

ORDINARY COUNCIL

Wednesday 18 September 2019

Ordinary Council Meeting

Wednesday, 18 September 2019

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1 Leadership and Governance

18/09/2019

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 effective 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



NOMINATION PAPER
for the
ELECTION OF DEPUTY MAYOR

We the undersigned, hereby nominate

for the position of DEPUTY MAYOR for the ensuing term
(requires two (2) or more Councillors to sign nomination)

I, the undersigned, hereby consent to the above nomination of myself to the
position of Deputy Mayor

**Legislative Compliance Report
For the month ending 30/06/2019**

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
PID first half yearly report lodged with the NSW Ombudsman		14/02/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Information entered in to the Ombudsman's database in July 2018 and lodged within required time frames.
Noxious weeds grant application to Department of Primary Industry with regional weeds plan - 30 April	Biosecurity Act	30/04/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Achieved. Monthly reporting is undertaken to DPI and annual compliance report will be sent in July 2019.
Details of Council's native title managers to be provided to Minister of Lands	Pursuant to section 8.8 the Crown Land Management Act 2016.	31/10/2018	Annually (Fin Year)	Commercial and Business Units 2018 - 2019	100%	100%	Achieved. Report presented to the Ordinary Council Meeting 21 November 2018 and notification provided to the minister in line with legislation.
Crown Reserve Reporting (Annual reporting for Crown Trust Managers)	Crown Lands Act 1989; section 122	31/10/2018	Annually (Fin Year)	Recreation and Buildings 2018 - 2019	100%	100%	Achieved.
Gravel Tip Road EPBC Act referral annual monitoring and reporting	Federal legislation, due to road location vicinity to koalas in eastern swamp region	30/06/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Reporting completed for Department of Environment regarding upgrade of Gravel Tip Road under the Environment Protection Biodiversity Conservation Act 1999 (EPBC Act) - (EPBC 2013/6757). - D2019/300825
GIPA Annual Report information to be included in Council's Annual Report	GIPA Act 2009 (s125(1))	30/11/2018	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. The annual GIPA Report was included in Council's 2017-2018 Annual Report as Appendix B in line with legislation

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
GIPA Annual Report to be lodged with the OLG (the Minister) and the Information Commissioner within 4 months of EOFY	GIPA Act 2009 (s125(1))	31/10/2018	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Information is collected and entered in to the online Information and Privacy Commission (IPC) database on a monthly basis. The 2017-18 Annual Report was submitted to the IPC in August 2018.
Maintain a register of contracts \$150,000 or more	Local Govt General Regulation (cl217)(1)(a2)	30/06/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Register maintained and publicly available on Council's website.
Maintain a register of the open access information (if any) that is not publicly available	GIPA Act 2009 (s.6(5))	30/06/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Information available on Council's external GIPA web page.
Maintain a register that records information about formal access applications (Disclosure Log)	GIPA Act 2009 (s.27)	30/06/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Disclosure register updated and made available at the October 2018 Ordinary Council Meeting.
Maintain a register of graffiti removal work	Graffiti Control Act 2008 (s.13)	30/06/2019	Annually (Fin Year)	Community Place 2018 - 2019	100%	85%	Partial achieved. A register for graffiti removal work is established, however gaps have been identified with what information should be captured, therefore, continuous improvement is ongoing in relation to the information captured. It is publicly available upon request.
Report suspected corrupt conduct to ICAC	ICAC Act (s.11)	30/06/2019	Annually (Fin Year)	General Manager's Office 2018 - 2019	100%	100%	Achieved.
All registration fees receipted during the month must be entered into the Companion Animals Register in that month. Registration fees must be remitted to the OLG as detailed on monthly invoices issued	Calendar of Compliance and Reporting Requirements	30/06/2019	Monthly	Regulatory Services 2018 - 2019	100%	100%	Achieved.

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Annual Report to be furnished to the Minister (by submitting to the Division of Local Government) and posted on Council's website	Local Govt Act 1993 (s428(5))	30/11/2018	Annually (Fin Year)	Organisational Performance 2018 - 2019	100%	100%	Achieved. The 2017-2018 Annual Report was presented to the November 2018 Ordinary Council Meeting and published on Council's website in line with legislation.
Asset Management Planning (Asset Management Policy, Asset Management Strategy and Asset Management Plan)	Local Govt Act 1993 (s403) - Resourcing Strategy - Asset Management Planning	30/06/2019	Annually (Fin Year)	Assets and Property Investments 2018 - 2019	100%	100%	Asset Management Policy adopted 19/04/2017, update required 19/04/2021. Asset Management Strategy and supporting Asset Management Plans adopted 21/06/2017, update required 30/06/2021.
Audited financial statements & Financial Data Return (FDR) to be lodged	Local Govt Act 1993 OLG Circular 13-38	31/10/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Submitted 30/10/18. Refer D2018/247656
Audited Reports to be presented to the public	Local Govt Act 1993 (s418)	5/12/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Audited financial statements presented to the Ordinary Council Meeting in November 2018 and published on Council's website
Auditors Report and Audited Financial Statements to be forwarded to Director General	Local Govt Act 1993 (s417(5))	31/10/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Submitted 30/11/18 - refer D2018/247656
Closing date for Pensioner Concession subsidies claims	Calendar of Compliance and Reporting Requirements	2/10/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Claim lodged by due date
Council is required to report on any dog attacks they are made aware of to the OLG within 72 hours of being notified via the Animal Companion Register	Companion Animals Regulation 2008 (ci33A (3))	30/06/2019	Monthly	Regulatory Services 2018 - 2019	100%	100%	Achieved.
Council must have swimming inspection program developed and adopted.	Swimming Pools Act 1992 (s22B)	30/06/2019	Annually (Fin Year)	Regulatory Services 2018 - 2019	100%	100%	Achieved.

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Council must review its Publication information guide and adopt a new Publication Information guide at intervals of not more than 12 months	GIPA Act 2009 (s21)	31/03/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. The Publication Information guide was reviewed and updated March 2019 and is available on Council's website.
Councils should notify the OLG of any senior staff or address changes via e-mail to enable updating of the directory	Calendar of Compliance and Reporting Requirements	30/06/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved.
Delivery Program progress report provided to Council at least every 6 months - presented to September Council meeting	Local Govt Act 1993 (s404(5))	30/09/2018	Annually (Fin Year)	Organisational Performance 2018 - 2019	100%	100%	Achieved. The Delivery Program progress report was presented to the September 2018 Ordinary Council Meeting.
Delivery Program progress reports provided to Council at least every 6 months - presented to March Council Meeting	Local Govt Act 1993 (s404(5))	31/03/2019	Annually (Fin Year)	Organisational Performance 2018 - 2019	100%	100%	Achieved. The Delivery Program progress report was presented to the March 2019 Ordinary Council Meeting.
Electronic lodgement of Grants Commission General Data Returned	Local Govt Act 1993 (s613)	30/11/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Return lodged by due date
Financial Report to be audited within 4 months (reminder) (s.416 (1))	Local Govt Act (s.416(1))	31/10/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Independent auditors report included in annual report
First quarterly rates instalment due by 31 August	Local Govt Act 1993 (s562(3) (b))	31/08/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved.
Fourth quarterly rates instalment due 31 May	Local Govt Act 1993 (s562(3) (b))	31/05/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Fourth quarterly rates instalment notice to be sent 30 April	Local Govt Act 1993 (s562(5))	30/04/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
GST Certificate to be submitted to OLG	Local Govt Act 1993	31/07/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Income adjustment for newly rateable Crown Land to be lodged	Calendar of Compliance and Reporting Requirements	16/02/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Last date for Councils to resolve who is conducting their next Ordinary Election (18 months before next election)	Local Govt Act 1993 (s.296(3)(a))	31/03/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Report presented to the December 2018 Ordinary Council Meeting.
Last day for making rates - 31 July	Local Govt Act 1993 (s533)	31/07/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Last day for Valuer General to provide increase/decrease in values of rateable land - 30 June	Local Govt Act 1993 (s513(2))	30/06/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Ledger balances to be prepared for six monthly inspection by Auditor - 31 January	Local Govt General Regulation (cl228(2)(a))	31/01/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
LIRS claim period for all projects approved for funding	Calendar of Compliance and Reporting Requirements	16/05/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
LIRS claim period open for all projects approved for funding	Calendar of Compliance and Reporting Requirements	17/11/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Lodge completed Pecuniary Interest returns for Councillors & designated persons who held office at 30 June	Local Govt Act 1993 (s449(3))	30/09/2018	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Tabled at the Ordinary Council Meeting October 2018.
Lodgement of ALGA's National Local Road Data System Return (Grants Commission)	NSW Local Government Grants Commission	30/10/2018	Annually (Fin Year)	Assets and Property Investments 2018 - 2019	100%	100%	Achieved. Report forwarded to the OLG in line with legislation. Content Manager D2018/241201.

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Lodgement of Audited Statement of Compliance with OLG	Calendar of Compliance and Reporting Requirements	31/10/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. Submitted as part of annual audited financial statements on 30/10/18. Refer D2017/247656
Lodgement of Pecuniary Interest returns for newly elected Councillors	Local Govt Act 1993 (s449(1))	1/12/2018	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. No newly elected Councillors in the 2018-2019 financial year.
Long Term Financial Plan must be updated as part of the development of the Operational Plan - 30 June	Local Govt Act 1993 (s406(2)) IPR Guidelines [March 2013] LTFP 2.4	30/06/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Notice of presentation of audited Financial Reports due by 28 November	Local Govt Act 1993 (s418(2))	28/11/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Objections to the inclusion of land to be vested in public bodies lodged - 30 June	Local Govt Act 1993 (s600(6))	30/06/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. None noted for the current year
Operational Plan adopted	Local Govt Act 1993 (s405(1))	30/06/2019	Annually (Fin Year)	Organisational Performance 2018 - 2019	100%	100%	Achieved. The 2018-2019 Operational Plan was presented to the June 2019 Council Meeting in line with legislation.
Proposed Loan Borrowings Return to be submitted to OLG	Calendar of Compliance and Reporting Requirements	7/07/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved.
Public bodies to provide Council with a list of parcels of land to which rate rebate applies - 30 April	Local Govt Act 1993 (s600(5))	30/04/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. None noted in the current year
QBRs reported to Council by 28 Feb	Local Govt General Regulation (cl203(1))	28/02/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. QBRs tabled at Ordinary Council meeting February 2019.
QBRs reported to Council by 30 Nov	Local Govt General Regulation (cl203(1))	30/11/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. QBRs tabled at ordinary council meeting November 2019

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
QBRs reported to Council by 31 May	Local Govt General Regulation (cl203(1))	31/05/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved. QBRs tabled at Ordinary Council meeting May 2019
Rates levied by service of rates and charges notice by 1 August	Local Govt Act 1993 (s546)	1/08/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Report to Council (cl12.1) and the OLG (cl12.2) on the complaint statistics	Procedures for the Administration of the Model Code of Conduct for Local Councils in NSW	31/12/2018	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Report presented to the December 2018 Ordinary Council Meeting.
Request for extension to lodge financial statements to be submitted in writing to OLG (if required)	Local Govt Act 1993 - (s416)	30/06/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Not required
Requests to Valuer General for estimates of changes in value of land for supplementary valuations by 31 May	Local Govt Act 1993 (s513(1))	31/05/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Responsible Accounting Officer (RAO) to prepare a written report monthly for Council on money invested under s.625 of the LG Act	Local Govt General Regulation (cl212)	30/06/2019	Monthly	Financial Services 2018 - 2019	100%	100%	Achieved.
Responsible Accounting Officer (RAO) to report material budget variances from the budget to the following Council meeting	Local Govt General Regulation (cl202(b))	30/06/2019	Monthly	Financial Services 2018 - 2019	100%	100%	Achieved.
Review of General Manager's and other senior staff performance, undertake contact renewal process subject to the terms of the relevant contract/s	Local Govt Act 1993 (s338)	30/06/2019	Annually (Fin Year)	General Manager's Office 2018 - 2019	100%	100%	Achieved.

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Review of Local Approval Policies (other than a local policy adopted since the last general election) as they are revoked	Local Govt Act 1993 (s165(4))	30/06/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Not applicable. No Local Approval Policies reviewed.
Roads and Bridges Data Return (Grants Commission)	NSW Local Government Grants Commission	30/09/2018	Annually (Fin Year)	Assets and Property Investments 2018 - 2019	100%	100%	Achieved. Report forwarded to the OLG in line with legislation. Content Manager D2018/198236
Second quarterly rates instalment due by 30 November	Local Govt Act 1993 (s562(3)(b))	30/11/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Second quarterly rates instalment notice to be sent 31 October	Local Govt Act 1993 (s562(5))	31/10/2018	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Survey of seizures of cats and dogs due	Calendar of Compliance and Reporting Requirements	31/08/2018	Annually (Fin Year)	Regulatory Services 2018 - 2019	100%	100%	Achieved.
Third quarterly rates instalment due by 28 February	Local Govt Act 1993 (s562(3)(b))	28/02/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Third quarterly rates instalment notice to be sent 31 January	Local Govt Act 1993 (s562(5))	31/01/2019	Annually (Fin Year)	Financial Services 2018 - 2019	100%	100%	Achieved
Training plan required under the Local Govt (State) Award following consultation with the Consultative Committee. Action arising to be included in the Workforce Mgmt Plan & DP & OP, as appropriate	Local Govt (State) Award 2014 (cl31 (iii) (a)) Local Govt Act 1993 (s403(2))	30/06/2019	Annually (Fin Year)	Organisational Performance 2018 - 2019	100%	100%	Achieved. Training Plan in place which is reported against at each Ordinary Consultative Committee throughout the year. .
Cairncross Organic Resource Recovery Facility (ORRF) Environment Protection License (EPL) return to the EPA	Protection of the Environment Operations Act 1997 (s 63) (Conditions of License)	30/06/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Compliance Reporting complete - Cairncross WMF EPL - D2019/026269

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Camden Haven Sewerage Treatment Plant EPL 805	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	31/03/2019	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved. Annual licence return submitted to the NSW EPA in March 2019.
Dunbogan Environment Protection Licence (EPL) return to the EPA	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	30/06/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Compliance Reporting completed - Dunbogan EPL - D2019/026298
Kew-Kendall Sewerage Treatment Plant EPL 10339	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	8/08/2018	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved. Annual licence return submitted to the NSW EPA in August 2018.
Kingfisher Environment Protection Licence (EPL) return to the EPA	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	30/06/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Compliance Reporting completed - PMWMF (Kingfisher) EPL - D2019/286599
Lake Cathie/Bonny Hills Sewerage Treatment Plant EPL 594	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	31/12/2018	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved. Annual licence return submitted to the NSW EPA in December 2018.

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Maintain a public register in accordance with section 308 of the POEO Act	Protection of the Environment Operations Act 1997 (s.308)	30/09/2018	Annually (Fin Year)	Regulatory Services 2018 - 2019	100%	100%	Achieved.
NSW local government waste and resource recovery data report - June	Protection of the Environment Operations (Waste) Regulation 2005, (cl.14)	30/06/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Reporting completed - Local Gov data survey - D2019/291801
Port Macquarie Sewerage Treatment Plant EPL 589	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	31/12/2018	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved. Annual licence return submitted to the NSW EPA in December 2018.
Waste and Environment Levy return to the EPA	Protection of the Environment Operations Act 1997 (s.88(2)) Protection of the Environment Operations (Waste) Regulation 2005, (cl.5 & 13)	30/06/2019	Annually (Fin Year)	Environmental Services 2018 - 2019	100%	100%	Waste Levy Data Return completed - SF12/17696

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Wauchope Sewerage Treatment Plant EPL 804	Protection of the Environment Operations Act 1997 (s.63) (Conditions of License)	31/03/2019	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved. Annual licence return submitted to the NSW EPA in March 2019.
PID Annual Report of obligations to be lodged with the OLG (the Minister) and Ombudsman	Public Interest Disclosures Act (s31)	31/10/2018	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. The 2017-2018 PID Annual Report was lodged within required time frames to the OLG and Ombudsman as required by legislation.
PID second half yearly report lodged with the NSW Ombudsman	Public Interest Disclosures Act (s6CA)	31/01/2019	Annually (Fin Year)	Governance and Procurement 2018 - 2019	100%	100%	Achieved. Information entered in to the Ombudsman's database in February 2019 and lodged within required time frames.
Koree Pump Station 1 - Water Supply river extraction licence	Water Act 1912 (s.12) Extracted Amounts (Conditions of License)	30/06/2019	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved - Council have been compliant with licence conditions. Natural Resources Access Regulator have not yet forwarded request for details of extraction.
Koree Pump Station 2 - Water Supply river extraction licence	Water Act 1912 (s.12) Extracted Amounts (Conditions of License)	30/06/2019	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved - Council have been compliant with licence conditions. Natural Resources Access Regulator have not yet forwarded request for details of extraction.

Compliance Item	Legislation/ Regulation/ Clause or Section	Due date	Frequency	Responsible Section	Target	Achieved	Comment
Koree Pump Station 3 - Water Supply river extraction licence	Water Act 1912 (s.12) Extracted Amounts (Conditions of License)	30/06/2019	Annually (Fin Year)	Water and Sewer 2018 - 2019	100%	100%	Achieved - Council have been compliant with licence conditions. Natural Resources Access Regulator have not yet forwarded request for details of extraction.

AUDIT, RISK & IMPROVEMENT COMMITTEE ANNUAL REPORT 2018-2019

Following the Council elections held on 10 September 2016 the Council at its meeting held on 16 November resolved to establish the Audit, Risk & Improvement Committee. The Council at its meeting held on 21 June 2017 adopted a revised Charter for the Committee and Clause 3.1 Member (voting) provides that the Committee shall comprise:

- Appointed Councillors of the Finance, Corporate Services and Information Technology Portfolio.
- Three (3) Independent external members (not a member of Council) one of which shall be appointed as Chairperson of the Committee.

In accordance with the Charter the term of an Independent member expired and an EOI process was initiated to fill this position. At its meeting held on 20th February 2019 Council resolved to re-appoint Mr Michael Parkinson for a further 4 year term.

The Committee therefore currently comprises:

- Councillor Lisa Intemann
- Councillor Geoffrey Hawkins
- Grahame Marchant (Chairperson)
- Stephen O'Rourke
- Michael Parkinson

The Committee members bring a unique range of skills and experience to matters considered by the Committee and has worked together as a cohesive team. It is considered that the Committee has provided valuable advice and recommendations to Council and management on a wide range of issues.

The Committee has met on four occasions during the period to which this report refers:

- 9 August 2018
- 8 November 2018
- 14 February 2019
- 9 May 2019

Various matters have also been considered by committee members on an out of session basis during the period.

All Committee members have attended all meetings except Stephen O'Rourke who was unable to attend the November 2018 and May 2019 meetings. The General Manager has also attended meetings when available and Senior Staff have attended various meetings during consideration of matters that are related to their areas of responsibility. The Committee considers that the General Manager and Senior Staff value the role of the Committee and have been very responsive in providing reports and other information to the Committee.

Council has provided the Committee with a comprehensive Charter that specifies its scope, responsibilities, authority and relationships with other Council activities and of course its independence.

The Key Functions of the Committee as detailed in the Charter include:

- Compliance
- Risk Management
- Fraud Control
- Financial Management
- Governance
- Implementation of the Community Strategic Plan, Delivery Program and Strategies.
- Service reviews and Performance Management
- Performance of Council Functions
- Internal Audit
- External Audit

In order to address its Key Functions, the Committee has developed a Forward Plan and has undertaken the following work:

COMPLIANCE

Compliance with relevant laws, regulations and associated government and Council determined policies is a fundamental governance function.

In determining whether management has appropriately considered legal and compliance risks as part of risk assessment and management arrangements the committee has:

This aspect is considered as part of the review of the Corporate Risk Register. The Committee will further consider this aspect at future meetings.

In reviewing the effectiveness of the system for monitoring compliance with relevant laws, regulations and associated government policies the committee has:

A Legislative Compliance Register has been established using the Performance Manager Platform. The Register contains details of the key legislative requirements and enable monitoring and reporting on compliance. The Committee has previously supported the mechanisms to monitor legislative compliance, which incorporates a monthly and quarterly reporting cycle. The Committee was provided with the Legislative Compliance 2017-2018 Report which provided a review of the status of compliance for matters contained within the Legislative Compliance Register. Management is giving further consideration to how best to report key legislative compliance requirements.

A Major Non Compliance Exceptions Report has also now been developed and is provided to the committee on a regular basis. This Report makes the committee aware of major non-compliance events and what actions are proposed to ensure that the risk of these events occurring again are appropriately managed. Internal audit reviews considered by the committee also often address compliance issues.

RISK MANAGEMENT

The identification and control of risks is fundamental to Council being able to achieve the objectives that it has determined for provision of services to the community.

In reviewing whether management has in place a current and comprehensive risk management framework, and associated procedures for the effective identification and management of business and financial risks the committee has considered the following:

- **Risk Management Framework**

The Committee had previously reviewed a report on the framework architecture. The report detailed that the risk management framework includes all the people, systems, policies and processes that identify, assess, mitigate and monitor all material internal and external sources of risks.

It was evident however, that some of the key elements of the framework were under review. The Risk Management Policy has been reviewed and a revised Risk Management Policy has been adopted by Council at its meeting held on 20th February 2019. This Policy sets the tone for Council's risk management approach and establishes the risk management responsibilities of councillors, management and staff. At a briefing session held with Councillors it was agreed to communicate the Risk Appetite through Council policies and the Risk Management Framework and not to develop a standalone Risk Appetite statement. It is envisaged that supporting the policy will be a Procedure (to be approved by the General Manager), Risk Matrix (approved by the General Manager) and supporting tools.

The Committee considers that the completion, adoption and implementation of these key elements of the framework are essential to imbedding a more mature risk management culture within the organisation. The Committee will be pursuing this matter as part of its work in the coming year. Also, the Committee is intending to then review the implementation and effectiveness of the other key elements of the framework.

- **Corporate Risk Register**

The Corporate Risk Register details the high level corporate wide risks, existing controls, current risk rating, changes proposed to controls and revised risk ratings.

The Register has been reviewed at each meeting and the Committee is aware that management have reviewed and updated the Register on a quarterly basis. In respect of the Corporate Risks (high residual only that are considered ALARP), the Committee has been provided with a list of controls that are in place and the assessed level of effectiveness for each individual control and the scale upon which this effectiveness is based. The Committee has also been provided with reporting on improvements in the implementation of further controls in relation to the management of Corporate Risks (high residual only that are considered ALARP).

The committee has also raised various matters that may need consideration in relation to managing risks that could result in an adverse impact on the Council. The Committee now receives a regular report on Material Litigation Matters which provides details on how risks involved with these matters are being managed. Reports were provided to the committee outlining actions taken to mitigate risks in other areas including:

- Solar installation Procurement
- Enforceable Undertaking

The Committee will also consider a Report on legal advice relating to Fluoridation at a future meeting.

- **Risk Management Working Group**

The objective of the RMWG is to assist Council in the fulfilment of its risk management responsibilities by developing, implementing, monitoring and reviewing Council policies, plans and processes associated with risk management that are relevant to the day-to-day operation of Council.

Reports from the meetings of the RMWG have been considered by the Committee. The Committee considers that the work of this Group is vital in progressing the implementation of risk management framework through comprehensive processes and procedures across the organisation.

In reviewing whether a sound and effective approach has been followed in developing strategic risk management plans for major projects or undertakings the committee has considered the following:

- **Project Management Framework**

The Project Management Policy was adopted by Council on 15 February 2017. The Committee is monitoring the progress in the implementation of the revised Project Management Framework through the reports of the Risk Management Working Group.

The implementation of the PMF has been supported by the following initiatives:

- PMF Intranet site
- PMF brochure
- PMF Training
- PMF Divisional Champions
- PMF Continuous Improvement Register

The Institute of Project Management were tasked with delivering Project Management training to support the implementation of the Project Management Framework. Additionally they were tasked with providing a report that gives Council information to develop a plan for continuous improvement of Council's project management capability. The report developed by IPM, acknowledged that: *Overall PHMC must be congratulated for the delivery of a common project management framework (PMF) that is robust, appropriate and ready to be employed across the whole of Council.*

One of the most significant risks for Council in achieving Strategic Objectives is the performance of the organisation in delivering projects. Following a review of the report the Committee considers that a maturity level of 3 is the minimum acceptable and requests that the GM come back to the Committee with a suggestion of how this could be achieved. The maturity level rating is a score out of 5 in respect of groups of related processes and concepts bundled together under seven headings. These are:

- Organisational governance
- Management control
- Benefits management
- Stakeholder management
- Risk management
- Financial management
- Resource management

- **Contract Management**

A key element for the successful delivery of projects is the management of contractors engaged to deliver works or services. For contracts valued at more than one million dollars (\$1,000,000), the Infrastructure Delivery section is utilising the industry standard general conditions of contract, GC 21 (edition 2). In May 2017 NSW Public Works Advisory Procurement Consultant Stuart Wood was engaged to prepare an Independent Audit of Council's use of GC21 General Conditions of Contract: Contract Documentation and Contract Management..

The audit found a high level of compliance with the principles, practices and procedures required for the documentation and management of the GC21 due to the sound level of knowledge, skills and experience in the use of GC21 by the Infrastructure Delivery section. The Committee will be reviewing the organisations performance in this area in future reviews.

In reviewing the impact of the risk management framework on its control environment and insurance arrangements the committee has considered the following:

- **WH&S Framework**

The Committee considered a Report on the current status of the WH & S Framework. The Report indicated that a WHS Strategy 2018 – 2021 is currently being developed. This will be provided to the Committee after finalisation.

The committee has also requested that management give consideration to developing a quarterly WHS performance report for consideration by the Committee. The Committee will be reviewing performance in this area in the future.

- **General Insurances Performance Statistic**

The Committee has previously been provided with details of Council's portfolio of insurance policies and the coverage provided. The Committee was satisfied that the portfolio was comprehensive and the report contained trend data on settled claims and premium cost comparisons to previous years. The Committee will further review this area in the future.

In reviewing whether a sound and effective approach has been followed in establishing business continuity planning arrangements, including whether plans have been periodically tested the committee has considered the following:

- **Council Headquarters Disaster Recovery Plan**

The Committee had previously noted that the plan was in place. The plan was considered to be comprehensive and robust and it was intended to undertake a further exercise to test and further improve the plan. Council participated in the Statewide Mutual; Business Continuity Management Review and Gap Analysis Programme in 2016. Part of this programme was a facilitated scenario-based exercise.

The committee will be reviewing the extent that the observations made by the facilitator during the review of the documentation and the execution of the exercise, and the recommendations have been incorporated into the Plan during the coming year.

- **Business Continuity Planning**

The BCM Review and Gap Analysis provided a number of recommendations for improvement to Council's Business Continuity Framework. The committee has now been advised that Echelon Consulting have been engaged to review and improve Council's Business Continuity Framework.

Council engaged with Echelon Risk Management services to develop the Business Continuity Framework. This includes the Business Continuity Plan- Manual, Business Procedure and Divisional Plans. This information is available on the internal website of Council.

A mock trial was conducted in June 2016 to test the Business Continuity documentation.

The committee will be reviewing the results of this project as concerns were previously expressed as to the adequacy of planning in relation to critical functions/processes.

FRAUD CONTROL

In order to effectively manage fraud risks adequate internal controls need to be in place and complied with and that these are periodically reviewed and updated.

In reviewing whether management has in place a current and comprehensive fraud control framework and associated procedures for effective identification and management of fraud risks.

The current Fraud Management Policy was reviewed and no changes were considered necessary. So as to support the policy an external consultant has been engaged to:

- Review and assess the current Fraud Control Framework.
- Develop the Fraud Control Framework.

The Committee will be reviewing the outcome of the consultant's review and assessing the adequacy of the Fraud Control Framework.

This review will take into account the Audit Office of NSW recently released NSW Auditor-General's Report on Fraud Controls in local councils. This is a Performance Audit and contains Key Findings and Recommendations.

In reviewing whether management has taken steps to embed a culture which is committed to ethical and lawful behaviour the committee has considered the following:

The Committee has requested that management advise the Committee of any enquiry or investigation being carried out. This will ensure that the Committee is abreast of issues as they arise and, if necessary, the Committee may request information on the actions being taken to address any underlying governance issues that may be reflected in these inquiries or investigations.

The Committee has also requested that the General Manager report back annually to the Committee on the number and type of enquiries and investigations that were required to be undertaken within Council for the period 1 July to 30 June.

FINANCIAL MANAGEMENT

The Council must be able to demonstrate to all stakeholders that it is continually meeting its legislative requirements and that the information it provides is in accordance with the standards required for external reporting.

In satisfying itself that the annual financial reports comply with applicable Australian Accounting Standards and any other relevant legislation or departmental guidelines and supported by appropriate management sign-off on the statements and the adequacy of internal controls and reviewing the external audit opinion, including whether appropriate action has been taken in response to audit recommendations and adjustments the committee has considered the following:

The Annual Financial Report and Audit Report for the year ended 30 June 2018 were reviewed by the Committee. The reports provided statements by management and the External Auditor that the financial reports complied with applicable Australian Accounting Standards. The External Audit opinion indicated that adequate internal controls were in place and that the financial reports accurately reported the financial performance and financial position of Council for the period.

The Committee was satisfied that management has taken appropriate action in response to audit recommendations.

In considering contentious financial reporting matters in conjunction with Council's management and external auditors the committee has:

The Committee has been regularly updated by management as to the capability of the organisation to meet financial reporting requirements, particularly in relation to assets and has been satisfied that appropriate actions are being taken to ensure that Council is able to meet these requirements. It has been significant to note the progress being made to establish the required data to effectively manage and report on the wide ranging portfolio of assets controlled by Council.

In order to adequately meet the accountability of the Committee in this area a Report has been requested that would provide a framework and timetable to enable the Committee to consider the basis of construction of the Financial Reports, Accounting Policies applicable and Disclosures required in relation to the impact and applicability of Accounting Standards. It is expected that the Committee would be able to review this information prior to the end of financial year ensuring that any input from the Committee would be taken into account in the final preparation of the Financial Reports.

In reviewing the processes in place designed to ensure financial information included in the annual report is consistent with the signed financial statements the committee has considered the following:

The Annual Report for 2018 was reviewed and as far as the Committee are aware it met all the requirements for annual reporting.

GOVERNANCE

The Mayor and Councillors have the overall accountability for the governance of Council. The Council appears to be functioning effectively. The Committee is not aware of any reviews or investigations into the conduct of Council generally, Councillors or staff.

In reviewing whether management has in place relevant policies and procedures, and these are periodically reviewed and updated the committee has considered the following;

The Committee has previously been provided with a detailed schedule of all Council Policies and their status in terms of when the Policy was established and the scheduled date for review. The Committee will undertake a further review of the progress of these reviews during the next period.

During this period the committee has reviewed the following Policies:

- Investment Policy and Strategy
- Risk Management Policy

In progressively reviewing whether appropriate processes are in place to assess whether policies and procedures are complied with and whether appropriate policies and procedures are in place for the management and exercise of delegations the committee has considered the following;

The current and future Internal Audit Plans include a review of compliance with Council Policies and procedures in various areas. The Committee will also review what systems are

in place in regard to compliance with Policies and procedures and management of delegations.

IMPLEMENTATION OF THE COMMUNITY STRATEGIC PLAN, DELIVERY PROGRAM AND STRATEGIES

In progressively reviewing whether management has in place current and comprehensive processes to support the implementation of the Community Strategic Plan, Delivery Program and Strategies the committee has:

During the period covered by this Report the Committee has been provided with the following Reports:

- Quarterly budget review statement and investment reports
- Operational Plan quarterly progress report
- Six monthly Delivery Program 2017 - 2021
- Draft Delivery Program (revised) 2017-2021
- Operational Plan 2019-2020

The committee has noted these reports and has provided various recommendations to management regarding additional information that if provided would improve disclosure of performance of Council in achieving objectives detailed in these plans.

The Committee has recommended to management that future reporting should be progressively improved to incorporate more information on actual performance against targets and trends over time.

SERVICE REVIEWS and PERFORMANCE MEASUREMENT

In reviewing whether management has in place a current and comprehensive service review process the committee has:

Business Improvement Strategy

At the March 2018 Council Meeting the Business Improvement Strategy was adopted. This Strategy focuses on creating a framework for the Business Improvement Office (BIO) to implement a culture of continuous improvement.

BIO over the last quarter has focused on developing a three-year plan on a page that outlines three key areas that will be the focus of efforts including measures to track progress as follows:

- Improvement Culture
- Service Planning & Review
- Building Capability

The Committee has received regular quarterly reporting on the progress made and what work is envisaged for future periods.

The last report indicates that these activities are on target and targets for the ensuing period have been determined.

The Committee has considered a Report on the Customer Experience Project. The reason for the project is to help Council focus on creating an organisation where customers are at the heart of what we do and to work with staff and the community to find out the best way to

do that. Following finalisation of the Customer Experience Plan and recommendations are prioritised and the approach going forward is determined, an engagement plan will be developed to communicate the outcomes, learning and insights will then be shared with the organisation to start the transformational change to being more customer centred.

In satisfying itself there are appropriate mechanisms in place to review and implement, where appropriate, relevant State Government reports and recommendations and satisfying itself that there is a performance management framework linked to organisational objectives and outcomes the Committee has:

Progressively reviewed with management any relevant State Government reports and recommendations.

The reporting against TCorp Performance Indicators has improved considerably and Council has adopted short term targets (1-2 years) as appropriate levels for Council to strive for. The quarterly reporting now compares actual performance against the short- term targets as well as the actual TCorp Indicators.

Section 421B of the Local Government Act gives the Auditor-General the mandate to conduct performance audits. The Auditor-General decides the local government performance audit topics and the councils to be audited. The Auditor-General has released the following initial Performance Audit Reports:

- Development assessment: pre-lodgement & lodgement in Camden Council & Randwick City Council.
- Domestic Waste Management in Campbelltown City Council & Fairfield City Council.

The performance audits have resulted in recommendations for improvement that will be applicable to the whole local government sector. The Auditor-General has indicated that the progress of individual councils in implementing these recommendations will be monitored through Audit, Risk & Improvement Committees.

Committee member Grahame Marchant attended LG NSW Training session for Audit, Risk & Improvement Committees briefing and noted that PMHC is well positioned in terms of Audit Committee related issues and was certainly at the upper end performance of a range of measures relative to the councils present.

PERFORMANCE OF COUNCIL FUNCTIONS

In providing information to the Council for the purpose of improving the Council's performance of its functions the Committee has:

As previously mentioned the committee has reviewed reports on the development and implementation of the suite of documents that comprise the Integrated Planning & Reporting (IP&R) framework. The committee considers that the objectives are well defined but have suggested that council continue to improve the reporting on actual outcomes achieved against the outcomes and objectives contained within the plans.

In this regard the Committee noted that the Office of Local Government has been working on defining measures of performance which can be utilised across local government for some considerable time but are yet to release any guidelines for use by councils.

INTERNAL AUDIT

The internal audit function ensures that the Policies, procedures and processes developed and implemented are effective in managing and controlling the risks that are inherent across all the operations of Council.

In reviewing the internal audit coverage and internal audit plan, whether the plan has considered the Risk Management Plan and approving the plan the committee has considered the following:

- **Strategic Internal Audit Plan 2018-2020**

The Strategic Internal Audit Plan 2018 – 2020 has been adopted by the committee. The plan identified a considerable number of auditable areas and listed them based on the assessed level of risk inherent in each area.

The committee however, determined that this should be a guide to future internal audit activities and has determined to undertake the following reviews for the remainder of 2018 – 2019:

- Safety Management System – Scope finalised and seeking RFQ responses.
- Capital Works Program – Draft Scope developed.
- Building Certification – Draft Scope developed
- Accounts Payable – Timing is being considered in consideration of the Procure to Pay project.

It is unlikely that these reviews will be completed before the end of June 2019 and will be carried over for completion in 2019 - 2020.

The Strategic Internal Audit Plan 2018 – 2020 has identified the following areas for review in 2019 – 2020:

- Development Assessment
- Roads & Stormwater maintenance
- Development engineering
- Water & Sewer Operations
- IT Support & Infrastructure

Given the reviews to be carried over from 2018 – 2019 it is likely that some of the reviews identified above will be carried over to future years.

In considering the adequacy of internal audit resources to carry out its responsibilities, including completion of the approved Internal Audit Plan the committee has considered the following:

- **Internal Audit Function**

The Committee is aware that there is not a separate internal audit function or human resource dedicated to this function. Internal audit is a part of the responsibility of the Group Manager Governance and Procurement. It has been pleasing to note that a budget allocation of \$100,000 has continued to be provided in the 2018-2019 Budget for the operation of the Audit Committee and to fund external resources to undertake specific internal audit projects. This is considered a very positive step in appropriately recognising the importance of and adequately resourcing the internal audit function.

In reviewing all audit reports and considering significant issues identified in audit reports and action taken on issues raised, including identification and dissemination of better practices the committee has considered the following:

- **Internal Audit Reports**

In accordance with the Strategic Audit Plan 2018-2020 the following reviews were undertaken:

- Currency and adequacy of the VPA Policy and process.
- Outsourced management contracts – contractual form, assignment of risk between Council and Contractor, term, performance and compliance

The Committee has considered these reports however, it was not satisfied that the scope for these audits has been met. Further clarification and details were requested from the service provider and the issues raised are currently being duly considered by management for further consideration by the Committee.

The Committee is provided with a report on the status of all outstanding audit report recommendations in order for it to be satisfied that appropriate action is being taken.

The Committee now receives a summary report which indicates the progress that the organisation has made in dealing with the recommendations coming from the various audits. A total of fifteen (15) recommendations have been completed for the 2018-2019 financial year to date with 9 additional recommendations added in this period. Thirty (30) audit recommendations remain outstanding, fifteen (15) of which are overdue by 18 months or greater from the original completion due date.

The actions required to deal with the recommendations would appear to be a matter of competing priorities and the Committee has recommended that consideration be given to using Council's risk matrix to determine the risk rating on internal audit actions in future and higher risk matters be dealt with as a priority.

- **Internal Audit Scopes**

The Committee is invited to provide input to the Internal Audit Scope as they are developed for the various review projects.

In periodically reviewing the performance of Internal Audit the committee has considered the following:

- **Internal Audit Key Performance Indicators**

The Committee has endorsed a number of Key Performance Indicators to provide measures of the progress of completion and the effectiveness of the internal audit function. These indicators are as follows:

- Number of audits scheduled
- Number of audits completed by agreed due date
- Percentage of audit plan delivered during the year
- Cost of audits completed against budget allocated (%)
- Number of audit recommendations accepted
- Number of audit recommendations implemented
- Number of audit recommendations to be completed from previous reporting periods
- Percentage of the audit plan aligned to major corporate risks.

The Committee has been provided with progress reporting against these indicators and is satisfied that performance of internal audit has been satisfactory during the period.

EXTERNAL AUDIT

In providing input and feedback on the financial statement and performance audit coverage proposed by external audit, and providing feedback on the external audit services provided the committee has considered the following:

- **Annual Financial Report and Audit Report for year ended 30 June 2018**

The Committee reviewed the Annual Financial Reports and Engagement Closing Report for the year ended 30 June 2018 at its November 2018 meeting. A representative of the Audit Office of NSW and Kevin Franey of Thomas Noble Russell addressed the meeting and provided further information on the reports to the Committee.

The Management Letter on the Final Phase of the Audit for the Year Ended 30th June 2018 issued by the Audit Office was considered by the committee at its February meeting. The Management letter lists matters identified throughout the course of their audit with recommendations provided by the Auditor for improvement. These recommendations were responded to by Management and will be addressed as per timeframes noted in the letter. The Committee is satisfied that the issues raised in the Audit Report and Management Letter are being addressed by management.

In reviewing all external plans and reports in respect of planned or completed external audits and monitoring the implementation of audit recommendations by management the committee has considered the following:

- **Audit Office – Annual Engagement Plan 2019**

The Audit Office – Annual Engagement Plan for the year ending 30th June 2019 was considered by the Committee and the Committee received a presentation from Reiky Jiang, Engagement Director-Audit Office and Lead Partner Kevin Franey from Thomas Noble & Russell. The Committee considered that the Plan was comprehensive and clearly set out the role of the external auditor and Council in the preparation and certification of the Annual Financial Reports.

The Annual Engagement Plan identified a number of significant entity level issues and risks that may impact on the audit as follows:

- Assessing the Fair Value of Infrastructure Property, Plant & Equipment
- Quality & timeliness of financial reporting
- Information Technology General Controls
- Completeness and accuracy of Crown Land
- New Accounting Standards
- Management & Use of Credit Cards

Other key issues are:

- Capital expenditure
- Procurement and Contract management Risk
- Capital grants & contributions
- Developer Contributions

Management has confirmed to the Committee that planning and actions have been undertaken to ensure that these risks are addressed and the financial statements will be prepared in compliance with the relevant Accounting Standards. Given the timeline requirements set out in the plan the Committee has recommended that consideration be given to appropriate resourcing to ensure that Council can continue to meet its legislative requirements in terms of financial reporting.

SUMMARY

The Committee is confident that it is progressively addressing its role and responsibilities as defined in the Charter and has been effective in providing advice and assistance to Council and management in order to improve the governance of Council and its capacity to deliver on its objectives for service provision to the community. The Committee has endorsed a Forward Plan which is aimed at supporting the committee in completing their responsibilities (as per the charter) and to enable Council to plan resources effectively relating to the committee.

The committee considers that the performance of PMHC in the areas relevant to the charter of the AR & I Committee is of a high standard.

Grahame Marchant
Chairman

For and on behalf of the Members of the Audit, Risk & Improvement Committee
8 July 2019



Local Government Grants Commission

5 O'Keefe Avenue NOWRA NSW 2541
Locked Bag 3015 NOWRA NSW 2541

Our Reference: A658479
Contact: Helen Pearce
(02) 4428 4131
helen.pearce@olg.nsw.gov.au

Mr Craig Swift-McNair
General Manager
Port Macquarie-Hastings Council

By email: craig.swift-mcnair@pmhc.nsw.gov.au
Cc: council@pmhc.nsw.gov.au

22 August 2019

Dear Mr Swift-McNair

In accordance with the Commission's policy of providing information to councils about the way it calculates financial assistance grants (FAGs), please find attached a summary of Council's 2019-20 estimated FAG entitlement (**Appendix A**).

The national figure for 2019-20 was made up of \$1,757 billion for the general purpose component and \$780 million for the local roads component. The estimated entitlement for 2018-19 reduced by \$5.6 million for final adjustments to CPI and population shares.

The general purpose component was distributed across the States on a population basis. NSW received 32% or \$562 million, which represents a 3.9% increase on last year's figure.

The local roads component is based on a historical formula. NSW's share of the total road funding is a fixed 29% share, or \$226 million, which was in line with the previous year. The total, then, for NSW was \$788 million.

The Council's 2019-20 FAG estimated entitlement compared to 2018-19 final entitlement is as follows:

Port Macquarie-Hastings Council				
Year	General Purpose	Local Roads	Total	
2018-19 final	\$6,285,005	\$2,872,411	\$9,157,416	Change
2019-20 est.	\$6,449,088	\$3,018,625	\$9,467,713	3.4%

To assist councils with budgeting and bank reconciliations, a breakdown of the 2019-20 quarterly instalments is attached (**Appendix A**). The NSW Statement of Payments is also attached (**Appendix B**).

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As councils will be aware, the Commission is required to adhere to the National Principles which mandate a per capita payment based on population growth/decline. It is also the policy of the NSW Government to explore opportunities to direct grants to communities with the greatest relative need. In allocating the grants the Commission has had regard to these policies.

A key challenge for the Commission continues to be the Commonwealth's request to apply the minimum per capita grant, which has a significant impact on the ability of the Commission to redirect funding. The map contained in **Appendix D** identifies the rate of population change in NSW from 2006 to 2016. **Appendix D** also lists the revised expenditure categories, disability factors, data sources used in calculating the expenditure allowance and the relative disability allowance.

In addition to these calculations, in its 2019 Budget, the Federal Government decided to retain the practice of forward payments of approximately half of the financial assistance grants based on the 2018-19 estimates for payment. Councils, therefore, received approximately 52 percent of their estimated 2019-20 FAGs on 18 June 2019. The remainder of the grant entitlements will be paid in quarterly instalments in August 2019, November 2019, February 2020 and May 2020.

SPECIAL SUBMISSIONS RELATING TO 2020-21 GRANTS

Special submissions from councils for 2020-21 will be considered by the Commission. The purpose of a submission is to give councils the opportunity to present information on the financial impact of inherent expenditure disabilities beyond councils' control that are not generally recognised in the current methodology. Please refer to the expenditure functions and Council's disability factors listed in **Appendix A**. This process allows the Commission to adequately consider all legitimate factors that affect councils' capacity to deliver services.

Appendix C, titled *Guidelines for Special Submissions*, contains guidelines for preparing submissions – please read the guidelines carefully.

Submissions should be e-mailed to the Commission at olg@olg.nsw.gov.au by **30 November 2019**.

I would ask that this letter please be tabled at the next Council meeting.

If you have any questions concerning these matters please contact me on (02) 4428 4131.

