definition of Development in clause 1.1.

Development Contributions:

See Part 2.

D2020 198183 HAS_HAS19050_011(7)

Item 13.14 Attachment 1 Page 841

4

ורו

Brierley Hill Environmental Land East Planning Agreement Port Macquarie-Hastings Council Brierley Hill Pty Ltd

Application of s7.11, s7.12 and s7.24 of the Act:

See clause 8.

Enforcement:

See Part 4.

Restriction on dealings:

See Part 5.

Dispute Resolution:

See Part 3.

D2020 198183 HAS_HAS19050_011(7)

Item 13.14 Attachment 1 Page 842

Brierley Hill Environmental Land East Planning Agreement

Under s7.4 of the Environmental Planning and Assessment Act 1979

Parties

Port Macquarie Hastings Council ABN 11 236 901 601 of Corner Lord and Burrawan Streets, Port Macquarie, New South Wales, 2444 (**Council**) and

Brierley Hill Pty Ltd ABN 79 090 846 923 of PO Box 166, Port Macquarie NSW 2444 (Developer)

Background

- A The Developer has been granted Development Consent to DA2008 440 for residential subdivision of the former Lot 1 DP515602 at The Ruins Way, Port Macquarie.
- B Pursuant to conditions B(16), E(18) and E(30) of the Development Consent, the Developer has:
 - prepared and obtained Council's approval of a vegetation management plan (VMP) in respect of the Environmental Management Land,
 - dedicated the Environmental Management Land to the Council, and
 - carried out vegetation management works on the Environmental Management Land in accordance with the approved Vegetation Management Plan.
- C Pursuant to condition A(43) of the Development Consent, the Developer has provided and the Council holds a security deposit for the remaining management obligations in respect of the Environmental Management Land as described in the Vegetation Management Plan.
- D In lieu of the Developer carrying out the remaining management obligations in respect of the Environmental Management Land as described in the Vegetation Management Plan, the Developer intends to pay the Council monetary development contributions to be applied by the Council towards those works.
- E The Developer and the Council intend to enter into this Deed in connection with a modification to condition A(43) of the Development Consent to include the following additional matters:
 - to allow for the Council to return any security deposit provided under that condition and releasing the Developer from the requirement to carry out any further management obligations of the Environmental Management Land, but only if monetary contributions for the management of the Environmental Management Land have been paid under a planning agreement, and
 - to require the Developer to comply with any planning agreement that is entered into with the Council.

Operative provisions

Part 1 - Preliminary

1 Interpretation

1.1 In this Deed the following definitions apply:

Act means the Environmental Planning and Assessment Act 1979 (NSW).

Approval includes approval, consent, licence, permission or the like.

Council's Management Obligations means any management obligations in respect of the Environmental Management Land as described in the Vegetation Management Plan that remain to be carried out on and from the date of approval of the Modification Application.

Deed means this Deed and includes any schedules, annexures and appendices to this Deed.

Developer's Management Obligations means any management obligations in respect of the Environmental Management Land as described in the Vegetation Management Plan that are required to be carried out before the date on which approval is granted to the Modification Application.

Development means development the subject of Development Consent to Development Application DA2008 - 440 originally lodged with Council on 6 November 2008 and determined on 16 August 2010, as modified from time to time.

Development Application has the same meaning as in the Act.

Development Consent has the same meaning as in the Act.

Development Contribution means a monetary contribution, the dedication of land free of cost, the carrying out of work, or the provision of any other material public benefit, or any combination of them, to be used for, or applied towards a public purpose, but does not include any Security or other benefit provided by a Party to the Council to secure the enforcement of that Party's obligations under this Deed for the purposes of s7.4(3)(g) of the Act.

Dispute means a dispute or difference between the Parties under or in relation to this Deed.

Environmental Management Land means Lot 1139 & 1140 DP 1248153 and Lot 1032 DP 1231419 situated The Point Drive, Port Macquarie, which is owned by the Council as at the date of this Deed.

GST has the same meaning as in the GST Law.

GST Law has the same meaning as in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any other Act or regulation relating to the imposition or administration of the GST.

Management Contribution means the amount of \$52,800.00 indexed quarterly from the date this Deed commences until the date of payment in accordance with the *Consumer Price Index (Sydney – All Groups)* published by the Australian Bureau of Statistics, subject to clause 9.

Modification Application means the application under s4.55 of the Act to modify condition A(43) of the Development Consent to Development Application DA2008/440 to include the following additional matters:

- (a) to allow for the Council to return any security deposit provided under that condition and releasing the Developer from the requirement to carry out any further management obligations on the Environmental Management Land, but only if monetary contributions for the management of the Environmental Management Land have been paid under a planning agreement, and
- (b) to require the Developer to comply with any planning agreement that is entered into with the Council.

Party means a party to this Deed.

Regulation means the *Environmental Planning and Assessment Regulation* 2000.

Vegetation Management Plan means the document titled '*Vegetation Management Plan*' prepared by LandDynamics Australia dated October 2012 in respect of DA2008/440, being the vegetation management plan approved by the Council pursuant to condition B(16) of the Development Consent for the Development, as amended or replaced from time to time.

- 1.2 In the interpretation of this Deed, the following provisions apply unless the context otherwise requires:
 - 1.2.1 Headings are inserted for convenience only and do not affect the interpretation of this Deed.
 - 1.2.2 A reference in this Deed to a business day means a day other than a Saturday or Sunday on which banks are open for business generally in Sydney.
 - 1.2.3 If the day on which any act, matter or thing is to be done under this Deed is not a business day, the act, matter or thing must be done on the next business day.
 - 1.2.4 A reference in this Deed to dollars or \$ means Australian dollars and all amounts payable under this Deed are payable in Australian dollars.
 - 1.2.5 A reference in this Deed to a \$ value relating to a Development Contribution is a reference to the value exclusive of GST.
 - 1.2.6 A reference in this Deed to any law, legislation or legislative provision includes any statutory modification, amendment or re-enactment, and any subordinate legislation or regulations issued under that legislation or legislative provision.
 - 1.2.7 A reference in this Deed to any agreement, deed or document is to that agreement, deed or document as amended, novated, supplemented or replaced.
 - 1.2.8 A reference to a clause, part, schedule or attachment is a reference to a clause, part, schedule or attachment of or to this Deed.
 - 1.2.9 An expression importing a natural person includes any company, trust, partnership, joint venture, association, body corporate or governmental agency.
 - 1.2.10 Where a word or phrase is given a defined meaning, another part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning.

D2020 198183 HAS_HAS19050_011(7)

8



- 1.2.11 A word which denotes the singular denotes the plural, a word which denotes the plural denotes the singular, and a reference to any gender denotes the other genders.
- 1.2.12 References to the word 'include' or 'including' are to be construed without limitation.
- 1.2.13 A reference to this Deed includes the agreement recorded in this Deed.
- 1.2.14 A reference to a Party to this Deed includes a reference to the employees, agents and contractors of the Party, the Party's successors and assigns.
- 1.2.15 A reference to 'dedicate' or 'dedication' in relation to land is a reference to dedicate or dedication free of cost.
- 1.2.16 Any schedules, appendices and attachments form part of this Deed.
- 1.2.17 Notes appearing in this Deed are operative provisions of this Deed.

2 Status of this Deed

2.1 This Deed is a planning agreement within the meaning of s7.4(1) of the Act.

3 Commencement

- 3.1 This Deed commences and has force and effect on and from the date when the Parties have:
 - 3.1.1 both executed the same copy of this Deed, or
 - 3.1.2 each executed separate counterparts of this Deed and exchanged the counterparts.
- 3.2 The Parties are to insert the date when this Deed commences on the front page and on the execution page.

4 Application of this Deed

4.1 This Deed applies to the Environmental Management Land and to the Development.

5 Warranties

- 5.1 The Parties warrant to each other that they:
 - 5.1.1 have full capacity to enter into this Deed, and
 - 5.1.2 are able to fully comply with their obligations under this Deed.

Brierley Hill Environmental Land East Planning Agreement

Port Macquarie-Hastings Council

Brierley Hill Pty Ltd

שבו

6 Further agreements

6.1 The Parties may, at any time and from time to time, enter into agreements relating to the subject-matter of this Deed that are not inconsistent with this Deed for the purpose of implementing this Deed.

7 Surrender of right of appeal, etc.

7.1 The Developer is not to commence or maintain, or to cause or procure the commencement or maintenance, of any proceedings in any court or tribunal or similar body appealing against, or questioning the validity of this Deed, or an Approval relating to the Development in so far as the subject-matter of the proceedings relates to this Deed.

8 Application of s7.11, s7.12 and s7.24 of the Act to the Development

- 8.1 This Deed does not exclude the application of s7.11, s7.12 or s7.24 of the Act to the Development.
- 8.2 The benefits under this Deed are not to be taken into consideration when determining a development contribution under s7.11 of the Act in relation to the Development.