Yours sincerely



Helen Pearce
Executive Officer

APPENDIX A
LOCAL GOVERNMENT GRANTS COMMISSION 2019-20 FINANCIAL ASSISTANCE GRANTS

Port Macquarie-Hastings Council

General Purpose Component

Expenditure Allowance

Expenditure Functions	State ave cost per capita
Recreation and cultural	\$210.51
Admin and governance	\$248.52
Education and community	\$63.17
Roads, bridges, footpaths and aerodromes	\$204.68
Public order, safety, health and other	\$162.62
Housing amenity	\$69.42

Recreation and cultural			Pop <SS = relative disadvantage Pop >SS = 0 ATSI <SS = 0 ATSI >SS = relative disadvantage
Disability Measure	LGA measure	State Std (SS)	Weighted DF%
Population	83,131	62,400	0.0%
Aboriginal & Torres Strait Islander	4.0%	2.9%	4.0%

Admin and governance			
Disability Measure	LGA measure	State Std	Weighted DF%
Population	83,131	62,400	0.0%

Education and community			
Disability Measure	LGA measure	State Std	Weighted DF%
Population	83,131	62,400	0.0%

Roads, bridges, footpaths and aerodromes			
Disability Measure	LGA measure	State Std	Weighted DF%
Population	83,131	62,400	0.0%
Road Length	1,254	1,148	3.7%

Public order, safety, health and other			RTD <SS = 0 RTD >SS = relative disadvantage Env <SS = 0 Env >SS = relative disadvantage
Disability Measure	LGA measure	State Std	Weighted DF%
Population	83,131	62,400	0.0%
Rainfall, topography and drainage index	188%	161%	9.9%
Environment (Ha of environmental lands)	91,089	54,087	1.9%

Housing amenity			
Disability Measure	LGA Std	State Std	Weighted DF%
Population	83,131	62,400	0.0%

Isolation Allowance

Outside the Greater Statistical Area	Yes
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APPENDIX A

LOCAL GOVERNMENT GRANTS COMMISSION 2019-20 FINANCIAL ASSISTANCE GRANTS

Pensioner Rebate Allowance

PR <SS = relative disadvantage (+ allowance)	
PR >SS = relative advantage (- allowance)	
LGA % Pensioner Rebates (PR) Res Props:	29.1%
State Standard (SS) % PR	15.8%

Revenue Allowance

Revenue Allowance	
CV <SS = relative disadvantage (+ allowance)	
CV >SS = relative advantage (- allowance)	
No. of Urban Properties:	35,607
Standard Value Per Property:	\$449,458
Council Value (CV):	\$232,362

No. of Non-urban Properties:	1,191
Standard Value Per Property:	\$640,070
Council Value (CV):	\$473,688

Relative Disadvantage Allowance

Unsealed roads; Isolation; Population Decline	\$3,193
Special Submission	-

Total General Purpose Grant	\$6,449,088
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Local Roads Component

Population:	83,131
Local Road Length (km):	1,254
Length of Bridges on Local Roads (m):	4,813

Road/Population Allowance:	\$2,607,958
Bridge Length Allowance:	\$410,667
Local Roads Total:	\$3,018,625

Total Grant	\$9,467,713
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Quarterly Instalments Payable in 2019-20 for 2019-20 FAGs

	August 2019	
GPC	\$796,165	
LRC	\$367,073	\$1,163,238
	November 2019	
GPC	\$796,165	
LRC	\$367,073	\$1,163,238
	February 2020	
GPC	\$796,165	
LRC	\$367,073	\$1,163,238
	May 2020	
GPC	\$796,165	
LRC	\$367,073	\$1,163,238
	TOTAL	
GPC	\$3,184,659	
LRC	\$1,468,291	\$4,652,950

Appendix B Financial Assistance Grants - Schedule of Payments 2019-20												
Councils	2019-20 Recommended General Purpose Entitlement	2019-20 Recommended Local Roads Entitlement	2019-20 Recommended Total Entitlement	2018-19 General Purpose CPI/Pop Adjustment	2018-19 Local Roads CPI/Pop Adjustment	2018-19 Total CPI/Pop Adjustment	2019-20 General Purpose Advance Payment	2019-20 Local Roads Advance Payment	2019-20 Total Advance Payment	2019-20 General Purpose Payments	2019-20 Local Roads Payments	2019-20 Total Payments
Albury (C)	53,767	5,066,127	5,119,894	(35,431)	(11,034)	(46,465)	2,528,685	729,222	3,257,907	2,502,011	718,597	3,220,608
Armidale Regional	30,707	4,352,742	4,383,449	(29,783)	(19,199)	(48,982)	2,204,948	1,266,598	3,471,546	2,118,012	1,225,911	3,343,923
Ballina (S)	44,208	3,191,859	3,236,067	(21,949)	(10,988)	(32,937)	1,603,505	735,353	2,338,858	1,566,406	714,731	2,281,136
Bairnsdale (S)	2,340	2,877,838	2,880,178	(18,948)	(10,407)	(29,355)	1,408,363	683,772	2,092,135	1,450,527	667,386	2,117,913
Bathurst Regional	43,206	4,468,198	4,511,404	(31,246)	(15,600)	(46,847)	2,230,931	1,028,931	3,259,862	2,206,020	1,001,132	3,207,152
Bayside	174,378	3,677,564	4,855,942	(25,195)	(9,214)	(34,409)	1,904,427	617,552	2,521,979	1,747,942	551,530	2,299,473
Bega Valley (S)	34,348	5,259,640	5,293,988	(36,300)	(15,268)	(51,568)	2,627,236	999,025	3,626,261	2,596,103	976,911	3,573,014
Bellingen (S)	12,963	2,927,070	2,939,999	(19,783)	(7,430)	(27,213)	1,477,341	485,107	1,962,448	1,429,947	479,812	1,909,759
Berrigan (S)	8,707	3,488,747	3,497,454	(23,577)	(10,964)	(34,542)	1,752,053	726,327	2,478,380	1,713,117	700,516	2,413,632
Blacktown (C)	366,534	13,408,926	13,775,460	(96,225)	(26,724)	(122,949)	6,863,072	1,780,391	8,643,463	6,449,628	1,732,493	8,182,122
Bland (S)	5,985	4,789,741	4,795,726	(32,555)	(12,715)	(45,270)	2,379,119	1,511,412	3,890,531	2,378,067	1,488,491	3,866,558
Blayney (S)	7,342	1,877,962	1,885,304	(12,715)	(6,713)	(19,428)	950,736	445,162	1,395,898	914,512	422,486	1,336,997
Blue Mountains (C)	79,260	7,565,620	7,644,880	(52,942)	(10,860)	(63,802)	3,776,084	708,984	4,485,068	3,736,594	685,477	4,422,071
Bogan (S)	2,621	2,807,240	2,809,861	(18,637)	(11,389)	(30,026)	1,393,612	746,040	2,139,652	1,394,992	731,858	2,126,849
Bourke (S)	2,630	4,204,703	4,207,333	(27,639)	(14,992)	(42,631)	2,042,324	985,781	3,028,105	2,134,740	958,957	3,093,697
Brewarrina (S)	1,655	2,920,286	2,921,936	(18,573)	(10,253)	(28,826)	1,391,563	672,600	2,064,163	1,510,150	657,903	2,168,053
Broken Hill (C)	17,734	4,476,652	4,494,386	(29,891)	(3,881)	(33,771)	2,250,595	248,680	2,499,275	2,196,166	251,965	2,448,131
Burwood	39,866	847,957	887,823	(5,796)	(2,114)	(7,910)	443,789	142,742	586,531	398,372	130,700	529,072
Byron (S)	34,574	2,060,215	2,094,790	(13,996)	(9,122)	(23,118)	1,039,055	603,533	1,642,588	1,007,164	600,493	1,607,657
Cabonne	13,680	2,983,319	2,996,999	(20,229)	(16,165)	(36,394)	1,510,341	1,060,481	2,570,822	1,452,749	1,037,673	2,490,422
Camden	94,159	2,429,878	2,524,037	(17,437)	(10,929)	(28,366)	1,223,855	753,684	1,977,539	1,188,585	771,904	1,960,489
Campbelltown (C)	188,139	8,220,832	8,408,971	(58,994)	(13,823)	(72,817)	4,140,581	917,651	5,058,232	4,021,256	929,409	4,950,665
Canada Bay (C)	95,159	2,006,866	2,102,022	(13,887)	(5,043)	(18,930)	1,030,963	334,540	1,365,503	962,016	316,114	1,278,130
Canterbury-Bankstown	373,931	8,218,435	8,592,366	(25,075)	(18,201)	(43,276)	4,139,373	1,380,120	5,519,493	4,020,085	1,333,528	5,353,613
Carrahoon (S)	2,802	3,774,146	3,776,920	(25,075)	(18,201)	(43,276)	1,846,684	1,200,390	3,047,074	1,902,387	1,162,459	3,064,846
Central Coast	342,047	21,675,943	21,922,886	(151,683)	(34,634)	(186,317)	10,818,555	2,267,960	13,086,515	10,705,705	2,204,031	12,909,736
Central Darling (S)	1,837	4,152,482	4,154,319	(27,282)	(12,517)	(39,799)	2,016,294	821,124	2,837,418	2,108,906	803,828	2,912,734
Cessnock (C)	59,101	5,613,146	5,672,252	(39,240)	(13,312)	(52,552)	2,802,088	882,504	3,684,592	2,771,818	876,534	3,648,352
Clarence Valley	51,647	7,779,443	7,831,086	(54,305)	(25,631)	(79,937)	3,884,773	1,668,233	5,553,006	3,840,365	1,666,749	5,507,114
Cobar (S)	4,722	4,211,204	4,215,915	(28,497)	(13,559)	(42,057)	2,090,744	889,310	2,980,054	2,091,963	870,599	2,962,562
Coffs Harbour (C)	76,551	5,368,426	5,444,977	(37,546)	(17,269)	(54,815)	2,679,612	1,150,674	3,830,286	2,651,268	1,105,709	3,756,977
Coolamon (S)	4,368	2,511,380	2,515,748	(16,953)	(9,651)	(26,605)	1,271,326	634,480	1,905,806	1,223,101	617,418	1,840,518
Coonamble (S)	4,014	2,721,240	2,725,254	(17,997)	(11,618)	(29,615)	1,382,220	762,826	2,145,046	1,321,023	744,508	2,065,531
Cootamundra-Gundagai Regional	11,260	3,780,849	3,792,109	(25,599)	(12,314)	(37,913)	1,902,139	808,402	2,710,541	1,853,111	789,835	2,642,945
Cowra (S)	12,767	3,305,679	3,318,448	(22,367)	(11,438)	(33,805)	1,675,480	753,514	2,428,994	1,607,832	726,747	2,334,579
Cumberland	236,893	6,396,130	6,632,260	(45,900)	(12,989)	(58,889)	3,523,298	861,764	4,385,062	2,826,932	910,005	3,736,936
Dubbo Regional	53,240	8,181,369	8,234,610	(57,041)	(26,820)	(83,860)	4,079,353	1,768,746	5,848,099	4,044,975	1,652,233	5,697,208
Dungog (S)	9,346	1,751,210	1,760,556	(11,861)	(7,182)	(19,044)	885,406	471,184	1,356,590	853,943	467,274	1,321,216
Edward River	8,995	4,111,465	4,116,460	(27,831)	(12,035)	(39,866)	2,068,103	791,582	2,859,685	2,015,532	762,629	2,778,162
Eurobodalla (S)	38,268	5,460,389	5,498,657	(37,823)	(12,986)	(50,809)	2,716,017	853,795	3,569,812	2,706,549	834,269	3,540,819
Fairfield (C)	210,612	7,414,047	7,624,664	(53,205)	(13,539)	(66,744)	3,734,228	884,758	4,618,986	3,286,614	860,633	4,487,247
Federation	12,462	4,782,221	4,794,703	(32,408)	(17,449)	(49,857)	2,363,418	1,145,833	3,509,251	2,386,395	1,119,217	3,505,612
Forbes (S)	9,910	3,593,378	3,603,290	(24,257)	(15,276)	(39,533)	1,822,881	1,005,063	2,827,944	1,746,240	979,264	2,724,504
Georges River	158,411	3,340,826	3,499,242	(8,822)	(1,171,314)	(1,180,136)	1,731,865	587,674	2,319,539	1,585,814	574,865	2,160,679
Gilgandra (S)	4,226	2,627,015	2,631,241	(17,466)	(10,976)	(28,442)	1,324,849	720,939	2,045,788	1,284,700	650,676	1,935,376
Glen Innes Severn	8,908	2,892,010	2,900,918	(19,497)	(10,901)	(30,397)	1,463,658	717,982	2,181,640	1,408,856	697,346	2,106,202
Goulburn Mulwaree	30,852	3,483,270	3,514,122	(23,783)	(13,430)	(37,213)	1,752,275	879,368	2,631,643	1,707,212	862,282	2,569,494

Appendix B Financial Assistance Grants - Schedule of Payments 2019-20													
Councils	Population 30/6/2018	2019-20 Recommended General Purpose Entitlement	2019-20 Recommended Local Roads Entitlement	2019-20 Recommended Total Entitlement	2018-19 General Purpose CPI/Pop Adjustment	2018-19 Local Roads CPI/Pop Adjustment	2018-19 Total CPI/Pop Adjustment	2019-20 General Purpose Advance Payment	2019-20 Local Roads Advance Payment	2019-20 Total Advance Payment	2019-20 General Purpose Payments	2019-20 Local Roads Payments	2019-20 Total Payments
Greater Hume (S)	10,686	3,365,495	2,117,426	5,482,921	(27,275)	(16,170)	(38,946)	1,705,276	1,066,753	2,772,029	1,637,444	1,034,503	2,671,946
Griffith (C)	26,882	4,026,350	1,687,694	5,714,044	(22,775)	(12,878)	(40,103)	2,032,547	851,083	2,883,630	1,966,578	823,733	2,790,311
Gunnedah (S)	12,661	3,056,621	1,650,702	4,707,323	(20,681)	(12,585)	(33,266)	1,547,330	825,500	2,372,830	1,488,610	812,617	2,301,227
Gwydir (S)	5,349	2,837,140	1,918,827	4,755,967	(19,009)	(14,772)	(33,781)	1,447,523	973,671	2,421,194	1,370,608	930,384	2,300,992
Hawkesbury (C)	67,083	2,703,428	1,765,985	4,469,413	(19,394)	(13,590)	(33,984)	1,361,983	891,538	2,253,521	1,322,051	860,857	2,182,908
Hay (S)	2,979	2,280,561	831,311	3,111,872	(14,600)	(6,356)	(20,955)	1,137,225	418,042	1,555,267	1,128,737	406,913	1,535,650
Hills (S)	172,473	3,637,431	1,970,843	5,608,274	(24,754)	(14,928)	(39,682)	1,798,086	936,252	2,734,338	1,814,591	1,019,663	2,834,254
Hilltops	18,782	5,381,114	2,867,441	8,248,555	(36,886)	(22,128)	(59,013)	2,717,748	1,453,702	4,171,450	2,826,481	1,391,611	4,018,092
Hornsby (S)	150,752	3,179,340	1,414,364	4,593,704	(22,082)	(10,890)	(32,972)	1,557,864	659,195	2,217,059	1,599,394	744,279	2,343,673
Hunters Hill (M)	14,909	331,297	150,780	482,077	(2,264)	(1,161)	(3,426)	167,038	75,474	242,512	161,995	74,145	236,140
Inner West	198,024	4,176,249	1,389,253	5,565,502	(28,869)	(10,706)	(39,575)	2,043,251	707,015	2,750,266	2,104,129	671,532	2,775,661
Inverell (S)	16,844	4,062,707	2,116,346	6,179,053	(27,502)	(16,183)	(43,685)	2,054,548	1,061,896	3,116,444	1,980,657	1,038,267	3,018,924
Junee (S)	6,631	2,003,825	957,233	2,961,058	(13,574)	(7,346)	(20,920)	1,014,509	487,786	1,502,275	975,742	462,121	1,437,863
Kempsey (S)	29,665	4,355,340	1,902,833	6,258,173	(29,675)	(14,496)	(44,171)	2,195,386	950,422	3,145,808	2,130,279	937,915	3,068,194
Kiama (M)	23,006	1,213,421	509,653	1,723,074	(8,257)	(4,040)	(12,297)	611,856	267,451	879,307	593,308	238,162	831,470
Ku-ring-gai	126,046	2,658,261	1,146,468	3,804,729	(18,490)	(8,832)	(27,312)	1,329,827	577,012	1,906,839	1,309,954	560,624	1,870,577
Kyogle	8,870	2,896,900	1,669,788	4,566,688	(19,424)	(12,797)	(32,221)	1,466,150	829,557	2,295,707	1,411,325	827,434	2,238,760
Lachlan (S)	6,151	5,985,676	3,478,114	9,463,790	(40,473)	(26,595)	(67,068)	1,744,617	4,701,812	6,446,429	2,968,008	1,706,902	4,674,910
Lake Macquarie (C)	204,914	13,690,940	2,851,728	16,542,668	(95,801)	(21,896)	(117,696)	6,833,230	1,439,892	8,273,122	6,761,910	1,389,940	8,151,850
Lane Cove (M)	39,486	839,515	293,321	1,132,836	(5,738)	(2,251)	(7,990)	430,022	150,010	580,032	403,754	141,060	544,814
Leeton (S)	11,438	3,419,640	1,071,754	4,491,394	(22,989)	(8,201)	(31,190)	1,732,143	536,842	2,268,985	1,664,508	526,711	2,191,219
Lismore (C)	43,843	4,436,886	2,006,928	6,443,814	(31,007)	(15,346)	(46,353)	2,216,107	1,000,582	3,216,689	2,189,772	991,000	3,180,772
Lithgow (C)	21,636	3,596,596	1,301,468	4,898,064	(24,487)	(9,956)	(34,442)	1,814,971	655,620	2,470,591	1,757,138	635,892	2,393,030
Liverpool (C)	223,304	6,511,545	2,350,399	8,861,944	(46,728)	(17,876)	(64,604)	3,279,671	1,190,902	4,470,573	3,185,146	1,141,621	4,326,766
Liverpool Plains (S)	7,893	2,490,174	1,417,142	3,907,316	(16,772)	(10,830)	(27,602)	1,264,322	713,437	1,977,759	1,209,079	692,875	1,901,954
Lockhart (S)	3,295	2,295,712	1,384,699	3,680,411	(15,513)	(10,578)	(26,091)	1,174,095	696,690	1,870,785	1,106,104	677,431	1,783,535
Lord Howe Island (Bd)	382	223,671		223,671	(1,544)		(1,544)	112,306		112,306	109,821		109,821
Maitland (C)	83,203	5,717,386	1,433,446	7,150,832	(40,002)	(10,905)	(50,907)	2,853,610	731,451	3,585,061	2,823,774	691,090	3,514,864
Mid-Coast	93,288	12,705,810	5,526,157	18,231,967	(88,590)	(42,388)	(130,977)	6,344,471	2,794,608	9,139,079	6,272,749	2,689,161	8,961,910
Mid-Western Regional	25,086	4,209,025	2,510,132	6,719,157	(28,530)	(19,066)	(47,596)	2,126,327	1,259,407	3,385,734	2,054,168	1,231,659	3,285,827
Moree Plains (S)	13,350	5,054,157	2,964,405	8,018,562	(34,493)	(22,676)	(57,170)	2,602,272	1,487,267	4,089,539	2,417,392	1,454,462	3,871,853
Mosman (M)	30,877	684,021	243,424	927,445	(4,675)	(1,872)	(6,548)	344,878	120,768	465,646	334,468	120,784	455,251
Murray River	12,118	5,504,940	3,068,785	8,573,725	(37,773)	(23,263)	(61,036)	2,775,344	1,532,628	4,307,972	2,891,823	1,512,894	4,204,718
Murrumbidgee (new)	3,961	2,944,030	1,680,292	4,624,322	(19,683)	(12,595)	(32,278)	1,481,708	827,193	2,308,901	1,442,639	840,504	2,283,143
Muswellbrook (S)	16,383	2,681,570	942,125	3,623,695	(18,219)	(7,221)	(25,439)	1,352,578	466,550	1,819,128	1,310,773	468,354	1,779,127
Nambucca (S)	19,773	2,852,768	1,258,135	4,110,903	(19,395)	(9,607)	(29,002)	1,439,919	633,292	2,073,211	1,393,453	615,236	2,008,690
Narrabri (S)	13,231	5,023,867	2,415,321	7,439,178	(34,454)	(18,432)	(52,886)	2,548,876	1,209,233	3,758,109	2,440,527	1,187,656	3,628,183
Narrandera (S)	5,931	3,325,526	1,629,434	4,954,960	(22,564)	(12,462)	(35,025)	1,687,685	819,741	2,507,426	1,615,278	797,231	2,412,509
Narramine (S)	6,567	3,039,368	1,486,392	4,525,760	(20,552)	(11,366)	(31,918)	1,546,795	745,380	2,292,175	1,472,021	729,646	2,201,667
Newcastle (C)	164,104	10,706,691	1,861,001	12,567,692	(74,918)	(14,325)	(89,243)	5,258,589	929,327	6,187,916	5,373,184	917,349	6,290,533
North Sydney	74,172	1,564,258	495,418	2,059,676	(10,813)	(3,806)	(14,619)	768,688	246,348	1,015,036	784,758	245,264	1,030,022
Northern Beaches	271,278	5,721,159	2,273,884	7,995,043	(39,857)	(17,722)	(57,579)	2,856,974	1,154,879	4,011,853	2,824,327	1,101,283	3,925,610
Oberon	5,408	1,844,326	983,339	2,827,665	(12,414)	(7,303)	(19,718)	937,670	472,797	1,410,467	894,242	503,239	1,397,480
Orange (C)	42,056	3,551,817	1,197,534	4,749,351	(24,384)	(9,006)	(33,390)	2,190,239	588,658	2,778,897	1,755,206	599,870	2,355,076
Parkees (S)	14,894	4,348,689	2,184,118	6,532,807	(29,486)	(16,713)	(46,199)	2,190,239	1,118,076	3,308,315	2,128,963	1,049,329	3,178,292
Parramatta (C) (new)	251,311	7,320,693	2,055,144	9,375,837	(52,535)	(16,023)	(68,557)	3,687,208	1,057,803	4,745,011	3,580,951	981,318	4,562,269
Penrith (C)	209,210	8,503,888	2,484,120	10,988,008	(61,026)	(19,020)	(80,046)	4,283,151	1,251,137	5,534,288	4,159,712	1,213,963	5,373,674

Appendix B Financial Assistance Grants - Schedule of Payments 2019-20													
Councils	Population 30/6/2018	2019-20 Recommended General Purpose Entitlement	2019-20 Recommended Local Roads Entitlement	2019-20 Recommended Total Entitlement	2018-19 General Purpose CPI/Pop Adjustment	2018-19 Local Roads CPI/Pop Adjustment	2018-19 Total CPI/Pop Adjustment	2019-20 General Purpose Advance Payment	2019-20 Local Roads Advance Payment	2019-20 Total Advance Payment	2019-20 General Purpose Payments	2019-20 Local Roads Payments	2019-20 Total Payments
Port Macquarie-Hastings	83,131	6,449,088	3,018,625	9,467,713	(45,107)	(22,823)	(67,930)	3,219,322	1,527,511	4,746,833	3,184,659	1,468,291	4,652,950
Port Stephens	72,695	5,509,349	1,274,355	6,783,704	(38,522)	(9,752)	(48,275)	2,749,936	642,669	3,392,605	2,720,891	621,934	3,342,824
Queanbeyan-Palerang Regional	59,959	3,706,001	2,531,328	6,237,329	(25,871)	(19,088)	(44,959)	1,850,907	1,270,033	3,120,940	1,829,223	1,242,207	3,071,430
Randwick (C)	154,265	3,253,389	1,003,405	4,256,794	(22,489)	(7,708)	(30,197)	1,658,909	509,797	2,168,706	1,571,991	485,900	2,057,890
Richmond Valley	23,369	3,600,758	1,633,678	5,234,436	(24,521)	(12,522)	(37,043)	1,817,435	820,912	2,638,347	1,755,802	800,244	2,559,046
Ryde (C)	127,446	2,687,786	964,529	3,652,315	(18,465)	(7,393)	(25,859)	1,378,388	491,456	1,869,844	1,290,933	465,680	1,756,613
Shellharbour (C)	72,240	4,355,314	952,504	5,307,818	(30,474)	(7,086)	(37,559)	2,173,783	470,677	2,644,460	2,151,057	474,741	2,625,798
Shoalhaven (C)	104,371	9,059,428	3,509,316	12,568,744	(63,366)	(26,762)	(90,128)	4,521,889	1,777,425	6,299,314	4,474,154	1,705,129	6,179,283
Silverton (VC)	50	34,657		34,657	(239)		(239)	18,102		18,102	16,315		16,315
Singleton	23,422	2,510,186	1,329,121	3,839,307	(17,096)	(10,195)	(27,292)	1,265,350	668,360	1,933,710	1,227,739	650,566	1,878,305
Snowy Monaro Regional	20,733	6,907,224	2,864,370	9,771,594	(47,777)	(21,795)	(69,571)	3,452,796	1,431,679	4,884,475	3,406,652	1,410,896	4,817,548
Snowy Valleys	14,532	4,453,487	1,429,975	5,883,462	(30,216)	(10,893)	(41,109)	2,222,575	712,645	2,935,220	2,200,696	706,437	2,907,133
Strathfield (M)	45,143	952,048	305,245	1,257,293	(6,449)	(2,319)	(8,768)	490,006	155,945	645,951	455,593	146,981	602,574
Sutherland (S)	229,213	4,834,013	2,084,278	6,918,291	(33,598)	(16,070)	(49,668)	2,400,798	1,049,690	3,450,488	2,399,617	1,018,518	3,418,135
Sydney (C)	240,229	5,066,336	1,417,819	6,484,155	(34,507)	(10,815)	(45,322)	2,712,287	746,011	3,458,298	2,319,542	660,993	2,980,535
Tamworth Regional	62,156	6,351,276	4,356,160	10,707,436	(44,382)	(33,143)	(77,525)	3,180,209	2,177,608	5,357,817	3,126,685	2,145,409	5,272,094
Temora (S)	6,274	2,374,965	1,352,112	3,727,077	(15,937)	(10,320)	(26,257)	1,211,371	727,063	1,938,434	1,147,657	614,729	1,762,386
Tenterfield (S)	6,638	3,275,266	1,707,011	4,982,277	(21,981)	(13,049)	(35,030)	1,665,071	854,589	2,519,660	1,588,214	839,373	2,427,587
Tibooburra (VC)	134	77,825		77,825	(537)		(537)	39,076		39,076	38,212		38,212
Tweed (S)	96,108	7,900,412	2,981,043	10,881,455	(55,224)	(22,672)	(77,896)	3,943,515	1,495,310	5,438,825	3,901,673	1,463,061	5,364,734
Upper Hunter (S)	14,220	3,173,364	2,010,175	5,183,539	(21,433)	(15,374)	(36,807)	1,606,539	1,009,153	2,615,692	1,545,392	985,648	2,531,040
Upper Lachlan (S)	7,961	2,927,203	1,967,013	4,894,216	(19,724)	(15,032)	(34,756)	1,467,473	987,139	2,454,612	1,420,006	964,842	2,384,848
Uralla (S)	6,062	1,678,468	973,076	2,651,544	(11,311)	(7,448)	(18,759)	852,954	476,095	1,329,049	814,204	489,533	1,303,736
Wagga Wagga (C)	64,820	7,150,326	3,360,046	10,510,372	(49,994)	(25,623)	(75,617)	3,570,280	1,685,979	5,256,259	3,530,053	1,648,444	5,178,497
Walcha	3,132	1,468,799	973,087	2,441,886	(9,550)	(7,394)	(16,945)	742,622	488,526	1,231,148	716,626	477,167	1,193,793
Walgett (S)	6,051	4,599,728	2,016,451	6,616,179	(31,005)	(15,439)	(46,444)	2,315,482	1,010,839	3,326,321	2,253,241	990,173	3,243,414
Warren (S)	2,745	1,911,821	1,070,616	2,982,437	(12,611)	(8,187)	(20,798)	985,020	537,248	1,522,268	914,190	525,181	1,439,371
Warumbungle (S)	9,399	4,780,546	2,538,036	7,318,582	(32,640)	(19,409)	(52,048)	2,416,894	1,273,482	3,690,376	2,331,012	1,245,145	3,576,157
Waverley	74,114	1,563,035	451,394	2,014,429	(10,827)	(3,471)	(14,298)	772,440	224,815	997,255	779,768	223,108	1,002,876
Weddin (S)	3,636	1,796,288	1,038,745	2,835,033	(11,934)	(7,938)	(19,872)	921,517	521,772	1,443,289	862,837	509,035	1,371,872
Wentworth (S)	7,042	4,303,337	2,090,032	6,393,369	(29,610)	(15,971)	(45,581)	2,161,824	1,050,606	3,212,430	2,111,904	1,023,455	3,135,359
Willoughby (C)	80,339	1,694,318	607,230	2,301,548	(11,774)	(4,692)	(16,466)	861,285	308,705	1,169,990	821,259	293,833	1,115,092
Wingecarribee (S)	50,493	3,255,506	1,950,855	5,206,361	(22,682)	(14,794)	(37,476)	1,625,706	979,911	2,605,617	1,607,118	956,150	2,563,267
Wollondilly (S)	52,230	2,437,124	1,415,390	3,852,514	(17,052)	(10,906)	(27,958)	1,216,510	719,369	1,935,879	1,203,562	685,115	1,888,676
Wollongong (C)	216,071	16,434,444	2,506,622	18,941,066	(115,002)	(19,254)	(134,256)	8,202,491	1,263,613	9,466,104	8,116,951	1,223,755	9,340,706
Woolahra (M)	58,964	1,243,528	443,433	1,686,961	(8,712)	(3,433)	(12,146)	612,546	221,271	833,817	622,269	218,729	840,998
Yass Valley	16,953	1,754,665	1,405,685	3,160,350	(11,873)	(10,711)	(22,584)	887,554	705,625	1,593,179	855,237	689,349	1,544,587
	7,987,727	561,526,802	226,201,773	787,728,575	(3,876,847)	(1,721,405)	(5,604,252)	282,220,097	113,692,045	395,912,142	275,429,858	110,782,323	386,212,181

APPENDIX C**LOCAL GOVERNMENT GRANTS COMMISSION
GUIDELINES FOR SPECIAL SUBMISSIONS IN RELATION TO THE 2020-21 GRANTS**

1. GENERAL

All submissions **must** be consistent with the principles which have been adopted by the Commission. The principles are attached in **Table 1**.

Information in the submissions must relate to the year ended 30 June 2019, in order to be compatible with the Grants Commission's **Return of General Information** for that year (for the 2020-21 grant calculations).

Only operational costs should be included; capital costs are to be excluded.

Submissions should be based only on *inherent* disabilities and problems, which are outside a council's control. **Additional costs that result from deliberate policy decisions made by councils to provide a higher than average standard of service are not considered disabilities.**

Information provided on disabilities should be brief and the costing estimates of the disabilities should be as accurate as is practicable.

If you have further question, then please contact:
Helen Pearce on (02) 4428 4131 or by email at helen.pearce@olg.nsw.gov.au

Submissions should be e-mailed to the Commission at olg@olg.nsw.gov.au as soon as possible, but no later than **30 November 2019**.

APPENDIX C**LOCAL GOVERNMENT GRANTS COMMISSION
GUIDELINES FOR SPECIAL SUBMISSIONS IN RELATION TO THE 2020-21 GRANTS**

2. EXPENDITURE DISABILITIES**(a) Content**

The details of the Commission's expenditure calculations for Council's area are enclosed (See **Appendix A**). This information should be used in assessing whether to make a submission on expenditure disabilities; that is, in assessing whether the particular disabilities of Council's area are **already recognised** in the formula. If council believes that disabilities **other than those currently identified by the formula** have an impact on the cost of providing services, then this should be substantiated in the submission.

Similarly, if council believes that the impact of any disability already identified by the Commission is greater than indicated, then the case should be argued in the submission. Please refer to Table 2 for the basic format for a special submission. Details of the expenditure items considered, the council functions and disability measures can be found in **Appendix D**.

APPENDIX C**LOCAL GOVERNMENT GRANTS COMMISSION
GUIDELINES FOR SPECIAL SUBMISSIONS IN RELATION TO THE 2020-21 GRANTS**

(b) Required Format

Table 2 shows the **REQUIRED FORMAT** for submissions on expenditure disabilities. Submissions should be **brief** and include:

- (1) the function affected (using the Commission's functional heading);
- (2) a **brief** description of the disability;
- (3) a **brief** account of the action taken to deal with that disability;
- (4) the **estimated additional cost** impact of that action.

Where a disability factor affects costs across a number of council functions, separate details should be used showing the cost impact in each function area.

(c) Outcome

Where the Commission recognises an additional disability raised in a submission beyond the measures recognised, an adjustment will be made as an "other" category.

Where an additional disability is recognised which has an impact on a number of councils, the methodology will be adjusted and *all councils* will be affected according to the extent of the relevant disability.

3. REVENUE DISABILITIES

While the approved principles generally bind the Commission's operation in this area, councils may wish to comment on the current methodology if it is considered that these unfairly disadvantage them.

It should be noted that non-rateable properties are taken into consideration in the Commission's calculation automatically. The loss of revenue from non-rateable properties does not need to be specified in the submission.

APPENDIX C**LOCAL GOVERNMENT GRANTS COMMISSION
GUIDELINES FOR SPECIAL SUBMISSIONS IN RELATION TO THE 2020-21 GRANTS**

TABLE 1**APPROVED PRINCIPLES**

1. general purpose grants to local governing bodies will be allocated as far as practicable on a full equalisation basis as defined in the *Local Government (Financial Assistance) Act 1995*; that is a basis which attempts to compensate local governing bodies for differences in expenditure required in the performance of their functions and in their capacity to raise revenue.
2. the assessment of revenue and expenditure allowances of local governing bodies will, as far as is practicable, be independent of the policy or practices of those bodies in raising revenue and the provision of services.
3. revenue raising capacity will primarily be determined on the basis of property values; positive and negative allowances relative to average standards may be calculated.
4. revenue allowances may be discounted to achieve equilibrium with expenditure allowances.
5. generally for each expenditure function an allowance will be determined using operational cost; both positive and negative allowances relative to average standards may be calculated.
6. expenditure allowances will be discounted to take account of specific purpose grants.
7. additional costs associated with non-resident use of services and facilities will be recognised in determining expenditure allowances.

APPENDIX C

LOCAL GOVERNMENT GRANTS COMMISSION
GUIDELINES FOR SPECIAL SUBMISSIONS IN RELATION TO THE 2020-21 GRANTS

TABLE 2

**REQUIRED FORMAT FOR SUBMISSIONS ON
EXPENDITURE DISABILITIES**

Function:

Disability:

Description and Response:

Cost Impact:

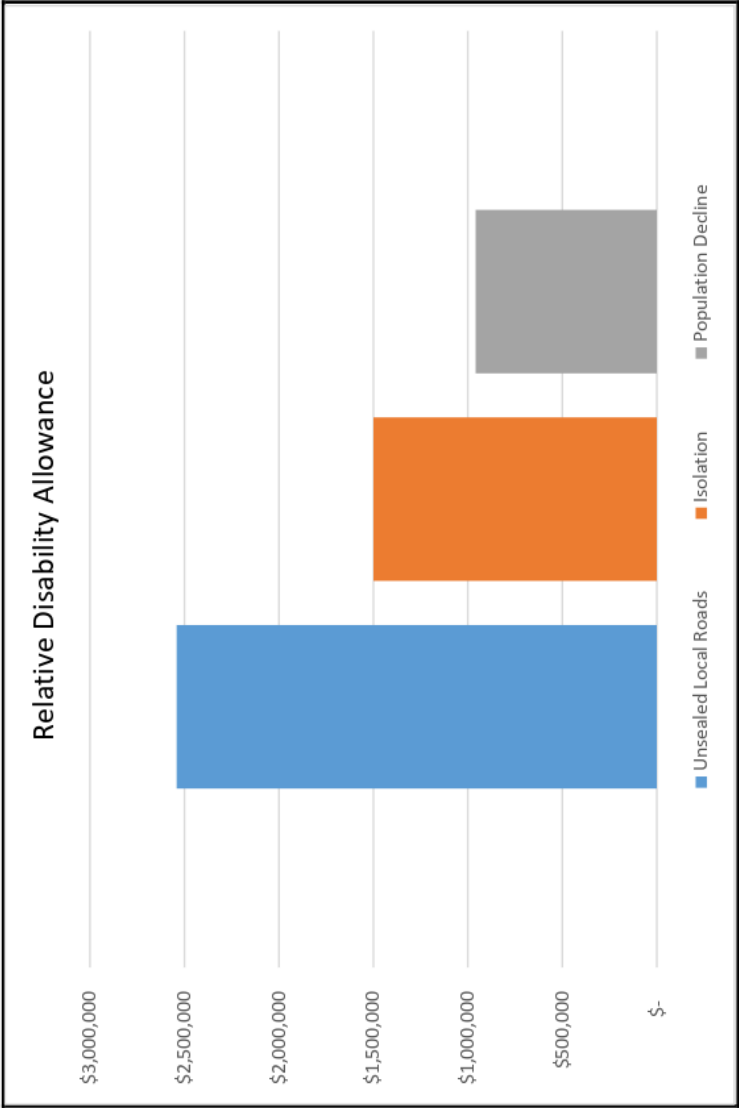
APPENDIX D
LOCAL GOVERNMENT GRANTS COMMISSION
2019-20 FINANCIAL ASSISTANCE GRANTS

Expenditure Categories with Expenditure Items Listed Below (Expenditure Items Source – Financial Data Return – Special Schedule 1)					
Recreation & cultural	Administration & governance	Community amenity	Community services & education	Roads, bridges & footpaths	Public order, safety, health & other
Museums	Administration	Public Cemeteries	Admin & Education	Aerodromes	Animal Containment
Art Galleries	Governance	Public Toilets	Children's Services	Urban Roads Local	Fire Service Levy
Communities Centres & Halls		Town Planning	Aged and Disabled	Sealed Rural Roads Local	Noxious Plants & Insects
Performing Arts Venues		Street Lighting	Social Protection	Unsealed Rural Roads Local	Environment Protection
Other Sport & Recreation				Bridges on Urban Roads Local	Stormwater Management
Other Performing Arts				Bridges on Sealed Rural Roads Local	Urban Storm Drainage
Public Libraries				Bridges on Unsealed Rural Roads Local	Other
Swimming Pools				Footpaths	Health
Sporting Grounds				Parking Areas	Enforcement of Regulations
Parks and Gardens					Beach Control
					Building Control
					Street Cleaning

APPENDIX D
LOCAL GOVERNMENT GRANTS COMMISSION
2019-20 FINANCIAL ASSISTANCE GRANTS

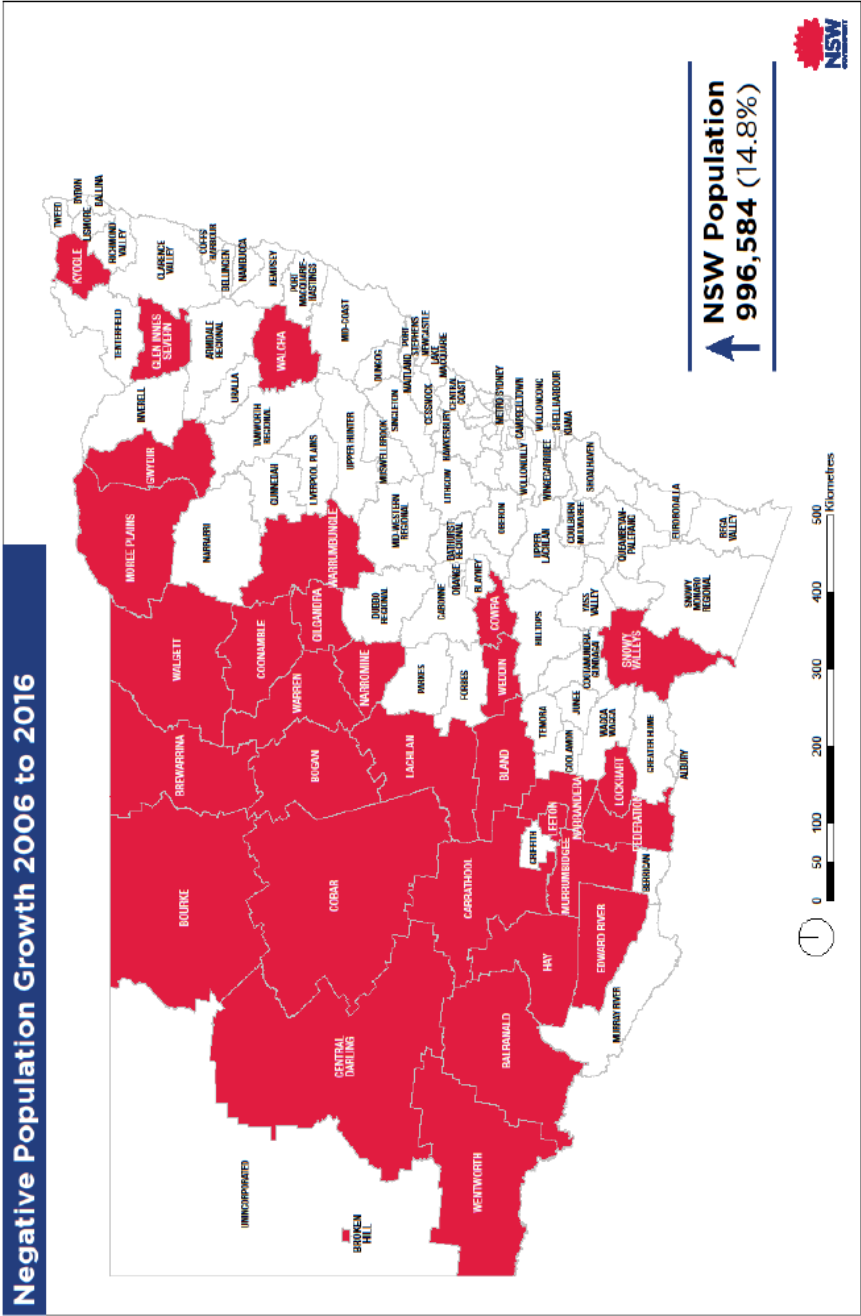
Expenditure Disability Factors		
Disability Factor	Description	Data Source
Population Size	Number of people residing in local government area. The more people in community, the cheaper it is to provide resources per person. This suggests compensation for councils with smaller populations	ABS 3218.0 Regional Population Growth Australia, Estimated Resident Population (released 27 March 2019).
ATSI	Proportion of residents identified as Aboriginal and Torres Strait Islander.	ABS 2075.0 Census of Population and Housing - Counts of Aboriginal and Torres Strait Islander Australians, 2016 (released 05.12.18).
Road Length	Kilometres of road within a local government area.	Data provided by OLG, based on data supplied by each local council FYE 2018
Environment	Hectares of environmental land (hectares of conservation and natural environment, water and inland water bodies).	ABS - LAND AND ENVIRONMENT, Local Government Area, 2011-2017 (released 8 November 2018).
Rainfall, topography and drainage index	An index that measures variation in the cost of construction and maintenance of stormwater drainage based on a number of considerations.	Data provided by OLG, Independent Consultants, 1987, Stormwater Drainage Return.

APPENDIX D
LOCAL GOVERNMENT GRANTS COMMISSION
2019-20 FINANCIAL ASSISTANCE GRANTS



Five million dollars of the CPI increase was apportioned to councils with greatest relative disadvantage on the basis of unsealed local roads, isolation and population decline.

APPENDIX D
LOCAL GOVERNMENT GRANTS COMMISSION
2019-20 FINANCIAL ASSISTANCE GRANTS



Red indicates population decline in NSW from 2006-2016.

BUDGET VARIATIONS - August 2019									
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to 31 August 2019	New Yearly Proposed Budget - August 2019	Effect on Funding Position
Adjustments which impact Council's Budget Position									
Council will receive a grant for \$125,477 from the State Government to assist in paying the increase in the emergency services levy this financial year.									
Infrastructure	11520	Emergency Services Levy Income	Operating	Infrastructure	0	0	0	125,477	-125,477 Revenue
Total adjustments which impact Council's Budget Position									-125,477
Reserve Movements									
Budget adjustment to cover costs associated with the collection of hazardous waste at the Kingfisher Waste Transfer Station and the collection of community sharp bins throughout the LGA.									
Waste	740	Hazardous Waste Disposal	Operating	Waste	0	0	4,771	30,000	-30,000 Revenue
Waste	9400	Transfer To Reserve - Waste	Operating		-489,900	-489,900	0	-519,900	30,000 Revenue
Total Reserve Movements									30,000
Contributions and Other Revenues									
Council will receive \$50,000 in Co-operative Marketing Income for the Eat, See Do Visitors Guide									
Destination Marketing	10660	Tourism Marketing Income	Operating	Strategy & Growth	-567,400	-567,400	-536,333	-617,400	50,000 Revenue
Destination Marketing	19480	Trf To Economic Development Reserve	Operating		0	-190,000	0	-140,000	-50,000 Revenue
Total contributions and other revenues received									50,000
									0

BUDGET VARIATIONS - August 2019										
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to 31 August 2019	New Yearly Proposed Budget - August 2019	Funding Source	EFFECT ON FUNDING POSITION
Budget Variation Requests - Approved by Executive										
This new Grants Officer role seeks to capitalise on the wide range of funding available via State and Federal Governments to maximise Council's opportunities through these channels.										
Economic Development	187.3765	Salaries & Wages	Operating	Strategy & Growth	330,370	330,370	20,920	278,213	52,157 Revenue	52,157
Asset Management	335.3765	Salaries & Wages	Operating		856,107	856,107	127,050	908,264	-52,157 Revenue	-52,157
Total Budget Variations approved by Executive									52,157	0
ORGANISATIONAL TOTAL - THIS REVIEW										
FORECAST FOR FINANCIAL YEAR ENDED 30 JUNE 2020										
Original Budget as at 1 July 2019										
Plus: Adjustments										
July Review										
August Review										
FORECAST FOR 30 JUNE 2020										
Notes:	1	The result shown above is the general fund result. All surpluses/deficits in the water, sewerage and waste funds are transferred to/from reserves.								
	2	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 credited/debited to that reserve.								
	3	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.								
		Contributions - Contributions are non-reciprocal transfers to Council in the sense that Council is not required to give value in exchange for the contributions directly to the contributor. Examples are contributions given by ratepayers towards capital works in their vicinity.								
		Reserves - Reserves 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 credited/debited to that reserve.								
		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.								
	4	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.								



Monthly Investment Report

August 2019

 IMPERIUM MARKETS	<p>Level 14, 5 Martin Place Sydney, NSW 2000 Website: https://www.imperium.markets Email: michael.chandra@imperium.markets Phone: +61 2 9053 2987 ABN: 87 616 579 527 ACN: 616 579 527 AFSL No. 429718 (Authorised Representative) Holder of an <u>Australian Market Licence</u></p>
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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 31/08/2019	1m (actual)	1m (% p.a.)	FYTD (actual)	FYTD (% p.a.)
AusBond Bank Bill Index	0.08%	0.99%	0.20%	1.20%
Council's Portfolio[^]	0.24%	2.92%	0.49%	2.93%
Outperformance	0.16%	1.93%	0.29%	1.73%

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

Council's Portfolio

Asset Allocation

The entire portfolio is directed to fixed term deposits (93.91%) and the cash account with Westpac (6.09%). Should credit securities become more attractive relative to deposits, we would consider introducing liquid senior floating rate notes (FRNs) into the portfolio. This will not only offer additional upside with regards to the portfolio's investment returns, but also provide additional liquidity (FRNs are saleable – generally accessible within 2 business days). FRNs are also dominated by the higher rated ADIs which allows Council to maintain a bias towards to the higher rated banks.

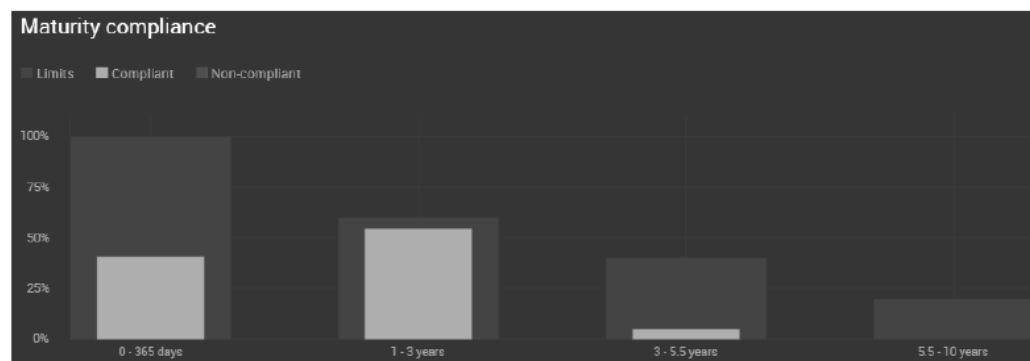
With further rate cuts on the horizon over the next 6-12 months, the priority should be to lock in any attractive medium-longer dated fixed deposits that may be available.





Term to Maturity

All maturity limits (minimum and maximum) comply with the Investment Policy. Medium-Term (3-5 years) assets account for around 8% of the total investment portfolio, with capacity of around \$93m at month-end.



Where there is (counterparty) capacity to invest in attractive 3-5½ year investments, we recommend this be allocated to new senior FRN issues and fixed or floating rate term deposits (refer to respective sections below).

Compliant	Horizon	Invested (\$)	Invested (%)	Min. Limit (%)	Max. Limit (%)	Available (\$)
✓	0 – 365 days	\$118,829,856	40.58%	0%	100%	\$174,000,000
✓	1 – 3 years	\$159,000,000	54.30%	0%	60%	\$16,697,914
✓	3 – 5.5 years	\$15,000,000	5.12%	0%	40%	\$102,131,942
✓	5.5 – 10 years	\$0	0.00%	0%	20%	\$58,565,971
		\$292,829,856	100.00%			



Counterparty

As at the end of August, 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	Issuer	Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
✓	NAB	AA-	\$49,000,000	16.73%	30.00%	\$38,848,957
✓	WBC (St George)	AA-	\$86,829,856	29.65%	30.00%	\$1,019,101
✓	Rabobank	A+	\$13,000,000	4.44%	20.00%	\$45,565,971
✓	ICBC Sydney	A	\$52,000,000	17.76%	20.00%	\$6,565,971
✓	ING Bank Aus.	A	\$33,000,000	11.27%	20.00%	\$25,565,971
✓	AMP Bank	BBB+	\$5,000,000	1.71%	10.00%	\$24,282,986
✓	BOQ	BBB+	\$26,000,000	8.88%	10.00%	\$3,282,986
✓	Bendigo	BBB+	\$2,000,000	0.68%	10.00%	\$27,282,986
✓	Auswide	BBB	\$5,000,000	1.71%	10.00%	\$24,282,986
✓	ME Bank	BBB	\$2,000,000	0.68%	10.00%	\$27,282,986
✓	Newcastle PBS	BBB	\$19,000,000	6.49%	10.00%	\$10,282,986
			\$292,829,856	100.00%		

On 27th August, AMP Bank was downgraded by ratings agency S&P to BBB+ (negative watch), from A- (negative watch). Their short-term rating was unchanged at A-2. This was a result of AMP Group selling its life insurance arm at a revised deal earlier in the month. S&P believed that the group's profits will be less diversified going forward due to this sale. We have no issues with Council's exposure to AMP Bank given they continue to have a robust balance sheet with their level of capital remaining above the minimum regulatory requirement set by APRA.

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 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.

APRA's Chairman affirmed that the banks had satisfactorily moved towards an '*unquestionably strong*' capital position and that bank's stress testing contingency plans were now far better positioned than was previously the case years ago. APRA's stress test which hypothetically increased the unemployment rate to 11% (more than double the current rate) and for house prices to fall 35% showed the banks remained above the minimum capital levels. We note that APRA's latest discussion paper also highlighted that the domestic major banks were required to raise more capital while the lower rated ADIs were already deemed to be at a satisfactory level.

Overall, the lower rated ADIs (BBB and unrated) are generally now in a better financial position than 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 ADIs continue to carry high levels of capital, particularly amongst the lower (“BBB”) and unrated ADIs. There is minimal (if any) probability of any ADI defaulting on their deposits going forward – this was stress tested during the GFC.

The biggest single risk that depositors face in the current low interest rate environment is not credit risk, but reinvestment risk.





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, then AMP Bank in August 2019, which are all now in the "BBB" rated category.

There is also still capacity to invest with the "BBB" rated ADIs following the adoption of a new policy.

Given the large number of "BBB" rated ADIs issuing deposits currently in the market (and conversely, the low number of "A" or higher rated ADIs), we suggest Council direct new funds into this sector, where attractive. We note that it is within this category where the most value is currently experienced. The difference in pricing can amount up to 10-20bp on any day.

All ratings categories are within the Policy limits:

Compliant	Credit Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
✓	AA Category	\$135,829,856	46.39%	100%	\$157,000,000
✓	A Category	\$98,000,000	33.47%	60%	\$77,697,914
✓	BBB Category	\$59,000,000	20.15%	30%	\$28,848,957
✓	Unrated ADIs	\$0	0.00%	10%	\$29,282,986
		\$292,829,856	100.00%		



Performance

Council's performance for the month ending 31 August 2019 is summarised as follows:

Performance	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.08%	0.27%	0.65%	0.17%	1.39%
AusBond Bank Bill Index	0.08%	0.34%	0.82%	0.20%	1.82%
Council's Portfolio[^]	0.24%	0.73%	1.48%	0.49%	2.99%
Outperformance	0.16%	0.40%	0.66%	0.29%	1.17%

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

For the month of August, the deposit portfolio provided a solid return of +0.24% (actual), outperforming the benchmark AusBond Bank Bill Index return by +0.16% (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 deposit portfolio returned +2.99% p.a., outperforming bank bills by 1.17% p.a. and more than double the official cash rate of 1.39%. 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 \$500,000 in additional interest income compared to its peers. 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 71 individual deposits PMHC held, 29 are still yielding higher than 3.00% p.a. That is, around 41% of outstanding deposits held is earning an interest rate that is three times the prevailing cash rate of 1.00%.

Investors using the Imperium Markets platform have reduced the invisible costs associated with brokerage, and thereby lift client portfolio returns as investors are able to deal in deposits directly with the ADIs and execute at the best price possible. Council has experienced this over the past 18 months, receiving on average, 2-4bp higher for every deposit dealt on the platform.



Council's Term Deposit Portfolio & Recommendation

As at the end of August 2019, Council's deposit portfolio was yielding 2.88% p.a. (down 6bp from the previous month), with an average duration of ~1½ 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 7¼% to the current historical low levels of 1.00% (potentially lower over coming months).

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 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. Another interest rate cut is currently factored in over coming months.**

At the time of writing (early September), we see value in:

ADI	LT Credit Rating	Term	T/D Rate
BoQ	BBB+	5 years	2.00% p.a.
BoQ	BBB+	4 years	1.90% p.a.
AMP Bank	BBB+	2-4 years	^1.90% p.a.
Judo Bank	Unrated ADI	2 years	~1.90% p.a.
BoQ	BBB+	3 years	1.80% p.a.
Auswide Bank	BBB	3-5 years	~1.80% p.a.
Auswide Bank	BBB	1½ - 2 years	~1.75% p.a.
BoQ	BBB+	2 years	1.70% p.a.
Australian Military Bank	Unrated ADI	2 years	~1.70% p.a.

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



For those investors that have capacity issues with the “BBB” and unrated ADI sector, we see value in:

ADI	LT Credit Rating	Term	T/D Rate
ICBC, Sydney Branch	A	2 years	~1.62% p.a.
Westpac	AA-	2 years	~1.50% p.a.
Macquarie Bank	A	2 years	1.50% p.a.

The above deposits are suitable for investors looking to provide some income protection and mitigate reinvestment/rollover risk in the low interest rate environment, and particularly with further interest rate cuts imminent on the horizon.

For terms under 12 months, we believe the strongest value is currently being offered by a number of lower and unrated ADIs offering above-market specials (dependent on daily funding requirements):

ADI	LT Credit Rating	Term	T/D Rate
AMP Bank	BBB+	6 months	^2.20% p.a.
Judo Bank	Unrated ADI	6 months	2.10% p.a.
Judo Bank	Unrated ADI	12 months	2.05% p.a.
AMP Bank	BBB+	7-12 months	^2.00% p.a.
Judo Bank	Unrated ADI	9 months	2.00% p.a.
BoQ	BBB+	6 months	1.70% p.a.
Auswide Bank (rollovers only)	BBB	3 months	1.70% p.a.
ME Bank	BBB	3-5 months	1.70% p.a.
ME Bank	BBB	6 months	1.67% p.a.
Australian Military Bank	Unrated ADI	6 months	1.65% p.a.
ME Bank	BBB	7-12 months	1.65% 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
Macquarie Bank	A	3-4 months	1.85% p.a.
Macquarie Bank	A	6 months	1.80% p.a.
Macquarie Bank	A	9 months	1.65% p.a.
Westpac	AA-	12 months	~1.58% p.a.
NAB	AA-	12 months	1.55% p.a.
CBA	AA-	12 months	1.55% p.a.



Senior FRNs & Recommendations

Over August, amongst the senior major bank FRNs, physical credit securities parred back some of their gains experienced in July. During the month, ANZ (AA-) launched a dual 3 and 5 year senior FRN at +58bp and +77bp respectively, which we thought was offered at fair value compared to secondary market equivalents.

Those investors that require liquidity with a domestic major bank (highly rated) and can roll down the curve should invest in 5 year terms over 3 year terms (or shorter), given the ability to lock in capital gains as early as two years after being launched. **The grossed up return would be closer to around +105-110bp over a 2 year holding period in a relatively stable credit environment.**

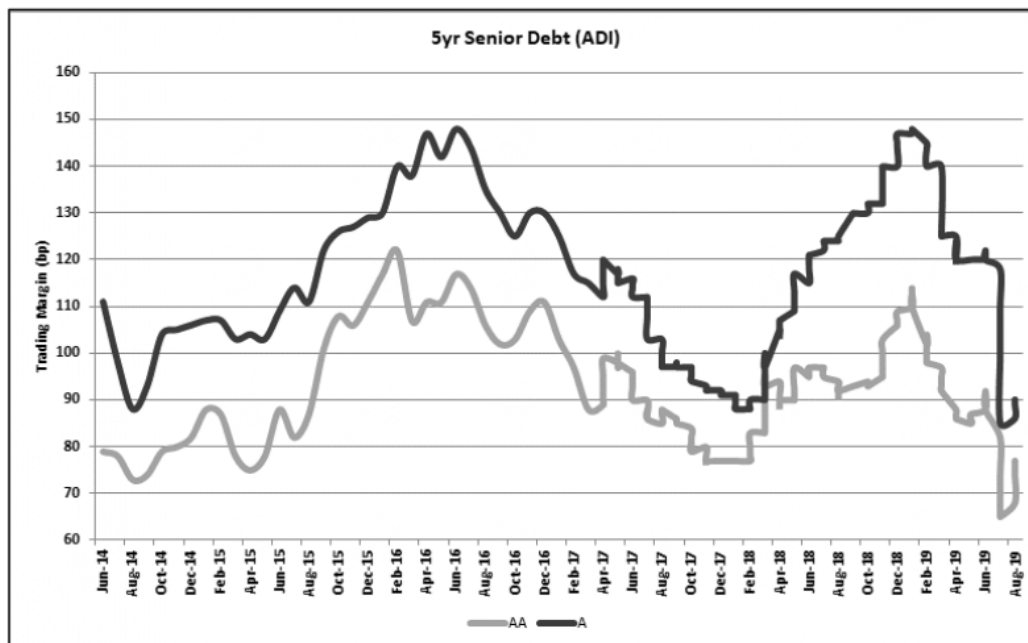
Collectively over the month, the "A" rated cohort widened between 5-7bp over the month, following the broad widening in credit assets. At month-end, Suncorp (A+) printed \$350m of a 1 year deal at +40bp, reflecting the tight credit conditions.

There was also activity in the "BBB" rated regional bank space, with a new 5 year 'benchmark' issue launched by Bendigo-Adelaide Bank (BBB+) at +97bp, printing \$500m, which was below their initial target size of \$750m. For the month, the "BBB" rated sector widened by around 15bp at the 3 year part of the curve.

Overall, credit remains tight on a historical basis, reaching their levels last experienced approximately 4 years ago. With a further rate cut priced in over coming months, any medium-longer-dated fixed deposits offered above +100bp should be considered. 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)	31/08/2019	31/07/2019
"AA" rated – 5yrs	+77bp	+65bp
"AA" rated – 3yrs	+57bp	+45bp
"A" rated – 5yrs	+90bp	+85bp
"A" rated – 3yrs	+72bp	+65bp
"BBB" rated – 3yrs	+97bp	+82bp

Source: IBS Capital



Source: IBS Capital

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

- On or before 2022 for the "AA" rated ADIs (domestic major banks);
- On or before 2020 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, Council put in a bid of \$3m into the new Bendigo (BBB+) 5 year FRN at +97bp, which settles in early September. 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.

At this stage, we prioritise medium-longer dated deposits (2-5 years) given further rate cuts are factored in over coming months.



Economic Commentary

International Market

Volatility returned to global financial markets over August as **recessionary fears, political instability and the ongoing trade wars drove sentiment. The US and UK 2yr/10yr yield curve spreads inverted for the first time since 2007** and the 30-year US bond yield touched a record low at 1.94%. Inversion in the 2/10s spread has preceded each of the last five US recessions.

Global equity markets finally parred back some of their gains in August. **In the US, the S&P 500 Index fell -1.81%**, while the NASDAQ dropped -2.60%. Across Europe, the main economies also fell, led by UK's FTSE Index (-5.00%), Germany's DAX (-2.05%) and France's CAC (-0.70%).

Trade tensions escalated after US President Trump announced tariffs could go **"well beyond" 25%**. **China then announced it would impose new tariffs on \$75 billion worth of US goods**. The retaliatory tariffs came after Trump surprisingly ended a trade war cease-fire by threatening to impose 10% tariffs on another \$300 billion of Chinese goods.

US CPI printed higher than expected in July with core inflation at +0.3% m/m against +0.2% expected. The US unemployment rate held steady at 3.7% in July (expectations of 3.6%), driven by higher participation to 63.0% from 62.9%.

Eurozone Q2 GDP came in at +0.2% for the quarter, with the annual rate down to +1.1% from +1.2%. Headline CPI fell to +1.1% from +1.3%, while core CPI fell to +0.9% from +1.1%.

The Bank of England (BoE) kept rates unchanged at 0.75% but downgraded their growth forecasts to +1.3% in 2019 from +1.5%, and for 2020 to +1.3% from +1.6%. **The UK economy contracted by -0.2% over the June quarter**, with the annual rate dropping to +1.2% (from +1.8%). It was the first quarterly decline since 2012 and before then the GFC.

The UK plunged closer to a constitutional crisis after PM Johnson suspended parliament for five weeks starting from September 12-14 to October 14, in lead up to the October 31 Brexit date.

The 66th Italian government collapsed during the month, following an attack by independent MP Giuseppe Conte on coalition partner Matteo Salvini, the deputy PM and leader of the far-right, anti-immigration League party.

The RBNZ cut interest rates by 50bp to 1% rather than the anticipated 25bp movement. This was then followed by an easing by India of 35bp and Thailand by 25bp.

Chinese profits kept alive global growth fears with Industrial Profits -3.1% y/y, well down from the previous month's +1.1% y/y. China's annual industrial production growth came in at 4.8%, down from 6.3% in June, which was a mere 0.2% seasonally adjusted monthly rise, the weakest since mid-2015.



The MSCI World ex-AUS fell -2.17% for the month of August.

Index	1m	3m	1yr	3yr	5yr	10yr
S&P 500 Index	-1.81%	+6.84%	+0.86%	+10.47%	+7.87%	+11.11%
MSCI World ex-AUS	-2.17%	+4.61%	-1.67%	+7.66%	+4.34%	+7.19%
S&P ASX 200 Accum. Index	-2.36%	+4.23%	+9.04%	+11.38%	+7.90%	+8.61%

Source: S&P, MSCI

Domestic Market

After two successive rate cuts, the RBA kept interest rates unchanged at 1.00% in its meeting in August. The Board remains on an explicit easing bias, noting they “will continue to monitor developments in the labour market closely and ease monetary policy further if needed” (previously “adjust monetary policy if needed”). The RBA remains cautiously optimistic about growth and now thinks it will take longer to return to their 2-3% inflationary target band (forecasted to return in 2021).

Governor Lowe commented on the headwinds of mounting political uncertainty saying, “we are experiencing a period of major political shocks” citing developments in the US, Brexit, Hong Kong, Italy and elsewhere, suggesting “political shocks are turning into economic shocks”.

The CPI rose by +0.6% in Q2 after holding steady in Q1. Annual inflation picked up from +1.3% to +1.6%. The trimmed mean CPI, which is the RBA’s preferred measure of underlying inflation, rose by +0.4% in Q2 after a +0.3% rise in Q1. Annual core inflation was unchanged at +1.6%, marginally above the multi-decade low of +1.5% reached in 2016.

The trade surplus rose to a new record \$8.0bn in June, exceed expectations of \$6.0bn. Exports rose 1% on increased sales of bulk commodities, while imports declined 4%, suggesting domestic demand remains weak.

The wage price index rose by +0.6% in Q2 after a +0.5% increase in Q1, with annual growth unchanged at +2.3%. The rise matched the RBA’s recently-downgraded forecast. Quarterly growth has ranged between +0.5 and +0.6% for almost three years now, suggesting annualised growth remains stuck at a low +2¼%.

The unemployment rate came in at 5.2% in July, unchanged for the fourth consecutive month as employment grew by a much stronger-than-expected +41k. While the ongoing strength in employment will be reassuring for the RBA, these data suggest that spare capacity remains in the labour market given the RBA estimates the NAIRU at 4.5%. Meanwhile the underemployment rate ticked up +0.2% to 8.4% as more part-time workers wanted longer hours of work.

There were more signs of stabilisation in the domestic housing market with the preliminary auction clearance rate at its highest level in over two years at 76.6%.

The Australian dollar slid another -2½% this month, reaching multi-year lows, finishing at US67.18 cents (from US68.94 cents the previous month).



Credit Market

The main global credit indices marginally tightened over August despite the 'risk-off' environment. Credit spreads remain very tight on a historical basis (trading around early 2018 levels):

Index	August 2019	July 2019
CDX North American 5yr CDS	54bp	55bp
iTraxx Europe 5yr CDS	49bp	50bp
iTraxx Australia 5yr CDS	64bp	59bp

Source: Markit

Fixed Interest Review

Benchmark Index Returns

Index	August 2019	July 2019
Bloomberg AusBond Bank Bill Index (0+YR)	+0.08%	+0.12%
Bloomberg AusBond Composite Bond Index (0+YR)	+1.51%	+0.95%
Bloomberg AusBond Credit FRN Index (0+YR)	-0.04%	+0.46%
Bloomberg AusBond Credit Index (0+YR)	+0.87%	+1.02%
Bloomberg AusBond Treasury Index (0+YR)	+1.95%	+0.96%
Bloomberg AusBond Inflation Gov't Index (0+YR)	+0.56%	+1.55%

Source: Bloomberg

Other Key Rates

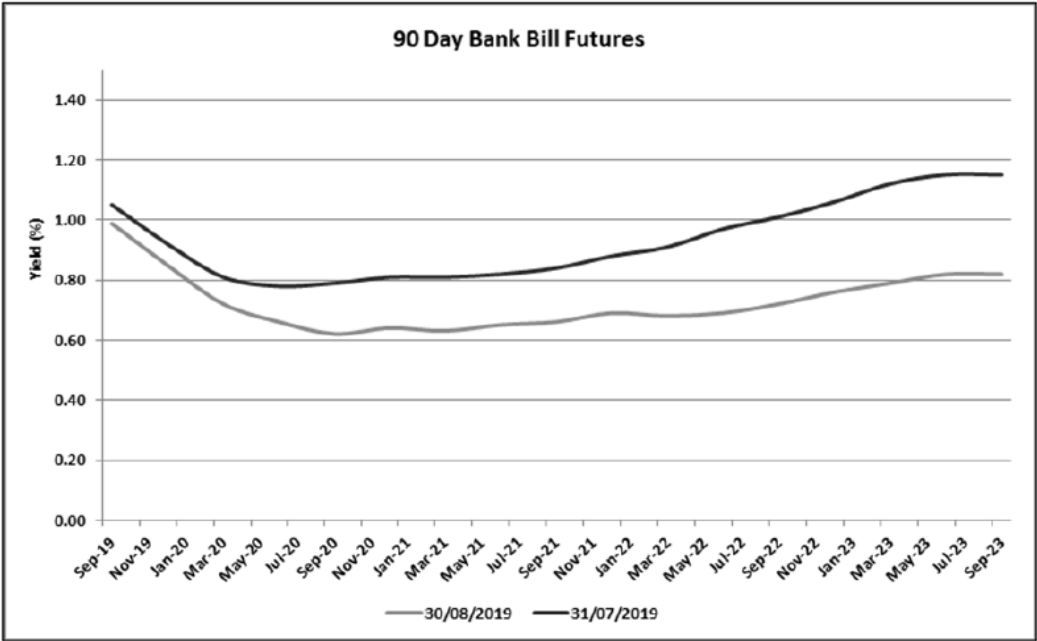
Index	August 2019	July 2019
RBA Official Cash Rate	1.00%	1.00%
90 Day (3 month) BBSW Rate	0.97%	1.01%
3yr Australian Government Bonds	0.67%	0.81%
10yr Australian Government Bonds	0.89%	1.19%
US Fed Funds Rate	2.00%-2.25%	2.00%-2.25%
10yr US Treasury Bonds	1.50%	2.02%

Source: RBA, AFMA, US Department of Treasury



90 Day Bill Futures

Over August, bill futures fell across the curve on pricing expectations of further rate cuts, particularly after RBA Governor Lowe commented to expect an “*extended period*” of low interest rates and discussed the (for now, unlikely) possibility of quantitative easing (QE) in Australia. **At month-end, the futures market was fully pricing in the next 25bp rate cut by November 2019, and a further 25bp cut by May-2020, which would take the official cash rate down to 0.50%.**



Source: ASX



Fixed Interest Outlook

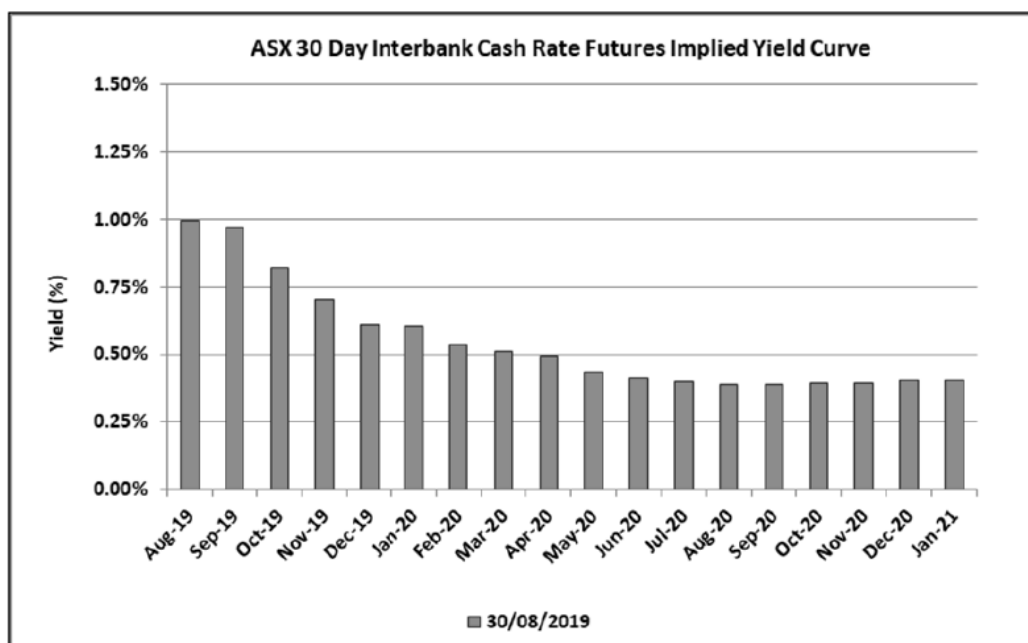
With global inflation remaining low and downside risks for global growth increasing (driven by the ongoing trade wars and geopolitics), most global central banks have moved towards an easing bias. After the US Fed cut rates on 31st July, the market is currently fully factoring in the next 25bp rate cut on 18th September and a further cut by the end of 2019.

Domestically, the RBA remains on an easing bias looking to address the 'spare capacity' in the economy. The RBA has suggested that additional stimulus through further rate cuts may be warranted in order to target full employment. Governor Lowe is looking for support from the Federal Government through expansionary fiscal policy, discussed the idea of Quantitative Easing (QE), and has now flagged an *"extended period"* of low interest rates to achieve full employment and progress towards their inflation target.

The global key risks for the RBA stem from the impact of ongoing trade and technology disputes, softening inflation, political uncertainty (e.g. US, Brexit, Hong Kong, Italy) and a broader slowdown in the global economy. The Board will continue to assess developments in the global and domestic market before considering further rate cuts.

Domestically, they are focused on employment, inflation, wage growth, housing and consumption. Should these areas continue to show signs of softening, **the RBA remains on hand to adjust the official cash rate lower if required.**

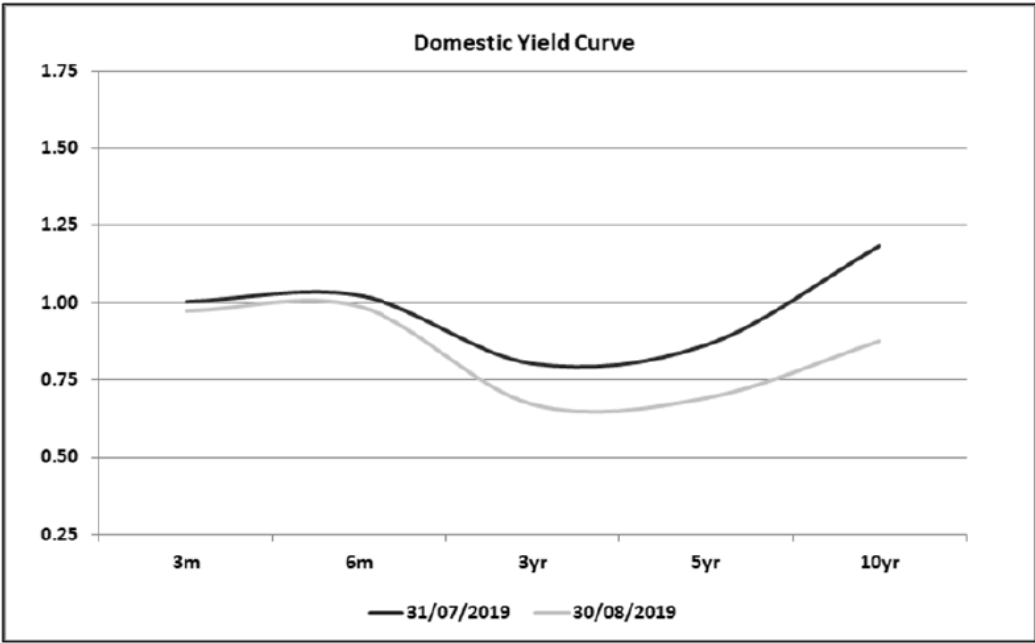
The futures market currently prices in a further 25bp rate cut by November 2019, taking the official cash rate down to 0.75%, with another factored in by May 2020:



Source: ASX



Over the longer-term, the domestic bond market continues to suggest a ‘lower-for-longer’ period of interest rates. Over the month, yields fell up to -30bp at the longer end of the curve:



Source: AFMA, ASX, RBA

Disclaimer

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 does not consider your individual investment objectives and adopted policy mandate. Imperium Markets also operates a financial market in fixed income investments. If a product provider uses our financial market platform, Imperium Markets receives a 1bp p.a. funding fee of the value of the investment they transact through the platform. However, we always recommend the best rate available to us, regardless of whether the provider uses our platform. You are responsible for deciding whether our recommendations are appropriate for your particular investment needs, objectives and financial situation.



Monthly Investment Report

01/08/2019 to 31/08/2019



Portfolio valuation

As at 31/08/2019



Issuer	Rating	Type	Interest	Purchase	Maturity	Rate	Value	Accrued	AccrMTD	Ref
Westpac	AA-	TD	Annual	04/09/2017	04/09/2019	2.9600	3,000,000.00	88,070.14	7,541.92	032-697 115 794
St George Bank	AA-	TD	Annual	08/09/2016	08/09/2019	3.2000	5,000,000.00	156,054.79	13,589.04	355290684
St George Bank	AA-	TD	Annual	27/09/2016	27/09/2019	3.2000	4,000,000.00	118,882.19	10,871.23	355333138
NAB	AA-	TD	Annual	11/07/2018	15/10/2019	2.8500	3,000,000.00	12,180.82	7,261.64	GMI-DEAL-10547992
ICBC Sydney Branch	A	TD	Annual	31/10/2018	29/10/2019	2.8300	4,000,000.00	94,591.78	9,614.25	00001
ICBC Sydney Branch	A	TD	Maturity	20/11/2018	12/11/2019	2.8600	5,000,000.00	111,657.53	12,145.21	0125001100000186702
ICBC Sydney Branch	A	TD	Annual	13/11/2018	19/11/2019	2.8600	4,000,000.00	91,520.00	9,716.16	00003
AMP Bank	BBB+	TD	Maturity	29/05/2019	25/11/2019	2.4500	5,000,000.00	31,883.56	10,404.11	TD341584423
ICBC Sydney Branch	A	TD	Annual	28/11/2018	26/11/2019	2.8200	5,000,000.00	107,005.48	11,975.34	00006
Westpac	AA-	TD	Qly	14/12/2018	10/12/2019	2.7300	3,000,000.00	17,726.30	6,955.89	7389786
Westpac	AA-	TD	Qly	14/12/2018	17/12/2019	2.7300	4,000,000.00	23,635.07	9,274.52	7389774
Westpac	AA-	TD	Qly	14/01/2019	14/01/2020	2.7200	5,000,000.00	17,884.93	11,550.68	7448784
Members Equity Bank	BBB	TD	Annual	24/01/2017	24/01/2020	3.2600	2,000,000.00	39,298.63	5,537.53	22835
ICBC Sydney Branch	A	TD	Maturity	20/02/2019	04/02/2020	2.7200	1,000,000.00	14,382.47	2,310.14	00010
ING Direct	A	TD	Annual	15/02/2018	17/02/2020	2.8700	4,000,000.00	62,275.07	9,750.14	30810
ING Direct	A	TD	Annual	28/02/2018	03/03/2020	2.8900	4,000,000.00	58,591.78	9,818.08	378133
Newcastle Permanent	BBB	TD	Annual	10/03/2016	10/03/2020	3.7000	2,000,000.00	35,276.71	6,284.93	29843
ING Direct	A	TD	Annual	02/03/2018	17/03/2020	2.8800	4,000,000.00	57,126.58	9,784.11	378677
Rural (Bendigo Group)	BBB+	TD	Maturity	18/04/2019	14/04/2020	2.5500	2,000,000.00	19,002.74	4,331.51	2952006
Auswide Bank	BBB	TD	Maturity	30/04/2019	29/04/2020	2.4500	5,000,000.00	41,616.44	10,404.11	
BOQ	BBB+	TD	Annual	19/05/2017	19/05/2020	3.0000	3,000,000.00	25,643.84	7,643.84	453470
ING Direct	A	TD	Annual	22/05/2018	26/05/2020	2.9400	4,000,000.00	32,863.56	9,987.95	403498
ING Direct	A	TD	Annual	29/05/2018	09/06/2020	2.8800	3,000,000.00	22,487.67	7,338.08	6775257
Westpac	AA-	TD	Qly	06/06/2018	16/06/2020	2.9100	5,000,000.00	34,680.82	12,357.53	6795148
NAB	AA-	TD	Annual	03/07/2018	07/07/2020	2.9000	5,000,000.00	23,835.62	12,315.07	10545823
NAB	AA-	TD	Annual	11/07/2018	14/07/2020	2.9200	3,000,000.00	12,480.00	7,440.00	GMI-DEAL-10547993
ING Direct	A	TD	Annual	21/08/2018	25/08/2020	2.8500	4,000,000.00	3,435.62	3,435.62	424329
ING Direct	A	TD	Annual	13/09/2018	08/09/2020	2.8700	4,000,000.00	111,025.75	9,750.14	429068
Westpac	AA-	TD	Annual	13/09/2017	14/09/2020	3.1700	3,000,000.00	91,973.42	8,076.99	032-697 116017

Issuer	Rating	Type	Interest	Purchase	Maturity	Rate	Value	Accrued	AccrMTD	Ref
ING Direct	A	TD	Annual	13/09/2018	22/09/2020	2.8700	4,000,000.00	111,025.75	9,750.14	429067
NAB	AA-	TD	Annual	17/10/2018	13/10/2020	2.7800	4,000,000.00	97,185.75	9,444.38	GMI-DEAL-10573417
ICBC Sydney Branch	A	TD	Annual	31/10/2018	27/10/2020	2.9300	6,000,000.00	146,901.37	14,930.96	00002
ICBC Sydney Branch	A	TD	Annual	13/11/2018	10/11/2020	2.9300	5,000,000.00	117,200.00	12,442.47	00004
ICBC Sydney Branch	A	TD	Annual	05/12/2018	08/12/2020	2.8600	2,000,000.00	42,312.33	4,858.08	0125001100000186702
ICBC Sydney Branch	A	TD	Annual	14/12/2018	15/12/2020	2.8900	6,000,000.00	123,992.88	14,727.12	00009
BOQ	BBB+	TD	Annual	24/01/2017	25/01/2021	3.6500	2,000,000.00	44,000.00	6,200.00	438425
Westpac	AA-	TD	Annual	21/02/2017	22/02/2021	3.3900	2,000,000.00	35,664.66	5,758.36	032-586 519825
BOQ	BBB+	TD	Annual	10/03/2016	10/03/2021	3.8000	3,000,000.00	54,345.21	9,682.19	391843
ING Direct	A	TD	Annual	20/02/2019	16/03/2021	2.8200	2,000,000.00	29,822.47	4,790.14	475707
Westpac	AA-	TD	Qtly	22/03/2018	23/03/2021	3.0200	4,000,000.00	22,836.16	10,259.73	6791206
Westpac	AA-	TD	Qtly	22/05/2018	25/05/2021	3.1000	4,000,000.00	3,397.26	3,397.26	6927394
BOQ	BBB+	TD	Annual	29/05/2019	31/05/2021	2.3000	3,000,000.00	17,958.90	5,860.27	167170
Rabobank Australia	A+	TD	Annual	08/06/2017	07/06/2021	3.0200	5,000,000.00	33,923.29	12,824.66	25359
Westpac	AA-	TD	Qtly	06/06/2018	15/06/2021	3.1000	3,000,000.00	22,167.12	7,898.63	6795153
NAB	AA-	TD	Annual	03/07/2018	22/06/2021	3.0000	4,000,000.00	19,726.03	10,191.78	10545826
NAB	AA-	TD	Annual	03/07/2018	06/07/2021	3.0000	3,000,000.00	14,794.52	7,643.84	083-375 99-999-9947
Westpac	AA-	TD	Qtly	17/07/2018	13/07/2021	3.0400	5,000,000.00	19,156.16	12,909.59	7052868
NAB	AA-	TD	Annual	26/07/2018	20/07/2021	3.0400	4,000,000.00	12,326.58	10,327.67	GMI-DEAL-10552065
Westpac	AA-	TD	Annual	24/07/2019	23/07/2021	1.7500	4,000,000.00	7,479.45	5,945.21	24072017-00045
NAB	AA-	TD	Annual	02/08/2018	03/08/2021	3.0700	5,000,000.00	12,616.44	12,616.44	GMI-DEAL-10554251
ICBC Sydney Branch	A	TD	Annual	30/08/2019	30/08/2021	1.6200	5,000,000.00	443.84	443.84	
Westpac	AA-	TD	Qtly	13/09/2018	14/09/2021	2.8800	5,000,000.00	31,561.64	12,230.14	7180013
NAB	AA-	TD	Annual	27/09/2018	28/09/2021	3.0500	5,000,000.00	141,636.99	12,952.05	GMI-DEAL-10568550
Westpac	AA-	TD	Qtly	13/09/2018	12/10/2021	2.8900	5,000,000.00	31,671.23	12,272.60	7179943
ICBC Sydney Branch	A	TD	Annual	05/12/2018	07/12/2021	3.0100	4,000,000.00	89,063.01	10,225.75	0125001100000186702
Newcastle Permanent	BBB	TD	Qtly	07/02/2019	08/02/2022	3.0500	4,000,000.00	8,356.16	8,356.16	1381/37459
NAB	AA-	TD	Annual	21/02/2017	21/02/2022	3.4600	5,000,000.00	91,002.74	14,693.15	10420935
Westpac	AA-	TD	Annual	21/02/2017	21/02/2022	3.6100	2,000,000.00	37,979.18	6,132.05	23294
BOQ	BBB+	TD	Annual	15/03/2017	15/03/2022	3.8000	2,000,000.00	35,397.26	6,454.79	445483
Newcastle Permanent	BBB	TD	Qtly	12/03/2019	22/03/2022	2.9000	4,000,000.00	25,742.47	9,852.05	1684
Newcastle Permanent	BBB	TD	Annual	27/03/2019	29/03/2022	2.8000	5,000,000.00	60,602.74	11,890.41	
Newcastle Permanent	BBB	TD	Qtly	18/04/2019	19/04/2022	2.7000	4,000,000.00	13,315.07	9,172.60	1978
BOQ	BBB+	TD	Annual	28/05/2019	30/05/2022	2.4000	4,000,000.00	25,249.32	8,153.42	167130

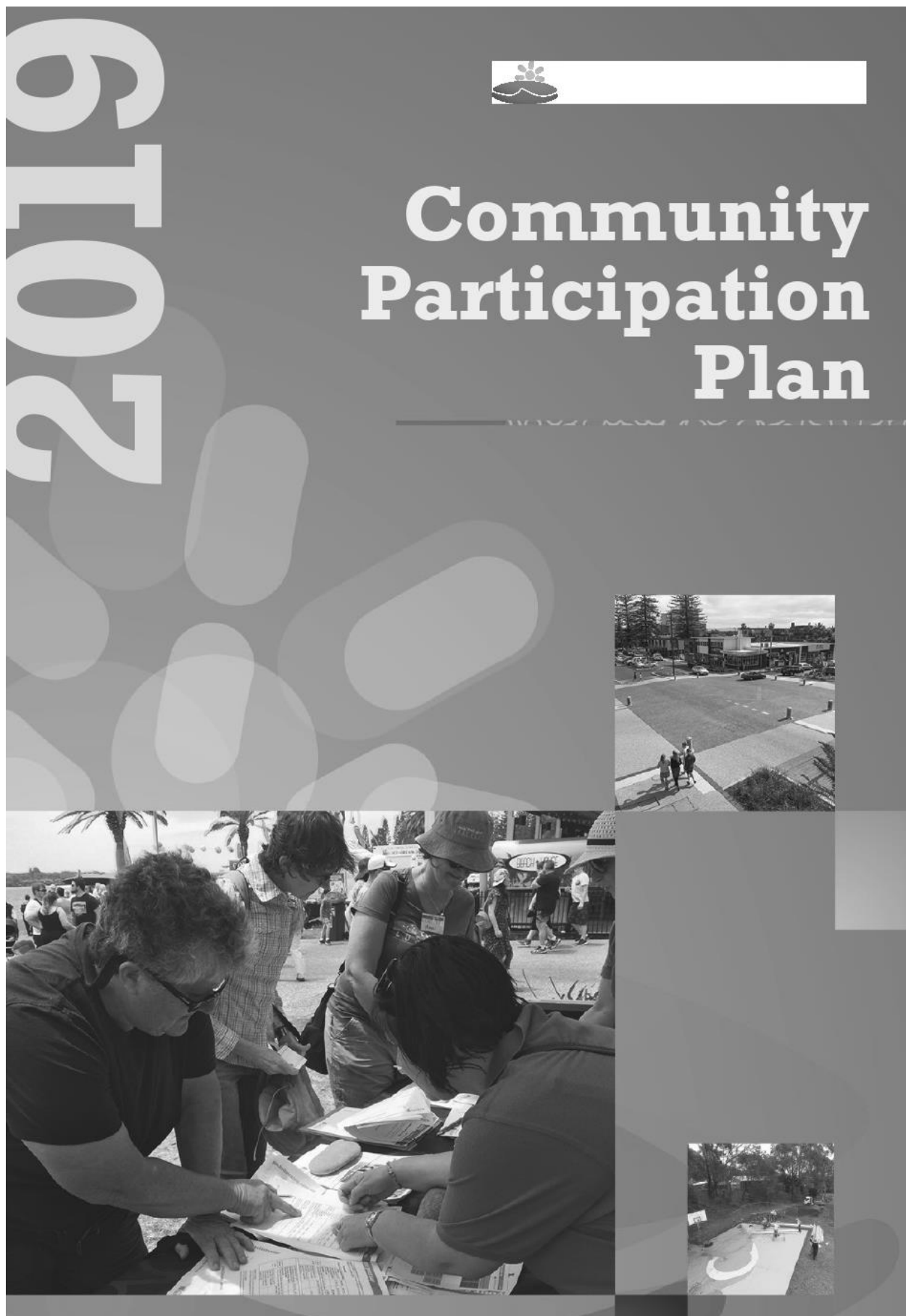
Issuer	Rating	Type	Interest	Purchase	Maturity	Rate	Value	Accrued	AccrMTD	Ref
Rabobank Australia	A+	TD	Annual	08/06/2017	07/06/2022	3.2200	5,000,000.00	36,169.86	13,673.97	25360
NAB	AA-	TD	Annual	02/08/2018	02/08/2022	3.2200	4,000,000.00	10,586.30	10,586.30	GMI-DEAL-10554252
NAB	AA-	TD	Annual	16/08/2018	16/08/2022	3.0500	4,000,000.00	5,347.95	5,347.95	GMI-DEAL-10557367
ICBC Sydney Branch	A	TD	Annual	28/08/2019	29/08/2022	1.6400	5,000,000.00	898.63	898.63	00011
Rabobank Australia	A+	TD	Annual	13/09/2017	13/09/2022	3.3800	3,000,000.00	98,066.30	8,612.05	27388
Westpac	AA-	TD	Annual	13/09/2017	13/09/2022	3.4100	3,000,000.00	98,936.71	8,688.49	032-697 116 009
BOQ	BBB+	TD	Annual	28/05/2019	29/05/2023	2.5500	4,000,000.00	26,827.40	8,663.01	167127
BOQ	BBB+	TD	Annual	27/06/2019	27/06/2023	2.2000	5,000,000.00	19,890.41	9,342.47	
Westpac	AA-	CASH	Month	31/08/2019	31/08/2019	2.2000	17,829,856.10	33,314.96	33,314.96	WESTPAC COMMERCIAL BANK 31 DAY NOTICE SAVER ACCOUNT
TOTALS								\$3,467,981.81	\$671,881.54	

2017-2021 Delivery Program and 2018-2019 Operational Plan Exception Report as at 30 June 2019						Attachment A
Operational Plan Activity	Lead Responsibility	Success Measures	Target	Actual	Comment on Progress 30 June 2019	
2018 - 2019						
1.3.4.3 Implement workplace strategies and processes to continue to improve Learning and Development Strategy actions	Organisational Performance	Implementation of Learning and Development Strategy actions	100%	50%	Behind schedule. Implementation of strategy actions will take place once the strategy is adopted. Strategy currently in drafting phase.	
1.3.4.5 CW Works Depot relocation - preconstruction/design (multi-year project in 2017-18 linked to 1.3.4.4 CW)	Assets and Property Investment	Deliver project according to approved project plan (Works Depot relocation)	100%	75%	Behind schedule. Land negotiations commencing.	
1.3.5.3 Implement the Human Resource Information System (HRIS)	Organisational Performance	Commenced training of HRIS system	100%	0%	Yet to commence. This action is dependant on implementation of HRIS system. Training will commence once system selected and will continue into 2019-2020.	
1.5.1.7 Greenmeadows Drive residential development planning	Assets and Property Investment	Develop concept plan for Greenmeadows Drive development	100%	50%	Behind schedule. Project on hold while Council finalise our approach to the existing community facility next door and our approach to community facilities in this area more broadly.	
1.5.1.7 Greenmeadows Drive residential development planning	Assets and Property Investment	Lodge Development Approval application for Greenmeadows Drive development	100%	50%	Behind schedule. Project on hold while Council finalise our approach to the existing community facility next door and our approach to community facilities in this area more broadly.	
1.5.1.8 Conduct asset revaluation of land under roads, stormwater, flood and foreshore assets	Assets and Property Investment	Complete asset revaluation by 30 June 2019	100%	75%	Behind schedule. Asset Revaluation for Stormwater, Flood and Foreshore Assets is yet to be completed, pending CCTV condition analysis of Stormwater network. Request for Tender is currently in Draft, with the planned dates 29 Feb 2020 (Roads) and 30 Apr 2020 (Stormwater, Flood and Foreshore).	
Theme: Your Community Life						
2.1.3.1 Monitor and take action as appropriate to ensure compliance with development approvals	Regulatory Services	Undertake 1,000 on-site sewage inspections	1,000#	836#	Behind target. Strategies in place to ensure annual target is met	
2.2.1.6 Finalise a new Port Macquarie Hastings Events Plan	Community Place	Commence implementation of actions relating to community events	100%	95%	Behind schedule. The events plan was presented to Exec in June and is subject to a Council Briefing in July. There is some additional work required to develop the plan and determine the strategic direction of events for the community into the future. Council continued to deliver community events including work on the Four Seasons Dementia Project and planning for the 2019 Artwalk Event. In May Council delivered a Mayor Sporting Fund Golf day raising \$6000. Council also held events around Reconciliation week and are in the midst of planning 2019 NAIDOC week for the first week of July.	
2.2.1.6 Finalise a new Port Macquarie Hastings Events Plan	Community Place	Finalise Events Plan	100%	95%	Behind schedule. The Events Plan was presented to Exec in June 2019 and is subject to a Council Briefing in July 2019. There is some additional work required to develop the plan and determine the strategic direction of events for the community into the future.	
2.2.1.7 Finalise the Community Inclusion Plan, that determines focused actions for Seniors, Youth, Aboriginal Communities, Diversity, Multiculturalism and LGB TIQ groups	Community Place	Implement the Community Inclusion Plan actions	100%	95%	Behind schedule. The Community Inclusion Plan has been drafted and was presented to the Executive in June 2019 for comment. Key revisions have been made and the Plan will be resubmitted to the Executive before going to a Council Briefing and then to Council.	
2.3.2.4 Undertake regional master planning for recreational facilities	Recreation and Buildings	Continue master planning for Flynns Beach	100%	60%	Behind schedule. Draft Master Plan developed following community engagement process. The Draft master plan was presented to July 2019 Council Meeting prior to further community engagement being undertaken. Project to continue into 2019-2020.	
2.3.2.6 CW Hastings River recreational boating improvements - Undertake design/pre-construction for provision of new facility as per Boating Needs Investigation Allocated Amount	Recreation and Buildings (Infrastructure Delivery)	Deliver project according to approved project plan (Hastings River recreational boating improvements)	100%	80%	Behind schedule. This project remains in the initiation phase. Design phase commencement is pending negotiations re land acquisition and traffic/intersection planning. No construction is proposed on this project during the 2018/19 FY. This project will continue into the 2019/20 FY.	
2.3.3.12 CW Sancroft/Thrumster Sports Fields - Detailed design and approvals - multi-year project - Adopted 2017-18 - \$300,000	Recreation and Buildings (Infrastructure Delivery)	Deliver project according to approved project plan (Sancroft/Thrumster Sports Fields - design and approvals)	100%	85%	Behind schedule. This project continues from 2017/18 FY. This design phase only project is progressing towards design finalisation in late 2019. The design phase of this project is pending the Development Approval (private developer) for the filling of the sports field site. timing TBC. No construction budget allocation has been made to this project at this stage.	
2.3.3.15 CW Kendall Skatepark - renewal of facility at end of useful life - Design and construct Allocated Amount 2018-19 - \$150,000	Recreation and Buildings (Infrastructure Delivery)	Deliver project according to approved project plan (Kendall Skatepark renewal)	100%	50%	Behind schedule. The initiation phase of this project dependent on confirmation of land availability for the proposed skatepark. This project will continue into 2019/20 FY	

2.3.3.18 Administration of public roads, public spaces, events and customer engagement - Section 138 Road Applications, 2.3.4.03 Wayne Richards Park — Stage 3B detailed design and approvals - Adopted 2016-17 - \$300,000	Transport and Stormwater Network	Deliver works in accordance with Council's Policies and Procedures	100%	90%	Behind schedule. Review of services has been undertaken and revised to ensure targets are being met within the new Infrastructure Planning Group, including the establishment of the Infrastructure Stakeholder Relations Section.
2.3.4.07 CW Googik Track - construct shared walkway/cycleway, Stage 2 - multi-year project - Adopted 2017-18 - \$75,696	Recreation and Buildings (Infrastructure Delivery)	Deliver project according to approved project plan (Wayne Richards Park — Stage 3B)	100%	85%	Behind schedule. (multi year project) Design underway for this multi year project and is expected to continue into the 2019/20 FY with estimated design completion in May 2020. The construction phase would then be subject to depot relocation and budget allocation.
2.3.4.12 CW Port Macquarie Town Centre Master Plan (TCMP) Improvements Banner Poles, Clarence St- Tree and Understorey Replanting, Foreshore Landscaping - General Embellishment, Gordon St Bridge	Recreation and Buildings	Deliver project according to approved project plan (Googik Track - construct shared walkway/cycleway, Stage 2)	100%	10%	Behind schedule. The next stage of works associated with the Googik Track was confirmed by National Parks at the August 2018 Googik Track Working Group Meeting. Design timelines are yet to be confirmed by National Parks.
2.3.4.14 CW Port Macquarie Pool - Detailed design and approvals - Allocated Amount 2018-19 - \$500,000	Recreation and Buildings	Deliver project according to approved project plan (Port Macquarie Pool - Detailed design and approvals)	100%	0%	Behind schedule. Gordon Street underpass works are continuing and will be ongoing into 2019-2020. There has been a change in the environmental pathway which has impacted the delivery. The following TCMP projects have been deferred to allow for focus on the finalisation of designs and approvals for the Port Macquarie Foreshore Walk: Foreshore Landscaping, Clarence Street Tree and Understorey Replanting and William Street - Tree and Understorey.
Theme: Your Business and Industry					
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	Strategic Land Use Planning	Report to Council regarding adoption of LEP and DCP amendments by 31 Dec	100%	50%	Behind schedule. Draft Planning Proposal received early June 2019 for the proposed airport precinct business park and biodiversity certification outcomes. Further report to be presented to the July 2019 Council meeting for a decision to request a Gateway determination. Report also recommends a DCP be prepared for concurrent exhibition with the Planning Proposal.
3.1.2.2 Investigate the capacity of land at the intersection of Ocean Drive and Houston Mitchell Drive Lake Cathie, for potential service industrial development	Strategic Land Use Planning	Review of information submitted by landowners and progress report to Council by 31 December 2018	100%	95%	Behind schedule. Assessment report on the Planning Proposal presented to the April 2019 Council meeting for a decision to request a Gateway determination. Council has forwarded the Planning Proposal to the Department of Planning, Industry & Environment and is awaiting the issue of a Gateway determination.
3.1.3.2 Finalise and implement a new Port Macquarie-Hastings Events Plan	Economic Development and Communications	Finalise Events Plan	100%	95%	Behind schedule. The Events Plan was presented to Executive Group for review in June. Feedback has been incorporated into an updated draft to be resubmitted to the Executive Group in mid July.
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%	97%	Behind schedule. Passenger numbers for 2018-19 (214,794) are -2.8% behind 2017-18 (at 220,887 passengers). The decrease is attributed primarily to temporary regional network changes implemented by QantasLink during the year.
Theme: Your Natural and Built Environment					
4.1.1.18 CW Commence construction of the Wauchope to Sancroix Trunk Main - Allocated Amount 2018-19 - \$1,285,574	Water and Sewer (Infrastructure Delivery)	Deliver project according to approved project plan (Construction of the Wauchope to Sancroix Trunk Main)	100%	90%	Behind schedule. This project is in the finalisation of the design phase. During the previous reporting period the environmental assessment pathway for the proposed watermain was reviewed and the need for an Environmental Impact Statement (EIS) and Development Application (DA) was confirmed to be required for a portion of the propose route. These additional environmental assessment processes delayed the completion of the project design phase until mid 2019, hence delaying the potential construction commencement until the start of the 2019/20FY at earliest. This project budget will consequently require some carry over into the 2019/20FY.
4.1.2.2 CW Upgrade disinfection dosing system at various locations - Allocated Amount 2018-19 - \$204,400	Water and Sewer	Deliver project according to approved project plan (Upgrade disinfection dosing system at various locations)	100%	50%	Behind schedule. Sourcing alternative quotes for a sodium hypochlorite dosing package for the Telegraph Point Water Treatment Plant as the chlorine gas system proved not to be feasible.
4.1.3.01 CW Commence construction of the Port Macquarie Sewer rising main (PMSP71), Port Macquarie - Adopted 2017-18 - \$1,388,749	Water and Sewer (Infrastructure Delivery)	Deliver project according to approved project plan (Port Macquarie Sewer Pump Station 71)	100%	85%	Behind schedule. This project continues from 2017/18 FY and is a multi year project. Detailed design phase has reached completion during the reporting period, and construction phase progressing towards commencement in 2019/20FY.