Part 2 – Development Contributions

9 Variation to Management Contribution

- 9.1 The parties acknowledge that the Management Contribution has been calculated assuming that the Council's Management Obligations involve 9 years of management by Council of the Environmental Management Land, and that the Developer will have properly performed the Developer's Management Obligations.
- 9.2 The Council may by notice in writing to the Developer adjust the amount of the Management Contribution:
 - 9.2.1 to recover any increased costs Council reasonably considers it will incur having regard to the manner in which the Developer has carried out the Developer's Management Obligations; or
 - 9.2.2 to reflect any reduced period of time during which the Council must carry out the Council's Management Obligations.
- 9.3 Council must provide the notice required by clause 9.2 within 14 days of the approval of the Modification Application if Council wishes to vary the Management Contribution.
- 9.4 The Developer can at any time request that the Council provides a notice pursuant to clause 9.2.2, and Council must, within 14 days of receiving that notice from the Developer advise the Developer whether Council will adjust



the Management Contribution as requested in the notice, and must act reasonably when doing so.

9.5 For the avoidance of doubt, until such time as the Modification Application is approved, the Developer must carry out the Developer's Management Obligations.

10 Payment of monetary Development Contributions

- 10.1 The Developer is to pay to the Council the Management Contribution within 30 days after both the following have occurred:
 - 10.1.1 the commencement of this Deed, and
 - 10.1.2 the approval of the Modification Application.
- 10.2 The Management Contribution is taken to be paid for the purposes of this Deed when the Council receives the full amount of the Management Contribution payable under this Deed in cash or by unendorsed bank cheque or by the deposit by means of electronic funds transfer of cleared funds into a bank account nominated by the Council.
- 10.3 The Council is to apply the Management Contribution made by the Developer under this Deed towards the carrying out of the Council's Management Obligations.

11 Return of security provided under Development Consent

11.1 Within 14 days after the Developer's payment of the Management Contribution, the Council is to release and return any security that has been provided by the Developer to the Council under condition A(43) of the Development Consent to the Development which are held for the purpose of the Council's Management Obligations.

Part 3 – Dispute Resolution

12 Dispute Resolution - mediation

- 12.1 A Dispute is taken to arise if one Party gives another Party a notice in writing specifying particulars of the Dispute.
- 12.2 If a notice is given under clause 12.1, the Parties are to meet within 14 days of the notice in an attempt to resolve the Dispute.
- 12.3 If the Dispute is not resolved within a further 28 days, the Parties are to mediate the Dispute in accordance with the Mediation Rules of the Law Society of New South Wales published from time to time and are to request the President of the Law Society to select a mediator.
- 12.4 If the Dispute is not resolved by mediation within a further 28 days, or such longer period as may be necessary to allow any mediation process which has been commenced to be completed, then the Parties may exercise their legal



rights in relation to the Dispute, including by the commencement of legal proceedings in a court of competent jurisdiction in New South Wales.

- 12.5 Each Party is to bear its own costs arising from or in connection with the appointment of a mediator and the mediation.
- 12.6 The Parties are to share equally the costs of the President, the mediator, and the mediation.

Part 4 - Enforcement

13 Enforcement in a court of competent jurisdiction

- 13.1 Without limiting any other provision of this Deed, the Parties may enforce this Deed in any court of competent jurisdiction.
- 13.2 For the avoidance of doubt, nothing in this Deed prevents:
 - 13.2.1 a Party from bringing proceedings in the Land and Environment Court to enforce any aspect of this Deed or any matter to which this Deed relates, or
 - 13.2.2 the Council from exercising any function under the Act or any other Act or law relating to the enforcement of any aspect of this Deed or any matter to which this Deed relates.

Part 5 – Restriction on Dealings

14 Restriction on dealings

14.1 The Developer is not to assign the Developer's rights or obligations under this Deed, or novate this Deed:

to any person unless:

- 14.1.1 the Developer has, at no cost to the Council, first procured the execution by the person to whom the Developer's rights or obligations under this Deed are to be assigned or novated, of a deed in favour of the Council on terms reasonably satisfactory to the Council, and
- 14.1.2 the Council has given written notice to the Developer stating that it reasonably considers that the assignee or novatee, is reasonably capable of performing its obligations under this Deed, and
- 14.1.3 the Developer is not in breach of this Deed, and
- 14.1.4 the Council otherwise consents to the assignment or novation, such consent not to be unreasonably withheld.
- 14.2 The Developer acknowledges and agrees that it remains liable to fully perform its obligations under this Deed unless and until it has complied with its obligations under clause 14.1.