4.1.3.18 CW Preconstruction of Thrumster Sewerage treatment Plant (Area 13) - Phase 1 - 20000EP - Allocated Amount 2018-19 - \$511,000	Water and Sewer	Deliver project according to approved project plan (Preconstruction of Thrumster Sewerage Treatment Plant (Area 13))	100%	50%	Behind schedule. This project has been included as a high priority with Integrated Water Cycle Management project engagement with Public Works Advisory and includes Environmental Impact Statement and feasibility assessment of different options for Thrumster and the Port Macquarie STPs that can cater for growth in the Port Macquarie area.
4.1.5.06 CW Black Swan Terrace - Stormwater detention facility - Adopted 2017-18 - \$300,000	Transport and Stormwater Network	Deliver project according to approved project plan (Black Swan Terrace - Stormwater detention facility)	100%	80%	Behind schedule. Project planning is currently being refined now the outcome of the Dam Safety Committee is known. Services integration is being refined within the detailed design to remove a clash between the access ramp and a sewer manhole and gravity main.
4.1.5.07 CW Continue stormwater remediation - Calwalla Crescent - Allocated Amount 2018-19 - \$275,000	Transport and Stormwater Network (Infrastructure Delivery)	Deliver project according to approved project plan (Continue stormwater remediation - Calwalla Crescent)	100%	85%	Behind schedule. Design phase complete. Construction commenced in July 2019 with expected completion prior to end of 2019 (subject to weather)
4.2.1.03 Undertake development of Coastal Management Plans (Coastal Management Program)	Environmental Services	Development of Coastal Management Plans complete (Coastal Management Program)	100%	50%	Behind schedule. Development of the over arching Coastal Management Program is dependant on funding. Grant funding being sought. Scoping study commenced in-house. Operational Plan action to continue into 2019-2020.
4.2.1.03 Undertake development of Coastal Management Plans (Coastal Management Program)	Environmental Services	Development of Estuary Management Plans complete (Coastal Management Program)	100%	50%	Behind schedule. Development of the over arching Coastal Management Program is dependant on funding. Grant funding being sought. Scoping study commenced in-house. Operational Plan action to continue into 2019-2020.
4.2.1.04 Wrights and Yarranabee Creeks Flood Study - Update to include Urban Drainage Systems	Environmental Services	Wrights and Yarranabee Creeks Flood Study complete	100%	70%	Behind schedule. Flood study presented to the December 2018 Ordinary Council Meeting, however due to policy change (climate change) further modelling mapping is required. Operational Plan action will continue into 2019-2020.
4.2.1.08 CW Lake Cathie Illaroo Road Revetment Wall Funding Model	Environmental Services	Lake Cathie Illaroo Road Revetment Wall Funding Model complete	100%	60%	Behind schedule. The cost benefit analysis is currently being reviewed by the Office of Environment and Heritage team. Funding model due to start and the Operational Plan action to continue into 2019-2020 with finalisation expected by end of 2019.
4.4.1.02 Develop a Regional Integrated Transport Strategy - multi-year project	Transport and Stormwater Network	Deliver project according to approved project plan (Develop a Regional Integrated Transport Strategy)	100%	80%	Behind schedule. Project has been delayed due to the Orbital Community Engagement Project.
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	Transport and Stormwater Network (Infrastructure Delivery)	Deliver project according to approved project plan (Lake Road - continuation of detailed design of dual lanes)	100%	75%	Behind schedule. This design only project continues from 2017/18 FY. Design is now progressing towards anticipated completion in Aug 2019 due to additional traffic study investigations required to inform the detailed designs.
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	Transport and Stormwater Network (Infrastructure Delivery)	Deliver project according to approved project plan (Design Stages 5 and 6 of Beechwood Road reconstruction)	100%	85%	Behind schedule. This design only project is progressing with additional flood modelling now completed the finalisation of the designs is underway. Design completion is now expected in Sept 2019.
4.4.1.31 CW Deliver Bold Street Pedestrian Crossing Launeon - Allocated Amount 2018-19 - \$347,000	Transport and Stormwater Network (Infrastructure Delivery)	Deliver project according to approved project plan (Bold Street - Pedestrian Crossing Launeon)	100%	85%	Behind schedule. Project deferred pending the review of crossing locations as outlined in the May Council meeting item 12.02. Consideration is also being given the outcomes of additional community consultation with a report being tabled at the September Council meeting.
4.4.1.33 CW Continue detailed designs - north of Miala Street to Orana Drive Lake Cathie - Adopted 2017-18 - \$250,000	Transport and Stormwater Network (Infrastructure Delivery)	Deliver project according to approved project plan (Detailed designs - north of Miala Street to Orana Drive Lake Cathie)	100%	85%	Behind schedule. This design only project continues from 2017/18 FY. The design engagement process is progressing and a community engagement session has been completed and a council report was presented to the Dec 2018 Ordinary Council meeting summarising the community feedback. The council have resolved to update the concept design to include parking lanes and a supplementary community engagement activity is proposed to inform the community of the updated designs once completed. The detailed design for the project will then follow for section A (Southern portion of works, Miala to Fiona Crs) and continue in 2019/20FY. Target design completion has extended from Sept to Dec 2019.
4.4.1.48 Development Contribution Plan (Roads) Review and Update	Transport and Stormwater Network	Deliver project according to approved project plan (Development Contribution Plan (Roads) Review and Update)	100%	80%	Behind schedule. Planning has commenced on producing an interim contributions plan. Detailed project planning for the development of the final contribution plan is pending the establishment of the revised Infrastructure Planning Group structure within the reorganised Infrastructure Division.

4.4.1.52 AUS-SPEC Review - Undertake a comprehensive review of Councils full suite of design and construction specifications - multi-year project	Transport and Stormwater Network	Deliver project according to approved project plan (AUS-SPEC Review)	100%	80%	Behind schedule. The revised specifications have been drafted and reviewed by the local development industry. The implementation plan, for the revised specifications, is pending the establishment of the revised Infrastructure Planning Group structure within the reorganised Infrastructure Division.
4.5.1.07 Investigate LEP and DCP amendments for the proposed Yppin Creek urban release area to the west of Wauchope	Strategic Land Use Planning	Report recommended draft planning outcomes to Council by 30 June	100%	50%	Behind schedule. Project status considered as part of April 2019 report to Council on UGMS priorities and funding received from interested land owners. Consultants engaged for bushfire, flooding and stormwater. Fee proposals being assessed for biodiversity.
4.5.1.08 Commence preparation of Local Environmental Plan (LEP), Development Control Plan (DCP) and Contributions Plan (CP)	Strategic Land Use Planning	Completion of a Project Plan for the LEP, DCP and CP process by 31 December 2018	100%	90%	Behind schedule. Master Plan exhibited from 26 November 2018 - 21 February 2019. Report on submissions received to exhibition to be presented to Council in September 2019. Following adoption of the Masterplan, project planning can commence.
4.5.1.08 Commence preparation of Local Environmental Plan (LEP), Development Control Plan (DCP) and Contributions Plan (CP)	Strategic Land Use Planning	Implementation of key Stage 1 actions in accordance with the Project Plan by 30 June 2019	100%	50%	Behind schedule. Master Plan exhibited from 26 November 2018 - 21 February 2019. Report on submissions received to exhibition to be presented to Council in September 2019. Following adoption of the Masterplan, project planning can commence.
4.5.1.10 Commence a review of housing related Local Environmental Plan (LEP) and Development Control Plan (DCP) provisions to promote housing choice options	Strategic Land Use Planning	Preliminary support studies complete to inform the review by 30 June 2019	100%	75%	Behind schedule. Delay to the appointment of consultants due to the need to obtain revised fee proposals. Consultants expected to be appointed in July 2019 to undertake the preparation of the Local Housing Strategy. Project expected to be completed in 2019-2020.
4.5.2.2 Commence a review of the Major Roads Contributions Plan and Water and Sewerage Development Servicing Plans for completion in 2020	Strategic Land Use Planning	Preliminary support studies complete to inform the review and an update provided to Council by 30 June 2019	100%	90%	Behind schedule. Roads, water and sewerage works program under preparation as precursor to contributions plan and DSP reviews.
4.6.1.01 Undertake weed management program according to the Mid North Coast Invasive Plant Species Strategy 2012, working in partnership	Environmental Services	20% of all plant nurseries in the local government area (LGA) inspected for invasive weeds	100%	0%	Yet to commence. Strategy in place to ensure annual target is met.
4.6.1.01 Undertake weed management program according to the Mid North Coast Invasive Plant Species Strategy 2012, working in partnership	Environmental Services	300 properties inspected for invasive weeds	300#	196#	Behind schedule. Strategy in place to ensure annual target is met.
4.6.1.02 Control feral animals on Council-controlled land	Environmental Services	Undertake feral animal control	100%	0%	Yet to commence. Commencement delayed due to the requirement to review the action plan.
4.6.1.04 In collaboration with community groups, such as Landcare, implement the Bushland	Environmental Services	1,200ha of bushland under active management	1,200ha	724ha	Behind schedule. Vacancies in this area have prevented this program from meeting target to date. Strategies in place to ensure annual target is achieved.
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 and Buildings	Provide advice in accordance with service standards and industry best practice	100%	53%	Behind schedule. Total number of Customer Requests received for the period from 1 July 2018 to 30 June 2019 was 1284. Of these, 974 (Public), 195 (Private) and 12 (illegal tree removal/pruning). In addition there were 50 (Storm) and 6 (Rural Roads). 48 customer requests currently exceed service standard. This was impacted by a number of storm events resulting in tree damage during this reporting period. Additional information: 416 enquiries (331 public phone and 87 private phone and email enquiries). This does not include calls transferred from call centre to mobile or landline. In addition, there were 169 internal enquiries.
4.6.1.08 Undertake implementation of the Koala Management Strategy and the Koala Management Project - Fire & Biodiversity Consortium, the Koala Road Strike Project, Flood Mitigation Maintenance Prog	Environmental Services	Commence implementation of the identified actions in the Koala Management Strategy (incl Fire & Biodiversity Consortium and Koala Road Strike Project)	100%	50%	Behind schedule. Commenced. Strategy being developed to ensure actions can be achieved.
4.6.1.11 Hastings River Streamflow and Rainfall Gauges	Environmental Services	Hastings River Streamflow and Rainfall Gauges	100%	0%	Yet to commence. Awaiting Crown Lands licence.
4.7.1.2 CW Install solar energy systems at the Kew Waste Transfer Station and the Port Macquarie Reclaimed Water Treatment Plant	Water and Sewer	Solar system installation at the Port Macquarie Reclaimed Water Treatment Plant complete	100%	25%	Behind schedule. Public works were engaged to develop tender specifications. Specifications have now been completed and requests for quotation will go out in Q1 of 2019/20.
4.7.1.6 CW Install solar energy systems at selected existing Council facilities - Allocated	Recreation and Buildings	Install solar energy systems at identified Council facilities	100%	80%	Behind schedule. Two nominated projects at the Wauchope and Kendall Pool have had all preliminary works completed. Procurement process has commenced.



Glossary

PLANNING TERM	DEFINITION
Contribution plans	A plan developed by councils for the purpose of gaining financial contributions from new development towards the cost of new and upgraded public amenities and/or services required to accommodate the new development
Designated development	Designated Development refers to developments that are high-impact developments (e.g. likely to generate pollution) or are located in or near an environmentally sensitive area (e.g. a coastal wetland)
Development control plans (DCP)	A plan that provides detailed planning and design guidelines to support the planning controls in a LEP
Gateway determination	A gateway determination is issued following an assessment of the strategic merit of a proposal to amend or create an LEP and allows for the proposal to proceed to public exhibition
Local environmental plan (LEP)	An environmental planning instrument developed by a local planning authority, generally a council. An LEP sets the planning framework for a Local Government Area
Regional plan	20-year plans that address the community's needs for housing, jobs, infrastructure and a healthy environment for a Department of Planning, Industry & Environment (DPI&E) Region
State Environmental Planning Policy (SEPP)	An environmental planning instrument developed by the DPI&E, that relates to planning matters that are state significant or are applicable across the state
State significant development (SSD)	Some types of development are deemed to have State significance due to the size, economic value or potential impacts that a development may have. Examples of possible SSD include: new educational establishments, hospitals and energy generating facilities
State significant infrastructure (SSI)	SSI includes major transport and services development that have a wider significance and impact than on just the local area. Examples of possible SSI include: rail infrastructure, road infrastructure and water storage and treatment plants

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1. Introduction

As a result of the passing of the *Environmental Planning and Assessment Amendment Act 2017* in the NSW Parliament in November 2017, all planning authorities are required to prepare a Community Participation Plan (CPP) about how and when they will undertake community participation when exercising relevant planning functions.

Community Participation Plans are required to meet mandatory requirements including:

- public exhibition for a minimum periods for plans, development applications and other matters,
- public notification requirements of plans or applications, and public notification of the determination or reasons for a determination.

The purpose of the CPP is to provide a single document that the community can access that sets out all of council's community participation requirements under the planning legislation, including all minimum mandatory exhibition timeframes.

This Plan forms only one part of Council's overall engagement strategy on how the community can be involved in the decision-making process across all areas of Council.

1.1 What is Community Participation?

Community participation (often referred to as engagement) is the process of involving the public in problem solving or decision-making. This participation is based on the belief that those affected by a decision have a right to be involved.

Engagement provides a forum for Port Macquarie-Hastings Council (Council) to gain insight into local knowledge, skills and experiences of the community, which can be critical to the success of projects. Through community engagement, Council can work with communities in exploring options and reaching solutions that seek to maximise the benefit and reduce negative impacts to a minimum.

Consistent communication, information sharing and feedback to the community builds awareness and understanding of the projects, services and initiatives of Council - it is not possible to effectively engage the community in a decision-making process until they are first adequately informed. Ongoing communication also demonstrates that Council takes the views and opinions of the community seriously.

In all dealings with the community, Council will also employ its Corporate Values:

- Communication
- Accountability
- Professionalism
- Integrity
- Teamwork

1.2 Community Participation in the Planning Process

For this particular Plan, Council recognises community participation in its planning decision-making is not only the community's right; it also delivers better planning outcomes for the people within the Port Macquarie-Hastings.

In the context of planning, community participation is an overarching term identifying how Council engages with our community under the Environmental Planning and Assessment Act 1979 (EP&A Act), including plan and strategy making and making decisions on proposed development. The level and extent of community participation will vary depending on the scope of the proposal/plan under consideration and the potential impact of the decision.

Ultimately, Council's responsibility is to deliver the objectives of the EP&A Act including the promotion of orderly and economic use of land, facilitating ecologically sustainable development and promoting social and economic wellbeing.

1.3 Why is community participation important?

Effective community participation:

- Builds confidence and trust in the Council's planning decision-making;
- Creates a shared sense of purpose, direction and understanding of the need to manage growth and change, while preserving local character;
- Provides Council with access to community knowledge, ideas and expertise to better inform Council's decision-making.

1.4 What is a Community Participation Plan?

The Port Macquarie-Hastings Council Community Participation Plan (CPP) is designed to make participation in **planning** decisions clearer for the Port Macquarie-Hastings community. It does this by setting out in one document the different types of planning functions Council performs, and how and when community members can participate in planning decisions.

This CPP also establishes our community participation objectives which we use to guide our approach to community participation.

1.5 Principles of this Community Participation Plan

The EP&A Act guides Council to ensure that it will be clearer and easier for the community to understand how it can participate in planning decisions. The Act outlines the principles that underpin Council's Community Participation Plan. These principles are outlined below:

- a) The community has a right to be informed about planning matters that affect it;
- b) Council will encourage effective and on-going partnerships with the community to provide meaningful opportunities for community participation in planning;
- c) Planning information will be in plain language, easily accessible and in a form that facilitates community participation in planning.
- d) The community will be given opportunities to participate in strategic planning as early as possible to enable community views to be genuinely considered;
- e) Community participation will be inclusive and Council will actively seek views that are representative of the community;
- f) Members of the community who are affected by proposed major development will be consulted by the proponent before an application for planning approval is made;

- g) Planning decisions will be made in an open and transparent way and the community will be provided with reasons for those decisions (including how community views have been taken into account);
- h) Community participation methods (and the reasons given for planning decisions) will be appropriate having regards to the significance and likely impact of the proposed development.

1.6 Scope of the Community Participation Plan

The Port Macquarie-Hastings Council Community Participation Plan applies to all land within the Port Macquarie-Hastings Local Government Area (LGA).

Whilst consistent with Council's approach to engagement, this Community Participation Plan does not outline Council's engagement strategy for the delivery of other Council services, functions or infrastructure. Community engagement for these activities is developed considering the requirements of Council's Community Engagement Strategy (under development).

Some types of development do not need development consent from Council and therefore there is no pathway for formal community participation. This Plan does not relate to applications that fall within the following categories:

- a) Development which is exempt development under the provisions of Clause 3.1 Exempt Development of the LEP and or any applicable State Environmental Planning Policy (SEPP);
- b) Development which is complying development under the provisions of Clause 3.2 Complying Development of the LEP and/or any applicable State Environmental Planning Policy.

1.7 Objectives of the Community Participation Plan

Council's community engagement objectives for the CPP are to:

- a) Enhance opportunities for all members of the community to participate in planning decisions to achieve better planning outcomes, in an open and transparent process;
- b) Ensure the community understands how they can participate in planning decisions;
- c) Ensure that the needs and concerns of the community are identified and addressed wherever possible;
- d) Ensure our strategic planning reflects the aspirations of our community, partners and stakeholders;
- e) Ensure Council meets its legislative requirements in regard to community engagement for planning activities.

This Community Participation Plan addresses the following key strategies of Council's Towards 2030 Community Strategic Plan:

Strategy 1.1 Inform and engage with the community about what Council does using varied communication channels

Strategy 4.3 Facilitate development that is compatible with the natural and built environment

Strategy 4.5 Plan for integrated and connected communities across the Port Macquarie-Hastings area

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2. What are Council's Planning Functions?

Under the Environmental Planning and Assessment Act 1979, Council's planning functions are divided into two streams:

- a) Strategic planning and
- b) Development assessment.

2.1 Strategic Planning

Council's strategic planning functions incorporate the preparation of plans including:

2.1.1 Local strategic planning statements & Urban Growth Management Strategy

The Local Strategic Planning Statement (LSPS) will set out the 20-year vision for land use in the Port Macquarie-Hastings region, the special character and values that are to be preserved and how change will be managed into the future. The Local Strategic Planning Statement will shape how the development controls in the Local Environment Plan (LEP) evolve over time to meet the community's needs, with the LEP the main planning tool to deliver Council's and the community's plan.

The LSPS:

- Identifies the planning priorities for an area;
- Explains how these priorities are to be delivered; and
- Demonstrates how Council will monitor and report on how the priorities will be implemented.

The LSPS will implement actions from the North Coast Regional Plan as well as Council's own priorities identified in its Community Strategic Plan, the Urban Growth Management Strategy (UGMS) and other strategies and other studies that support the growth of the LGA. The North Coast Regional Plan is developed by the NSW Department of Planning, Industry and Environment to plan for our region's future population in the areas of housing, jobs, infrastructure and a healthy environment.

2.1.2 Strategic Land Use Plans, Strategies and Studies

Council develops a range of long-term plans and strategies for specific areas or development issues. Many of these plans and strategies will become Council policy after community consultation and will be implemented through Council's planning controls. Some strategies and plans also require endorsement from Government Agencies and support the North Coast Regional Plan.

Examples include Council's key land use strategies (for example, the Urban Growth Management Strategy) and studies including open space, heritage and transport.

2.1.3 Planning proposals for local environment plans subject to a gateway determination

The Local Environmental Plan (LEP) guides planning decisions for the Port Macquarie-Hastings area. It does this through zoning and development controls, which provide a framework for the way land can be used. The LEP is the main planning tool to shape the future of communities and ensure local development is achieved appropriately.

A Planning Proposal is required to amend the LEP and must demonstrate the strategic merit of the proposed LEP amendment. After it is considered by Council, a

Planning Proposal is submitted to the NSW Department of Planning, Industry and Environment for a Gateway Determination. A Gateway Determination will identify whether there is merit in the proposed amendment proceeding further in the plan-making process.

A Gateway Determination is issued by the NSW Department of Industry, Planning and Environment and will determine:

- Whether or not to proceed with the planning proposal;
- Whether or not to impose conditions to the proposal;
- The minimum exhibition period.

2.1.4 Development Control Plans

A Development Control Plan (DCP) is prepared by Council, applies to specific types of development or areas of land and provides detailed development guidelines and controls. The DCP provides detailed guidance for the design considerations, general standards and area-based provisions related to development proposals in the Port Macquarie-Hastings region.

Council periodically amends the DCP to introduce new controls relating to specific development types, to reflect legislative changes, or to clarify the intent of an existing control.

2.1.5 Developer and infrastructure contribution plans

Contributions plans allow Council to levy contributions on development consents issued for land within the Port Macquarie-Hastings region. These contributions assist the provision of community facilities and infrastructure to meet the demand created by development.

Council periodically reviews and amends these Plans in order that they reflect population growth, rezoning of land, completion of works, or to amend the schedule of works to reflect Council's priorities.

2.1.6 Voluntary Planning Agreements

A Voluntary Planning Agreement (VPA) is an offer by a developer to Council to dedicate land, make monetary contributions, or provide any other material public benefit, to be used for or applied toward a public purpose.

A public purpose includes the provision of:

- a) A community facility
- b) Affordable housing
- c) The conservation or enhancement of the natural environment
- d) Transport or other infrastructure relating to the development
- e) The funding of recurrent expenditure relating to the provision of community facilities, affordable housing or transport or other infrastructure
- f) The monitoring of the planning impacts of development.

Voluntary Planning Agreements can be entered into in relation to a development application or an amendment to the Local Environmental Plan.

2.2 Development Assessment

Port Macquarie-Hastings Council is the consent authority for the following application types:

2.2.1 Local development (other than complying development certificate, for designated development or for State significant development)

Local development is the most common type of development in NSW, with projects ranging from home extensions to commercial, retail and industrial developments. The Port Macquarie-Hastings Local Environment Plan 2011 outlines those developments and land uses which require development consent before the development can take place.

2.2.2 Nominated integrated development

Integrated development is development (not being State significant development or complying development) that, in order for it to be carried out, requires development consent and approval under Section 4.46 of the EP&A Act 1979. For example, an application for a mining licence, or work to be carried out on a public road; or carrying out work on a listed heritage item.

2.2.3 Designated development

Designated development refers to developments that are high-impact developments (e.g. likely to generate pollution) or that are located in or near an environmentally-sensitive area (e.g. a wetland). There are two ways a development can be categorised as designated development:

- The class of development can be listed in Schedule 3 of the Environmental Planning and Assessment Regulation 2000 as being designated development or
- A Local Environment Plan (LEP) or State Environmental Policy (SEPP) can declare types of development to be designated.

2.2.4 State Significant Development

A State Significant Development is a development that due to its size, economic value or potential impacts is considered to be of state significance. Development that is State significant is identified in the State and Regional Development SEPP. For all State significant development applications, the Minister for Planning is the consent authority.

2.3 Modification of Development Consents

After a development consent has been issued, the applicant or anyone entitled to act on the applicant's behalf can apply to Council, for approval to modify that development consent.

An application to modify a development consent is made under Section 4.55 of the EP&A Act 1979 provided the development is substantially the same.

If Council does not agree that the proposed modifications would result in substantially the same development as was originally approved, a new development application must be submitted for assessment.

3. Participating in Council's Planning Process

Opportunities to participate in Council's planning process will be dependent on the nature, scale and likely impact of the proposal or project being considered or assessed. A valuable way for community members to participate in the planning process is by making a submission on a proposal during a public exhibition.

3.1 Public Exhibitions

A key technique Council uses to encourage community participation is formal public exhibitions. During an exhibition, Council makes available relevant documents that may include a draft of the strategy, plan, policy, or proposed development that we are seeking input on.

Exhibition timeframes vary in length. Some timeframes are prescribed in legislation and others are at our discretion. Details of the timeframes for various planning functions are detailed in the following sections.

3.1.1 *Mandatory Exhibition Timeframes*

Section 2.21 (2) of the EP&A Act details the type of proposals that must be considered in the CPP and Schedule 1 sets a minimum exhibition timeframe for most of these proposals. We will always exhibit a proposal for this minimum timeframe and will consider an extended timeframe for exhibition based on the scale and nature of the proposal.

The mandatory community participation requirements are outlined in Table 1 below. These requirements reflect the minimum public exhibition periods for planning functions as specified in Schedule 1 of the EP&A Act.

Table 1: Mandatory community participation requirements for planning functions (Schedule 1 EP&A Act)

Planning Function	Minimum community participation requirement
Strategic Planning functions	
Draft Community Participation Plans	28 days
Draft Local Strategic Planning Statements	28 days
Planning proposals for local environmental plans subject to a Gateway determination	28 days or: (a) if a different period of public exhibition is specified in the gateway determination for the proposal—the period so specified, (b) if the gateway determination specifies that no public exhibition is required because of the minor nature of the proposal—no public exhibition.

Port Macquarie-Hastings Council - Draft Community Participation Plan

Planning Function	Minimum community participation requirement
Draft development control plans	28 days
Draft development contributions plans	28 days
Development Applications	
Application for development consent (other than for complying development certificate, for designated development or for State significant development)	<p>14 days or:</p> <p>(a) if a different period of public exhibition is specified for the application in the relevant community participation plan—the period so specified, or</p> <p>(b) if the relevant community participation plan specifies that no public exhibition is required for the application—no public exhibition.</p> <p>Refer Table 2 below for DA advertising and notification requirements.</p>
Application for development consent for designated development	30 days
Application for modification of development consent that is required to be publicly exhibited by the regulations	28 days
Environmental impact statement obtained under Division 5.1	28 days
Re-exhibition of any amended application or matter referred to above required under or by Schedule 1	Discretionary based on the scale and nature of the amendments.

Notes:

1. This table does not include the minimum exhibition timeframes for planning functions that do not apply to the Council (for example, State significant development).
2. A reference to a number of days in this table refers to calendar days and includes weekends.
3. The period between 20 December and 10 January (inclusive) is excluded from the calculation of a period of public exhibition (Schedule 1, EP&A Act).
4. If a particular matter has different exhibition or notification periods that apply, the longer period applies.

Table 2: Development Application notification and advertising requirements

Application Category	Type of Development	Notification / advertising requirements
Advertised Development	<ul style="list-style-type: none"> Major community or public facilities whether publicly or privately owned including hospitals, libraries, schools, universities, sports and entertainment facilities, licensed clubs Major commercial and retail development Major transport infrastructure and interchanges Hotels, pubs or entertainment facility Caravan parks Places of public worship Manufactured home estates Motels Public buildings in residential zones; Major development on Council owned or controlled land The demolition of a heritage item listed in Schedule 5 of the <i>Port Macquarie-Hastings Local Environmental Plan 2011</i>, or the use of a building or land which is a heritage item for a purpose which is not permitted under the land use zoning table applying to that land; Extractive industries Any development application accompanied by a Species Impact Statement Water based activities Any other development required to be advertised under the EP&A Act, Regulations or any other environmental planning instrument. 	<ul style="list-style-type: none"> A notice will be published in local newspapers and on Council's website for 14 days and will provide the address of the application and a brief description of the proposed development. In the case of advertised development which is Integrated Development¹ (excluding Nominated Integrated Development and Threatened Species Development), a notice will be published in the local newspapers and on Council's website for 14 days. For Nominated Integrated Development and Threatened Species Development², a notice will be published in the local newspapers and on Council's website for 28 days. Letters will be sent to adjoining and adjacent property owners to inspect the application and make a written submission.

¹ Integrated development is development (not being State significant development or complying development) that, in order for it to be carried out, requires development consent and one or more approval another piece of legislation (Section 4.46, EP&A Act 1979)

² Refer Clause 89 (4) of the EP&A Regulation 2000 for definitions of Nominated Integrated Development and Threatened Species Development.

Application Category	Type of Development	Notification / advertising requirements
		<ul style="list-style-type: none"> • Copy of the application available for viewing at Council's Customer Service Centre/s. • Where an adjoining or adjacent property is a strata title, the Council will notify the individual strata unit owners as well as the Owners Corporation, or an Association under the <i>Community Land Development Act 1989</i>. • Council may consider a wider notification period for an application or an extension of time available for comment in the circumstances of the case.
Notifiable Local Development	All types of development which are not listed as Advertised Development (above), and are not of a type listed below will be notified by Council as Local Development.	<ul style="list-style-type: none"> • Notified for 14 days on Council's Application Tracker. • Letters sent to adjoining and adjacent property owners to inspect the application and make a written submission • Copy of the application available for viewing at Council's Customer Service Centre/s. • Where an adjoining or adjacent property is a strata title, the Council will notify the individual strata unit owners as well as the Owners Corporation, or an Association under the <i>Community Land Development Act 1989</i>.

Application Category	Type of Development	Notification / advertising requirements
		<ul style="list-style-type: none"> Council may consider a wider notification of an application or an extension of time available for comment in the circumstances of the case.
Development applications which will not be notified or advertised	<ul style="list-style-type: none"> Single storey dwelling houses and single storey additions that comply with setback provisions, except raised single storey dwelling houses that have a similar impact to a 2-storey dwelling house; Swimming pools; Sheds and outbuildings that comply with maximum floor area height and setback provisions; Fences and retaining walls; Rural dwellings and ancillary structures; Buildings ancillary to agriculture (not complying development); Demolition of buildings Industrial land uses within the IN1 General Industrial zone, except where the site borders residentially zoned land; Minor development in commercial zones; Applications to modify a consent under S4.55 of the EP&A Act where the application will not significantly alter the intensity or likely impact compared to the original development; Strata subdivisions of existing buildings where the number of dwellings or units remains unchanged. 	<ul style="list-style-type: none"> DA available for viewing on Council's Application Tracker.

3.1.2 Non mandatory exhibition timeframes

Several of Council's planning functions do not have minimum public exhibition timeframes under the NSW planning legislation. As a matter of course and in line with Council's community participation objectives, we will typically exhibit documents related to the exercise of these functions for the timeframes described in Table 3 below:

Table 3: Non-mandatory exhibition timeframes for planning functions

Strategic Planning Function	Minimum community participation requirement
Draft Master Plans	28 days
Draft Structure Plans	28 days
Strategic Land Use Plans, Strategies and Studies	28 days
Draft planning and development policies (Public policies)	Up to 28 days, depending on the nature of the policy

3.2 General requirements for public exhibition and notification of strategic planning functions

For all Strategic Planning functions identified in Table 1 and Table 3 above, a public exhibition notice will be published in local newspapers for the minimum time period outlined. Notification letters will be sent to adjoining and adjacent property owners. Properties notified are dependent on the scale and potential impacts of the planning matter.

In relation to draft Master Plans and Structure Plans or the like, Council will notify all property owners included in draft Master Plan or Structure Plan area, as well as adjacent and adjoining property owners

In relation to planning proposals, public exhibition will be undertaken in accordance with the Department's *A guide to preparing local environmental plans* and any conditions of the Gateway Determination.

In all cases, documentation will be available to view at Council's offices (Port Macquarie, Wauchope and Laurieton) and at the Port Macquarie Library. Documentation will also be available to view on Council's website for the exhibition period at: <https://haveyoursay.pmhc.nsw.gov.au/>

In certain circumstances and depending on the nature and scale of the strategic planning matter, Council may hold workshops, public meetings and/or information sessions or carry out online surveys during the public exhibition period.

3.3 Making a Submission

Any person is entitled to make a submission which may object to or support a planning matter within the public exhibition or notification period. Submissions must be made in writing and delivered to the Council either via electronic mail, via Council's online engagement tool "Have your say" or by post.

3.3.1 Submission Period

The submission period is the stated exhibition or notification period, as detailed in Section 3.1 of this Community Participation Plan.

3.3.2 Submission Inclusions

Submissions must:

- be in writing;
- be addressed to the General Manager (unless made via Have Your Say);
- clearly indicate the names, postal address or e-mail of person(s) making the submission so they can be notified in advance if the matter is to be considered by Council at a Council meeting. This information will remain public and may be included in reports to Council.
- outline your feedback on the planning matter and the reasons for your support or objection (if relevant);
- contain information relevant to the planning matter;
- quote the subject matter, and;
- quote the development application number or reference number and clearly state the address of the property (if relevant).

3.3.3 Making a Submission on a Development Application

Any person who feels that their property or locality may be adversely impacted by a proposed development may make a written submission in response to a development application or DA. In making a submission, it is recommended that you consider the following:

1. An application to develop a parcel of land may be made by the landowner(s) or anyone obtaining consent from the landowner(s).
2. Council is obliged to consider DAs within a legal framework established by the Environmental Planning and Assessment Act 1979 and related documents including the Port Macquarie-Hastings Local Environmental Plan 2011 and Port Macquarie-Hastings Development Control Plan 201.
3. Although Council may write to adjoining and adjacent neighbours inviting their comments, anyone can make a submission on any DA, whether they received a letter or not.
4. Matters raised in submissions should be planning-related, such as the potential impact of the proposed development in terms of scale, privacy, access, noise, dust etc.

3.3.4 Petitions

Petitions may also be used for submissions provided they satisfy the same guidelines outlined above in Section 3.3.2. Where a petition is received, the head petitioner, or, where not nominated, the first petitioner will be acknowledged for the purpose of future contact as to the progress of the application. Only the head petitioner, or first petitioner, will be advised of any related meeting times or receive written confirmation of the determination of an application or outcome of the planning matter.

3.3.5 Disclosure of submissions

Anyone who lodges a submission who does not wish their personal information to be made public, should clearly make a statement to that effect, however their name and suburb (if available) will remain public.

Council will consider making a submission confidential, however, the submission must make a statement to that effect and clearly outline the reasons the submission should be confidential.

Submissions may be accessed by the public by way of a GIPA request (fee payable) to Council. Also, if the planning matter is reported to a Council meeting, the issues raised in that submission will be summarised in the Council report and the submissions will be attached to that report.

3.3.6 Acknowledgement of submissions

All submissions received during the public exhibition or notification period will be acknowledged as soon as practicable by Council following the conclusion of the exhibition or notification period. and will be advised of an indicative timeframe for the planning matter

3.3.7 Applicant request for submissions

Council may provide applicants in respect of a strategic planning matter or development application with a copy of submissions received on receipt of a written request. In providing a copy of submissions, Council will remove the personal contact details and signature of the submitter.

The Applicant will be encouraged to address the issues raised in submissions, by way of comments and/or amended plans.

3.4 Consideration of Submissions

Council must consider all matters which have been raised within any submission before making a decision regarding a strategy, plan or development application.

Following determination of a development application, or the adoption of a strategic plan or strategy, everyone who made a submission will be notified in writing of the decision regarding the application, strategy or plan.

3.4.1 Development Applications

All submissions are considered as part of the development assessment process and summarised in the officer's assessment report.

The lodging of a submission does not mean that Council will refuse the application. Generally, the number of submissions received in response to a DA does not have a bearing on the outcome of the application. The matters raised in the submissions and the potential impacts of the development are of primary importance.

When a submission cannot be resolved, the development application will be referred to Council's Development Assessment Panel (DAP) for determination. Details on the role of the DAP and the DAP Charter can be obtained on Council's website at the following address:

<https://www.pmhc.nsw.gov.au/About-Us/How-Council-Works/Council-and-Committee-Meetings/Sub-Committees-of-Council/Development-Assessment-Panel>

All submitters will be invited to attend and make representations at a DAP meeting. In some instances, applications are determined by the elected Council or by the

Northern Regional Planning Panel (JRPP). In any case, submitters will be kept informed of any meetings where a decision is being made on the development application.

The status of all development applications (from 2002 to current) are available to view on Council's Application Tracking tool. You can view application details, assessment milestones, plans and supporting documents.

You may also phone Council's Development Assessment team on (02) 6581 8111 for information regarding the progress of your submission.

3.4.2 Strategic Planning

Council officers will consider the feedback and any issues raised in the submissions as part of the development of the Plan or Strategy.

Council officers will determine how each issue is to be addressed and identify whether and (if applicable), how the draft Plan or Strategy should be amended. The issues raised in the submissions and any resulting amendments will be summarised by the Council Officers in their report to Council.

Those who made a submission and the Applicant (if relevant) will be encouraged in the acknowledgement of their submission (refer 3.3.6 above) to monitor Council Meeting Agendas on Council's website <https://www.pmhc.nsw.gov.au/About-Us/How-Council-Works/Council-and-Committee-Meetings/Council-Meeting-Agendas-and-Minutes> for the planning matter. The Agenda item will include the relevant Council report to be tabled. There is a further opportunity to address the Councillors at this meeting prior to the draft Plan or Strategy being adopted.

Supporting Documents

The following Council documents (which are available on Council's website www.pmhc.nsw.gov.au) are linked closely to this Community Participation Plan:

- Towards 2030 Community Strategic Plan
- Customer Service Charter
- Urban Growth Management Strategy 2017 - 2036 (UGMS)
- Port Macquarie-Hastings LEP 2011
- Port Macquarie-Hastings Development Control Plan 2013

Relevant Legislation

Relevant legislation for this Community Participation Plan includes:

- Environmental Planning & Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000
- NSW Government Information (Public Access) Act 2009
- NSW Privacy and Personal Information Protection Act 1998
- North Coast Regional Plan 2036

2 Your Community Life

18/09/2019

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





P2/6

FLYNNS BEACH MASTER PLAN
STUDY AREA



STUDY AREA

REVISION HISTORY			
ISSUE	DATE	AUTHOR	APPROVED
1 DRAFT MASTER PLAN	28 August 2018	Rebecca Doblo	Liam Bulley
2 DRAFT MASTERPLAN	05 July 2019	Michael Nunez	Liam Bulley
3 DRAFT MASTERPLAN	06 September 2019	Craig Luff	Liam Bulley



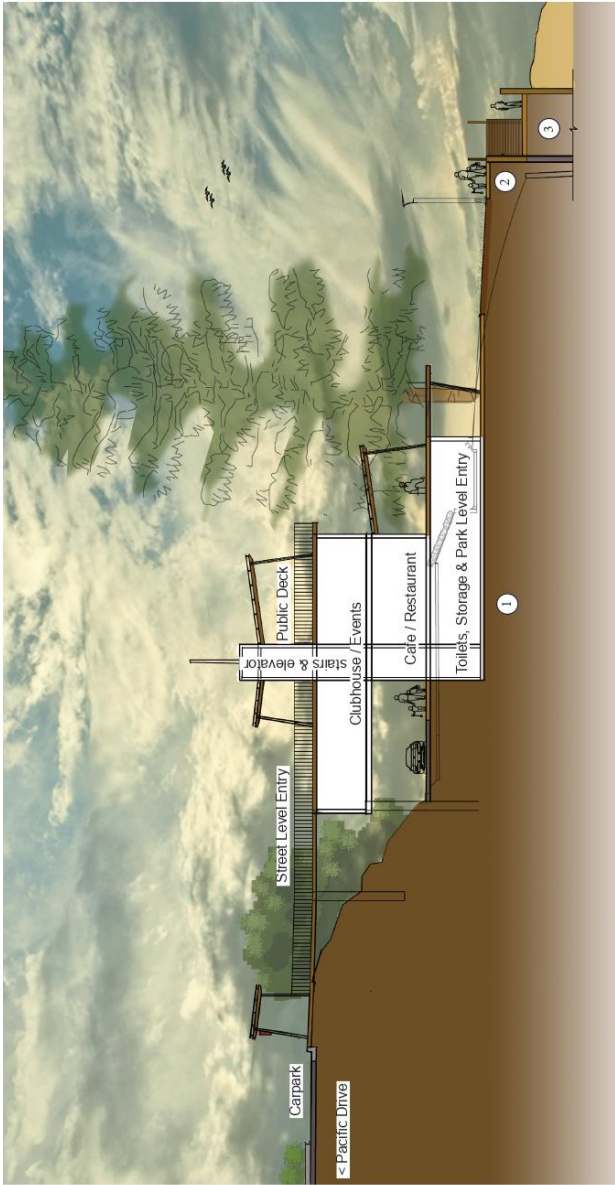


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FLYNNS BEACH MASTER PLAN
PHOTOGRAPHIC RECORD OF EXISTING ISSUES







SECTION A-A



SECTION B-B

LEGEND

- ① New Surf Club. Current clubhouse has some structural and services issues. Additional space is required for all users. A new Clubhouse creates opportunities for level access from Pacific Drive.
- Potential uses of the new building include:
 - Conference Facilities / Hire Venue
 - Cafe
 - Restaurant / Bistro
 - Surf Life Saving Club requirements
 - Improved amenities toilets and showers.
 - Public viewing deck and shelter.
- ② Continuous footpath with pedestrian lighting has been provided throughout the parkland.
- ③ New beach access ramp
- ④ Tiered seating
- ⑤ New picnic facilities and open space in place of existing surf club
- ⑥ Addition of road lighting, footpath and stabilisation of embankment along Tuppery Road.

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SECTIONS

FLYNN'S BEACH MASTER PLAN
NEW CLUBHOUSE





Community Engagement Report (Stage 2)

Flynns Beach Master Plan

Version: 4 September 2019



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1 INTRODUCTION

1.1 BACKGROUND

This Engagement Plan provides specific information in relation to proposed community and stakeholder engagement activities during the concept design and site selection phase for the development of Flynnns Beach Master Plan. This plan will guide the future of Flynnns Beach, a site that is significant to the Port Macquarie - Hastings community.

Flynnns Beach is a significant recreation asset for the area. Council will be embarking on a range of comprehensive community engagement activities in order to determine the most appropriate use for the site and prepare a Master Plan to guide future development of this reserve.

1.2 ENGAGEMENT APPROACH

This Community Engagement Report provides a summary of the community engagement activities carried out during stage two of the engagement process. The intent of the engagement is to develop a range of ideas, based on community feedback, for consideration within the creation of the Flynnns Beach Master Plan. This will provide direction into the design, help build relationships with stakeholders and community members, provide feedback to community on outcomes of their input, generate positive media and develop, deliver a place that the community are proud of, meets user requirements, and adds recreation value.

The initial phase of engagement was undertaken during 2018 and informed the development of the draft master plan. This phase of community engagement will see the draft master plan publically exhibited so that the community can provide feedback to Council staff regarding:

- Plan inclusions they support, and
- Modifications they would like to see in the final document.

ENGAGEMENT OVERVIEW

2.1 Stage 2 Engagement - Master Plan Broad Community Engagement

When	Stakeholder Group/(s)	Purpose
June 2019	Community Think Tank Team	Provide a copy of the draft Flynnns Beach Master Plan
17 July 2019	Recreation and Buildings	Report to Ordinary Council Meeting - Final Draft for Public Exhibition
22 July 2019 - 28 days	All Stakeholders	Draft Master Plan on Exhibition 28 days 22 July – 18 August 2019
18 August	Exhibition Closed	Feedback through variety of engagement methods collated
4 September 2019	Community Place	Develop Community Engagement Report

4 September 2019	Recreation and Buildings	Council report due for finalisation - Review and refine Master Plan document for endorsement at the Ordinary Council Meeting.
18 September 2019	Recreation and Buildings	Review and refine Master Plan document for endorsement at the Ordinary Council Meeting.
19 - 27 September 2019	All Stakeholders	Inform stakeholders of the outcome of the Master Plan report following consideration by Councillors

Table 1: Community engagement timeline

Additional engagement processes will be undertaken through all stages of the project and be based on feedback from the community throughout the process.

2.2 ENGAGEMENT SCOPE

The Master Plan will provide a design for the future development of Flynn's Beach.

The Master Plan will incorporate the structural sea wall between the surf lifesaving club ramp and car parking area on Tuppery Road including vehicle and mobility access ramp, footpath connection through Flynn's Beach Reserve, onto the beach and to Pacific Drive, additional car parks/ reconfiguration of existing car parks and road way and concepts for furniture, signage and lighting.

2.3 ENGAGEMENT METHODOLOGY

Community were invited to participate in a variety of engagement methods during the period June - August 2019. Community members were encouraged to provide their feedback to Council, leave comments and make submissions email or online via Council's Have Your Say website.

The community think tank were provided with the information prior to the July Council meeting. This enabled the community think tank to review the documents and make suggested changes.

The following communication channels were used:

Project FAQ's	Available on Have Your Say webpage.
Think Tank members and CRM submissions	Letter, Engagement Report and Draft Flynn's Beach Master Plan provided to Think Tank members on 28 May 2019. Collate feedback from Think Tank and CRM submissions 28 June 2019.
Webpage – Have Your Say	Master Plan on exhibition for 28 days 22 July - 18 August - FAQ's, key dates for engagement and opportunity to provide feedback.
Have Your Say Submissions and CRM Submissions	Collate feedback from Have Your Say and CRM Submissions from exhibition period.

	Develop Community Engagement Report, feedback review.
Direct contact with key stakeholders	Contact key stakeholders to discuss the Master Plan Encourage key stakeholders to make written submissions.

Table 2: Communication channels

3 ENGAGEMENT RESULTS

3.1 COMMUNITY FEEDBACK

A total of 32 pieces of feedback were received from the community:

- 3 were received via email and CRM's;
- 24 were received from Have your Say;
- 5 were received directly from key stakeholders.

In general, there was a high level of support for the Draft Master Plan with submissions received providing positive feedback in addition to constructive feedback on the concept design which was provided for comment.

The following is a summary of the feedback received:

PROPOSED IMPROVEMENTS	DESCRIPTION
UPGRADE FURNITURE	Additional BBQ's Comfortable benches with back support Shade is paramount Extra picnic tables
UPGRADE AMENITIES	Improvements to the café and amenities along with the proposed viewing deck/platform will exploit the incredible natural beauty from Flynn's Beach.
PLAYGROUND	Welcome installation of small playground at the northern area of the beach. That way the load (people and parking) would be spread across the entire beach rather than concentrated in the centre. Fenced area with seating for parents. The playground is not suitable for the beach reserve and believe it should not proceed. The beach is its own playground and such a facility would be better elsewhere. We have real concerns with it current position close to the observation tower. The tower is the major observation location for swimmers in trouble and as such need clear radio reception between Surf Lifesavers during rescue events. Noise from any playground adjacent the tower would compromise this function.
FITNESS STATION	Beach volleyball courts - beach volleyball

	Fitness machines - this allows all ages & disabilities to benefit (like Town Beach)
UPGRADE SURF CLUB	Option A supported Any proposed redevelopment of the Surf Club building would need to be done in close consultation with the Club.
PROVISION OF DRINKING WATER POINTS	Include bubblers with water bottle refill stations.
ACCESS PATHS	Safe and easy access for wheelchairs, prams and pedestrians from Pacific Drive down to the beach, with no stairs.
INSTALL STAIRS AT SOUTHERN END OF WALL	Installation of stairs supported
BEAUTIFICATION OF THE AREA	Maintain natural beauty of the area Bush regeneration Clearing/ tidy up of entrance to Tuppeny Road Generally overgrown and needs maintenance.
DROP-OFF ZONE	Short term drop off car park supported. It is preferred that two car spaces be available. Drop off zone of the western side is in the wrong spot. It needs to be in a more appropriate place. The identified location on the western side puts pedestrians at risk.
AREA IN FRONT OF NORM MORGAN ROW	Support for seating near and around the Norfolk Island Pines.
EXTRA BEACH SHOWERS	Supported
VIEWING OPPORTUNITIES	Viewing opportunity near corner Tuppenny Road and Pacific Drive opposed - this one as it will impact the EEC. EEC must be protected. There are two threatened plant species at Flynn's. Viewing Opportunity near Rocky's access - Good idea, needs to be formalised. Informal tracks should be closed down. Tully's Headland lookout, seating and shelter - this was interesting as we always call it 'Holmes Reserve'. Oppose this as area has been just regenerated and is EEC.
CREATION OF FRIENDS OF FLYNNS	Voluntary team supported.
SIGNAGE	Signage or branding of the area as Flynn's Beach with an insignia could be included across the entire sight, including logo/ branding could be added to any planned informational signs on the beach/walkways/road and thereby promoting the area for all. Street pole flags or similar could be considered.