Part 7 – Other Provisions

15 Review of Deed

- 15.1 The Parties agree to review this Deed if either party is of the opinion that any change of circumstance has occurred, or is imminent, that materially affects the operation of this Deed.
- 15.2 For the purposes of clause 15.1, the relevant changes include (but are not limited to) any change to a law that restricts or prohibits or enables the Council or any other planning authority to restrict or prohibit any aspect of the Development.
- 15.3 For the purposes of addressing any matter arising from a review of this Deed referred to in clause 15.1, the Parties are to use all reasonable endeavours to agree on and implement appropriate amendments to this Deed.
- 15.4 If this Deed becomes illegal, unenforceable or invalid as a result of any change to a law, the Parties agree to do all things necessary to ensure that an enforceable agreement of the same or similar effect to this Deed is entered into.
- 15.5 A failure by a Party to agree to take action requested by the other Party as a consequence of a review referred to in clause 15.1 (but not 15.4) is not a Dispute for the purposes of this Deed and is not a breach of this Deed.

16 Notices

- 16.1 Any notice, consent, information, application or request that is to or may be given or made to a Party under this Deed is only given or made if it is in writing and sent in one of the following ways:
 - 16.1.1 delivered or posted to that Party at its address set out in the Summary Sheet, or
 - 16.1.2 emailed to that Party at its email address set out in the Summary Sheet.
- 16.2 If a Party gives the other Party 3 business days' notice of a change of its address or email, any notice, consent, information, application or request is only given or made by that other Party if it is delivered, posted or emailed to the latest address.
- 16.3 Any notice, consent, information, application or request is to be treated as given or made if it is:
 - 16.3.1 delivered, when it is left at the relevant address,
 - 16.3.2 sent by post, 2 business days after it is posted, or
 - 16.3.3 sent by email and the sender does not receive a delivery failure message from the sender's internet service provider within a period of 24 hours of the email being sent.
- 16.4 If any notice, consent, information, application or request is delivered, or an error free transmission report in relation to it is received, on a day that is not a business day, or if on a business day, after 5pm on that day in the place of

D2020 198183 HAS_HAS19050_011(7)

13

> the Party to whom it is sent, it is to be treated as having been given or made at the beginning of the next business day.

17 Approvals and Consent

- 17.1 Except as otherwise set out in this Deed, and subject to any statutory obligations, a Party may give or withhold an approval or consent to be given under this Deed in that Party's absolute discretion and subject to any conditions determined by the Party.
- 17.2 A Party is not obliged to give its reasons for giving or withholding consent or for giving consent subject to conditions.

18 Costs

- 18.1 The Developer is to pay to the Council the Council's costs of preparing, negotiating, executing and stamping this Deed, and any document related to this Deed within 7 days of a written demand by the Council for such payment.
- 18.2 The Developer is also to pay to the Council the Council's reasonable costs of enforcing this Deed within 7 days of a written demand by the Council for such payment.

19 Entire Deed

- 19.1 This Deed contains everything to which the Parties have agreed in relation to the matters it deals with.
- 19.2 No Party can rely on an earlier document, or anything said or done by another Party, or by a director, officer, agent or employee of that Party, before this Deed was executed, except as permitted by law.

20 Further Acts

20.1 Each Party must promptly execute all documents and do all things that another Party from time to time reasonably requests to effect, perfect or complete this Deed and all transactions incidental to it.

21 Governing Law and Jurisdiction

- 21.1 This Deed is governed by the law of New South Wales.
- 21.2 The Parties submit to the non-exclusive jurisdiction of its courts and courts of appeal from them.
- 21.3 The Parties are not to object to the exercise of jurisdiction by those courts on any basis.



22 Joint and Individual Liability and Benefits

- 22.1 Except as otherwise set out in this Deed:
 - 22.1.1 any agreement, covenant, representation or warranty under this Deed by 2 or more persons binds them jointly and each of them individually, and
 - 22.1.2 any benefit in favour of 2 or more persons is for the benefit of them jointly and each of them individually.

23 No Fetter

23.1 Nothing in this Deed shall be construed as requiring Council to do anything that would cause it to be in breach of any of its obligations at law, and without limitation, nothing shall be construed as limiting or fettering in any way the exercise of any statutory discretion or duty.