	<p>Signage highlighting how to identify rips currents and dangers in the area e.g. submerged rocks etc.</p> <p>Improved beach safety signs that accommodate a few other languages for our visitors.</p>
OTHER CONSIDERATIONS	<p>Keep the historical ambience of this rare area, as it is, not as a futuristic place for the masses.</p> <p>Please stop referring to the road to Flynns as Tuppeny Lane, it is Tuppeny Road.</p> <p>Please consider the impact the erosion is having on the stability of the road where people park. Remember there is an Endangered plant there. Gabions to control erosion - absolutely!</p> <p>More lighting at night.</p> <p>The proposed storage for the surf schools would need to be a separate stand-alone facility separate from the Surf Club Building. There is no room within the current building and if storage was to be considered in any redevelopment of the club it would need to be separate from the club areas with its own access.</p> <p>Possibility of considering allocated parking for the two Surf Schools. This will reduce impact of their parked vehicles merging onto the pedestrian and vehicle traffic.</p> <p>A footpath would be good from the top of the road Southern end of the beach on the eastern side of the road down to the Surf Life Saving Clubhouse.</p>
PARKING	<p>Carpark places at the exit end set at 45 degrees for easy entry and exit.</p> <p>Provide spaces that are not to minimum standard as that is too small for family cars and kids opening doors.</p>
PEDESTRIAN SAFETY	<p>The pedestrian safety would be additionally addressed with a 40 km/hr speed zone from the entry to the lane and exit, and include the car park/pedestrian crossing to the shops.</p> <p>The zone could have a 40km/hr flashing lights and be enforced during peak times - school holidays, weekends and public holidays between 9 and 4. This would add to the overall family friendliness to the area.</p> <p>Reducing the speed limit down to 30km in the Flynns Beach shop precinct and Tuppeny Road. Better signage/warning signal to clearly identify the pedestrian crossing.</p>

	<p>Option 2 is a great proposal, which properly addresses traffic and pedestrian issues and properly utilises this great space - another outstanding asset for residents and drawcard for tourists.</p> <p>Consideration of alternative traffic calming devices should be investigated before the inclusion of speed humps on Tuppenny Road.</p> <p>Pedestrian crossing on Pacific Dr at the shops could be moved south by 100m. This would greatly improve the safety of people using the crossing.</p>
ROAD ACCESS	The southern end of Tuppenny Road is too wide and sometimes confusing to tourists or first time users to the beach. Suggest creating left and right turning lanes on the exit of Tuppenny Road.
CYCLE PATH	Suggest a line-marked cycle path on Pacific Drive

4 COUNCIL'S RESPONSE

4.1 RESPONSES TO FEEDBACK

Detailed responses to issues raised in submissions against the Draft Flynn's Beach Master Plan will be addressed in the Council Report to be considered by Councillors at the September 2019 Meeting.

The Master Plan will not undergo significant change given the general support for planned improvements. Changes that will be presented to Council for consideration in the Final Draft Master Plan are:

- Text change on plans - change from Tuppenny Lane to Tuppenny Road
- Adoption of Option 2 for the surf clubhouse facility
- Altering the location of the playground to the northern end of the reserve
- Referencing the need for lighting to be provided along Tuppenny Road and within the reserve.

4.2 DESIGN CONSIDERATIONS

Council has developed the Master Plan with consideration of the following elements raised as a result of the engagement with the community:

- Upgrade of furniture and BBQs;
- Upgrade of amenities;
- Installation of a playground Northern end of beach;
- Upgrade of the Surf Club;
- Freshwater bubblers and bottle fillers;
- Improved access paths;
- Installation of stairs at the southern end of the beach;
- Beautification of the area;
- Safe drop off zone (2 car spaces);
- Beautification of the area in front of Norm Morgan Row;
- Extra beach showers;
- Improvements to Tully's Headland;
- Interpretative Signage strategy.

FLYNNS BEACH MASTERPLAN

COST ESTIMATE (Rev 0 - 06 September 2019)



No.	ITEM DESCRIPTION	QTY.	UNIT	RATE	TOTAL
1.0	Landscaping				
1.01	Concrete pavement	3439	m2	\$126.00	\$433,314.00
1.02	Boardwalk & steps	58	lm	\$1,200.00	\$69,600.00
1.03	Bollards	22	item	\$220.00	\$4,840.00
1.04	Planting beds with mulch	1221	m2	\$60.00	\$73,260.00
1.05	Advanced trees 400L	30	item	\$3,000.00	\$90,000.00
1.06	Turf	2019	m2	\$25.00	\$50,475.00
1.07	Irrigation	2414	m2	\$15.00	\$36,210.00
1.08	Entry signage wall 1.5m height	1	item	\$9,000.00	\$9,000.00
1.09	Playground area	1	item	\$85,000.00	\$85,000.00
1.10	Sculpture	3	item	\$20,000.00	\$60,000.00
1.11	Rock filled gabion baskets 200*50*100cm	675	lm	\$500.00	\$337,500.00
1.12	Viewing decks	70	m2	\$1,500.00	\$105,000.00
2.0	Furniture				
2.01	Picnic settings with wheelchair access to one end	8	item	\$2,000.00	\$16,000.00
2.02	Bench seat with armrest and back	6	item	\$1,700.00	\$10,200.00
2.03	Timber seating pods	7	item	\$4,500.00	\$31,500.00
2.03	Water Bubbler (Unisite Reviva)	3	m2	\$4,500.00	\$13,500.00
2.04	Bin including concrete pads	6	item	\$1,000.00	\$6,000.00
2.05	Bike rack (Bennetts Steel). 4 no. in total	2	item	\$1,000.00	\$2,000.00
2.06	Electric BBQ (double)	4	item	\$8,000.00	\$32,000.00
2.07	Shelters (12x5m)	3	item	\$17,000.00	\$51,000.00
3.0	Sea walls				
3.1	Concrete sea wall including steps, seating wall, showers and balustrade	160	lm	\$28,000.00	\$4,480,000.00
3.2	Rock reventment wall with steps	140	lm	\$4,300.00	\$602,000.00
4.0	Buildings				
4.01	Demolition of existing building	1	item	\$250,000.00	\$250,000.00
4.02	Design for new building	1	item	\$100,000.00	\$100,000.00
4.03	Ground preparation	1	item	\$1,000,000.00	\$1,000,000.00
4.04	Linking boardwalk	1	item	\$220,000.00	\$220,000.00
4.05	New building	980	m2	\$5,000.00	\$4,900,000.00
5.0	Road upgrades and car parking				
5.01	Carpark including kerbs	57	item	\$2,500.00	\$142,500.00
5.02	Upgrde intersections	2	item	\$50,000.00	\$100,000.00
5.03	Pedestrian crossings	3	item	\$20,000.00	\$60,000.00
6.0	Road upgrades and car parking				
6.01	Road lighting	1	item	\$500,000.00	\$500,000.00
6.02	Pedestrian lighting	1	item	\$200,000.00	\$200,000.00
7.0	General				
6.01	Preliminaries	10	%		\$1,407,089.90
6.02	Contingency	30	%		\$4,221,269.70
6.03	Project management	5	%		\$703,544.95
TOTAL					\$20,402,803.55

Subtotal

\$14,070,899.00





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FLYNNS BEACH MASTER PLAN
STUDY AREA



STUDY AREA

REVISION HISTORY				
ISSUE	DATE	AUTHOR	APPROVED	
1	DRAFT MASTER PLAN	28 August 2018	Rebecca Doblo	Liam Bulley
2	DRAFT MASTERPLAN	05 July 2019	Michael Nunez	Liam Bulley





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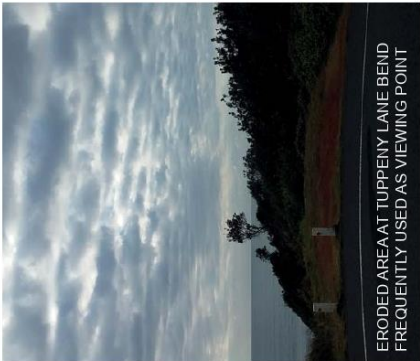
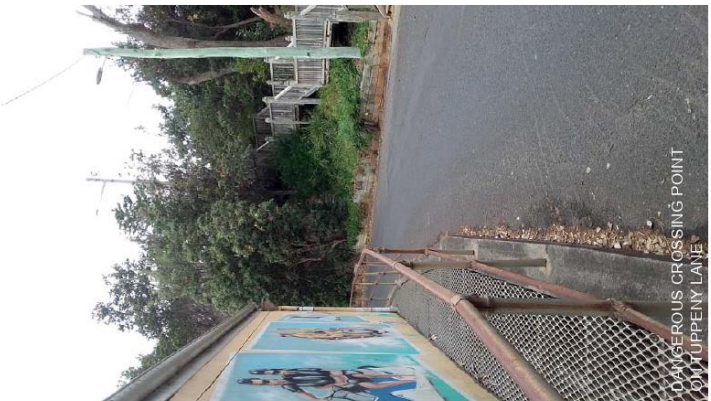
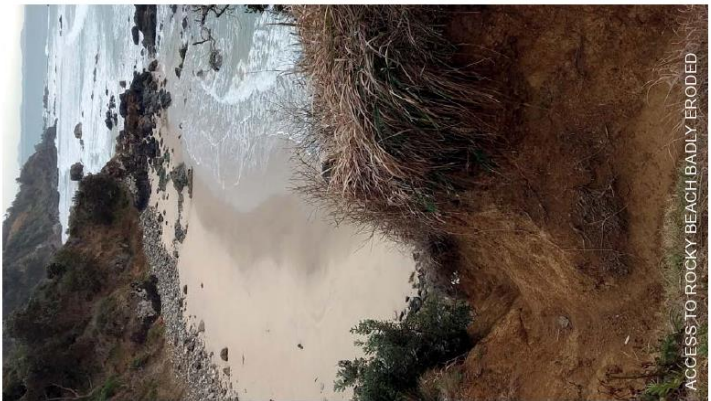
FLYNNS BEACH MASTER PLAN
PHOTOGRAPHIC RECORD OF EXISTING ISSUES



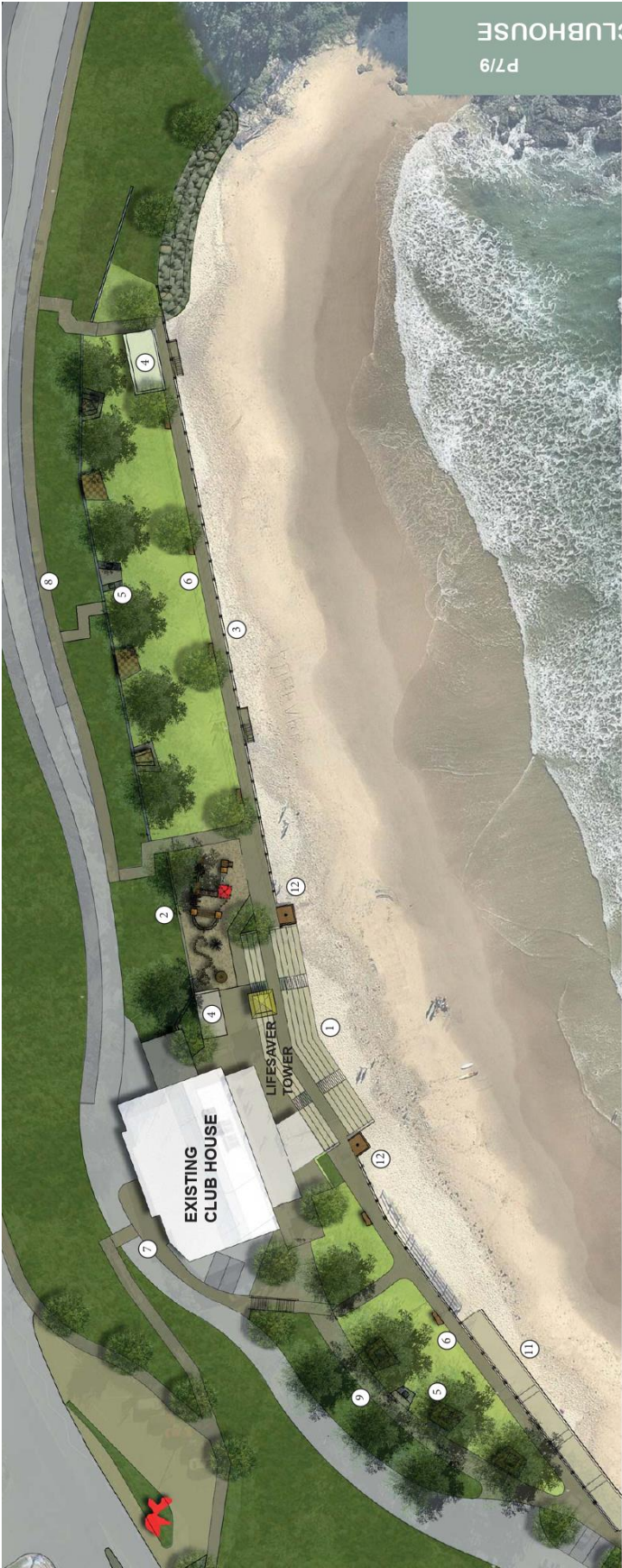


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FLYNNS BEACH MASTER PLAN
PHOTOGRAPHIC RECORD OF EXISTING ISSUES







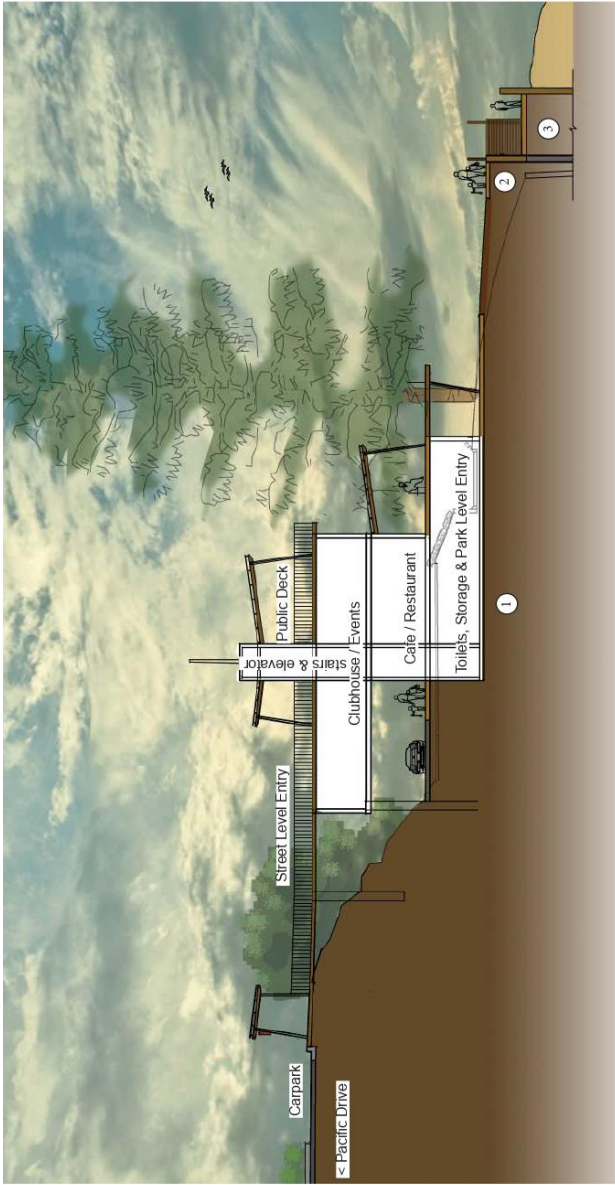
FLYNN'S BEACH MASTER PLAN
OPTION 1 UPGRADE EXISTING CLUBHOUSE
P7/9
DETAIL PLAN



LEGEND

- ① Coloured concrete tiered seating with integrated artwork.
- ② Nature based playground.
- ③ New vertical sea wall.
- ④ New BBQ and picnic pavilions.
- ⑤ Seating provided near and around the Norfolk Island Pines.
- ⑥ Continuous footpath throughout reserve
- ⑦ Improved footpath access and upgraded pedestrian crossing with signage and traffic calming measures
- ⑧ Addition of boardwalk and stabilisation of embankment along Tupper Lane.
- ⑨ Vehicle access corridor to be shared with pedestrians. Create a pedestrian only zone along the beach side with bollards and differential pavement finishes. Include traffic calming measures.
- ⑩ Opportunity to integrate public art along parklands
- ⑪ Vehicle and disabled access ramp.
- ⑫ Beach showers at same level as the pathway.





LEGEND

- ① New Surf Club. Current clubhouse has some structural and services issues. Additional space is required for all users. A new Clubhouse creates opportunities for level access from Pacific Drive.
- Potential uses of the new building include:
 - Conference Facilities / Hire Venue
 - Cafe
 - Restaurant / Bistro
 - Surf Life Saving Club requirements
 - Improved amenities toilets and showers.
 - Public viewing deck and shelter.
- ② Continuous footpath. A continuous footpath provided throughout the parkland.
- ③ New beach access ramp
- ④ Tiered seating
- ⑤ New picnic facilities and open space in place of existing surf club
- ⑥ Footpath along Tuppenny Lane

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FLYNNS BEACH MASTER PLAN
OPTION 2 NEW CLUBHOUSE



HYS Flynnns Beach Draft Master Plan Submissions

No.	Name	Feedback on the Draft Flynnns Beach Master Plan	Is there anything else you would like us to consider for this space?	Date of Submission
1	Alan Forrester	The pedestrian safety would be additional addressed with a 40 Km/hr speed zone from the entry to the lane and exit, and include the car park/pedestrian crossing to the shops. The zone could have a 40km/hr flashing lights and be enforced during peak times - school holidays, weekends and public holidays between 9 and 4. This would add to the overall family friendliness to the area. Signage or branding of the area as Flynnns Beach with an insignia could be included across the entire sight, including logo/branding to added to any planned informational signs on the beach/walkways/road and thereby promoting the area for all. Street pole flags or similar could be considered.	No Answer	29/07/2019
2	Brenton Burden	I would like to see the carpark places at the exit end set at 45 degrees for easy entry and exit. This is a very popular beach and trees look pretty but take up car spaces, just have them at the ends. Hopefully the spaces are not to minimum standard as that is too small for family cars and kids opening doors. Vegetat the land on the North west side for shading if you must, not the car park.	No Answer	29/07/2019
3	Mark Thomas	Community Engagement Report - the list of Internal Stakeholders there was a conspicuous omission. I would say that the Natural Resources section is a rather important stakeholder in view of the sensitive flora of the area. Draft Master Plan Rocky Beach stairs - good idea but a low priority I think. Viewing Opportunity near Cnr Tuppenny and Pacific - I have to oppose this one as it will impact the EEC. EEC - agreed. It must be protected. There are two Threatened plant species at Flynn's. Viewing Opportunity near Rocky's access - Good idea, needs to be formalised. Informal tracks should be closed down. Tully's Headland lookout, seating and shelter- This was interesting as we always call it 'Holmes Reserve'. I must oppose this one as we've just regenerated the area and is EEC. Tully's Headland lookout, seating and shelter- This was interesting as we always call it 'Holmes Reserve'. I must oppose this one as we've just regenerated the area and is EEC. The plan acknowledges the area is EEC but proposes building stuff. I have to reject the notion that the pathway is "overgrown". When we regenerated the area we deliberately made the path 'low-tech'. Its open for discussion. Southern access to beach - Formal stairs are long overdue. Please consider the impact the erosion is having on the stability of the road where people park. Remember there is an Endangered plant there. Southern carpark - Go for it! Crossing point from bottom of stairs near club (plan point 23) - agreed, its pretty average at the moment. Gabions to control erosion - absolutely!	No Answer	31/07/2019

4	nick g	<p>AMAZING! This is the kind of sophisticated redevelopment Port Macquarie needs. As a local resident that enjoys Flynn's Beach, these upgrades will really enhance the experience of living in Port Macquarie. At present Flynn's is under-utilised... The proposed upgrades will undoubtedly improve the flow of visitors to this part of town and will ensure local shop-owners and stakeholders have great footfall to support their businesses. Improvements to the café and amenities along with the proposed viewing deck/platform will exploit the incredible natural beauty from Flynn's Beach. As an alternative to Town Beach, Flynn's deserves high quality infrastructure.</p>	<p>I would love to see Flynn's Beach urbanised with colourful lights at night. It could be Port's answer to Vivid if there were seasonal lightshows at Flynn's Beach, The Glasshouse and the yet-to-be-built Aquatic and Leisure Centre. I'd also suggest looking at the Gold Coast Broadwater Parklands because they've made clever use of architectural and environmental features (http://www.goldcoast.qld.gov.au/broadwater-parklands-image-gallery-28781.html). Also, I'd suggest looking at the INCREDIBLE "Street's Beach" in Brisbane - not because of the manmade lagoon but because of the way they incorporate urban and natural features to create an unforgettable outdoor experience. The floral pavilions would really enhance the visual appeal of the beach.</p>	23/07/2019
5	Peter Allen	<p>We live near the beach and use it regularly, including after school surfing. Tuppenny Lane is dangerous for children, without designated pathways and limited parking. Option 2 is a great proposal, which properly addresses traffic and pedestrian issues and properly utilises this great space - another outstanding asset for residents and drawcard for tourists.</p> <p>Having read the Draft 2 of the Master Plan and going through the suggestions of others in conjunction with the "plan" I believe that much of the "plan" is perhaps achievable but not necessarily warranted. For instance, I do not believe that any playground or exercise area is needed. The area available for improvements such as these are very limited, there already exists a sufficient playground at John Downes Park and two exercise stations between Rocky Beach Reserve and Mill Hill reserve. I walk the Coastal Walk from Mill Hill to Swift Street daily and seldom see the equipment being utilized. The demand for more is not there and the resources to install and maintain them could be better utilized in other improvements to Flynn's. Similarly, the installation, ongoing maintenance and repair of playground items will be costly, may well not be cost-effective (cost/benefit analysis) or warranted. I would anticipate that the Port Macquarie Surf Club has been and will continue to be included in all discussions in relation to the future "improvements" to the clubhouse building. What control of the use will the PMSLSC have over the use of the building? This is a paramount issue. Consideration of alternative traffic calming devices should be investigated before the inclusion of speed humps on Tuppenny Road - NOT Tuppenny Lane. The name of the road has nothing to do with a Beatle's song of a similar name!!!! I am totally against any erection of a memorial to the fellow who died at Flynn's. He was not the first to die there and, unfortunately, won't be the last. I am aware of another young man from Port who drowned at Flynn's, in the late '80s, four members of the surf club received commendations for bravery for their efforts to save this young man and no memorial has ever been requested. I am also aware of the deaths of a young man at John Downes(suicide) and the drowning of a young local boy on Christmas Day in the late 70s at Shelly Beach and so on. Memorials such as the one suggested are not for council to erect and maintain. The idea of loved ones seeking council approval to have a memorial seat installed at some appropriate</p>	<p>Beach volleyball courts / posts would be another drawcard- they are cheap and aren't found elsewhere. More BBQs please.</p>	24/07/2019
6	Peter Navin		<p>Yes, try to keep the historical ambience of this rare area as it is, not as a futuristic place for the masses. PLEASE STOP REFERRING TO THE ROAD TO FLYNN'S AS TUPPENNY LANE. IT IS TUPPENNY ROAD</p>	31/07/2019

7	Sergio Pavan	Very comprehensive and positive plan. Happy to support the concept, the devil is often in the detail and will look forward to the unfolding and development of the plan.	Planners seem to have covered all at this stage. I support the Council statement on the Tidal Pool issue as noted in the plan. I am strongly opposed to such a project on many levels, none the least is the intrusion of a built structure onto a world class natural and beautiful beach and landscape.	25/07/2019
8	Tessa Hodson	Lots of good features. Prefer option 1 - upgrade of existing surf club if this means lower cost. Please add some comfortable benches with back support on the lawns under the Norfolk Pines - for people who just want to sit comfortably and enjoy the view. It all looks absolutely fantastic, we always expected The Flynns Beach area over the past 50 years to become something .. Now it all looks like what we all hoped for is finally happening. I can see why the 80% of people submitting love it. I do as well .. Shade is paramount and add a children's playground great .. I suppose a Tidal pool may come along in the future.. Nice older tidal pools shall be repaired in the area meantime... Great.. The volume of shark sightings may increase as such a tidal pool may be a wonderful option at Flynns in the coming years... Thankyou to you all at Council, you do a great job for us all in the area anyway but This Flynns Beach development "tops it" The new surf club expansion looks very classy .	No Answer	30/07/2019
9	David Wrigley		My only concern is with all this happening many more people will arrive and more parking shall possibly be needed / anticipated... If there is an event of an evening at The Surf Club +the new Surf club Restaurant + The Blue Whale eatery at 4 Flynn Street. It is of some concern as I watch 20 - 30 vehicles of an evening already looking to park and doing a U turn at Flynn and Surf street. I see from my balcony how popular the Blue Whale is becoming and the volume of cars arriving and looking to park, it is far greater than in the days when "Thommo's" seafood restaurant was paramount or any others who tried to make this largish establishment at 4 Flynn street work. Seating for over a hundred hmmm ... Lot's of vehicles now filling Flynn and Surf street especially on a Friday evening...	29/05/2019
10	Elizabeth Casey	1. There needs to be an inclusion to show proposed lighting of the area. 2. The comments about maintaining the natural beauty of the area are strongly supported but the potential future inclusion of a tidal bath is inconsistent with maintaining the natural beauty ie it would destroy the natural rock formations and beach scape. 3. I support the establishment of "Friends of Flynns Beach" and would be willing to participate in the establishment of this group. 4. I support both option 1 and 2 but option 2 with a new club house would be preferable. Having said that, I realise that the option involving a new club house is a far more costly scenario and may delay the implementation of other improvements outlined in option 1. I therefore would propose that option 1 be modified to allow all its inclusions to proceed as soon as possible, whilst incorporating contingency to include a new club house (as per option 2) in the future.	No Answer	31/05/2019
11	Bev Carver	Love the idea of revitalising Tully's Lookout. Also, Tuppenny Road not Tuppenny Lane. I notice there will be some recognition/remembrance of those who have lost their lives at Flynn's Beach. e.g. Bronson. I know of another local family who lost their son at this beach - will he also be part of the memorial? My Dad was on the Building Committee for the current surf club building. I am writing the 100 year history of the surf club.	No Answer	5/08/2019

12	Cadence Ward	We do not need another new playground in Port Macquarie-Hastings. Perhaps instead of building a new, unnecessary playground, council could upgrade existing ones to be sun safe, fenced in, with free access to water bubblers etc.	Port Macquarie struggles with car parking, especially during summer when the annual flood of tourists occurs and they proceed to take up every car park we have. Utilise the space being made available, and increase the amount of car parks being added to a beach that has previously struggled to keep up with demand.	1/08/2019
13	Christian Schafer	I am in favour of the "Flynn Beach Master Plan". I believe this plan is a great design and enhances the beach area. I have no adverse comments. Thank you Please do not impact on the degree of shady green areas - this is what I love about FB. The rest looks great and I commend the designers!	No thanks	02/08/202019
14	Christina Parkin	I have been watching the work progress from the start and I find the draft plan a little confusing with most of the visual plans on site back to front but am hopeful /confident the finished product will be worth the wait.	A small playground for kids in the shaded area - I know there is a beach but for those times when users want to use the amenity for BBQs etc, it would add to the potential usage.	5/08/2019
15	Fran Lake		I think it is well past time the club facilities (showers change rooms) were upgraded. I am aware there was a grant to upgrade the women's facilities a little while back but am left disheartened as we still have toilets which don't flush properly, wash basins with hardly any water coming from the taps and hot showers that may work occasionally but more often don't if there is more than one person to shower especially if the men's showers are being used at the same time and a ceiling that has more leaks than before the renovations !!!!! A very sad club	1/08/2019
16	Ian Ramsay	Firstly I do not live in Port Macquarie but I do own a unit in Beachpark (across the road). Having said that we are regular visitors to Port and we regard Flynn's beach as our front yard. I have had a look at the proposal and the only comment I can make is that from my observations I feel that the upgrade is long overdue. Obviously we are all aware of the current parking status and it is long overdue for a revamp. Better beach access will I feel be a tremendous asset as would improved picnic and a new playground. As stated above I feel the proposed improvements will greatly enhance the area and I fully support the proposal. Kind regards, Ian Ramsay	No Answer	2/08/2019
17	Janette Turnbull	Do not put in a playground at Flynn's Beach. Children are taken to the beach so they can experience a different form of play and learn about the coastal area of our country, discovering rock pools etc. Children can be taken to a number of playgrounds in the area if that is the experience the parent is giving them. On another note it would be vanalised within the week as at night it is very out of site which makes it an easy target.	If you want to spend money on recreation that is going to help the community and give families the opportunity to stay out longer, put in toilets to all playgrounds. It is irresponsible of council to keep allowing the building of playgrounds without these facilities. It is a health issue. It is a moral issue. It is another ignorant decision the council seem to be good at.	4/08/2019
18	Lyn Webb	My main concern is that there seems like a lot of the beach (sand area) will be overtaken by the construction, so that when the tide is fully in there will be a lot less space for holiday makers and locals to sit on the sand. I have lived near this beach for 25 years and at busy holiday times the whole beach is full of people and beach umbrellas etc. Also locals who want to walk the beach every day would only be able to do it when the tide is out!!	No	5/08/2019
19	Kaye Walters	Please provide safe and easy access for wheelchairs, prams and pedestrians from Pacific Drive down to the beach, with no stairs.	No Answer	7/08/2019

20	Annie	The draft master plan looks great. I do believe we need to upgrade our surf clubs to provide more facilities & modernise - just need to consider if there will be sufficient parking at Flynn's Beach to accommodate increase usage of the surf club for functions etc. Please, if you upgrade or build a new surf club you add to the council's future works (not too far in the future) the same for Tacking Point Surf Club. The improvements to Flynn's Beach may be at detriment to Tacking Point Surf Club usage and thus fund raising ability.	If you include outdoor gym type area - please make it similar to Town Beach - that is the style that you can move i.e. fitness machines - this allows all ages & disabilities to benefit. Please include bubble's with water bottle refill stations. May need to consider improved beach safety signs that accommodate a few other languages for our visitors - e.g. Chinese, Indian	8/08/2019
21	Daniel Barakat	A tidal pool would be a great plan for Flynn's beach community and greater port Macquarie. All other proposals are great, anything new will bring more life to Flynn's beach.	New surf club.	8/08/2019
22	Trudy Thwaites	Play area and more barbeques would be fantastic	Better access for pedestrians specially those unable to use the stairs.	8/08/2019
23	Rachel Rhodes	Bronson Rhodes Memorial incorporating seat and plaque and contemporary art work such as a Sculpture etc. A dedicated art wall in Bronson Rhodes name with community artists invited to conduct community workshops to create community art installations.	Signage highlighting how to identify rips currents and dangers in the area eg submerged rocks etc.	8/08/2019
24	Andrew Bailey	excellent plan, well conceived and all elements make sense. I would suggest that tiered concrete steps in stead of the proposed vertical seawall would be a better outcome in terms of environment, facility and engineering stability. I am confident that Option 2 (replacement of Surf Club) would be a much more viable long term strategy than refurbishing the old surf club.	Ensure use of natural materials - hardwood etc. rather than treated pine. Ensure expanded space for Café area	9/08/2019
25	Annemieke English	The Master Plan looks very comprehensive, hopefully will make for a safe enjoyable place for lots of use in the future years.	Being a beach walker, access to Flynn's Beach across Tupenny Road is probably my first concern. The speed limit is never adhered to and the vision is poor. My only easy suggestion is to put a diagonal crossing from the bottom of the stairs to the top of the next set of stairs and indicate on the road that there is a crossing ahead. This may make it a little safer for pedestrians. I think it is wonderful that some thought is being put into future use of this beautiful beach and area.	13/08/2019
26	Denise Herd	The master plan appears to be well considered.	The plans sound well considered. My suggestions would be: An extension of the cafe area with easy handicapped parking access close to the cafe. Children's safe play equipment in a child safe fenced area with seating for parents so they can supervise their children.	14/08/2019

27	Wayne Hudson	As a long term resident of flynn's beach the plan looks okay. A few changes would be to move the childrens play ground from the centre of the beach to the north end. That way the load (people and parking) would be spread across the entire beach rather than concentrated in the centre. More of the beach would be used and accessed which would be great rather than concentrating it near the centre. It is important to maximise parking too and so the boardwalk next to the existing parking area is a good idea. The plan looks to remove some parking which would be catastrophic on such a busy beach. Please dont remove any parking, because summer time and also nipper days this is ALL needed. With out parking flynn's will lose its tourists and locals Updating the surf club looks amazing and will bring a more user friendly beach and a better and more state of the art surf club for such a busy beach	More lighting at night. It is extremely dark and with these new decks etc it would be great to use into the dusk and night times for family dinners, gatherings etc	15/08/2019
28	Corey Enfield	Drop of zone of the western side is in the wrong spot. It needs to be in a more appropriate place. The identified location on the map puts pedestrians at risk. Reducing the speed limit down to 30km in the flynn's beach shop precinct and Tuppenny Road. Better signage/ warning signal to clearly identify the pedestrian crossing.	A footpath would be good from the top of the road Southern end of the beach on the eastern side of the road down to the Surf Life Saving Clubhouse. Possibility of considering allocated parking for the two Surf Schools.	2/09/2019
29	Latif Ucderehli	Pedestrian safety from the shops up the top down to the beach.	When any construction is occurring in the area to engage with the businesses, this will ensure they have enough lead time to plan and prepare.	2/09/2019
30	Rick Rolff	Any proposed redevelopment of the Surf Club building would need to be done in close consultation with the Club. Whilst the current concept is in line with the Surf Club Master Plan done some years ago any work to advance the design would need close consultation with the club to ensure it's primary function is suitable to support the club and councils surf life saving functions. We would note that the original club building, the construction of which dates back to the 1950's, was financed by the club along with the numerous upgrades and maintenance to the present day and as such the club has a considerable financial interest in the existing building. The proposed storage for the surf schools would need to be a separate stand alone facility separate from the Surf Club Building. There is no room within the current building and if storage was to be considered in any redevelopment of the club it would need to be separate from the club areas with it's own access. The club would not consider loss of footprint to accommodate this additional storage. We will not consider the playground suitable for the beach reserve and believe it should not proceed. The beach is it's own playground and such a facility would be better elsewhere. We have real concerns with it current position close to the observation tower. The tower is the major observation location for swimmers in trouble and as such need clear radio reception between Surf Lifesavers during rescue events. Noise from any playground adjacent the tower would compromise this function.	No Answer	3/09/2019
31	Tracey Wells	Happy with the draft plan. Pedestriansafety and car parking has been my concern in this area.	No answer	4/09/2019
32	David Craddock	Move existing cross at the flynn's beach shops south by 100m and remove parking from infront of it (directly)	No Answer	4/09/2019



Port Macquarie Aquatic Facility Site Selection

Community Engagement Report

September 4, 2019



Community Engagement Report Port Macquarie Aquatic Facility Site Selection

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1 INTRODUCTION

1.1 BACKGROUND

An aquatic facility that caters for the region's continuing growth is a high priority for the Port Macquarie-Hastings community, and at the July 2019 meeting, Council resolved to conduct further community engagement on possible sites for a new facility.

1.1 PROJECT BACKGROUND

The Port Macquarie Pool was built in 1966, and is approaching its use by date, with structural, accessibility, programming and maintenance issues identified as barriers in providing quality swimming facilities for the community into the future.

Other facilities within the current Port Macquarie Pool complex are also reaching the end of their useful life with the toddler's pool undergoing rectification works in 2017 as a short-term solution to extend its usability.

In late 2017, Council undertook an initial round of community engagement to understand the elements the community would like to see included in a new aquatic facility. In mid-2018 Council engaged *Otium Planning Group*, a specialist consultancy service with extensive expertise in aquatic facility development and management, who commenced a thorough review of the region's current aquatic facilities and future needs.

In developing the Port Macquarie-Hastings Aquatics Strategy, Otium have identified and recommended the key components needed to meet the aquatic needs of the community for the next 50 years. These elements include a 50-metre and 25-metre pool, children's water play, program pools, and fitness & wellness elements.

Detailed costing for a new aquatic facility will be determined following the detailed design stage of the project. However, based on recently developed contemporary facilities within Australia, it is estimated that the project in its entirety will cost in the vicinity of \$40 - \$50 million.

1.2 SITE OPTIONS FOR NEW FACILITY

Based on the community engagement already undertaken, and the Otium report findings, six Council-owned or managed sites in Port Macquarie have been identified that could accommodate a new aquatic facility.

The six potential sites are as follows:

- Macquarie Park (Gordon Street)
- Dixie Park (Aston Street)
- Findlay Park (Findlay Avenue)
- Upper Oxley Oval (Pacific Drive)
- Thrumster Sporting Complex (College Drive)
- Wayne Richards Park (Koala Street) - that part of the Park currently occupied by the Council Depot

These six sites and the current pool locations across the Local Government Area are shown in the **Site Contexts Map** shown over:

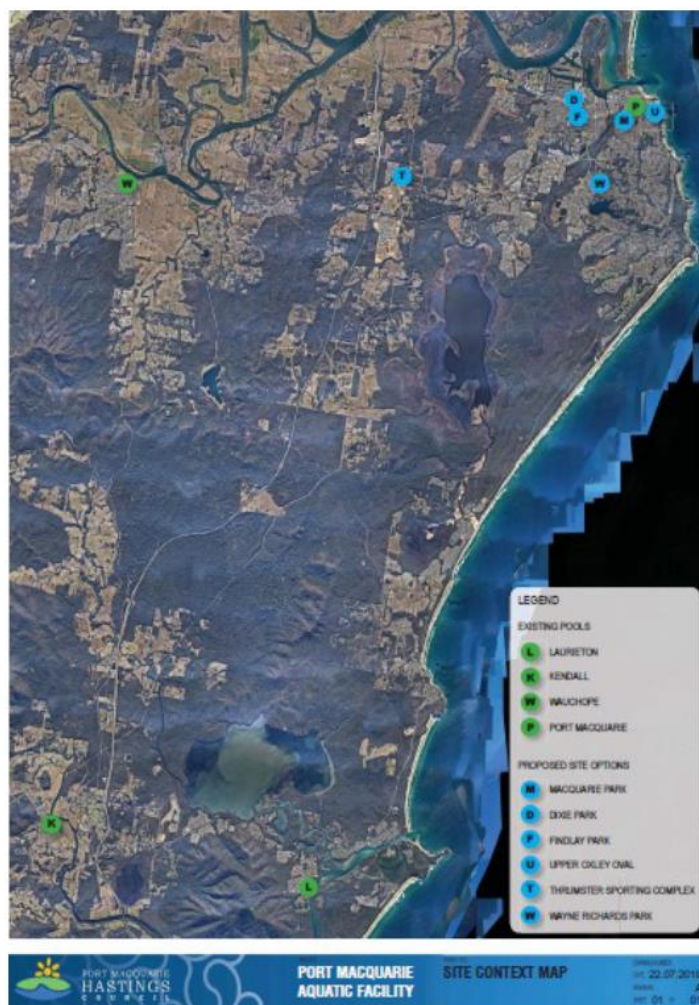


Image 1 - Site Contexts Map

High-level layouts were developed for each of these sites see Attachments A-E.

1.3 ALTERNATIVE OPTION

In addition, there is the alternative option to upgrade the existing site in Gordon Street. It is recognised that the existing pool site is not large enough to accommodate a new aquatic facility based on the identified spatial requirements. However, an alternative option to constructing a new aquatic facility would be to upgrade or replace the existing pool facilities to extend their useful life.

This would essentially involve a like-for-like upgrade; however, further works would be required to bring the facility up to current industry standards and meet compliance requirements, which have come into effect since the original facility was constructed.

The estimated cost of delivering this option is in the order of \$8 - 10 million. The works would need to be undertaken over an extended period (estimated 8-12 months). It is likely that the

entire pool facility would be closed during this period to complete the works. Further, this option does not address existing congestion issues associated with this facility, which will only worsen as our population continues to expand.

Each of the options has its "pros and cons" which were detailed in the Positives and Constraints document which was available for residents to download and view.

1.4 ENGAGEMENT APPROACH

This Community Engagement Report provides a summary of the community engagement activities carried out by the Community Participation Team during the period July 8 - September 1, 2019.

The intent of the community engagement was to inform the site selection decision for the proposed new Aquatic Facility.

2 ENGAGEMENT METHODOLOGY

2.1 ENGAGEMENT TIMELINES

DATE(S)	ACTIVITY
11 - 15 July	Stakeholder Meetings with site user groups (existing and future) & Pool for Port Macquarie Group
18 July	Media Release
22 July - 1 September *	Have Your Say Online Engagement Survey https://haveyoursay.pmhc.nsw.gov.au/Port-Macquarie-Aquatic-Facility2
w/c 22 July	Public Notice in Council's Community Now Notices in Port Macquarie News, Wauchope Gazette and Camden Haven Courier
1 August	Featured Engagement in the August e-newsletter to registered HYS participants (3027 recipients)
2 August	Letterbox Drop to Neighbours of Sites (see Attachment xx for letter content)
8 August	Meeting with Birpai Local Aboriginal Land Council
13 - 15 August	Pop-Up Engagements:

	<ul style="list-style-type: none"> - Port Central - Port Macquarie Pool - Settlement City
22 July - 22 August	Promotion of Survey via newspaper advertisements, Facebook & posters on-site and in local spaces

Table 1: Community engagement timeline

*The exhibition period was extended for 2 weeks to allow for further input from the community (particularly from those who neighbour the potential sites).

Copies of all communications collateral supporting material the engagement including media release, articles, social media posts and poster can be found in Appendix A.

2.2 HAVE YOUR SAY SITE & SURVEY

A comprehensive Have Your Say site was developed to solicit feedback on the various site options. The following documents were available in the Document Library on this site:

- Otium Planning Group Report - Port Macquarie-Hastings Council Aquatic facilities Strategy
- Aquatic Facility - Site Context Map
- Port Macquarie Aquatic Facility Site Options - Schematic Layouts
- Port Macquarie Aquatic Facility Site Options - Existing Site Layout
- Port Macquarie Aquatic Facility Site Options - Positives and Constraints
- Port Macquarie Aquatic Facility Site Options - Existing Site Layout
- Port Macquarie Aquatic Facility Site Options - Frequently Asked Questions
- Council Report - Port Macquarie Aquatic Facility

Community members were asked for their feedback on the different site options and the various criteria that will help Council determine the best site for a new Aquatic Facility by completing a survey. The survey was also available at Council offices and libraries and at the Community Engagement Pop-Ups.

Submissions could also be sent directly to Council via email or letter.

3 ENGAGEMENT ACTIVITIES

3.1 STAKEHOLDER MEETINGS

Prior to the exhibition period commencing, face-to-face meetings were held with the following key stakeholders for the project to inform them of the engagement and answer any questions they may have had about the engagement process and/or concerns with the project moving forward. All stakeholders were encouraged to provide feedback during the engagement period.

- BlueFit - managers of the existing Port Macquarie Pool;
- Football Mid North Coast - overarching body for football clubs in the region, one of which could be affected depending on the site chosen; future user of the Thrumster site;
- Little Athletics, Port Pacers - future users of the Wayne Richards Park site option;
- Port Macquarie Netball Association, Port Macquarie Football Club & Port Macquarie Army Cadets - current neighbour and users (respectively) of the Macquarie Park site
- Port United Football Club - current user of Dixie Park site;
- Port Saints Football Club, Hastings Secondary College (Westport Campus), Port Macquarie Softball Association - current users of the Findlay Park site;
- Port Macquarie Vikings Rugby Club - users of the Oxley Oval site
- Pool for Port Macquarie Group (now Aquatic Facility Committee) - lobby group for the development of a new Aquatic Facility for Port Macquarie.

A meeting was also held with representatives from the Birpai Local Aboriginal Land Council, which confirmed that there were no known Aboriginal Heritage issues with any of the sites. The Land Council wishes to be involved in both the design and construction phases of the project.

3.2 ON SITE POP-UP CONVERSATIONS

Three engagement pop-ups were held during the exhibition period with a total of approximately 80 conversations held with community members. Residents were encouraged to complete the Aquatic Facility survey either at the pop-up or on-line.

4 ENGAGEMENT RESULTS

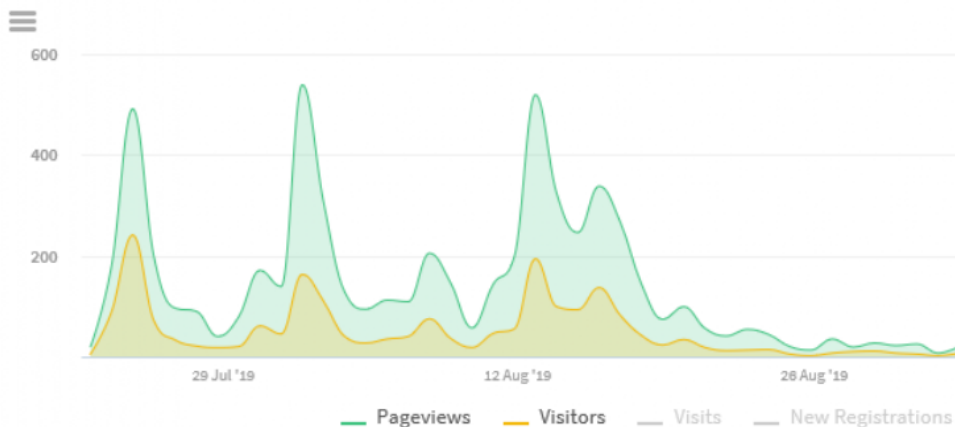
4.1 SUBMISSIONS RECEIVED VIA HAVE YOUR SAY (22 July - 1 Sept 2019)

Visitors Summary

Port Macquarie-Hastings Council Have Your Say from 22 Jul'19 to 01 Sep'19

DAILY

MONTHLY



AWARE PARTICIPANTS	1,796
Visited at least one Page	
INFORMED PARTICIPANTS	1,220
Downloaded a document	457
Visited Multiple Project Pages	401
Visited the Key Dates Page	8
ENGAGED PARTICIPANTS	822
Participated in Surveys	
Number of Surveys Completed	880 *

*58 surveys were completed in hard copy and entered by Council staff on to the Have Your Say platform

TRAFFIC SOURCES

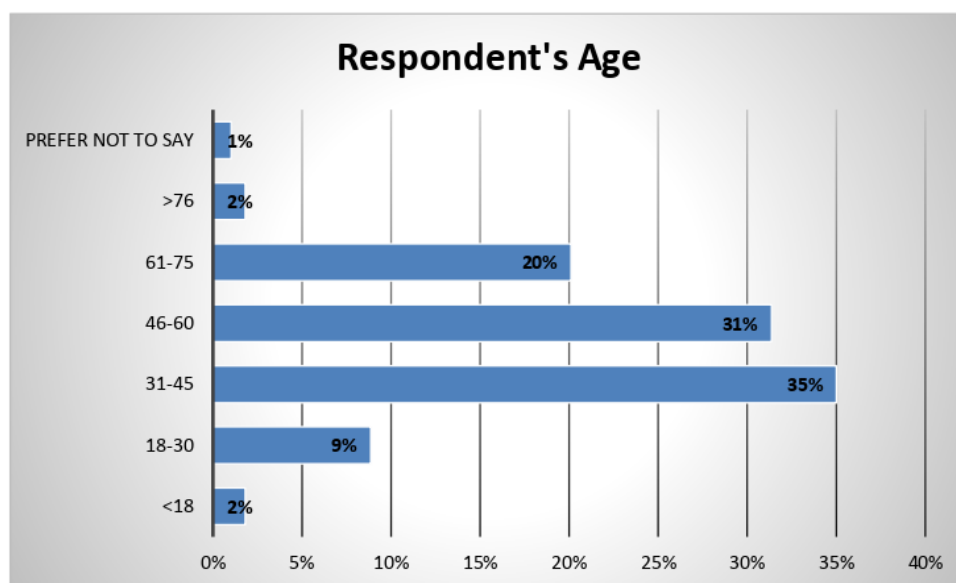
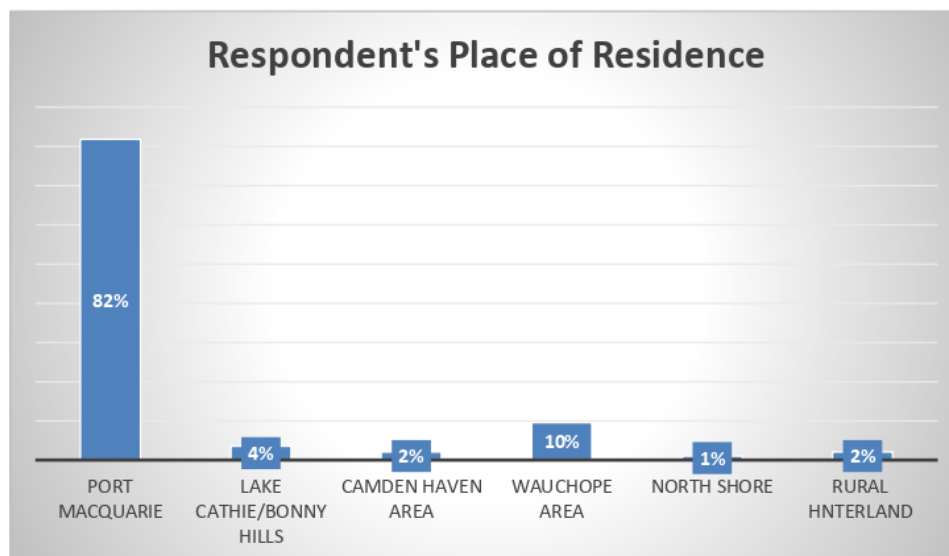
TRAFFIC CHANNEL	AWARE VISITS	INFORMED VISITS(%)	ENGAGED VISITS(%)
DIRECT	1123	743 (66.2%)	445 (39.6%)
SOCIAL	484	228 (47.1%)	153 (31.6%)
EMAIL	292	190 (65.1%)	110 (37.7%)
SEARCH ENGINE	114	79 (69.3%)	29 (25.4%)
.GOV SITES	261	163 (62.5%)	66 (25.3%)
REFERRALS	52	36 (69.2%)	25 (48.1%)

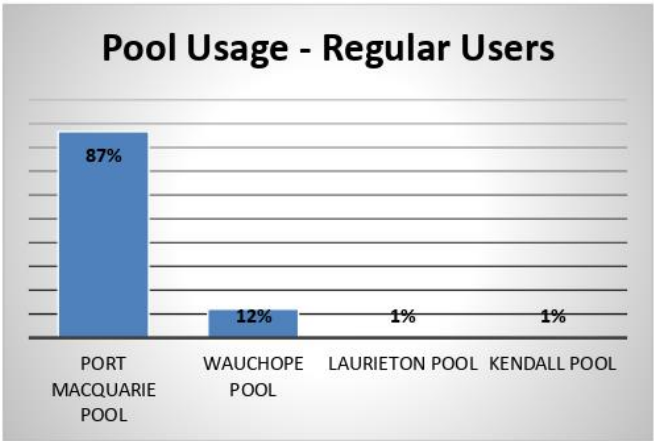
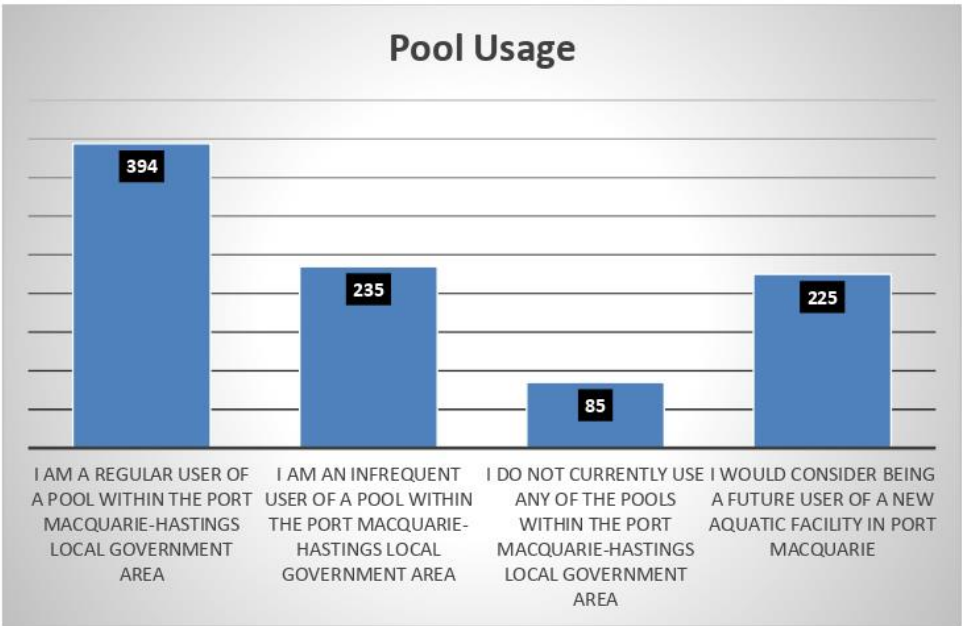
DOCUMENT DOWNLOADS

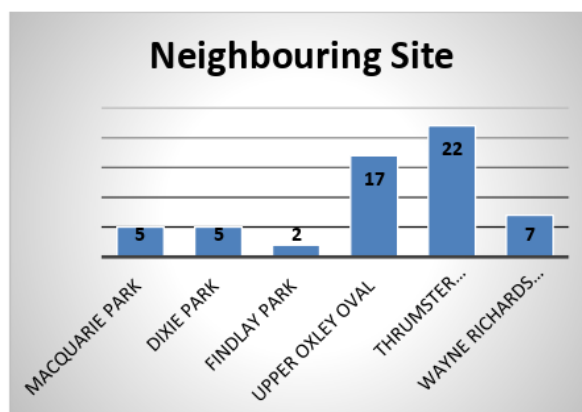
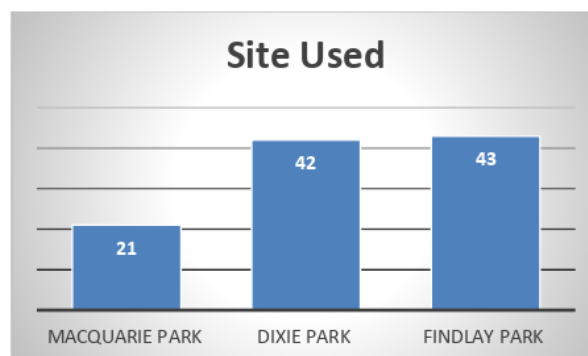
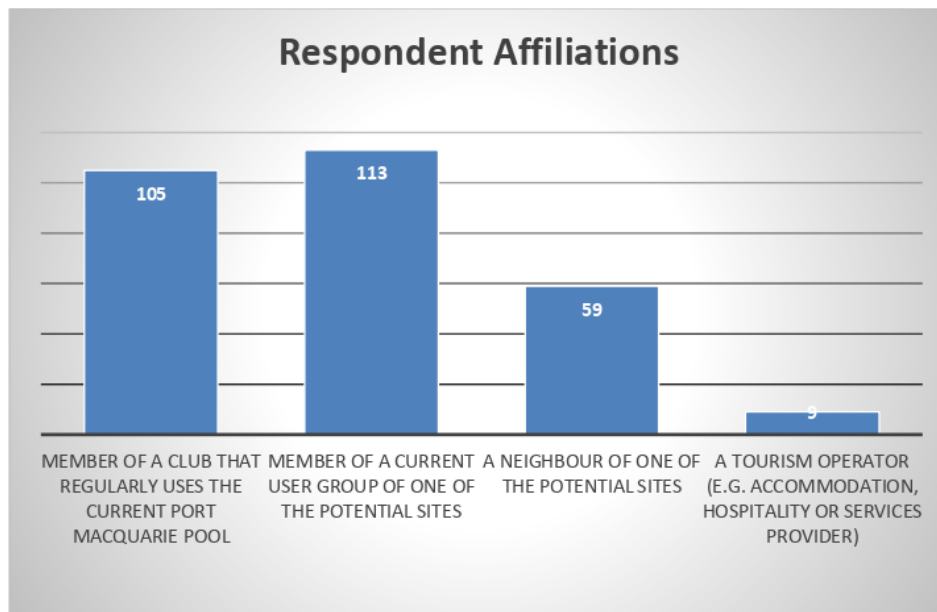
Document	Visitors	Downloads/Views
Port Macquarie Aquatic Facility Site Options - Schematic Layouts	331	395
Port Macquarie Aquatic Facility Site Options - Positives and Constraints	158	173
Aquatic Facility - Site Context Map	115	129
Port Macquarie-Hastings Council Aquatic Facilities Strategy	76	96
Port Macquarie Aquatic Facility Site Options - Existing Site Layout	53	57
Port Macquarie Aquatic Facility - Frequently Asked Questions	52	56
Council Report - Port Macquarie Aquatic Facility	8	8
TOTAL NUMBER OF DOCUMENTS DOWNLOADED		914

Many survey responses reflect the relatively low number of documents downloaded by respondents. For example, the site layouts that reflected that parking would be accommodated at all of the sites, and the facility inclusions.

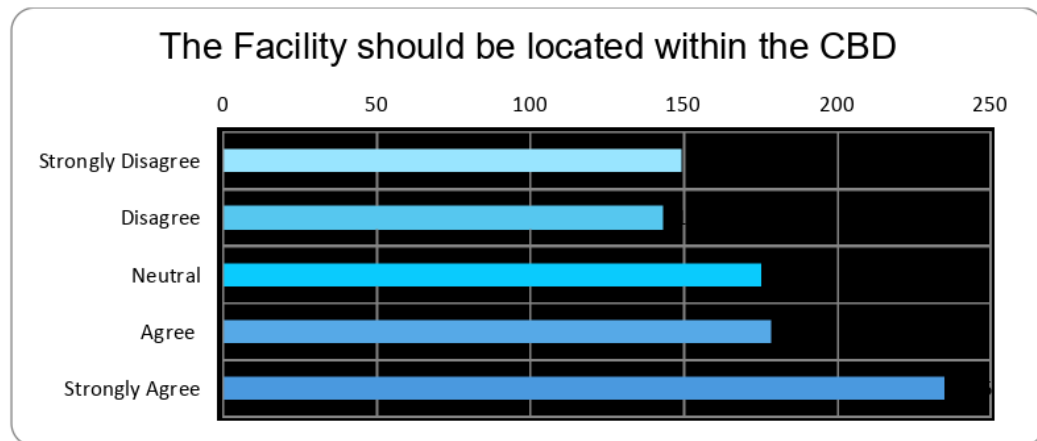
4.2 HAVE YOUR SAY ENGAGEMENT DEMOGRAPHICS



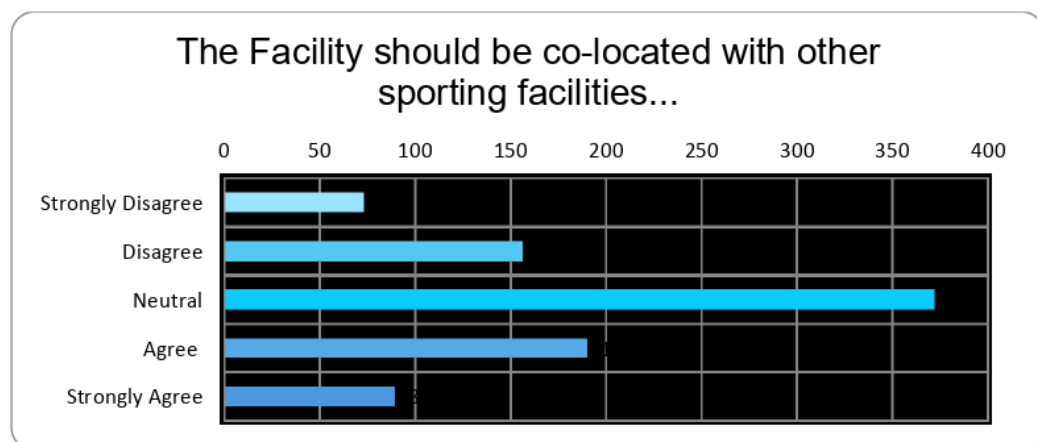




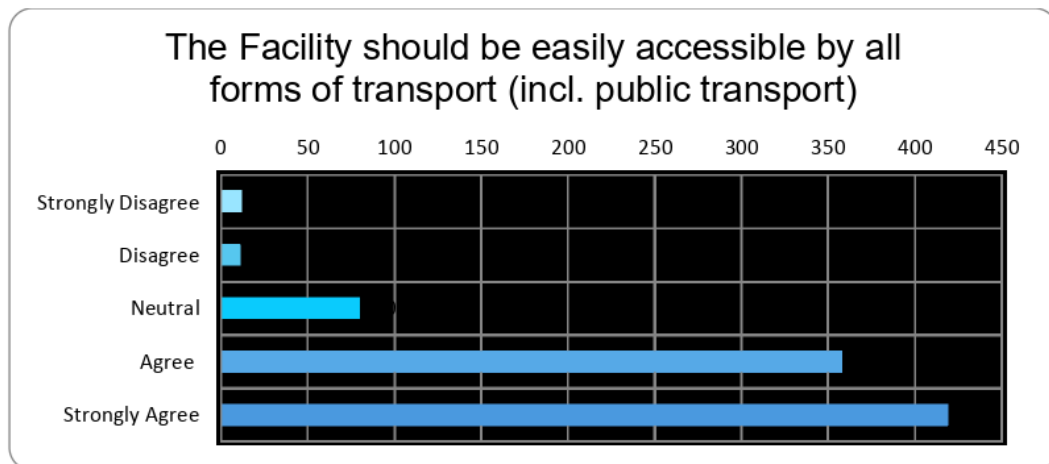
4.3 HAVE YOUR SAY ENGAGEMENT ANALYTICS - SITE CRITERIA



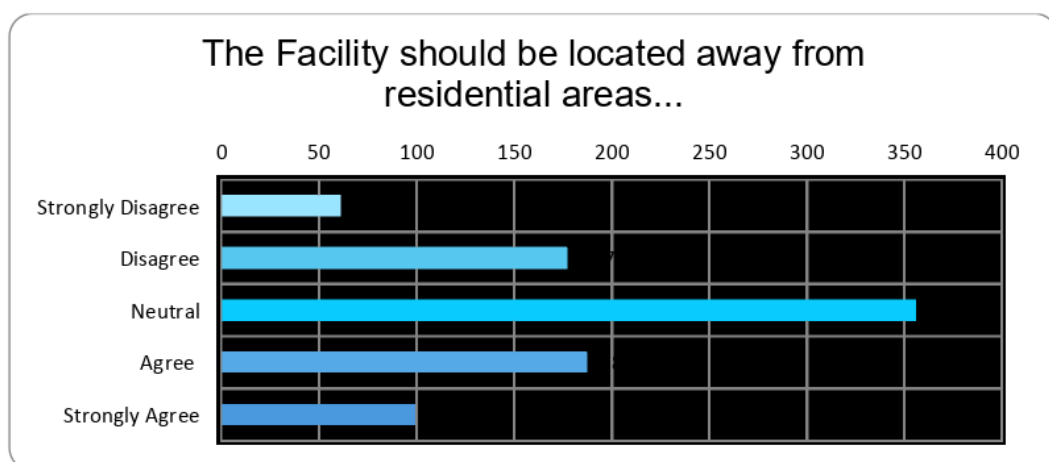
47% of respondents either agreed or strongly agreed with the statement that the new Aquatic Facility should be located within the Pot Macquarie CBD compared with 33% who disagreed or strongly disagreed. 20% were neutral on this criterion.



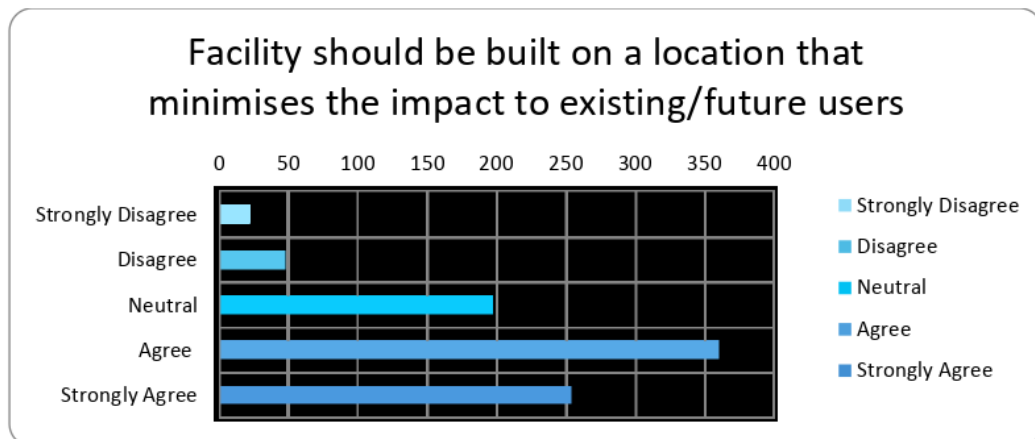
There was **not a strong outcome from this question** with 42% being neutral, 26% disagreeing and 32% agreeing with the statement.



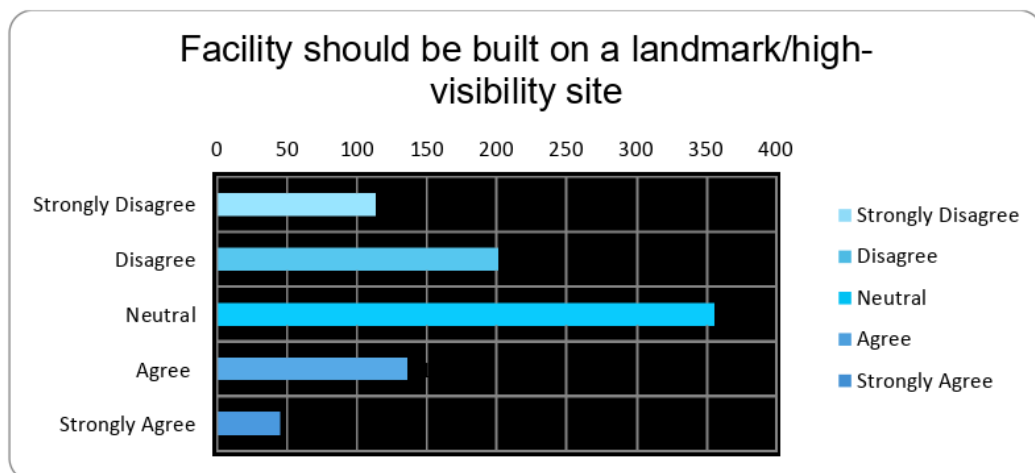
89% of all respondents either agreed/strongly agreed that the Aquatic Facility should be accessible by all forms of transport (including public transport).



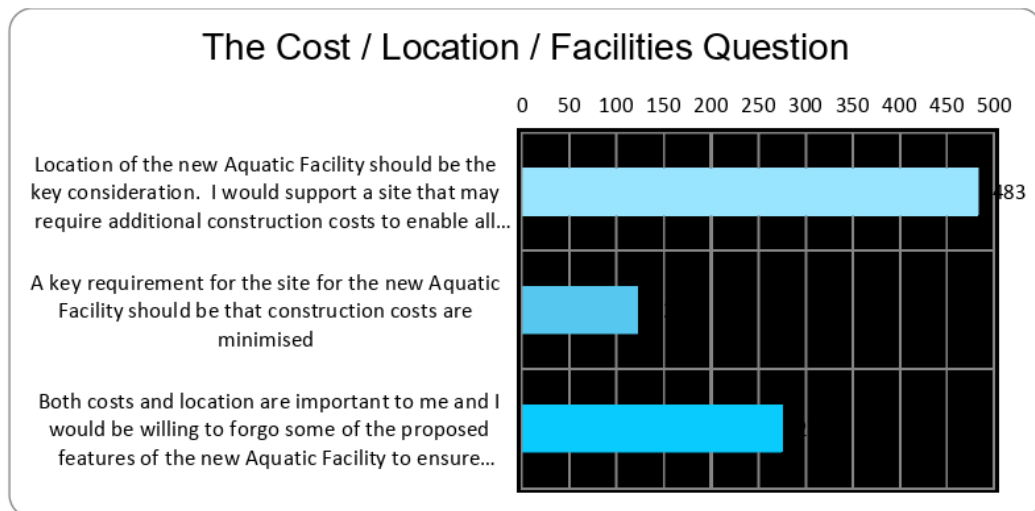
No strong opinion either way for this criterion with 40% of respondents neutral, 27 % disagreeing and 33% agreeing with this statement.



A clear majority of respondents (70%) agreed with this statement.



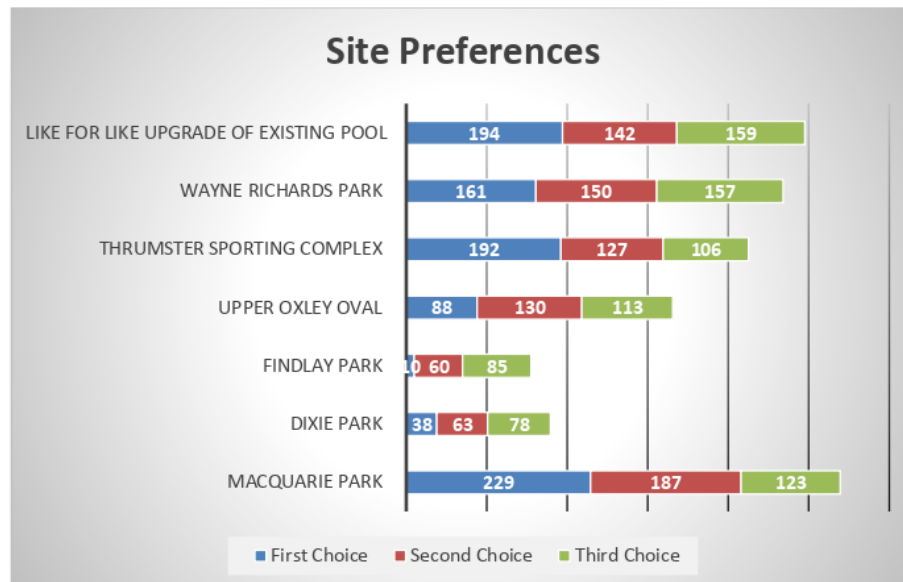
41% of respondents are neutral about this statement, however more respondents are not in favour of building on a landmark site (38%) than for (21%).



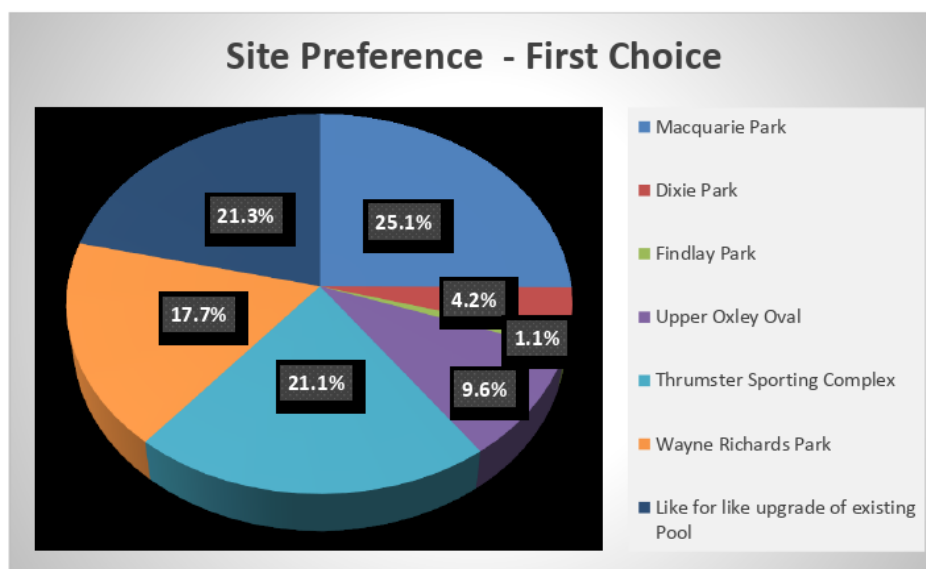
A majority of respondents (55%) indicated that they would support a site that may require additional construction costs to enable all identified features of the Aquatic Facility to be delivered, compared with 14% for costs to be minimised and 31% selecting a balance of both cost and location.

4.4 HAVE YOUR SAY ENGAGEMENT ANALYTICS - PREFERRED SITE

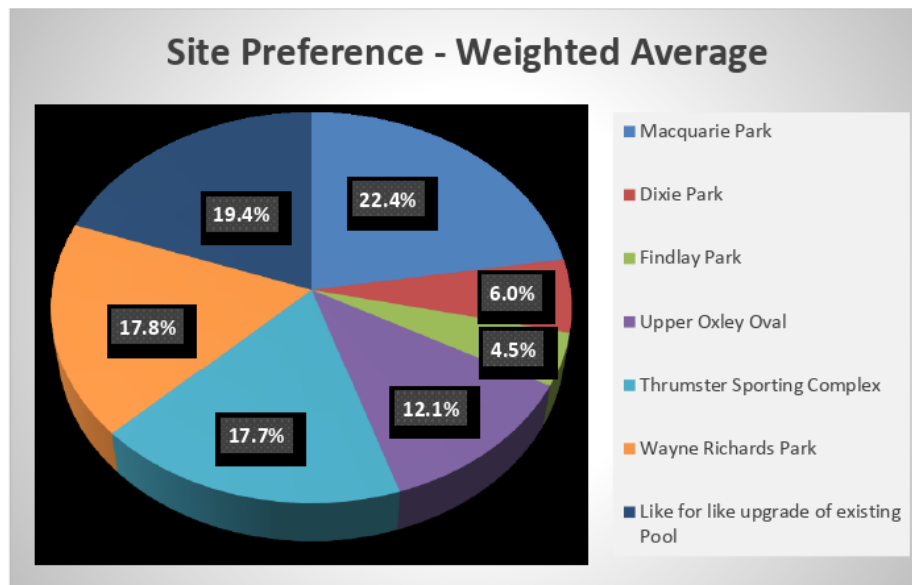
Respondents were asked to select their first, second and third choices for the location of the new Aquatics Facility (from the list of the six new sites and the upgrade of the existing site). The results are summarised below:



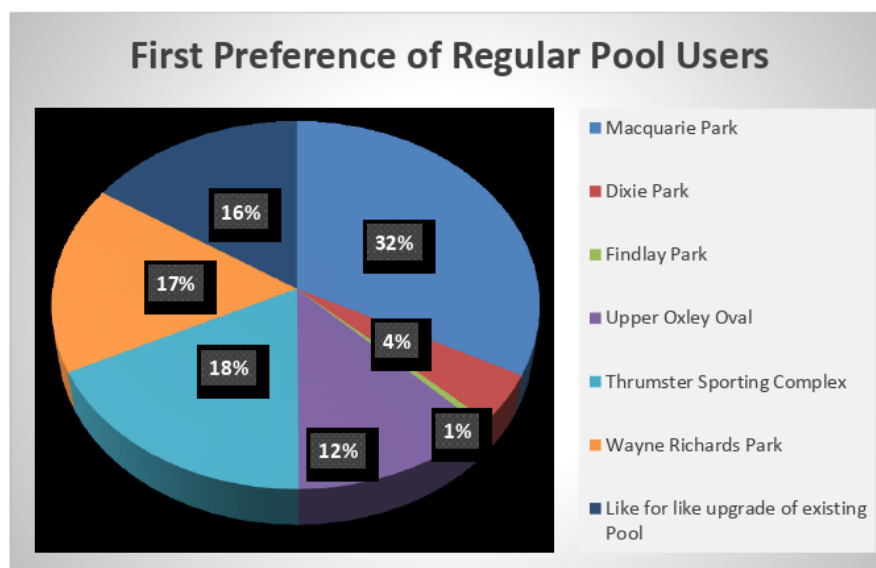
Macquarie Park is the most preferred site with 20.8% of all votes cast. Second is an upgrade of the existing pool site with 19.1% of the votes and third Wayne Richards Park with 18.1% of all votes cast.



The Macquarie Park site has 25% of the first choice votes with a like for like upgrade of the existing pool site and the Thrumster Sporting Complex site showing just over 21% of votes each.



The site choices were weighted with three points for 1st choice, two points for 2nd choice and 1 point for third choice. When the sites are totalled for all votes cast using this weighting method, **Macquarie Park has the greatest number of points at just over 22% of the possible points.** Second is the upgrade of the existing pool site with 19.4% of all points available, closely followed by Thrumster and Wayne Richards Park both with just under 18% of the possible points.



Macquarie Park was the preferred (first choice) site for regular users of a pool in the Port Macquarie-Hastings LGA with 32% of the 394 regular pool users selecting this site. Thrumster was the second most preferred site with 18% of the votes.

It is interesting to note that of the 66 votes cast for Thrumster by regular users, 27 were from people who lived outside of Port Macquarie (22 in Wauchope and 5 in Lake Cathie/Bonny Hills and the Camden Haven). 26 were regular users of pools other than the Port Macquarie Pool - Wauchope Pool (24); Kendall (1) and Laurieton (1).

Although the numbers shown above are relatively small it would be important to consider possible loss of revenue to outlying pools from regular users (Wauchope in particular) if the new Aquatic facility were to be located at Thrumster.

4.5 SUBMISSIONS RECEIVED

A total of 57 submissions were received via email or post to Council. One of the submissions contained 30 completed surveys, which were subsequently added to the HYS Survey statistics. A summary of the submissions is shown below.

THEME / COMMENT	NUMBER OF SUBMISSIONS
Opposition to Upper Oxley Oval as a site	30
Opposition to decentralised location at Thrumster/ Wauchope and/or support for CBD location	5
Opposition to \$40m being spent on Aquatic Facility. Advocating for spend on other projects: <ul style="list-style-type: none"> - rural road network - additional pool (not Aquatic Facility) at Thrumster - contemporary amphitheatre at Oxley Oval 	4
Submissions from Key Stakeholders & Sporting User Groups (see commentary below)	4
Support for Tidal Pool	2
Suggestion of alternative locations: <ul style="list-style-type: none"> - Hibbard Bowling Club - Laurieton 	2
Opposition to Macquarie Park	1
Concern regarding parking at Macquarie Park	1
Supportive of a 10 lane 50m pool and 10 lane 25m pool	1
Support for one or more sites *	

*Where support was indicated for particular sites, these were added to the Site Preference tallies from the Have Your Say survey (and are included in the graphs shown in the Preferred Site analytics shown above).

4.6 SUBMISSIONS RECEIVED BY SITE USER GROUPS

The following submissions were received from user groups of the potential sites which are summarised below: The full submissions are attached:

Port United (Dixie Park)

Opposed to Dixie Park as a site location

Port Macquarie Aquatic Centre Committee (Existing Site)

Detailed submission covering pros and cons of all sites. Preferred sites are 1) **Macquarie Park**, 2) Upper Oxley Oval, then less preferred sites 3) Findlay Park, 4) Dixie Park, then Problematic Sites 5) Wayne Richards Park, 6) Thrumster.

Port Macquarie Swimming Club (Existing Site)

Opposed to two sites, Wayne Richards Park (due to odour) and Thrumster due to traffic problems. Preferred site is Macquarie Park.

Port Macquarie Junior AFL Club (Wayne Richards Park)

Opposed to Wayne Richards Park site location due to the site being currently designated as a 2nd AFL ground and purpose built athletics track in Council's Master Plan for 2020, and also unpleasant smell close to STP. **Macquarie Park would be a better site location** as close to town and more parking. Sporting Clubs at Macquarie Park can be catered for at other sites (including new fields planned at Thrumster).

Port Saints (Findlay Park)

The option to utilise Findlay Avenue as a location for the proposed aquatic centre is not a preferred option for our 500 club members. Until further detailed information is provided on relocation options for Port Saints Football Club in and around a similar location to the current Port Saints Football Club the club proposes that PMHC adopt the option of the status quo, i.e. upgrading the current pool in its current location.

A second option was also offered to locate the Aquatic Centre at Thrumster and develop Wayne Richards Park as the Football Centre of Excellence (in lieu of Thrumster site).

4.7 HAVE YOUR SAY ENGAGEMENT - COMMENTARY

The commentary below summarises the feedback and themes received in answer to an additional two questions asked in the Survey. Close to 500 respondents provided additional feedback in this way.

Question 1: Please outline below any specific comments you have regarding your preferred sites (above), or any of the potential site locations.

LOCATION:

There was strong support for both a decentralised location (Wayne Richards and Thrumster in particular) primarily reflecting:

- Ease of access,
- Ability to provide sufficient parking;
- And lack of traffic congestion;
- The need for an area inland where there are fewer sporting facilities.

There was however **stronger support for a location close to the CBD** (which is consistent with the outcome of the survey question regarding this) for the following reasons:

- Accessibility by public transport, cycling and walking;
- Convenient for local schools;
- Financial viability - brings recreation into the heart of the town and will ensure maximum patronage as ideal for tourists; lunchtime swimmers, close to shopping precinct, which is important in terms of income generation to offset costs.
- Close to retirement villages and accessible by disabled and elderly;
- Located conveniently close to the beaches for use by beach users on days where there are stingers.

Important factors for the site selection were offered:

- No impact to sporting clubs - A large number of comments were regarding the need to minimise impact to existing sporting clubs (especially those sites used as football grounds). This was consistent with the survey question on this topic. Some suggested if a football club needed to be moved that it be relocated to Wayne Richards Park;
- Access and area for future expansion;
- Low impact to residential areas (noise, lights at night etc.);
- Should be on a site that is physically unobtrusive - preferably flat site;
- Well-served by public transport;
- Accessible - kids can walk there and ride bikes;
- Impact on traffic congestion to be considered - don't put any more traffic on to the major roads;
- Should be in a location with the least environmental, social and economic impacts to the community;
- Co-location of other facilities e.g. arts/creative space so a recreational hub not just sporting complex;
- Minimise environmental impact;
- Site needs sun throughout the day;
- A generous space for outdoor passive recreation adjacent to the outdoor pool is important.

SITE LOCATION:

Many of the comments were either in support of the choices made in the survey or against sites not selected. The pros and cons as seen by the community for each site are summarised below:

THRUMSTER:

FOR:

- Growing area, central to the LGA and therefore more easily accessible by other towns and villages;
- Is a greenfield site and so has no impact on existing user groups;
- Scope for future growth and provision of sufficient car parking;
- Closest to medical facilities for those using pool for therapy;
- Opportunity for a sporting hub in Thrumster;
- Distributes/diverts traffic congestion & noise away from CBD and nearby beaches.
- Thrumster would allow for a spread of facilities across the LGA if tidal pool built;
- More facilities in the area will encourage people to buy new homes in Thrumster and it will bridge the gap between Port Mac and Wauchope;
- Provides access to water activities for those who do not live close to the beaches.
- Provides a strategic alignment with current LEP and Urban Growth Management Strategy 2017-36 by delivering a Community infrastructure facility to the area for both new and future local users, these being:
 - A) new families populating designated growth areas;
 - B) nearby new university and;
 - C) nearby local schools;
- Preserves existing green areas within CBD & nearby beaches;

AGAINST:

- An increase in time for the vast majority of Port Macquarie residents to visit and probably less public visitation as a result;
- Much further away from all of the public schools in Port Macquarie that use the pool for swimming lessons and carnivals;
- The road to Thrumster, in particular the Lake Road/ Oxley Highway intersection and Wright's Road/ Oxley Highway intersection are already beyond capacity during morning and afternoon peaks. The pool being at Thrumster would only exacerbate this issue;
- No regular public transport.

MACQUARIE PARK

FOR:

Many of the comments for a CBD location (see above) were put forward for Macquarie Park.

Additional comments:

- Close to the original location so current users will be likely to use facilities here;
- Car park can also service netball;
- Flat and on main road so easy to get to.
- Traffic flow is through Munster St providing safe access for school kids.

AGAINST:

- Increased traffic at roundabout close to preschool.

UPPER OXLEY

FOR:

- A largely clear site with easy construction access, central, no impact to users;
- Opportunity for iconic development;
- Close proximity to PCYC and high school;
- Located in an already identified education/recreation precinct;
- Has greater capacity for a commercial component to include a function centre and shops;
- If Oxley beach was to be chosen as a site for the proposed rock pool this would enhance the location as a combined aquatic/recreation facility;
- Pacific Drive location may also enable a project partner with the Dept. of Education as education and training resource for the nearby Port Macquarie High School.

AGAINST:

- Results in a loss of major green zone within proximity of CBD & its closest beaches. Need to retain open area near water;
- Cause traffic congestion on Pacific Drive;
- Impact on Burrawan St residents;
- Important site for passive recreation, bird species and mature trees;
- Increased costs due to topography;
- Cool winds for swimmers;
- Disruption to traffic during construction;
- Endorsement of facility but not at expense of character of Port Macquarie - i.e. not Upper Oxley;
- Not good public transport;
- Delivers increased indirect project associated costs to Council (e.g. road upgrades, traffic lights etc.).

WAYNE RICHARDS PARK

FOR:

- Least congested - not increasing the traffic congestion in the CBD of Port Macquarie;
- Easy access for traffic from North, South, East and West without impeding on parking problems in the CBD;
- Site location best serves whole community - not too far away - but need to address smell;
- Minimises impact to users;
- Parking good;
- Sporting hub with other sporting venues in the close proximity.

AGAINST:

- Not suitable due to proximity to Sewerage Treatment Plant (strongly felt by many);
- In the middle of nowhere;
- Poor condition and width of Koala Street.

FINDLAY OR DIXIE PARK

FOR:

- In close proximity to town and are easily accessible by public transport;
- Closer to schools;
- Would not be affected by the traffic issues PMQ are facing on Ocean Drive and when driving towards Bunnings or Wauchope;
- Dixie Park is close to Westport Park and Settlement Point. Easy access for tourists;
- Location is flat and is in a central position for transport and access;
- Findlay Park is close to public transport, and existing infrastructure for supply of site services;
- Dixie Park site too small and would require upgrade of Aston St.

AGAINST:

- Will increase traffic congestion;
- Significant impact on sporting users with a long history and volunteer input into grounds;
- Will be less accessible for LALC events;
- Not at Findlay - good resource for school and surrounding residents;
- Not Dixie - due to mosquitos;
- Not Findlay due to issues with being a landfill site;
- Flooding issues;
- If Dixie Park site is chosen then a roundabout will be needed on Hastings River Drive at either Aston St or Bellbowrie. Both these streets will need to be upgraded for additional traffic.

EXISTING SITE UPGRADE

FOR:

- Upgrade current pool - holds a lot of history;
- Existing site is fine - build multi-storey carpark on adjacent site;
- Existing pool is fine don't see need to spend \$40 million on new facility;
- Need to limit spend;
- Upgrade current so as to spend money in other towns across LGA;
- No impact on sporting groups;

- Supporting infrastructure already in place.

AGAINST:

- It is very important that there be indoor pools to allow for swimming and aquarobics during the winter months. This is especially true for our large population of seniors who need appropriate exercise facilities. For that reason, an upgrade of the existing pool facility is not sufficient;
- Need a fully integrated facility to last for the next 50 years. This would be a short-term fix;
- Pool would not be open during construction - impact on swim squads and competitive swimmers as well as other regular users;
- PMQ has outgrown this site.

ALTERNATIVE LOCATIONS:

A number of alternative locations were offered:

- Stuart Park (6 nominations)
- Old pool rebuilt and a new one on the outskirts
- Bunnings site
- Wauchope
- With Sporting fields at Lake Cathie
- Bonny Hills
- Near the hospital
- Lagoon in old Coles Area
- Westport Park
- Expand existing site using the library site as additional area - relocate library to centre of town
- Where the new cinema complex is planned
- Could the tip at Kingfisher be moved and turned into an aquatic centre or sporting field for a displaced sports club
- Between Newman College and Regional stadium
- Lindfield Rd near golf driving range is pretty central to all PMQ and accessible from multiple directions (when the traffic problems are resolved)
- Fair amount of vacant Land between Oxley Highway and John Oxley Drive for an aquatic facility (or community car pool parking transfer station)

Question 2: Do you have any other specific comments about the proposed Aquatic Facility?

Responses were as follows:

GENERAL SUPPORT:

- Needs to be funded and sorted as soon as possible;
- Support for facility being the most modern between Sydney and Gold Coast;
- Support for new facility - enjoyment for families and visitors;
- Excellent and much needed, think big;
- A good centre is money well spent;
- All elements of facility to supported - these opportunities do not come around often;
- The sooner a new facility is built the better. The existing is well past it's use by date and not even close to being up to the standard expected for a rapidly growing town of Port's size;
- Port Macquarie is absolutely deserving of a state-of-the-art aquatic centre. With the right planning and execution Port Macquarie can become the wellbeing capital of

NSW with top class facilities to prove it. It's encouraging and great to see Council moving forward with this important piece of infrastructure.

COSTS/FUNDING:

- Control the costs and make it practical / Concerns re potential cost blow-outs / Cost is excessive;
- Upgrade cheaper for rate payers;
- Staging of the project would be best to control costs. Ensuring that the current facilities are duplicated first before adding slides/etc. which are nice but not essential. These may come later if more funds are available;
- Divert funds to other projects e.g. fixing Lake Cathie, better cycleways;
- Facility only used by some residents - significant costs to all ratepayers.
- How can we attract events to offset costs?
- Ensure the facility brings an income from users outside of the council through training camps and competitions;
- No public/private funding models;
- Need to factor in the impact this will have on rates. There have been increases which our families under financial pressure (north shore increase was significant per quarter from the sewer upgrade) and the economic situation / low employment rate in PMQ continues. Please ensure budgetary strategy is of the highest priority as the flow in effect may mean PMQ district will lose more "income earning" families from the district and increase the retired population - this doesn't assist to address economic or employment issues. PMQ is not a sleepy town, it is vibrant and full of life, the people of PMQ need to support council to allow it to flourish;
- Sell existing pool site to pay down loan or help fund new facility;

OVERALL FACILITY DESIGN:

- The need for ample parking was the most common piece of input to the survey. Additionally there was a call for:
 - consideration of multi-level parking;
 - bus parking;
 - partially-covered parking;
 - Well-lit parking.
- Involve the public in the design;
- Build to FINA specifications;
- The facility should be made to an acceptable standard to attract significant events from the wider region.
- The flow between amenities to pool areas needs to avoid having to return through the front house as is the case in some of the plans.
- The grass area needs to be large enough to invite use and not just an "add on". It should be easily accessible and "inviting" from both pool areas.
- Try to come up with something different in the indoor pool area to others in the region, something unique to entice visitors. We need to be ahead of the trends not catching up if this facility is to be for the next 20+ yrs.
- Name it to another iconic Australian swimmer please to encourage people and young swimmers to take up this sport.
- Should the siting of the new facility be Macquarie Park:
 - Site the car park well away from the Wrights creek environs
 - planting's along the perimeter of the car park would help to soften the impact
 - Wrights Creek is a significant green corridor in an increasingly urban location. It should be supported by buffer zone planting's for a beautiful green space for future generations
- Culturally and architecturally appropriate design;

- Bicycle paths to be considered for access.

FACILITY INCLUSIONS

A number of the comments included recommendations for or endorsement of facilities within the complex as listed below:

- An indoor and outdoor pool would maximise year-round usage and cater to individual preferences;
- Heated indoor pool accessible year-round;
- Children's water play (water park, water slide, toddler pool with shade, walk in infants pool with a gradual decent - like the beach);
- Facilities/attractions for teenagers not just u/12;
- Inclusion of diving facilities (1m and 3m boards) - host diving competitions;
- Minimum of 8 lanes for 50m pool;
- 10 or 12 lane 50m pool;
- Support for 2 x 50m pools (either one indoor and one outdoor) to allow for public to be able to use pool when swimming carnivals taking place;
- Wheelchair-friendly, accessible for people living with a disability, ramp access, multiple pieces of equipment for those with special needs including chair lift;
- Separate disability toilet (separate from baby-changing facilities)
- Hydrotherapy pool for public;
- Walking lanes;
- Spa, sauna & steam room;
- Facilities to enable water polo to be played;
- Open-air 25 m pool (rather than indoor);
- 25m pool more than waist-deep;
- Green space within complex;
- Dry change rooms;
- Bike cages/ lockers for secure locking;
- Café/restaurant;
- Picnic, BBQ and playground equipment;
- Swimwear shop;
- All pools heated - not just indoor pool - to allow for year-round usage;
- Entryway that is not open constantly - otherwise poses safety risk for very young or those with special needs;
- Facility should provide a range of uses, educational, functions, retail.

There was mixed support for inclusion of a gym with the centre with a number of residents suggesting that there are a number of gyms already in Port Macquarie (some of whom may be struggling financially).

ENTRY FEES

- Incorporate gym with cost included in pool admission;
- Council to fund usage - compare with Council cutting grass for other sports grounds;
- Make passes continuous;
- Entry fees and the capital cost of the centre need to be in balance. No point having a magnificent facility if the entry fees become prohibitive for some.

REFERENCE SITES

The following locations were offered as facilities to look to when designing the new Aquatic Facility:

- Miami Pools (Gold Coast)
- Taree

- Mackay (Qld) Aqua Park
- Oasis Regional Centre Wagga
- Cook Phillip Park (Sydney)
- Mt Annandale
- Blacktown Council
- Woy Woy - integrated with indoor sporting complex
- Ringwood Aquatic Centre, Melbourne
- Benella <http://www.benella.ymca.org.au/>
- Ian Thorpe Aquatic Centre in Sydney
- Randwick Aquatic centre - Des Renford Leisure Centre
- Darwin pool at Parap
- Ryde Aquatic Facility - facilities for all ages

GENERAL COMMENTS REGARDING OPERATION:

- Use Facebook to advise of usage restrictions due to carnivals etc.
- Extended hours of use - from 5:30 am 7 days a week
- Open all year round
- More aquarobics classes at Wauchope
- Support for non-chlorinated pool (for those who are allergic to chemicals)

SURVEY DESIGN

- Concern that survey design was biased in favour of a new facility
- Suggestion re survey design - high, medium and low site choices rather than 1,2,3 preference

GENERAL COMMENTS

- A number of survey respondents advocated for a tidal pool in lieu of a new aquatic facility. A similar number advocated for the proposed \$4.5 million to be re-allocated to a new Aquatic Facility.
- Build it properly - don't cut corners. Think of the future.
- The outdoor pool should be salt water or non-chlorine to accommodate tidal pool advocates as an alternative to their outdated idea. Also more pleasant to swim in for all.
- Long-term sustainable outlook that encourages stronger community, jobs and diversity by having a shopping complex that services all surrounding towns. The shopping complex can be partnering with the aquatic centre for better connectivity, also brings jobs and open up diversity with cafes, affordable business hubs, and activity playground. This type of urban planning will attract young family back to build the economic activity for the town. Consideration for arts/creative exhibition would attract and open up new thoughts and ideas;

5.1 APPENDIX A - SUPPORTING COMMUNICATIONS PIECES & ENGAGEMENT
COLLATERAL

Community Now Notice Newspaper Insert

communitynow
NOTICES

Contact us on (02) 6581 8111 or email council@pmhc.nsw.gov.au pmhc.nsw.gov.au

Privacy Notice: Community Now NOTICES is a community consultation newsletter that enables Council to be clearer, easier processes. The intended recipients of community consultation are officers within Council and those persons granted limited access to the information. Your submission, including your name, address and other contact information, may be included in Council's website and publicly accessible registers. Your submission remains in a development proposal or other planning application. Council is required to disclose or to exclude or release details of public interest or public safety. In limited circumstances, you may apply for suppression of your personal data from a publicly accessible register. Submissions are subject to the provisions of the Government Information (Public Access) Act 2009. Further information on how Council handles personal information can be found in our Privacy Statement located on Council's website at pmhc.nsw.gov.au/privacy-statement.

DEVELOPMENTS AND APPLICATIONS

Notice is given in accordance with Section 4.59 of the Environmental Planning and Assessment Act, 1979 and Section 124 of the Environmental Planning and Assessment Regulation 2000 of the determination of the following Development Consents. These consents/assessments are available for public inspection, by appointment and without charge, during ordinary office hours Monday to Friday (public holidays excluded) at Council's principal office on the corner of Lord & Burawan Streets, Port Macquarie. Please contact Council's Customer Service Centre on (02) 6581 8111 to make arrangements. Please note some plans may be unavailable due to privacy laws.

Developments referenced below that were granted consent were done so for the reason that the respective sites were considered suitable for the proposed developments and the proposals adequately addressed relevant planning controls. With the imposition of conditions of consent, the developments are not considered to be contrary to the public interest and will not result in significant adverse social, environmental or economic impacts. Those developments that were refused were not considered to meet these outcomes. Community views were taken into account in the decision making process having regard for the community participation process outlined in Council's adopted Development Control Plan.