24 Illegality

24.1 If this Deed or any part of it becomes illegal, unenforceable or invalid as a result of any change to a law, the Parties are to co-operate and do all things necessary to ensure that an enforceable agreement of the same or similar effect to this Deed is entered into.

25 Severability

- 25.1 If a clause or part of a clause of this Deed can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way.
- 25.2 If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Deed, but the rest of this Deed is not affected.

26 Amendment

26.1 No amendment of this Deed will be of any force or effect unless it is in writing and signed by the Parties to this Deed in accordance with clause 25C of the Regulation.

27 Waiver

- 27.1 The fact that a Party fails to do, or delays in doing, something the Party is entitled to do under this Deed, does not amount to a waiver of any obligation of, or breach of obligation by, another Party.
- 27.2 A waiver by a Party is only effective if it:

27.2.1 is in writing,



- 27.2.2 is addressed to the Party whose obligation or breach of obligation is the subject of the waiver,
- 27.2.3 specifies the obligation or breach of obligation the subject of the waiver and the conditions, if any, of the waiver,
- 27.2.4 is signed and dated by the Party giving the waiver.
- 27.3 Without limitation, a waiver may be expressed to be conditional on the happening of an event, including the doing of a thing by the Party to whom the waiver is given.
- 27.4 A waiver by a Party is only effective in relation to the particular obligation or breach in respect of which it is given, and is not to be taken as an implied waiver of any other obligation or breach or as an implied waiver of that obligation or breach in relation to any other occasion.
- 27.5 For the purposes of this Deed, an obligation or breach of obligation the subject of a waiver is taken not to have been imposed on, or required to be complied with by, the Party to whom the waiver is given.

28 GST

28.1 In this clause:

Adjustment Note, Consideration, GST, GST Group, Margin Scheme, Money, Supply and Tax Invoice have the meaning given by the GST Law.

GST Amount means in relation to a Taxable Supply the amount of GST payable in respect of the Taxable Supply.

GST Law has the meaning given by the *A New Tax System (Goods and Services Tax) Act 1999* (Cth).

Input Tax Credit has the meaning given by the GST Law and a reference to an Input Tax Credit entitlement of a party includes an Input Tax Credit for an acquisition made by that party but to which another member of the same GST Group is entitled under the GST Law.

Taxable Supply has the meaning given by the GST Law excluding (except where expressly agreed otherwise) a supply in respect of which the supplier chooses to apply the Margin Scheme in working out the amount of GST on that supply.

- 28.2 Subject to clause 28.4, if GST is payable on a Taxable Supply made under, by reference to or in connection with this Deed, the Party providing the Consideration for that Taxable Supply must also pay the GST Amount as additional Consideration.
- 28.3 Clause 28.2 does not apply to the extent that the Consideration for the Taxable Supply is expressly stated in this Deed to be GST inclusive.
- 28.4 No additional amount shall be payable by the Council under clause 28.2 unless, and only to the extent that, the Council (acting reasonably and in accordance with the GST Law) determines that it is entitled to an Input Tax Credit for its acquisition of the Taxable Supply giving rise to the liability to pay GST.
- 28.5 If there are Supplies for Consideration which is not Consideration expressed as an amount of Money under this Deed by one Party to the other Party that

are not subject to Division 82 of the A New Tax System (Goods and Services Tax) Act 1999, the Parties agree:

- 28.5.1 to negotiate in good faith to agree the GST inclusive market value of those Supplies prior to issuing Tax Invoices in respect of those Supplies;
- 28.5.2 that any amounts payable by the Parties in accordance with clause 28.2 (as limited by clause 28.4) to each other in respect of those Supplies will be set off against each other to the extent that they are equivalent in amount.
- 28.6 No payment of any amount pursuant to this clause 28, and no payment of the GST Amount where the Consideration for the Taxable Supply is expressly agreed to be GST inclusive, is required until the supplier has provided a Tax Invoice or Adjustment Note as the case may be to the recipient.
- 28.7 Any reference in the calculation of Consideration or of any indemnity, reimbursement or similar amount to a cost, expense or other liability incurred by a party, must exclude the amount of any Input Tax Credit entitlement of that party in relation to the relevant cost, expense or other liability.
- 28.8 This clause continues to apply after expiration or termination of this Deed.

29 Explanatory Note

- 29.1 The Appendix contains the Explanatory Note relating to this Deed required by clause 25E of the Regulation.
- 29.2 Pursuant to clause 25E(7) of the Regulation, the Parties agree that the Explanatory Note is not to be used to assist in construing this Planning Deed.