Application #	Property Description	Development Approved
19/0064	Lot B54 OP 1240086 Yaluma Drive, 10 Granton Ridge, Port Macquarie	Multi dwelling housing with tenures and community title subdivision
19/0174	52 Chapena Street, Lake Cathie	Dual occupancy and tenures title subdivision
19/0212	535 Pitt St-Bullangary Road, Rollands Plains	Attached Dual Occupancy
19/0307	20 Murrumbidgee Road, Port Macquarie	Change of use - recreation facility (indoor) to industrial training facility (unit 3)
19/0317	148 Settlement Point Road, Port Macquarie	Alterations and additions to dwelling
19/0366	70 Randall Street, Wauchope	Swimming pool
19/0386	3 Iona Avenue, Port Macquarie	Alterations and additions to educational facility
19/0387	8 Acacia Avenue, Port Macquarie	Ancillary development - car parking cover
19/0395	53 Home Ridge Terrace, Port Macquarie	Alterations and additions to dwelling
19/0398	2 Black Caviar Parade, Port Macquarie	Dwelling and secondary dwelling
19/0420	116 Cashedown Drive, Port Macquarie	Dwelling
19/0427	7 Mountaineer Avenue, Thurston	Dwelling
19/0466	71 Ansonby Way, Port Macquarie	Alterations and additions to dwelling
19/0469	44 Stanley Drive, Beachwood	Ancillary building - shed
19/0488	176 Ryans Road, Lake Innes	Alterations and additions to dwelling
19/0505	6 Pines Crescent, Lake Cathie	Swimming pool - continued use
19/0515	8 Stanley Drive, Beachwood	Carport

SECTION 96 AMENDED APPROVALS

Application #	Property Description	Modification Details
18/471.2	59 Sovereign Drive, Thurston	S4.55(1A) to modify design of childcare centre and conditions

COMPLYING DEVELOPMENT CERTIFICATES

Application #	Property Description	Development Approved
19/7184	12 Willow Drive Avenue, Beachwood	Dwelling
19/7190	3 Macrae Street, Henry Hills	Swimming pool
19/7195	35 Wedgital Drive, New	Ancillary building - shed

REQUESTS FOR TENDERS

PROVISION OF BUILDING MAINTENANCE SERVICES T19-40

Port Macquarie-Hastings Council is seeking tender submissions from suitably experienced firms or persons for the provision of Building Maintenance Services. Full documents are available for interested firms by visiting Council's tendering web site at www.tenderlink.com/pmhc/ and by registering and downloading the documents. Tenders should be submitted in accordance with instructions included in the information documents and deposited in the correct tender box located in the foyer at Council's Port Macquarie Office, Burawan Street prior to the closing time and date of the request. The onus rests on the tenderer to ensure that the tender is lodged in accordance with the above requirements. Tenders should be marked as follows:

BUILDING MAINTENANCE SERVICES T19-40
TENDER BOX
Ground Floor, PORT MACQUARIE-HASTINGS COUNCIL
Cnr Lord & Burawan St, Port Macquarie, NSW, 2444

Submissions will be received up until 11:00am on Thursday 15 August 2019. The lowest or any tender will not necessarily be accepted. Council's contact person for this tender is Lloyd Monahan, Procurement Project Officer (02) 6581 8111.

PROVISION OF PLUMBING SERVICES T19-41

Port Macquarie-Hastings Council is seeking tender submissions from suitably experienced firms or persons for the provision of Plumbing Maintenance Services. Full documents are available for interested firms by visiting Council's tendering web site at www.tenderlink.com/pmhc/ and by registering and downloading the documents. Tenders should be submitted in accordance with instructions included in the information documents and deposited in the correct tender box located in the foyer at Council's Port Macquarie Office, Burawan Street prior to the closing time and date of the request. The onus rests on the tenderer to ensure that the tender is lodged in accordance with the above requirements. Tenders should be marked as follows:

PROVISION OF PLUMBING SERVICES T19-41
TENDER BOX
Ground Floor, PORT MACQUARIE-HASTINGS COUNCIL
Cnr Lord & Burawan St, Port Macquarie, NSW, 2444

Submissions will be received up until 11:00am on Thursday 15 August 2019. The lowest or any tender will not necessarily be accepted. Council's contact person for this tender is Lloyd Monahan, Procurement Project Officer (02) 6581 8111.

PUBLIC NOTICE

TEMPORARY ROAD CLOSURE - HOMELESSNESS AWARENESS DAY

Notice is given that temporary closure of the Hay Street (Glasshouse) Footscourt is planned from 9am to 3pm on Monday 5 August 2019. These traffic arrangements are necessary to enable the set-up of the Homelessness Week Awareness Day event which includes the Big Red Bus. The community are warmly welcome to attend the event which is open between 10am to 3pm. Donations of new socks, flip flops (things) and t-shirts are welcome. Any further enquiries, please contact Council's Inclusion Officer on (02) 6581 8111 or email to julia.prisco@pmhc.nsw.gov.au.

PUBLIC NOTICES

EXHIBITION OF PORT MACQUARIE ALCOHOL FREE ZONE REVIEW AND EXTENSION 2019 PROPOSAL

Notice is given to place on public exhibition for a period of six weeks the proposal to re-establish an Alcohol Free Zone in the Port Macquarie Central Business District, in accordance with the requirements under the Local Government Act, Port Macquarie-Hastings Council has a role in addressing community issues regarding alcohol consumption. It follows a Council resolution in December 2007 to establish Alcohol Free Zones within the Central Business District (CBD) and a further request in 2014 to undertake a review and the extension of alcohol free zones. The Alcohol Free Zone expired in December 2018. Council is seeking to re-establish an Alcohol Free Zone for a further four years in line with current standards and guidelines. The proposal is on exhibition from Monday 22 July 2019 to Monday 2 September 2019 and is available to view on Council's website at www.portmacquarie.nsw.gov.au, or at Council's offices in Port Macquarie, Wauchope and Laurieton. Submissions can be made via hawkeyesay@pmhc.nsw.gov.au or by email to council@pmhc.nsw.gov.au or by post to:

The General Manager
Port Macquarie-Hastings Council
PO Box 84
Port Macquarie NSW 2444

Submissions close Monday 2 September 2019. For further information, contact Lucilla Marshall, Group Manager, Community Place on (02) 6581 8111 or by email at council@pmhc.nsw.gov.au.

HAVE YOUR SAY - PROPOSED BOLD STREET PEDESTRIAN CROSSING LOCATION AT LAURIETON

Council is currently reviewing the location of the proposed Pedestrian Crossing in Bold Street, Laurieton. In addition to Council's preferred option, two alternate options are being investigated in regards to safety, functionality and financial impacts. We invite you to review the findings, read the frequently asked questions, answer our short survey, or make an on-line submission at hawkeyesay@pmhc.nsw.gov.au. Or visit the Pop-Up Information stall at Haven Plaza, next to Oikos at Laurieton.

> 11am to 1pm Wednesday 7 August 2019
> 9am to 11am Saturday 10 August 2019

Comments are also welcome by:

- > Email to: council@pmhc.nsw.gov.au or
- > Post to: The General Manager, Port Macquarie-Hastings Council, PO Box 84, Port Macquarie NSW 2444.

The documents may also be viewed at our Council Customer Service Centres in Laurieton, Port Macquarie or Wauchope between 8:30am and 4:30pm Monday to Friday.

All submissions must be received by Monday 19 August 2019.

For further information, please contact Council's Project Manager Tim Venners, Tim.Venners@pmhc.nsw.gov.au or by phone on (02) 6581 8111.

HAVE YOUR SAY - DRAFT FLYNN BEACH MASTER PLAN

Development of a Master Plan for Flynn Beach commenced in 2018 with significant community engagement occurring during March and April 2018. During this period, a broad range of feedback was provided by the community, which has informed the development of the Draft Flynn Beach Master Plan. Council is now seeking feedback from the community on the proposed improvements for this significant community recreational facility detailed in the Draft Flynn Beach Master Plan, which will be on public exhibition from 22 July to 18 August 2019. We invite you to review the Master Plan and make an online submission by visiting hawkeyesay@pmhc.nsw.gov.au. Comments are also welcome by:

- > Email to: council@pmhc.nsw.gov.au or
- > Post to: The General Manager, Port Macquarie-Hastings Council, PO Box 84, Port Macquarie NSW 2444.

The documents may also be viewed at our Council Customer Service Centres in Laurieton, Port Macquarie or Wauchope between 8:30am and 4:30pm Monday to Friday.

All submissions must be received by Monday 19 August 2019.

For further information, please contact Council's Senior Landscape Architect, Craig Luff, by email craig.luff@pmhc.nsw.gov.au or by phone on (02) 6581 8111.

HAVE YOUR SAY - PORT MACQUARIE AQUATIC FACILITY SITE SELECTION

An aquatic facility that caters for the region's continuing growth is a high priority for the Port Macquarie-Hastings community, and at the July 2019 meeting, Council resolved to conduct further community engagement on possible sites for a new facility. Six Council-owned or managed sites in Port Macquarie have been identified that could accommodate a new aquatic facility. These sites are:

- > Macquarie Park (Gordon Street)
- > Dale Park (Platan Street)
- > Findlay Park (Findlay Avenue)
- > Upper Onley Oval (Pacific Drive)
- > Thurston Sporting Complex (College Drive)
- > Wayne Richards Park (Kilala Street)

Highlevel layouts have been developed for each of these sites and Council is now seeking feedback from the community on their preferred option. In addition, there is an alternate option to upgrade the existing site in Gordon Street. We invite you to review the site layouts and make an online submission by visiting hawkeyesay@pmhc.nsw.gov.au.

Comments are also welcome by:

- > Email to: council@pmhc.nsw.gov.au or
- > Post to: The General Manager, Port Macquarie-Hastings Council, PO Box 84, Port Macquarie NSW 2444.

The documents may also be viewed at our Council Customer Service Centres in Laurieton, Port Macquarie or Wauchope between 8:30am and 4:30pm Monday to Friday.

All submissions must be received by Monday 19 August 2019. For further information, please contact Council's Recreation and Facilities Manager Amanda Hutton by email amanda.hutton@pmhc.nsw.gov.au or by phone on (02) 6581 8111.

Expanded view of Community Now Notice (previous page):**HAVE YOUR SAY – PORT MACQUARIE AQUATIC FACILITY SITE SELECTION**

An aquatic facility that caters for the region's continuing growth is a high priority for the Port Macquarie-Hastings community, and at the July 2019 meeting, Council resolved to conduct further community engagement on possible sites for a new facility. Six Council-owned or managed sites in Port Macquarie have been identified that could accommodate a new aquatic facility. These sites are:

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- > Wayne Richards Park (Koala Street)

High-level layouts have been developed for each of these sites and Council is now seeking feedback from the community on their preferred option. In addition, there is an alternate option to upgrade the existing site in Gordon Street. We invite you to review the site layouts and make an on-line submission by visiting: haveyoursay.pmhc.nsw.gov.au.

Comments are also welcome by:

- > Email to: council@pmhc.nsw.gov.au or
- > Post to: The General Manager, Port Macquarie-Hastings Council,
PO Box 84, Port Macquarie NSW 2444.


The documents may also be viewed at our Council Customer Service Centres in Laurieton, Port Macquarie or Wauchope between 8:30am and 4:30pm Monday to Friday.

All submissions must be received by Monday 19 August 2019. For further information, please contact Council's Recreation and Facilities Manager, Amanda Hatton by email amanda.hatton@pmhc.nsw.gov.au or by phone on (02) 6581 8111.

Poster - displayed in Council offices and libraries, Port Macquarie Pool and various locations across the LGA.



Media Release



PORT MACQUARIE AQUATIC FACILITY - SITE SELECTION

18 July 2019

Page 1 of 2

An aquatic facility that caters for the region's continuing growth is a high priority for the Port Macquarie-Hastings community, and at the July meeting, Council resolved to conduct further community engagement on possible sites for a new facility.

The Port Macquarie Pool was built in 1988, and is approaching its useful life, with structural, accessibility, programming and maintenance issues identified as barriers in providing quality swimming facilities for the community into the future.

Other facilities within the current Port Macquarie Pool complex are also reaching the end of their useful life with the toddler's pool undergoing rectification works in 2017 as a short-term solution to extend its usability.

Council Director Melissa Watkins said that the pool is a major health and recreation facility enjoyed by many, and caters for a wide range of competitive and recreational swimmers.

"Our community is rapidly growing, and with our population expected to reach more than 100,000 by 2030 we need to ensure we can continue to meet our community's expectations by providing facilities that align with our regional city status, and that both locals and visitors can enjoy," said Ms Watkins.

"We've discussed the future development and upgrade of the Port Macquarie Pool with the community on several occasions, and following on from the latest community engagement in 2017 we are now in a position to seek the community's feedback on a number of site options."

In mid 2018 Council engaged Otium Planning Group, a specialist consultancy service with extensive expertise in aquatic facility development and management, who commenced a thorough review of the region's current aquatic facilities and future needs.

In developing the Port Macquarie-Hastings Aquatics Strategy, Otium have identified and recommended the key components needed to meet the aquatic needs of the community for the next 50 years. These elements include a 50 metre and 25 metre pool, children's water play, program pools, and fitness & wellness elements.

Based on the community engagement already undertaken, and the Otium report findings, six Council owned or managed sites in Port Macquarie have been identified that could accommodate a new aquatic facility.

Continued over>>>

Port Macquarie-Hastings Council
Page 1 of 2. If you do not receive the complete message phone (02) 6581 8111



MEDIA RELEASE

Page 2 of 2

These sites are:

- Macquarie Park (Gordon Street)
- Dixie Park (Aston Street)
- Findlay Park (Findlay Avenue)
- Upper Oxley Oval (Pacific Drive)
- Thrumeter Sporting Complex (College Drive)
- Wayne Richards Park (Koala Street)

In addition, there is the alternate option to upgrade the existing site in Gordon Street.

High-level layouts have been developed for each of these sites, and the community are being encouraged to 'have your say' on the different site options, and the facilities that might be provided.

"Council have met with key user groups that currently use the identified sites for sporting and related activities, and we are committed to working with these groups to ensure that if a future decision is made to develop a new aquatic facility on one of these sites, any impact will be minimised," Ms Watkins explained.

"This further community and stakeholder engagement we are undertaking is essential in identifying the preferred option for the Port Macquarie Aquatic Facility, and Council are encouraging the community to get involved and 'have your say'."

Following this engagement period, it is proposed that a report will go to Council at the September 2018 meeting for a decision to be made on the preferred site. This will then allow the project to move to Strategic Concept development, followed by Detailed Design, with further community engagement to take place at each stage of the project.

The Port Macquarie Aquatic Facility project is listed as a short-medium term priority in Council's 2017 - 2025 Recreation Action Plan.


Community engagement will take place from Monday 22 July until Sunday 18 August.

To have your say and for further information visit pmhc.nsw.gov.au/port-macquarie-pool or call Council on 6581 8111.

MEDIA CONTACT: Andy Roberts 0412 769 454

Port Macquarie-Hastings Council
Page 2 of 2. If you do not receive the complete message phone (02) 6581 8111

Media Mentions



Aquatic centre sites up for community consultation
PRIME7 News North Coast
July 24, 2019, 5:29 PM

<https://www.prime7.com.au/news/10185-aquatic-centre-sites-now-up-for-community-consultation>

COUNCIL APPROVES \$50-MILLION AQUATIC CENTRE

By Lauren Kempe - July 22, 2019

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Plans for a \$50-million Aquatic Centre in Port Macquarie are underway, but the new facility needs a home.

And from Monday, the community was given a say on where it should go.

<https://www.nbnnews.com.au/2019/07/22/council-approves-50-million-aquatic-centre/>

PORT MACQUARIE AQUATIC FACILITY SITE SELECTION
COMMUNITY ENGAGEMENT REPORT

SEPTEMBER 6 2019 - 4:00AM

Consultation over new Port Macquarie aquatic centre yields more than 900 submissions



Lisa Tisdell

Local News

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Looking ahead. The Port Macquarie pool, built in 1966, is approaching its use-by date.

More than 900 submissions will feed into the decision-making process around the preferred location for a new Port Macquarie aquatic centre.

Six potential sites have been identified which could be home to a new aquatic facility.

They are Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street).

The alternate option is to upgrade the Port Macquarie Olympic Pool site in Gordon Street.

The consultation around site options closed on Sunday, September 1 with Port Macquarie-Hastings Council receiving more than 900 submissions.

Council director Melissa Watkins said staff were working through the feedback and assessing all options to make sure the proposed future location was feasible and best suited to meet the needs of our growing community over the next 50 years.

A report including the proposed preferred location will be presented at the September 18 council meeting.

"We thank the community for getting involved and having your say on what is a major and very important recreational facility for our thriving region," Ms Watkins said.

The Port Macquarie pool, built in 1966, has a deteriorating structure and no longer meets the fast-growing community's needs.

Port Macquarie Aquatic Centre Committee spokesperson Greg Freeman said the number of submissions was a good sign the community was engaged and interested.

Mr Freeman said it was hard to know how many submissions had long-term community infrastructure development in mind versus those with a more personal impact interest.

"That will be played out by the results," he said.

Port Macquarie Aquatic Centre Committee's submission examined the positives and negatives of each potential site.

Regular pool user Coral Maloney said we definitely needed a new pool because the community was growing and the existing pool took a lot of maintenance.

"In the busy times, it doesn't provide the services it should to the wider community," she said.

Ms Maloney said the new site should definitely be in town so the facility had easy access for the community from the elderly to mums with young kids.

Macquarie Park is her preferred location.

It is estimated a new pool project would cost about \$40 million to \$50 million.

Refurbishment of the existing pool would have an estimated \$8 million to \$10 million price tag.

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LOCAL NEWS

- 1 Hayley's passion for taxation shines through with original song
- 2 Spotted a koala out and about?
- 3 Prisoner who escaped custody at hospital fronts court
- 4 Barbecue with mates could be the perfect remedy
- 5 Countdown to big Beechwood birthday is on
- 6 Three times over the limit with kids in car

PORT MACQUARIE AQUATIC FACILITY SITE SELECTION COMMUNITY ENGAGEMENT REPORT

AUGUST 12 2019 - 4:00AM

Residents concerned about possible use of Upper Oxley Oval for new Port Macquarie aquatic centre

Peter Daniels

Local News

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[COMMENTS](#)


PHOTO: Mystified. Burrawan Street residents Margaret Buckman, Jenelle Francis and Dawn Mallinson and Jeff Austin, Rod Mallinson, Chris Coorey and David Brown believe siting the new aquatic centre on open green space opposite their homes is wrong.

The argument to site the proposed new aquatic centre on open green space on Burrawan Street is not going down well with residents.

They are mystified, even by the decision to shortlist Upper Oxley Oval as one of the possible sites.

Port Macquarie-Hastings Council has **nominated six sites** it prefers as the home of the planned community aquatic centre.

The size sites are, Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street).

The other option is to upgrade the Port Macquarie Olympic Pool site. It is estimated a new pool project would cost about \$40 million to \$50 million.

Council acting group manager Amanda Hatton says the six sites have been identified that may be suitable and have the size requirements to accommodate a new contemporary aquatic facility.

"There is also the option to redevelop the existing Port Macquarie Pool," said Ms Hatton.

"All input is welcomed into the sites that have been proposed, and we encourage the community to let us know what you think by Sunday August 18.

"This input will assist in informing council's decision on a future direction for a Port Macquarie Aquatic Facility."

Before you judge the residents as NIMBYs - not in my backyard - a group of residents say they have been given just two weeks to mount a submission to lodge their opposition for the siting of the project with Port Macquarie-Hastings Council.

Chris Coorey says residents only received council notification in the first week of August with a deadline of August 18.

"Council's own website says it has undertaken extensive consultation," Ms Coorey said.

"How is that extensive? Council says that it is likely to make a decision at its September meeting.

"How can we make a contribution to the discussion when we have been given such a

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LOCAL NEWS

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- 2 Hayley's passion for taxation shines through with original song
- 3 Spotted a koala out and about?
- 4 Prisoner who escaped custody at hospital fronts court
- 5 Barbecue with mates could be the perfect remedy
- 6 Countdown to big Beechwood birthday is on

JULY 29 2019 - 12:52PM

New site needed for Port Macquarie pool

[Comment](#)

I am an old timer who has spent most of my developmental years in Port Macquarie 1955-1968, attended college, worked in Moree, Port Macquarie, Wauchope and Castle Hill.

Following ill health I have returned to Port.

Between 1955-1962 I attended Port Macquarie Primary School.

My home was located in Burrawan Street near to where Port Macquarie Hastings Council is now located.

Like most kids, when you walk to and from school, you look for the shortest path.

In the afternoon after school I would walk down Mowle Street, across Bridge Street and proceed to walk over the current site of the Port Macquarie Swimming Pool and then home.

It hasn't been mentioned in any correspondence I have read, but I believe the site was a council tip.

Port Macquarie needs a new pool but not on the current site. My suggestion is to use Macquarie Park.

I do think that if we are to compete with Coffs Harbour, we need to expand the concept to make it an Aqua Park.

We used to have a great facility frequented by tourists called Peppermint Park. I think this would be the direction to head for in the future.

Peter Willard

Port Macquarie

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Further consultation opens on possible sites for a new aquatic facility in Port Macquarie | Wauchope Gazette



Time to comment: Port Macquarie Aquatic Centre Committee spokesperson Greg Freeman and Port Macquarie Swimming Club president Warren Phillips welcome the further community consultation on possible sites for a new aquatic facility. Here is your chance to make your thoughts known on your preferred site for a new aquatic centre in Port Macquarie.

The next stage of community engagement is underway as planning continues for an aquatic facility to meet the region's future needs.

Six potential sites, which could accommodate a new aquatic facility, have been identified.

They are Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street).

The other option is to upgrade the Port Macquarie Olympic Pool site.

It is estimated a new pool project would cost about \$40 million to \$50 million. Refurbishment of the existing pool would have an estimated \$8 million to \$10 million price tag.

The Port Macquarie pool, built in 1966, is approaching its use-by date with structural, accessibility, programming and maintenance issues identified as barriers in providing quality swimming facilities into the future.

Community engagement will run from Monday, July 22 until Sunday, August 18.

Port Macquarie Aquatic Centre Committee spokesperson Greg Freeman said it was great to see the council on the front foot.

"We all understand this is a long-term project but it needed some serious momentum and the site selection was always the first big step," Mr Freeman said.

We all understand this is a long-term project but it needed some serious momentum and the site selection was always the first big step.

"I do think people will have points of view on all the sites."

Port Macquarie Swimming Club president Warren Phillips said the club was happy to see the matter progressing.

"It's been a long time coming and hopefully things will continue on at a bit faster pace," he said.

Mr Phillips said the pool needed to be built to FINA specifications, while an indoor 25-metre pool for training would make a huge difference, not just for the swimming club members but for all pool users.

The council engaged specialist consultancy service [Otium Planning Group](#) in mid-2018.

Otium, in developing the Port Macquarie-Hastings Aquatics Strategy, identified and recommended the key components needed to meet the aquatic needs of the community for the next 50 years.

Those elements include a 50 metre and 25 metre pool, children's water play, program pools, and fitness and wellness elements.

Six council-owned or managed sites in Port Macquarie have been identified which could accommodate a new aquatic facility.

The site identification was based on the past community engagement and the Otium report findings.

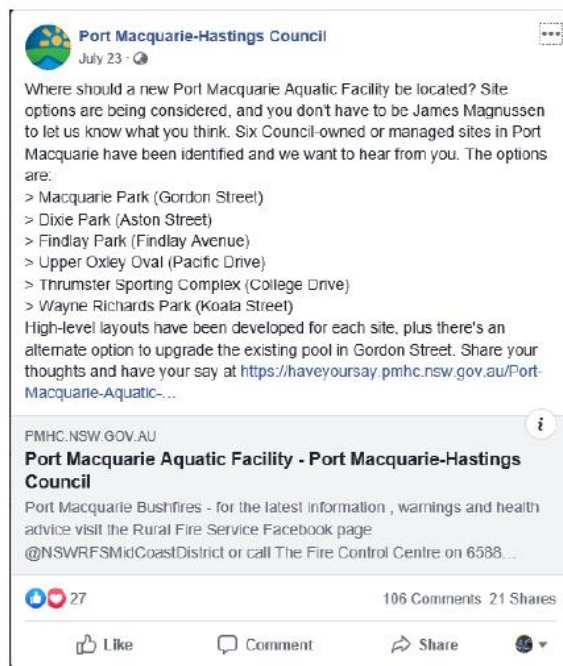
In addition, there is the alternate option to upgrade the existing pool site in Gordon Street. Council director Melissa Watkins said this further community and stakeholder engagement was essential in identifying the preferred option for the Port Macquarie aquatic facility and the council encouraged the community to get involved.


Cr Mike Cusato said it has been a lengthy process to get to this point.

"This [consultation] process gives us the opportunity to talk to the community and talk to stakeholders as to what we need and what it's going to be," he said.

To have your say and for further information [visit the council's website](#) or call the council on 6581 8111.

Social Media Posts


PORT MACQUARIE AQUATIC FACILITY SITE SELECTION
COMMUNITY ENGAGEMENT REPORT



Port Macquarie-Hastings Council
Yesterday at 23:21 · 🌐

We love our swimming! Feedback into the potential location of a new Port Macquarie Aquatic Facility closed earlier this week, and we've received over 900 submissions from our community. Thanks to everyone that had their say, we're now in the process of reviewing your thoughts to prepare a report, that will be considered at this month's Council meeting. Stay tuned for further updates at <http://bit.ly/2k3vYzB>

Port Macquarie News Triple M Mid North Coast Hit Mid North Coast ABC
Mid North Coast FM93.5 Radio 531am Camden Haven Courier Wauchope
Gazette PRIME7 News North Coast NBN Television



PMHC.NSW.GOV.AU
Port Macquarie Aquatic Facility - Port Macquarie-Hastings Council









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Social Media Mentions

Date	URL	Hit Sentence	Source	Influencer
06-Sep-2019 07:10AM	http://www.facebook.com/173035629397271/posts/2724743394226469	More than 900 community submissions will feed into the decision-making process around the preferred location for a new Port Macquarie aquatic centre. Six potential sites have been identified . We love our swimming! Feedback into the potential location of a new Port Macquarie Aquatic Facility closed earlier this week, and we've received over 900 submissions from our community. Thanks to everyone that had their say, we're now in the process of reviewing your thoughts to A new Port Macquarie Aquatic Facility at Sovereign Hills? Pop in and 'have your say'! on Thursday 15 August between 1pm and 3pm in Settlement City (opposite Adairs). Let Port Macquarie-Hastings Council know your thoughts! You can also complete the survey online before 18 August	Facebook	Port Macquarie News
05-Sep-2019 04:21PM	http://www.facebook.com/117445394973617/posts/2608563055861826	Would you like to see Port Macquarie's new aquatic facility located in Sovereign Hills? Be sure to have your say at council's community pop ups this week on Wednesday 14th August - 1:30pm - 3:30pm PORT MACQUARIE POOL (Gordon Street) on Thursday 15th August 1pm- 3pm SETTLEMENT CITY A new Port Macquarie Aquatic Facility... pop in and 'have your say'! We're at the first of three pop up stalls for the site locations of a future aquatic centre.... come and see us until 1pm today in Port Central (outside Target). We'll also be holding two more stalls this week:	Facebook	Port Macquarie-Hastings Council
15-Aug-2019 09:46AM	http://www.facebook.com/816704391695179/posts/2568954556470145	Burrawan Street residents have some concerns about Port Macquarie-Hastings Council's selection of Oxley Oval as one of several potential sites for a new aquatic centre.	Facebook	Port Macquarie News
13-Aug-2019 02:43PM	http://www.facebook.com/816704391695179/posts/2565741066791494		Facebook	Sovereign Hills Port Macquarie
13-Aug-2019 11:31AM	http://www.facebook.com/117445394973617/posts/2564626350255497		Facebook	Port Macquarie-Hastings Council
12-Aug-2019 07:00AM	http://www.facebook.com/173035629397271/posts/2672843122749830		Facebook	Port Macquarie News

PORT MACQUARIE AQUATIC FACILITY SITE SELECTION
COMMUNITY ENGAGEMENT REPORT

10-Aug-2019 05:45PM	http://www.facebook.com/117445394973617/posts/2557664650951667	Where should a future Port Macquarie Aquatic Centre be located? To ensure we have as much community feedback as possible we're setting up community pop-ups so you can share your thoughts! Catch us at these stalls on Tuesday 13 August at Port Central between 11am and 1pm	Facebook	Port Macquarie-Hastings Council
04-Aug-2019 07:30AM	http://www.facebook.com/162889267131291/posts/2433382760081919	Community feedback is sought on the location of a new aquatic facility in Port Macquarie. Port Macquarie Aquatic Facility - Site Selection #HaveYourSay	Facebook	Camden Haven Courier
01-Aug-2019 06:54PM	http://www.facebook.com/1637644166482050/posts/2415389688707490	Port Macquarie-Hastings Council are looking for your feedback on the different site options and the various criteria to help determine the best site for a new Aquatic Facility. To share your views, please complete WHERE DO YOU WANT TO SEE AN AQUATIC FACILITY IN PORT MACQUARIE?  Port Macquarie-Hastings Council is asking for feedback on where the community would like to see an aquatic facility built. Some options include Upper Oxley Oval and Wayne Richards Park or even upgrading the are Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street). The other option is to upgrade the Port Macquarie Olympic Pool site. AQUATIC CENTRE - PORT MACQUARIE  Of the 6 sites under consideration for a new Aquatic Centre in Port Macquarie, 3 are existing football clubs and a 4th site (Thrumster) is home to a proposed Regional Football Facility approved by council. We have had initial discussions with	Facebook	Kids Port Mac
30-Jul-2019 06:30PM	http://www.facebook.com/128552831082313/posts/417103662227227	MACQUARIE?  Port Macquarie-Hastings Council is asking for feedback on where the community would like to see an aquatic facility built. Some options include Upper Oxley Oval and Wayne Richards Park or even upgrading the are Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street). The other option is to upgrade the Port Macquarie Olympic Pool site. AQUATIC CENTRE - PORT MACQUARIE  Of the 6 sites under consideration for a new Aquatic Centre in Port Macquarie, 3 are existing football clubs and a 4th site (Thrumster) is home to a proposed Regional Football Facility approved by council. We have had initial discussions with	Facebook	WIN News Northern NSW and Gold Coast
25-Jul-2019 05:00PM	http://www.facebook.com/209265222453590/posts/2451046674942089	MACQUARIE?  Port Macquarie-Hastings Council is asking for feedback on where the community would like to see an aquatic facility built. Some options include Upper Oxley Oval and Wayne Richards Park or even upgrading the are Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street). The other option is to upgrade the Port Macquarie Olympic Pool site. AQUATIC CENTRE - PORT MACQUARIE  Of the 6 sites under consideration for a new Aquatic Centre in Port Macquarie, 3 are existing football clubs and a 4th site (Thrumster) is home to a proposed Regional Football Facility approved by council. We have had initial discussions with	Facebook	Wauchope Gazette
25-Jul-2019 09:32AM	http://www.facebook.com/509145149109151/posts/2600621336628178	MACQUARIE?  Port Macquarie-Hastings Council is asking for feedback on where the community would like to see an aquatic facility built. Some options include Upper Oxley Oval and Wayne Richards Park or even upgrading the are Macquarie Park (Gordon Street), Dixie Park (Aston Street), Findlay Park (Findlay Avenue), Upper Oxley Oval (Pacific Drive), Thrumster Sporting Complex (College Drive) and Wayne Richards Park (Koala Street). The other option is to upgrade the Port Macquarie Olympic Pool site. AQUATIC CENTRE - PORT MACQUARIE  Of the 6 sites under consideration for a new Aquatic Centre in Port Macquarie, 3 are existing football clubs and a 4th site (Thrumster) is home to a proposed Regional Football Facility approved by council. We have had initial discussions with	Facebook	Football Mid North Coast
23-Jul-2019 09:29PM	http://www.facebook.com/283337098396284/posts/2446704778726161	**PLEASE SHARE & VOTE AGAINST AQUATIC CENTRE ON MACQUARIE PARK! ** Port Macquarie Hastings Council have published 6 potential sites for the new aquatic facility and 3 of	Facebook	Port Macquarie Football Club

PORT MACQUARIE AQUATIC FACILITY SITE SELECTION
COMMUNITY ENGAGEMENT REPORT

those sites are already utilised by local football clubs. Port Macquarie Football Club is the oldest club

Where should a new Port Macquarie Aquatic Facility be located?

Site options are being considered, and you don't have to be James Magnussen to let us know what you think. Six Council-owned or managed sites in Port Macquarie have been identified and we want to hear from you. The

RT @nbnews: Plans for a \$50-million Aquatic Centre in Port Macquarie are underway, but the new facility needs a home. And from Monday, the community was given a say on where it should go. @laurenkempe <https://t.co/TDiefIqzDh>
RT @nbnews: Plans for a \$50-million Aquatic Centre in Port Macquarie are underway, but the new facility needs a home. And from Monday, the community was given a say on where it should go. @laurenkempe <https://t.co/TDiefIqzDh>
Plans for a \$50-million Aquatic Centre in Port Macquarie are underway, but the new facility needs a home. And from Monday, the community was given a say on where it should go.

@laurenkempe <https://t.co/TDiefIqzDh>

Port Macquarie-Hastings Council has commenced public consultation on the site for a new aquatic centre in Port

Macquarie. - Read more at:

[https://www.ausleisure.com.au/news/council-begins-](https://www.ausleisure.com.au/news/council-begins-consultation-on-sites-for-a-new-port-macquarie-aquatic-facility/)

[consultation-on-sites-for-a-new-port-macquarie-aquatic-facility/](https://www.ausleisure.com.au/news/council-begins-consultation-on-sites-for-a-new-port-macquarie-aquatic-facility/) this month include The Port Macquarie Aquatic Facility - Site Selection, the Bold Street Laurieton Pedestrian Crossing and the Draft Flynn's Beach Master Plan - Community Engagement.

Everyone's welcome to attend this Wednesday 17 July at the Port Macquarie Council Chambers in

23-Jul-2019 05:30PM <http://www.facebook.com/117445394973617/posts/2526949100689889>

22-Jul-2019 08:41PM <http://twitter.com/laurenkempe/statuses/1153253662493294593>

22-Jul-2019 08:30PM <http://twitter.com/ReyndersKim/statuses/1153250842818088962>

22-Jul-2019 07:20PM <http://twitter.com/nbnnews/statuses/115323219866845184>

22-Jul-2019 05:09PM <http://www.facebook.com/129790353728256/posts/3034487149925214>

15-Jul-2019 04:55PM <http://www.facebook.com/117445394973617/posts/2512149938836472>

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Facebook Australasian Leisure Management

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PORT MACQUARIE AQUATIC FACILITY SITE SELECTION
COMMUNITY ENGAGEMENT REPORT

12-Jul-2019 12:02PM	http://www.facebook.com/397908117232965/posts/893022307721541	Good news it seems with Port Macquarie Hastings Council set to consider a report on 17th July regarding community consultation for 6 possible sites for a new Aquatic Facility. These are:\n- Macquarie Park (Gordon Street)\n- Dixie Park (Aston Street)\n- Findlay Park (Findlay Avenue)	Facebook	New Pool for Port
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PORT MACQUARIE AQUATIC FACILITY SITE SELECTION
COMMUNITY ENGAGEMENT REPORT

your say

have

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PORT MACQUARIE AQUATIC FACILITY - SITE SELECTION

An Aquatic Facility that caters for the region's continuing growth is a high priority for the Port Macquarie-Hastings community, and at the July 2019 meeting, Council resolved to conduct further community engagement on possible sites for a new facility. We are looking for your feedback on the different site options and the various criteria, which will help Council determine the best site for a new Aquatic Facility.

The potential sites and current pool locations are shown on the map below:



have your say

WHAT IS IMPORTANT TO YOU FOR THE SITE SELECTED FOR THE NEW PORT MACQUARIE AQUATIC FACILITY?

Each of the potential sites for a new Aquatic Facility has different "pros and cons." The following questions are designed to gain a better understanding of what factors are important to you in selecting a site for a new facility.

1. The new Aquatic Facility should be located within the Port Macquarie CBD

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

2. The new Aquatic Facility should be co-located with other sporting facilities

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

In answering the following question, please be aware that Council will work with any existing users/potential users of that site if selected (e.g. sporting groups) to determine a suitable alternative venue.

3. The new Aquatic Facility should be built on a location that minimises the impact to existing/future users.

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

4. The new Aquatic Facility should be easily accessible by all forms of transport (including public transport)

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

5. The new Aquatic Facility should be located away from residential areas

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

6. The new Aquatic Facility should be built on a landmark/high-visibility site

☐ Strongly Disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly Agree

CONSTRUCTION COSTS

Based on recently developed contemporary facilities within Australia, it is estimated that a new Aquatic Facility in its entirety will cost in the vicinity of \$40 - \$50 million. Some of the potential sites may incur additional construction costs due to the physical features of the site (topography) and/or the cost of site services (e.g. water, access).

7. Please select from the options below the statement that best reflects your response regarding construction costs.

☐ The location of the new Aquatic Facility should be the key consideration and I would support a site that may require additional construction costs to enable all identified elements of the Aquatic Facility to be delivered.

have your say

A key requirement for the site for the new Aquatic Facility should be that construction costs are minimised.

Both costs and location are important to me and I would be willing to forgo some of the proposed features of the new Aquatic Facility to ensure that the budget is not exceeded.

YOUR PREFERRED SITE

8. Given your responses to the above statements and taking into account the pros and cons listed for each site please indicate below which are your top 3 preferred sites for the new Aquatic Facility in Port Macquarie. Place a tick or cross next to the site location for your first 3 choices.

	First Choice	Second Choice	Third Choice
Macquarie Park (Gordon Street)			
Dixie Park (Aston Street)			
Findlay Park (Findlay Avenue)			
Upper Oxley Oval (Pacific Drive)			
Thrumster Sporting Complex (College Drive)			
Wayne Richards Park (Koala Street) (currently occupied by the Council Depot)			
Like for like upgrade at the existing Pool Site			

9. Please outline below any specific comments you have regarding your preferred sites (above), or any of the potential site locations?

10. Do you have any other specific comments about the proposed Aquatic Facility?

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have your say

ABOUT YOU

11. Where do you live in the Port Macquarie-Hastings Local Government Area?

☐
☐
☐

Port Macquarie

Lake Cathie/Bonny Hills

Camden Haven Area

☐
☐
☐

Wauchope Area

North Shore

Rural Hinterland

12. Age Group:

☐

<18

☐

18-30

☐

31-45

☐

46-60

☐

61-75

☐

>76

☐

Prefer Not to Say

13. Pool Usage - Which of the following best describes you? Please select all that apply.

☐
☐
☐
☐

I am a regular user of a pool within the Port Macquarie-Hastings Local Government Area

I am an infrequent user of a pool within the Port Macquarie-Hastings Local Government Area

I do not currently use any of the pools within the Port Macquarie-Hastings Local Government Area

I would consider being a future user of a new Aquatic Facility in Port Macquarie

14. If you are a regular pool user, which pool do you use most frequently? Please select one response.

☐
☐

Port Macquarie Pool

Laurieton Pool

☐
☐

Wauchope Pool

Kendall Pool

15. Which of the following best describes you? Please select all that apply.

☐
☐
☐
☐
☐
☐

Member of a club that regularly uses the current Port Macquarie Pool

Member of a current user group of one of the potential sites - Site Name: _____

A neighbour of one of the potential sites - Site Name: _____

A tourism operator (e.g. accommodation, hospitality or services provider)

Port Macquarie-Hastings community member or resident

None of the above

Thank you for taking the time to complete this important survey.

Please drop the completed form into any Council Office/Library, Email to council@pmhc.nsw.gov.au or Post to

The General Manager
Port Macquarie-Hastings Council
PO Box 84, Port Macquarie NSW 2444

Survey closes 18 August 2019.

haveyoursay.pmhc.nsw.gov.au

06 MAYOR'S SPORTING FUND - APPLICATIONS RECEIVED

CONSENSUS:

1. That Wauchope Under 18's Girls Rugby Team receive \$350.00 to assist with the expenses incurred travelling to and competing at the NSWCHS Rugby Championships held in Sydney on 31st July 2019.
2. That Bailey Whitton receive \$350.00 to assist with the expenses incurred travelling to and competing at the All Schools Swimming Championships held in Melbourne from 27th July to 31st July 2019 inclusive.
3. That Morgan Jean receive \$350.00 to assist with the expenses incurred travelling to and competing at the All Schools Swimming Championships held in Melbourne from 27th July to 31st July 2019 inclusive.
4. That Maddison Drewitt receive \$350.00 to assist with the expenses incurred travelling to and competing as a member of the Under 16's NSW Girls Hockey Team to compete at the All Schools National Hockey Championships to be held in Newcastle from 1st - 8th August 2019 inclusive.

2018 – 2021 – Cultural Plan – Progress Report (2018 – 2019)

Objective 1 : Develop and empower our region's art & cultural communities and assets

2018 – 2019 PROGRESS AND MEASURES		STATUS		OUTPUT		ACTION		STRATEGY	
Council applied and was successful in receiving a grant from the Building Better Regions Fund for \$75,000 to develop a Cultural Economy Plan.		On target		Cultural Economy Plan developed with actions and priorities to increase opportunities for the development and strengthening of creative industries.		1.1 Cultural economy plan Develop and deliver a cultural economy plan to grow and diversify our region's economy through creative enterprises. The cultural economy plan will help to position our region as a hub for the creative industries, and identify opportunities to resource cultural development.		STRATEGY: IDENTIFY AND HARNESS THE POTENTIAL OF OUR CULTURAL ECONOMY	
This project will include: <ul style="list-style-type: none"> • Cultural Mapping across the LGA • An audit of current venues, spaces, assets, and infrastructure for Cultural / Creative Sector. • Establishment of a database of Creative Industries and Cultural Sector • Baseline data to inform future planning and complement state and federal research. This project is scheduled to be completed by 30/6/2020.		On target		Report & identifying potential creative hubs/precincts across the LGA and recommendations for development.		1.2 Creative precincts and hubs Investigate, plan and advocate for future creative precincts and cultural hubs designed to connect, build on the capabilities of, and showcase our significant cultural assets and the work of our local creative practitioners, with a key focus on developing a Port Macquarie CBD cultural precinct plan.		STRATEGY: CREATE, DEVELOP AND MAINTAIN VIBRANT CULTURAL SPACES AND PLACES TO MAXIMISE OPPORTUNITIES FOR OUR COMMUNITY TO PARTICIPATE IN CULTURAL ACTIVITIES ACROSS THE REGION	
This is scheduled to be commence in 2020 – 2021 period.		On target		Report on existing cultural facilities and potential spaces presented to the Cultural Steering Group with recommendations for future development and priority projects		1.3 Venues and spaces Identify community and Council venues and develop a plan for revitalising and strengthening existing cultural facilities across our towns and villages so everyone can access arts and culture locally. Identify opportunities for commercial, unused spaces to become vibrant creative spaces.		1.4 Showcase programs Provide or facilitate opportunities to showcase locally-developed, high-quality arts programs within our community spaces.	
An Audit of Venues and spaces will be undertaken as part of the development of the Cultural Economy Plan during the 2019/2020 period. 18 performances were presented as part of the 2018/2019 Performing Arts Season, including Opera Australia's Madame Butterfly, Melbourne International Comedy Festival, Circus Oz, TWO by Ensemble Theatre, The Gruffalo Live on Stage, Sydney Writers Festival, The Gospel According to Paul, Sydney Symphony Orchestra, TEDx SydneyLive, Expressions Dance, and David Helfgott with 15980 attendees. 19 exhibitions were hosted in the Regional Gallery, including the 2017 Archibald Prize Regional Tour Exhibition, The National Photographic Portrait Prize 2018, YES YES YES Graphics from the 1960s and 1970s from the Art Gallery of NSW and Primavera at 25/MCA Collection with 47,840 attendees. The Glasshouse venue was hired to 58 local community events, presented by tertiary educational institutions, schools, charities and non-for-profit groups including performances, dance festivals, graduations, training days, free concerts, school speech nights and fundraising events. The following programs and events focused around locally developed opportunities. <ul style="list-style-type: none"> • Friday Lunchtime Concerts with the Conservatorium Mid North Coast • Faces of the Hastings - Public exhibition • Free Sunday Drawing Sessions with - Hastings Valley Fine Art Association • Facilitation of the Creative Wauchope Business group and branding • Move Shake and Make – a 6 week block of creative workshops led by local artisans • Northern Exposure Exhibition – showcasing Mid-North Coast Artists • The Artist Blacksmith Association of NSW (formed in Wauchope 24 years ago) presented the exhibition Discovery F26 The Library Strategic plan has been drafted and presented to the Cultural Steering Group.		On Target		Library Strategic plan adopted and implemented.		1.5 Library strategic direction Investigate ways to enhance the delivery of innovative Library services across the LGA.		STRATEGY: RAISE THE SKILLS AND CAPACITY OF OUR LOCAL	
This will be carried out as part of the Cultural Economy Plan development. Council applied for and was successful in gaining a grant to complete the Cultural Economy Plan This is scheduled to commence in the 2019/2020 Financial year as part of the Cultural Economy Plan.		On target		Database and report developed.		1.6 Cultural mapping Undertake a cultural mapping process to identify information about all existing arts and cultural individuals, organisations, assets, activities and events to assist with building a cultural calendar; develop a			

CREATIVES TO FOSTER A VIBRANT CULTURAL COMMUNITY	comprehensive cultural database for networking & marketing purposes and as a resource for measurement information as the implementation of the Cultural Plan progresses.				
	1.7 Skills audit Undertake a skills audit of our local creatives and cultural sector to identify current strengths and future opportunities for skills development and capacity building.	Survey undertaken with report.	On target	This will be carried out as part of the Cultural Economy Plan development. Council applied for and was successful in gaining a grant to complete the Cultural Economy Plan. This is scheduled to commence in the 2019/2020 Financial year as part of the Cultural Economy Plan.	
	1.8 Professional development opportunities Support our local creatives and creative enterprises to develop the skills, networks and profile to enable them to thrive, by developing a program of activity which may include workshops, master classes, networking events and mentoring programs.	Professional Development programs delivered and implemented.	Achieved	Arts Smarts Program delivered and implemented with 20 participants. A review of the program will be undertaken to determine the future approach to the creative sector professional development. The Glasshouse Regional Gallery Artist in Residence Program hosted three nationally recognised artists along with 6 professional development workshop programs for local artists to participate in and increase their creative skills.	
		Inclusion of recommendations from part of the Cultural Economy Plan			

Objective 2 : Enrich our community through experiences that embrace and celebrate our diverse and unique arts and culture					
STRATEGY	ACTION	OUTPUT	STATUS	2018 – 2019 PROGRESS AND MEASURES	
STRATEGY: MAXIMISE ARTS & CULTURAL EXPERIENCES FOR ALL SECTORS OF OUR COMMUNITY	2.1 Inclusive programs and events Provide input into the development of Council's Events, Disability Inclusion and Community Inclusion Plans to ensure the facilitation, support and/or provision of a wide range of cultural events, programs and activities for all sectors of the community including our youth and seniors, Aboriginal and multicultural residents.	Input provided into CIP Plan. CIP Plan developed.	Achieved	<p>The Community Inclusion Plan will be presented to Council at the September 2019 Council meeting. Council's Internal Events Plan is currently in development.</p> <p>Council has supported and/or delivered the following targeted programs within our community throughout 2018-2019.</p> <p>Aboriginal and Torres Strait Islander Community</p> <ul style="list-style-type: none"> • NAIDOC Week 2018 and associated activities including Birpai Gamba, Flag Raising and Family Fun day – approximately 1100 attendees • Reconciliation week – 180 attendees • Saltwater Freshwater Exhibition and associated programs including weaving workshops, storytelling, language workshops and film screenings – est. 6,000 attendees • The Presence of Absence: Jason Wing Exhibition – est. <p>Seniors and People living with a Disability</p> <ul style="list-style-type: none"> • Monthly Accessible Art tours at the Gallery - est 200 participants • Four Seasons in One Day Dementia Program including digital animation creation, Soup Kitchen, Hands on History program and Sunday Afternoon video Animation – est 2,000 • Seniors Expo - 1458 attendees <p>Youth</p> <ul style="list-style-type: none"> • Youth Week Street Art Festival – est 450 attendees • Youth Grants Program • Education at the Glasshouse program including theatre performances and workshops – 6352 attendees • Glasshouse Gallery School Holiday Sprouts Program – est 337 attendees • Luminosity Youth Event – approx 400 attendees • Young Movers and Shakers Program 	
	2.2 Bicentenary Facilitate the development and delivery of Bicentenary events and activities for the period 2018-2021 in a manner which is inclusive and recognises the multiple cultural stories that make up the history and identity of our region.	2018 - Bicentennial Community Event held. 2018 – 2021 Community Bicentennial events supported. 2021 Bicentennial Program delivered.	Achieved	<p>The <i>Towards 200</i> - Bicentennial Event was held and delivered on Town Green on 18 October 2018. The event featured markets stalls including performances by Aboriginal Dance troupes, live music and food stalls. The event was attended by approximately 5,000 people.</p> <p>The following programs and events were supported by Port Macquarie Hastings Council:</p> <ul style="list-style-type: none"> • John Oxley Memorial reinstatement and conservation • Douglas Vale Bicentenary Performance • Bonny Hills Back to "Bonny's Bicentennial Event" • Hastings District Flying Club Historical Book • Port Macquarie and District Family History Group Historical Book • Tacking Point SLSC Historical Book • Friends of Mrs Yorks Garden Community Event • John Oxley Plaque installation by NSW Surveyors Association • Gaolhouse to Glasshouse exhibition - Hastings Valley Fine Arts Association • Discovery Fe26 Exhibition - Blacksmiths Association • Faces of The Hastings <p>A Bicentennial Working Group (BWG) has been established to drive the 2021 Port Macquarie Bicentennial program.</p>	
	2.3 Cultural vibrancy Work with our communities to identify ways to enhance cultural vibrancy across our towns and villages throughout the LGA as part of the community planning process.	Cultural opportunities identified within the Community Plans.	On Target	<p>Community Planning commenced in the following areas in 2018/2019.</p> <ul style="list-style-type: none"> • Bonny Hills • North Shore • Lake Cathie • Pappinbarra • Rollands Plains 	
STRATEGY: IDENTIFY AND DEVELOP THE CULTURAL IDENTITY OF OUR					