Brierley Hill Environmental Land Port Macquarie-Hastings Council		
Brierley Hill Pty Ltd		
Execution		
Executed as a Deed		
Dated:		
Executed on behalf of the Co	ouncil	
General Manager	Witness	
Mayor	Witness	
Executed on behalf of the De Corporations Act (Cth) 2001	eveloper in accordance with s127(1) of	the

Name/Position

Name/Position

18

ЫL

Appendix

(Clause 29) Environmental Planning and Assessment Regulation 2000 (Clause 25E)

Explanatory Note

Draft Planning Agreement

Under s7.4 of the Environmental Planning and Assessment Act 1979

Parties

Port Macquarie Hastings Council ABN 11 236 901 601 of Corner Lord and Burrawan Streets, Port Macquarie, New South Wales, 2444 (**Council**)

and

Brierley Hill Pty Ltd ABN 79 090 846 923 of PO Box 166, Port Macquarie NSW 2444 (Developer)

Description of the Land to which the Draft Planning Agreement Applies

The Draft Planning Agreement applies to the Environmental Management Land in respect of application of the Management Contributions towards ongoing management of that land.

Description of Proposed Development

Development means development the subject of Development Consent to Development Application DA2008 - 440 originally lodged with Council on 6 November 2008 and determined on 16 August 2010, as modified from time to time.

Summary of Objectives, Nature and Effect of the Draft Planning Agreement

D2020 198183 HAS_HAS19050_011(7)

19

Objectives of Draft Planning Agreement

The objective of the Draft Planning Agreement is to provide suitable funding for ongoing management of the Environmental Management Land.

Nature of Draft Planning Agreement

The Draft Planning Agreement is a planning agreement under s7.4 of the *Environmental Planning and Assessment Act* 1979 (Act). It is an agreement between the Council and the Developer of the land to which the Agreement applies. The Draft Planning Agreement is a voluntary agreement under which Development Contributions (as defined in clause 1.1 of the Draft Planning Agreement) are made by the Developer for various public purposes (as defined in s7.4(3) of the Act).

Effect of the Draft Planning Agreement

The Draft Planning Agreement:

- relates to the carrying out by the Developer of the Development,
- does not exclude the application of ss 7.11, 7.12 and 7.24 of the Act to the Development,
- requires monetary Development Contributions of a specified amount to be paid to the Council,
- requires the Council to apply monetary Development Contributions made under the Agreement towards the ongoing management of the Environmental Management Land,
- imposes restrictions on the Developer assigning an interest under the Agreement,
- provides one dispute resolution methods for a dispute under the Agreement, being mediation,
- provides that the Agreement is governed by the law of New South Wales, and
- provides that the A New Tax System (Goods and Services Tax) Act 1999 (Cth) applies to the Agreement.

Assessment of the Merits of the Draft Planning Agreement

The Planning Purposes Served by the Draft Planning Agreement

The Draft Planning Agreement:

- promotes and co-ordinates of the orderly and economic use and development of the Land to which the Agreement applies,
- provides increased opportunity for public involvement and participation in environmental planning and assessment of the Development.

How the Draft Planning Agreement Promotes the Public Interest

The Draft Planning Agreement promotes the public interest by promoting the objects of the Act as set out in s1.3(c) and (d) of the Act.

For Planning Authorities:

Development Corporations - How the Draft Planning Agreement Promotes its Statutory Responsibilities

N/A

Other Public Authorities – How the Draft Planning Agreement Promotes the Objects (if any) of the Act under which it is Constituted

N/A

Councils – How the Draft Planning Agreement Promotes the Guiding Principles for Local Government (previously Elements of the Council's Charter)

The Draft Planning Agreement promotes the guiding principles for local government by:

- ensuring that environmental lands are managed for the community in an affordable way, or are otherwise subject to the Council's control,
- providing a means that allows the Council to actively engage with the wider community by enabling them to make submissions to the Council in relation to the Agreement.

All Planning Authorities – Whether the Draft Planning Agreement Conforms with the Authority's Capital Works Program

The Draft Planning Agreement requires that monetary contributions be paid to the Council and be applied towards ongoing management works to be carried out on the Environmental Management Land.

These works are not included in the Council's relevant current capital works program. However, the Council's management plan identifies these types of works in the relevant capital works program.

The provision of funding for these works is considered consistent and conforms with other capital works.

All Planning Authorities – Whether the Draft Planning Agreement specifies that certain requirements must be complied with before a construction certificate, occupation certificate or subdivision certificate is issued

No.