PLACES (TOWNS AND VILLAGES)				<ul style="list-style-type: none"> • Telegraph Point • Camden Haven • Kew, Kendall & Lorne • Comboyne Byabarra <p>Plans with community identified priorities are currently in development.</p> <p>Town entrance signage featuring cultural motifs and symbols that connect with the area have been installed in the following areas: North Haven, Lake Cathie, Kew, Bonny Hills, Laurieton, Dubogan, West Haven, Lake Wood and Kendall. The following locations are expected to be installed in the 2019 – 2020 period. Wauchope, Byabarra, Comboyne, Herons Creek and Camden Head.</p>
	2.4 Facilitate community-based and community-led programs	Support our communities across the region to develop and deliver innovative cultural activities and programs which reflect local aspirations and identity and encourage community participation.	Support through the establishment of Arts and Cultural Grants and sponsorship program, for community led cultural events.	<p>The following community based programs have been supported by PMHC through in kind support:</p> <ul style="list-style-type: none"> • Friday Lunchtime Concerts with the Conservatorium Mid North Coast – 4200 attendees • Faces of the Hastings - Public outdoor exhibition – 1163 Guided App views • Free Sunday Drawing Sessions with - Hastings Valley Fine Art Association – free community workshops with local artists. • Facilitation of the Creative Wauchope Business group and branding resulting in the Creative Wauchope Weekend program of events. Multiple workshops were held across the weekend in various spaces, employing artists and provide a market for selling arts and crafts. • Move Shake and Make – a 6 week block of creative workshops led by local artisans • Northern Exposure Exhibition – showcasing Mid-North Coast Artists – profiling our regions top visual artists. • The Artist Blacksmith Association of NSW (formed in Wauchope 24 years ago) presented the exhibition Discovery F26
STRATEGY: IMPROVE SOCIAL AMENITY THROUGH PUBLIC ART	2.5 Public art audit	Undertake an audit of Council's existing Public Art and develop a maintenance/replacement schedule.	Public Art audit undertaken with recommendations for maintenance.	In progress
	2.6 Public art policy	Develop and implement a Public Art Policy and Guidelines which provides a framework for commissioning, developing and managing public art (including integration into our major infrastructure projects) that reflects best-practice in public arts.	Maintenance program developed and implemented. Public Art Policy adopted by Council.	In progress
	2.7 Public art master plan	Develop and implement as appropriate an LGA-wide Public Art Master Plan which identifies suitable sites for public art and encourages residents and visitors to look at our towns and villages in new and unexpected ways.	Percentage for Art established as part of internal capital infrastructure projects. 5 Year Public Art Masterplan developed.	In progress
				<p>A consultant has been engaged to review and update the policy and is currently in progress.</p> <p>An initial draft has been prepared in May 2019 and reviewed and a second draft was presented to the CSG in July. Work is still continuing to develop the policy.</p> <p>Scheduled to be completed and exhibited in December 2019.</p>

Objective 3 : Create Community pride and ownership in our Cultural brand which promotes our unique heritage, people and places.				
STRATEGY	ACTION	OUTPUT	STATUS	2018 – 2019 PROGRESS AND MEASURES
STRATEGY : FOSTER COLLABORATION	3.1 Collaborative partnerships Partner and collaborate with businesses, arts sector organisations and all levels of government to drive and strengthen our cultural assets, programs and facilities.	No of partners engaged to assist with the delivery and promotion of cultural activities.	Achieved	<p>Council has worked with the following groups within our community throughout 2018 -2019 to support Cultural Activities, program and events.</p> <ul style="list-style-type: none"> • Screen Wave - SWIFF Youth Film Workshops – 22 participants • Conservatorium Mid North Coast - Street Art Youth Festival and Friday Lunchtime Concerts – 4200 attendees • Charles Sturt University - Proof - Project Justice Project – 20 participants • Dementia Australia - Four Seasons in One Dementia day program - • ArtWalk - 49 business supported the program of events and satellite events • NAIDOC week • Wauchope Arts Council, St Thomas Church - Presentation of Bush Gothic in St Thomas's Church • Port Macquarie Chamber of Commerce and PMHC and Liberty Steel - Countdown to Christmas community event. • Wauchope Chamber of Commerce, Wauchope Historical Society and PMHC - River Walk History Project • Wauchope Chamber of Commerce - Creative Wauchope establishment and event • Arts Mid North Coast - Letters of support for SHINE project and financial contribution for support services • Hastings Co-op - Faces of the Hastings -Wauchope. • Create NSW - Government Body <p>Council is continuing to develop a number of corporate partnerships / sponsorships which support cultural programming in the Glasshouse:</p> <ul style="list-style-type: none"> • Australian Solar Timbers • Prime 7 • Angove Wines • WIN • Percival Property • Focus Magazine • Port Bus
STRATEGY : IDENTIFY AND DEVELOP OPPORTUNITIES TO PROFILE AND PROMOTE CULTURE AT ALL LEVEL – LOCAL TO INTERNATIONAL	<p>3.2 Cultural marketing & communications plan Develop and implement a PMHC Cultural Marketing & Communications Plan.</p> <p>3.3 Cultural tourism In partnership with key stakeholders, develop and implement a cultural tourism plan that promotes our culture and builds our reputation as a destination offering diverse cultural experiences.</p> <p>3.4 Cultural festival Building on the success of Council's ArtWalk event, undertake strategic planning to develop a sustainable cultural festival celebrating our local arts, heritage and culture that will promote Port Macquarie-Hastings region as a centre of cultural excellence.</p>	<p>Cultural Marketing and Communication developed.</p> <p>Cultural Tourism Program developed and delivered.</p> <p>Creative Producer engaged. Cultural festival delivered.</p>	<p>On Target</p> <p>Not Yet Commenced</p> <p>In progress</p>	<p>2018 - 2019 - A winter marketing campaign was developed as part of the Destination Marketing for Port Macquarie with a focus on the Creative Sector.</p> <p>Scheduled for 2020 - 2021</p> <p>Council developed and delivered the following cultural festivals: Towards 200 - Bicentennial Celebration - 5,000 participants Planning undertaken for ArtWalk 2019</p> <p>Council provided \$33,900 funding support to the following Cultural Festivals through the event sponsorship program:</p> <ul style="list-style-type: none"> • SummerSalt Music Festival • Hello Koalas Festival • Blues and BBQ Festival • Wildwood Music Festival • Under the Southern Stars Music • Red Hot Summer Concert • Slice of Haven Food Festival • A Gala Night at the Ballet
STRATEGY : WORK COLLABORATIVE	3.5 Heritage and management audit Assess and map the visual character and cultural significance of our landscape and built environment, including undertaking an audit of heritage interpretive	Aboriginal and local Heritage management Plan developed.	On Target	<p>Council staff has been successful in receiving a \$30,000 grant with matched funding to undertake an Aboriginal Heritage study over 2019 - 2021.</p> <p>An interpretive signage audit is scheduled to commence in 2019 - 2020.</p>

Y WITH THE CULTURAL COMMUNITY SECTOR TO DELIVER IDENTIFIED HERITAGE OUTCOMES	signage, Council and community-managed heritage assets and collections, leading to further policy and guidance for the future management and protection of these unique places and development of a heritage signage interpretation framework.	Heritage Signage Interpretation framework developed.			Council staff has been successful in receiving a \$30,000 grant with matched funding to undertake an Aboriginal Heritage study over 2019 - 2021.
	3.6 Our Aboriginal culture Develop a long-term plan for Aboriginal heritage and culture in the region that includes a commitment to the development and promotion of our local Aboriginal artists.	Aboriginal and Heritage and management Plan developed. Ensure Aboriginal heritage and culture and featured in Cultural Economy and Tourism Plan. Sister City program reviewed with recommendations presented to Council.	On target		Members of the Birpai Land Council and Bunyah Land Council are invited members onto the Cultural Steering group.
STRATEGY : PROMOTE OPPORTUNITIES FOR CULTURAL EXCHANGE	3.7 Handa sister city Review the Handa Sister City relationship to identify further potential for cultural exchange.		On Target		Discussion on numerous levels has taken place in regards to the Handa Sister City relationship. A report will go to Council meeting determining the future of the Handa Sister City relationship.
	3.8 Creative professional exchange program Develop a professional exchange program to include arts partnerships, workshops and scholarships for creative practitioners.	Process and criteria established for Arts and cultural Grants and Sponsorship Program. Implementation of a trial program.	Not yet commenced		

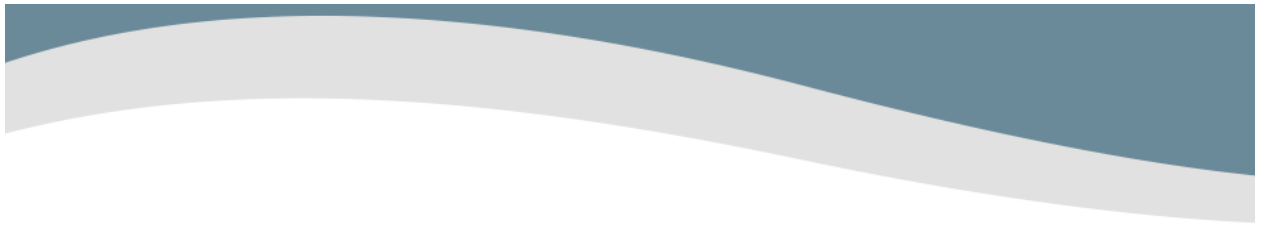
Objective 4: Ensure the effective planning, funding, integration and measurement of Councils art and cultural programs.					
STRATEGY	ACTION	OUTPUT	STATUS	2018 – 2019 PROGRESS AND MEASURES	
STRATEGY : IDENTIFY FUNDING OPPORTUNITIES TO SUPPORT CULTURAL OUTCOMES	4.1 Funding Identify potential funding streams (including grants, corporate funding and partnerships) to support the ongoing implementation of actions from the Cultural Plan.	Grants applications identified and applied for. Review distribution of Section 94 contributions and distribution of funds.	Achieved	Grants received <ul style="list-style-type: none"> \$75,000 - Cultural Economy Plan \$30,000 Matched Funding - Aboriginal Heritage Study \$6,000 Matched Funding - Heritage Advisor \$6,000 Matched funding - Local Heritage Assistance Fund \$196,000 - Bicentennial River Walk Sculptural Project \$70,000 - Glasshouse Regional Gallery Program \$128,000 - replace the existing Studio seating. \$136,470 – Library Van 	
	4.2 Grants program Support the development of arts programs and projects across the LGA by establishing a Community Cultural Development Grants program.	Art & Cultural Grants and Sponsorship program implemented and projects delivered.	Not yet commenced.	Community Grants were awarded totaling \$21,996 for equipment/ infrastructure and or programs to the following Cultural groups in 2018 – 2019 period. <ul style="list-style-type: none"> Laurieton Men's Shed - Thickneser Port Macquarie Women's Shed - Tools and Storage Comboyne Community Association - Restumping Museum Council provided \$33,900 funding support to the following Cultural Festivals through the event sponsorship program: <ul style="list-style-type: none"> SummerSalt Music Festival Hello Koalas Festival Blues and BBQ Festival Wildwood Music Festival Under the Southern Stars Music Red Hot Summer Concert Slice of Haven Food Festival A Gala Night at the Ballet A review of the Council Grants Program is scheduled for the 2020 – 2021 period.	
STRATEGY : INTEGRATE AND ALIGN THE CULTURAL PLAN WITH RELEVANT COUNCIL DOCUMENTS (PLANS, STRATEGIES AND POLICIES)	4.3 Glasshouse Strategic Plan Provide input into the development of Council's Glasshouse Strategic Plan to ensure the delivery of high-quality cultural, community activities which reflect the social and cultural aspects that are relevant to our community.	Glasshouse Strategic plan developed that responds to the Cultural aspirations of the region and approved by the CSG.	In progress	A draft Glasshouse strategic plan was presented to the Cultural Steering Group. The Cultural Steering Group reviewed and provided comments. The Plan is still under review with an amended document that responds to the Cultural aspirations of the region. This will be presented to the Cultural Steering Group for approval. Currently underway	
	4.4 Heritage guidelines Update Council's local heritage guidelines/studies to better reflect current planning & development trends.	LEP updated.	In progress	Scheduled for 2019 - 2020 period	
	4.5 Community engagement Undertake a comprehensive community engagement process for the development of the 2021-2024 Cultural Plan.	Community engagement undertaken and reported upon.	Not yet Commenced	Scheduled for 2020 - 2021 period.	
	4.6 Economic Development Strategy Provide input into the development of Council's Economic Development Strategy to ensure alignment with the cultural economic outcomes identified within the Cultural Plan, in particular, the development of our creative industries and cultural tourism.	Economic Development Strategy developed.	Not yet Commenced	Scheduled for 2020 - 21 period.	
STRATEGY : IDENTIFY MEASURE AND	4.7 Cultural performance measure Develop a relevant set of cultural performance measures based on recognised cultural indicators to allow benchmarking of cultural activity. Develop a	Cultural measures identified and reported on annually.	In progress		

Journal Pre-proof

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process to allow for evaluation of actions against these measures.

RAISE
AWARENESS OF
THE ECONOMIC
AND SOCIAL
VALUE OF
CULTURE TO OUR
COMMUNITY



ARTWALK 2019

EVENT REPORT

Authored by: Jo Mackellar
22 August 2019



Executive Summary

ARTWALK 2019 was held from 6-9pm on Thursday 18 July in Port Macquarie, NSW. The event featured pop up performances, artistic interventions and creative installations, attracting approximately 13,000 people to the CBD event area. This report provides a summary of the research conducted at the event, assessing the characteristics and expenditure patterns of visitors as well as the cultural value of the event to the local community. The research is based upon surveys collected on-line from a sample of 128 event visitors¹. These were analysed by the staff at Destination Research and Development, and the following key results were found:

Visitor profile

- 43% of visitors are over 40 years of age.
- 50% of visitors bring children with them to the event.
- 35% are in family groups of four or more and 26% couples.
- 10% of visitors are from outside Greater Port Macquarie.
- 4% came from neighbouring LGAs .
- 5% of event visitors stayed overnight or longer.
- The average night stay of event visitors was 3.5 nights.
- The event generated an estimated \$193,960 from direct visitor spending.

Marketing analysis

- 73% used social media to access information about the event.
- 44% used 2 or more sources to find event information.
- 95% rated the overall event experience as very good or excellent.
- 53% attended ARTWALK for the first time.

Cultural indicators

- 77% of respondents felt the event had a high impact on the vibrancy of the CBD.
- 69% felt the event had a high impact on the creativity of artists.
- 66% felt the event had a high impact on the connection to community.
- 60% felt the main community contribution was the sense of belonging and togetherness.
- Visitors described the event as inspiring, fun, inclusive and amazing

Overall, the research shows high levels of satisfaction with the event itself and its contribution to the local community.

¹ based upon a random sampling error of +/- 4.6 per cent at the 95 per confidence level within a population of 13,000

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Enquiries should be directed to the Research Manager, destination.research@yahoo.com.

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Demographic Profile

The profile of visitors attending the event demonstrates the appeal to a wide range of age groups. Most visitors attend small family and social groups of 2-4 people or in couples. Visitors are predominantly from the greater Port Macquarie area, and yet the event extends its reach to a range of visitors from NSW and interstate. The majority of survey respondents were visitors to the event (90%), while 10% were artists or participants.

Age profile

Survey respondents were asked the number of people in their group and the ages of those people with the results highlighting the mixed audience of all age groups, including a high ratio of families with children. Older age groups were prominent with 43% over 40 years of age.

Gender

15% of respondents were male, 2% other and 82% of respondents were female – (reflecting the predominance of females at many art events and exhibitions²).

Group Size and children

The average group size was **3.7** with visitors mainly attending in families. As shown in the table below most respondents attended in groups of four people (21%) or more than four people (14%) as well as small groups of 2 people (26%). Many of these groups included children with around half (50%) of visitors bringing children with them.

Figure 1: Age Groups

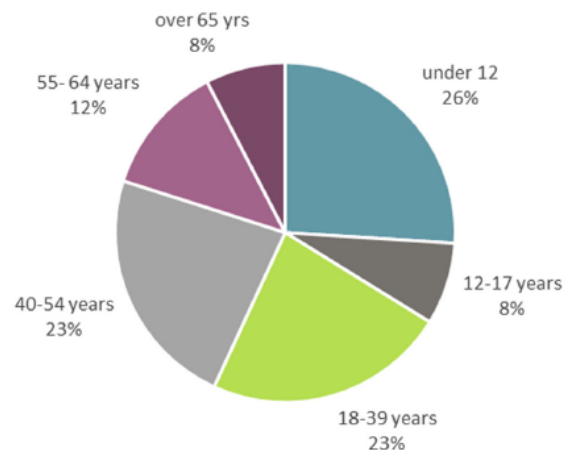


Table 1: Group size

Group size	single	couple	three	four	> four
% of respondents	11%	26%	15%	21%	14%



² MGNSW. (2010). *Guess who's going to the gallery? (NSW) A strategic audience evaluation and development.*

Place of Residence

Respondents were asked for their postcode allowing two forms of analysis to be provided – a *postcode analysis* determines the regions in which visitors reside, and an *annular analysis* determines the distances visitors have travelled to attend the event. The analysis of postcodes demonstrates the support for the event from local residents.

Postcode Analysis

The analysis suggests the majority of visitors reside in the Greater Port Macquarie area (90.4%). However, attendees also come from other geographical markets including:

- Neighbouring regions such as Greater Taree (0.8%) and Kempsey (3.2%).
- NSW regional areas such as Newcastle (1.6%) and Central Coast (0.8%).
- The city of Sydney (1.6%).
- Interstate (Noosa, QLD 0.8%).

As shown in later analysis this includes those who were specifically in Port Macquarie for the event, and for other reasons such as holiday or shopping.

Table 2: Region of Residence

Region	2019
NSW	99.2%
Greater Port Macquarie	90.4%
Kempsey	3.2%
Newcastle	1.6%
Sydney	1.6%
Foster/Tuncurry	0.8%
Central Coast	0.8%
Greater Taree	0.8%
Interstate	0.8%
QLD	0.8%
Overseas	0.0%
Total	100%



Annular region analysis

An annular region analysis is undertaken by plotting postcodes on an annular map that allows calculation of the distances travelled. The results of this analysis illustrate that approximately 10% of the audience reside more than 50 kilometres away. This result is useful for interpreting the tourist value of the event; as many tourism organisations such as Tourism Research Australia define a tourist as coming from over 50kms³.

Table 3: Annular analysis

No.	Annular Analysis	2019
1	Less than 50 kms	90%
2	41 - 100 kms	5%
3	101 - 200 kms	2%
4	201 - 400 kms	2%
5	401-800 kms	0%
6	800kms + interstate	1%
Total		100%

Figure 2: Annular regions



Figure is for illustrative purposes and is not to exact scale.

³ See <http://www.tra.gov.au/statistics/domestic-travel-by-australians.html>

Accommodation and Length of Stay

Survey respondents were asked about their accommodation choice and their length of stay. A large majority of visitors attend the event on a day trip from the local regions, with 94% returning to their own home. Some visitors utilized hotels/motels (3%), and the houses of friends and family (3%). For those who did stay overnight or longer specifically for the event, the following was found;

- The average night stay of visitors is 3.5 nights
- Stays ranged from 1 night to 7 nights, with most people choosing 3 nights (mode = 3).

Purpose of Visit

The 'purpose of visit' was analysed in order to determine the ratio of the audience that attended ARTWALK 2019 specifically for the event, and those who attended for 'other' reasons. In total, 99% of respondents came specifically for the event – this includes 90% who reside in Greater Port Macquarie and 9% who reside outside the LGA.

Those coming especially for the event came from;

- | | |
|---|---|
| <ul style="list-style-type: none"> • Kempsey • Newcastle • Sydney • Foster/Tuncurry | <ul style="list-style-type: none"> • Noosa • Central Coast • Greater Taree • Greater Port Macquarie |
|---|---|

A further 1% of the audience were in the area for other reasons such as shopping for the day or on holidays and came across the event, and combined their visit to ARTWALK with other reasons to visit the area.

Table 4: Purpose of visit to Port Macquarie CBD

	Day visitor	Overnight or longer
(A) overnight event visitors		5%
(B) day trippers (event visitors)	4%	
(C) other reasons or holiday*		1%
(D) local residents	90%	

* this segment may have been larger using different data collection technique



Direct Visitor Expenditure

'Direct visitor expenditure' is a reliable method to determine the direct economic impact of an event to its host community. As illustrated it is calculated using an event tourism ratio identifying visitors to the event who are bringing new money to the region. It does not include "(D) local residents" from the local region (Port Macquarie) as that money is assumed to exist in the local economy. Nor does it include "(C) holiday-makers" or others not in the area for the event, as their money is assumed to be spent in the LGA regardless of the event.

The direct visitor spending is estimated using "(A) overnight event visitors" determined through analysis in previous sections to be 5% of all visitors. These visitors have come into the region, for the purpose of visiting the event, and stayed overnight or longer. Day trippers not from the local area (4%) (B) are also included in the estimate. As expected, the average expenditure of these two groups varies dramatically and are therefore calculated separately as shown below.

Figure 3: Event tourism ratio

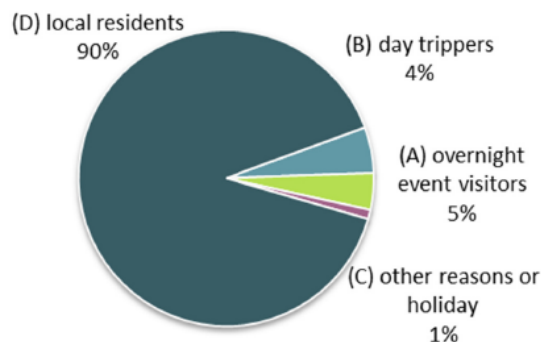


Table 5: Direct visitor expenditure

	2019
Event specific visitors (C)	
unique visitors	13,000
overnight tourist %	5.0%
overnight tourist #'s	650
Per person average spend per event	\$280
Total Overnight Visitor expenditure	\$182,000
Day Trippers (B)	
unique visitors	13,000
day trippers %	4.0%
# day trippers	520
Per person average spend per event	\$23
Total Day trippers	\$11,960
Total Overnight and Daytrips	\$193,960

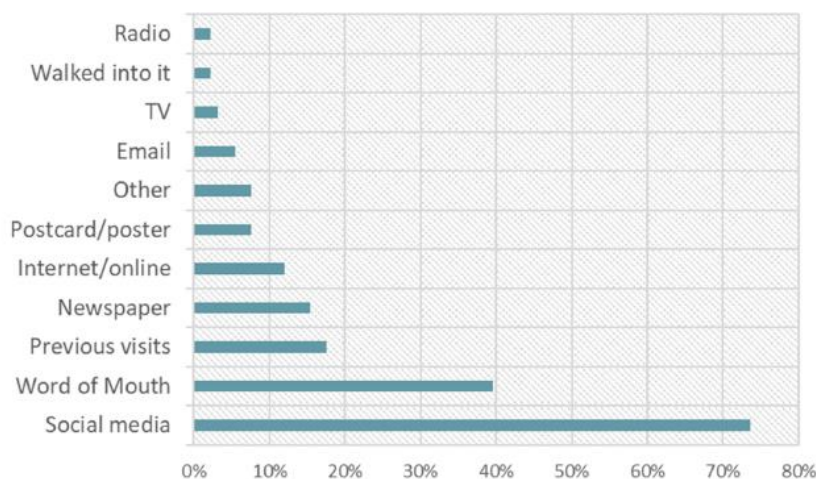
Promotion Analysis

Visitors were asked how they heard about the event, and allowed to choose more than one source (multiple response). As shown in the table below, over half of respondents reported using just one source (56%) of information, while others used two or more sources. This reinforces the importance of using a strong mix of promotional materials and mediums to reach a wide audience.

Table 6: Number of information sources used

1 source	2 sources	3 sources	4+ sources
56%	23%	11%	10%

Figure 4: Sources of event information



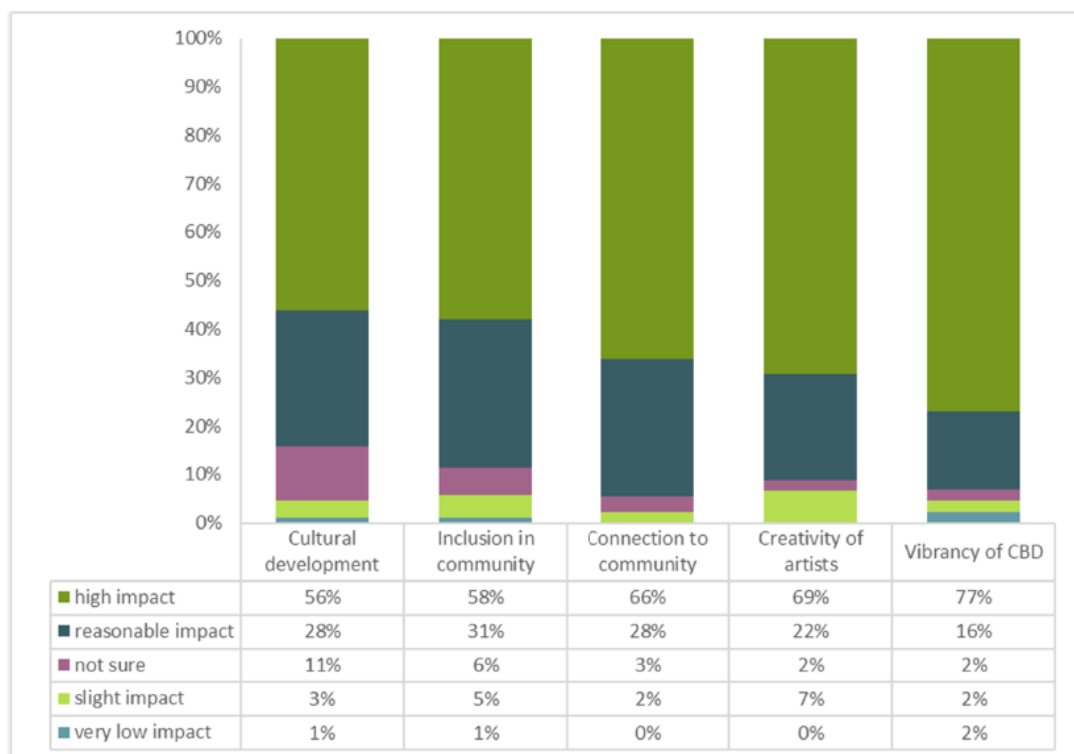
Social media (73%) was reported as the highest source of information (however it should be noted that the survey responses were also collected via this media which may bias the result). Other traditional sources of event information remain relevant such as 'word of mouth' (39%), 'newspaper' (17%) and previous visits (18%) all providing good response rates. While just under half (47%) of the audience had been to a previous event for an average of 2 times, more than half were there for the first time.



Cultural development

Survey respondents were asked for their opinion on the cultural value of the event to the local area. They were asked to rate the impact of the event across five different dimensions as shown in Figure 5. While all five areas received positive impact ratings, the highest response was for impact on the **vibrancy of the CBD** where 77% of respondents felt the event had a high impact, and the **creativity of artists** with 69% of respondents feeling a high impact. There was marginally less impact reportedly felt for **cultural development** and **inclusion**, however these aspects still rated highly with greater than 50% rating them as having a “high impact”.

Figure 5: Ratings of event aspects



Importance to the community

Visitors were also asked to suggest, in an open response, why ARTWALK is important for the local community. A range of responses were found which were grouped into themes as shown in the table below (see full list in Appendix). The strongest theme was for the sense of belonging and togetherness that the event has fostered, for example respondents suggested:

- *It allows everyone to be involved in something, and to enjoy the beauty and effort others put in*
- *It brings everyone together to celebrate the community's artists*
- *It is a beautiful coming together of artists and lovers of art. Great inclusive and happy atmosphere*
- *Any event that brings the community together is valuable. It allows the community to have a feeling of belonging and become aware of things that are happening in a close proximity*

The second theme was for strengthening the artists profile, and showcasing the local art, with some respondents suggesting:

- *ArtWalk raises the profile of our local arts industry and showcases Port Macquarie as an important arts/cultural destination.*
- *It gives local artists the opportunity to show their talents to a large number of people in a very safe and welcoming setting.*
- *It provides a diverse and culturally unique event to showcase to the community how important art is.*
- *Loads of families enjoying a night out showcasing local and national talent. It was beautiful*
- *It shows that PMQ has a healthy art scene. It's very important for all the Arts to be recognised.*

Other themes shown in Table 7, included ideas around the vibrancy and community spirit that the event provides to the CBD, and to the spirit of the town.

- *It builds a community spirit and allows a safe place for emerging artist to display their work and hopefully build some exposure for career progression.*

Table 7: Importance to the community

Theme	% of responses
Belonging/togetherness	60%
Artists profile	20%
Cultural experience	8%
Vibrancy & spirit	8%
Economy	5%
Total	100%



Visitors were asked to rate and describe their event experience, both on a rating scale and by open ended responses. On the rating scale from 1 to five, the results suggest an overall high satisfaction with all aspects of the event with 95% rating it as very good or excellent overall.

poor	Not good	average	Very good	excellent
0%	2%	3%	24%	71%

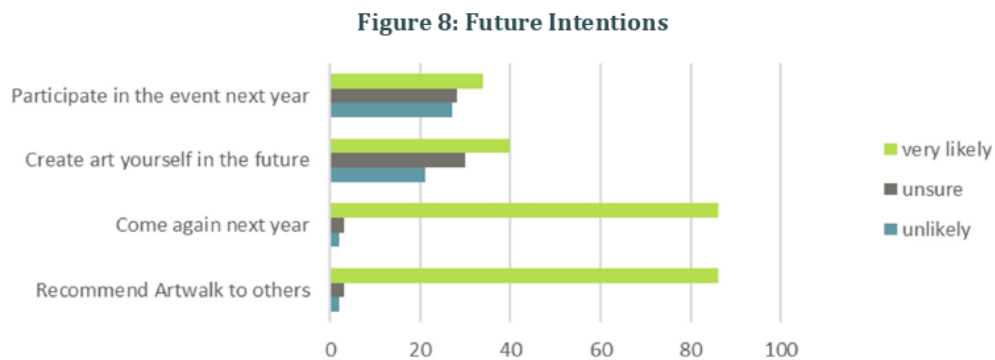
Respondents were asked to encapsulate their event experience in one word. The clear majority of words were positive based around the ideas of inspiring, fun and happiness. The word cloud shows the frequency of these and other words (frequency in brackets). The full list of words can be found in the appendix document.

alive (1) amazing (3) appreciation (1) art (2) busy (1) children (1) cold (1)
community (2) connected (1) different (1) disappointed (1) disassembled (1)
engaged (2) enjoyed (1) exciting (3) fabulous (1) families (1) fantastic (2)
feeling (1) festive (1) forms (1) found (1) fun (3) half (1) happy (4) immersive (1)
inclusive (3) inspired (5) interactive (2)
interesting (1) joy (3) luminous (1) magical (1) marvellous (1) mesmerised (2) night (1)
preferred (1) previous (1) proud (1) satisfied (1) sculpture (1) seeing (1) showcase (1) stimulated (1) thrilled (1)
timing (1) uplifted (1) walking (3) wonder (2) wow (1)

- Pure joy to see so many people expressing their art forms and appreciation by community
- Fun, happy, enjoyed walking around all the different events. Good vibe walking around.
- Fantastic to showcase Hastings Visual and Performing Arts

Future intentions

The future intentions of the respondents are very positive toward attending next year and with recommending the event to others (both 85% very likely). This reflects the high quality of the event, and the attractiveness to its target audience.



As anticipated, audiences were less personally inspired to create or participate than they were to engage in the event again as a spectator or audience. This is anticipated as many arts and cultural audiences appreciate viewing and engaging in art, but are not personally driven to be creative themselves⁴.

Conversely, it was interesting that comments were made about opportunities for other segments of the audience to engage in cultural practice in future events, suggesting that the event could well be a catalyst for more people to actively engage in art themselves.

- *Creative dance to music for all ages.*
- *A huge community painting board.*
- *[Include] indigenous art.*
- *More interactive things for adults to participate in also.*
- *Interactive workshops e.g weaving circle where the whole community can contribute to a piece to be displayed or paper craft/origami workshops to go into a larger community artwork.*

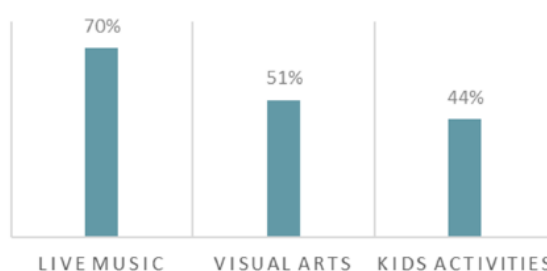


⁴ Australia Council for the Arts. (2010). *More than Bums on Seats: Australian Participation in the Arts*.

Suggestions for improvement

Analysis of survey comments found that many visitors were happy with the event as it was, with many suggesting 'nothing' needed changing. We asked for opinions on improving specific elements to the event, namely live music, visual arts and kids activities. The results show that live music would be the preferred improvement, with 70% agreeing this would improve the event. As shown there was less support for kids activities, perhaps as families felt their children were already well entertained at the event.

Figure 6: Suggested improvements



Other suggestions were categorised into themes shown in Table 9 below, relating mainly to:

- Timing (24%)– change the time of year and extend the event duration
- Food (19%) – engage food trucks or more food options
- Entertainment (17%) – related to having art in other locations and interactive workshops for adults/teenagers.

A full list of themed comments has been provided in the appendix.

Table 9: Suggestions for Improvement

Theme	% of responses
Timing	24%
Food	19%
Entertainment	17%
Other	15%
Art	8%
Music	5%
Accessibility	5%
Inclusion	5%
Kids	2%
Total	100%

Conclusions

The research demonstrates the audience's high satisfaction across many aspects of the event with 95% rating ARTWALK as very good or excellent overall. Survey respondents felt the event delivered a purposeful connection to the community, and a created a sense of belonging. The event connected the wider community with the creative sector and showcased the talent and work of local artists. Visitors felt this was important both for the community as a whole and for the benefits of the arts and cultural community. Many found the event inspiring and fun, providing opportunities to enjoy a cultural experience in the heart of the city - and a vibrant atmosphere for the CBD.

The research shows the important community benefits of the event, and increasingly important social opportunities that are offered to share art experiences with both visitors and friends alike. However beyond its immediate and significant social impacts, the event also makes an economic contribution through the attraction of tourists to the Port Macquarie LGA, with around 10% coming from outside the local area. The event attracted both overnight and day visitors bringing an economic contribution to the LGA of approximately \$193,960.

Assessment of opinions on improving specific elements at the event found that live music would be the preferred improvement (70% agreement) along with more visual arts (50%) and kids activities (44%). Survey respondents also suggested a range of other improvements to enhance the event in future years including the extension of food services through food trucks or stalls. Around 24% of respondents also suggested altering the timing of the event, either by a) moving the event to a weekend or b) moving the event to a warmer time of year.

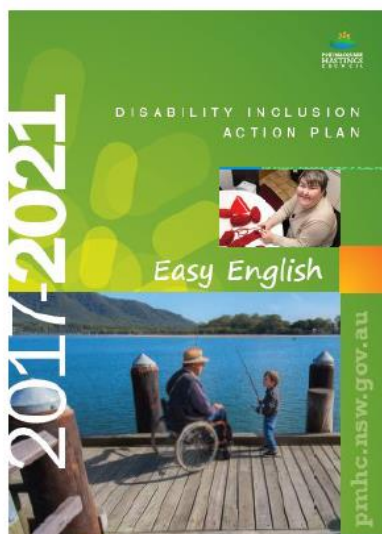
An event over a weekend creates opportunities to engage an audience for longer, and extend the program to workshops or other interactive projects. A weekend event also encourages visitors from outside the LGA to come for longer, and therefore extends the economic impact from visitation.

Both new media such as Facebook and traditional media were successful in attracting audiences, however it was interesting that over half the audience were attending for the first time. This has implications for providing relevant information, signage and assistance for new visitors.

There are many encouraging signs from the research to suggest that the program, activities and overall experience is very well received. With over 85% of visitors suggesting they will return next year (and recommend it to friends), a positive future for the event seems assured.



2018 to 2019 Report Card Disability Inclusion Action Plan Easy English



Council has a 4 year plan for how we can be a more disability friendly community.

It is called “The Disability Inclusion Plan.”

We want to tell you about some of the highlights in the 2nd year.



We built a new wheelchair friendly toilet and linking footpath at Lake Cathie Foreshore.



We installed a new wheelchair friendly toilet at Comboyne.



We built a new shared path and park benches at Westport Park, Port Macquarie.



We received a Dementia Australia Grant and delivered 4 programmes for people living with dementia...



... including pop-up soup cafes, a Giant Book Club at the Library ...



... 6 x iPad photography workshops to make a 'Hands on History' art exhibition...



... 6 x art workshops to create a film that was screened on a building during ArtWalk ...



... and presented at the
RED Dementia Conference.



We celebrated International
Day of People with
Disability, with SailAbility
volunteers.



We built some new
footpaths including ones at:

- Ocean Drive North Haven (250m)
- Kendall Road Kew (90m)
- Central Rd Port Macquarie (130m)
- Hill St Port Macquarie (290m).



We installed new footpath
and accessible car parks at
High Street, Wauchope.



We provided 67 residents
living with a disability with a
garbage bin 'wheel in wheel
out' service.



We installed a new accessible car park at Murray Street, Port Macquarie.



We continued to look after Council staff who have been injured or are living with a disability.



The Glasshouse provided 237 companion card tickets.



We installed a wheelchair friendly carousel at the Lake Cathie Foreshore Playground



We offered lots of different ways for the community to 'Have Your Say'



Our Rangers issued 59 fines to people parking in an accessible car park without a mobility permit



Australia Day aquatic activities along the Hastings River gave an opportunity for all to experience the joy of sailing on our National Day.



Our Council events were accessible including our Countdown to Christmas' event at Town Green. A wheelchair friendly, ground level viewing area was placed next to the Christmas tree and also next to the stage.



We continued to have a great Access Committee. Last year they audited 40 disability car parks...



... and they visited 20 businesses for an access friendly review.



Any questions?

We can help :)



Any enquiries please contact Council's Inclusion Officer. Call 6581 8111

Disability Inclusion Action Plan Annual Report: Year 2 of 4 years

For actions occurring between 1 July 2018 to 30 June 2019

1. Attitudes and Behaviours				Disability Inclusion Action Plan		
1 Focus Area	Action	KPI	Responsibility	Timing	Status	Supporting comment and \$ allocated budget
1.1 To increase opportunities for all residents to participate in civic life within the LGA	People with disability participate in Council meetings, community consultations, ceremonies and events	Monitor and report annually on the participation rates of people with disability	Community Participation Inclusion Officer	Short term (1-2 years)	Achieved & ongoing	Council community events and engagement meetings are held at accessible venues. Seniors Expo held at Panthers, free sponsored venue. 1458 attendees and 86 stallholders. (10% increase). Budget \$2500 Access Committee (PMHC Function Room). Cr Peter Alley, Chairperson and 11 members. Autism & Emergency Evacuation Workshops held at Glasshouse, with Emergency Services and people living with autism and their carers with 22 attendees

1.2 Council works with its community partners to advocate for appropriate service levels to the region	Participate in disability services regional forums and inter-agency networks	Attend minimum 3 industry meetings per year	Community Participation Inclusion Officer	Short term (1-2 years)	Achieved and ongoing	<p>-Attended NDIS Interagency Network meeting.</p> <p>-Chair 6 x Dementia Friendly Communities Steering Committee.</p> <p>Delivered a 12- month programme with \$15k Dementia Australia Grant including 3 x Pop Up Soup Cafes with 240 attendees, Dementia in Fiction Library event with 80 attendees, Hands on History art exhibition with 12 participants, exhibition launch at Library and 10 day exhibition, and ArtWalk video screening created by 8 people living with dementia and seen by over 6000 people.</p> <p>-Member of Prevention of Elder Abuse Network. Coordinated 2 x forums for 100 seniors to be aware of scams and pathways to receive help from Elder Abuse Counselling Services. Budget \$400</p>
1.3 Participation by people with a disability in Council's decision	Ensure Access Committee's continued effectiveness as an	6 Access Committee meetings held per year	Community Participation Inclusion Officer	Short term (1-2 years)	Achieved and ongoing	6x Access Committee meetings coordinated. Includes prioritisation of footpath and kerb ramp requests from residents and

2018-2019 Disability Inclusion Action Plan

making processes is encouraged and supported	advisory body on access issues					reviews of draft designs of footpath works. 5x access-friendly business excursion days meeting with 25 businesses. 40x car parks audited and data entered into an 'app' that will enable those with a disability to easily locate disability-friendly carparks across the LGA. Budget \$1500.
1.4 Council works with its community partners to advocate for appropriate service levels to the region	Advocate to State and Federal Government for increased services for people with disability and their carers	Report annually on advocacy	Community Participation Inclusion Officer	Medium term (2-4 years)	Achieved and ongoing	-Attended National Disability Inclusion Scheme State Government Forum. -Attended NSW Dept FACS Mid North Coast Planning Forum which advocated to State Govt for simpler process for people with disability to submit their annual plan so as to receive NDIS funding.
1.5 Positive attitude towards people with a disability in the LGA are promoted	Coordinate and widely promote an International Day of People with a Disability event (IDPwD)	1 event delivered per year	Community Participation Inclusion Officer	Short term (1-2 years)	Achieved and ongoing	Int Day of People with Disability held at McInherney Park with SailAbility. Access Committee & Mayor thanked 48 volunteers and supported 24 people living with a disability. Budget \$150

1.6 To facilitate change towards more accessible and inclusive business practices by operators in all areas of tourism and commercial industry in the LGA	Access Committee continues to roll out the Access Friendly Business Project	10 businesses visited per year	Community Participation Inclusion Officer	Short term (1-2 years)	Achieved & ongoing 15 were accessible and 10 deemed not accessible	25 x businesses visited including: Bonny Hills Caravan Park, Fat Fish Café, NorthPoint Apartments, Shelly Beach, Sea Acres, Settlers Inn, Spotlight, Supercheap Auto, Beacon Lighting and Australian Hearing. As a result of advocating the Colonial Arcade installed a disability-friendly public toilet. Common issues at failed shops were steps at front door, high counter height and aisles too narrow to fit a 90cm wide wheelchair.
1.7 Council works with local industry providers to identify and resolve issues associated with providing inclusive tourism and other services to people with a disability	Provide education and promotion around accessible tourism and encourage business to use access symbols on their marketing collateral and windscreen viewpoints marked on maps	2 business and tourism presentations	Group Manager Economic Development	Medium term (2-4 years)	On target	PMHC Economic Development team supported and facilitated the Inclusive Tourism Regional Road Show in August 2017. The NSW Business Chamber, Destination NSW and Trip Advisor were presenting industry relevant tips, information and fact sheets. This information has been distributed through the Greater Port Macquarie Tourism Association to local tourism related businesses.

2018-2019 Disability Inclusion Action Plan

2. Focus Area: Liveable Communities						Disability Inclusion Action Plan	
2 Focus Area	Action	KPI	Responsibility	Timing	Status	Supporting comment and \$allocated budget	
2.1 To progressively improve access to public spaces, buildings and infrastructure for all residents and visitors	Upgraded footpaths and kerb ramps provide a continuous accessible path-of-travel throughout town centres and between town centres and key retail, leisure, residential aged care and community facilities	Report annually on new or upgraded footpath, kerb ramps and pedestrian refuges and crossings installed – subject to resources and budget availability	Group Manager Transport & Stormwater Network	Short term (1-2 years)	On target and ongoing	<p>Footpaths installed in 2018/19 include:</p> <ul style="list-style-type: none"> -Kendall Rd, Kew (100m) -The Parade, North Haven (300m) -Ocean Drive, North Haven (300m) Central Rd Parklands Village PMQ (130m) -Hill St Port Macquarie (150m) -Hastings River Drive PMQ (230m) -Lighthouse Rd, PMQ (280m) <p>Footpaths installed in 2017/18 Budget \$500k. include:</p> <ul style="list-style-type: none"> • Bellbowrie St (200m) • Lake Rd (70m) • Park St (140m) • Sherwood Rd (120m) • Lake Rd (150m, part of Lake Rd upgrade near Oxley Hwy) <p>Yarranabee Road Pedestrian crossing installed Budget: \$50k</p>	

2.2 To progressively improve Council-owned community buildings to provide equal access for people with disability	Scope, design and access improvements at community facilities within budget constraints	Access Committee review and prioritise improvements annually	Community Participation Inclusion Officer	Short term (1-2 years)	On target	<p>- Audited Halls with Emerald Downs Hall and Mac Adams Hall reviewed as accessible.</p> <p>-Senior Citizens Port Macquarie Facility reviewed. This is a 25-year old building. Disability toilets access too difficult with two x 90 degree narrow turns, with wheelchairs requiring assistance. 2020/21 DIAP budget proposed modifications of \$30k to make the amenities compliant.</p>
2.3 To progressively improve access to public amenities for all residents and visitors	Audit council public toilets. Review scope of works and design and implement to upgrade existing public toilets in the LGA	Access committee audited public amenities. 2 new accessible toilets installed Detailed design completed for PMQ Plaza car park amenities.	Group Manager Recreation & Buildings	Short term (1-2 years) Medium term (2-4 years)	<p>Achieved and ongoing</p> <p>3 new accessible toilets installed</p> <p>New Plaza car park amenities on-track for</p>	<p>Comboyne Hall installed new toilet at \$77k (18/19).</p> <p>Lake Cathie Foreshore Installed new toilet (18/19).</p> <p>Shelly Beach installed new toilet (17/18) and wheelchair friendly picnic table and footpath with a DIAP budget of \$20k towards the project.</p> <p>Grant received through the Stronger Country Communities Fund (\$255,030) for new amenities</p>

2018-2019 Disability Inclusion Action Plan

					delivery September 2019	to be installed at PMQ Plaza car park scheduled completion by September 2019. An additional contribution from the Access Committee will result in the inclusion of an adult change table & gantry hoist within this facility. Pilot Beach Amenities to be rebuilt in April 2020 to meet all current standards
2.4 To progressively improve access to public amenities for all residents and visitors	Scope, design and build Dog Parks with input from Guide Dogs	2 Dog Parks created	Group Manager Recreation & Buildings	Medium term (2-4 years)	50 % completed 1 Dog Park created	Allocated Grant for 2019/2020 to develop off-leash dog exercise park in Port Macquarie (Stuart Park Regional Sporting Precinct) Wauchope Completed. These facilities will also be used by people with assistance animals and guide dogs to train their puppies. Dog Parks to include seating and easy access for people with disability.
2.5 Services and facilities provided by Council comply	Resolve access issues at Wauchope Library arising from poorly located	Improvements undertaken at Wauchope Library	Group Manager Recreation & Buildings	Medium term (2-4 years)	Achieved	Wheelchair ramp to outdoor play space installed. DIAP Budget: \$13k.

2018-2019 Disability Inclusion Action Plan

with the requirements of Disability Discrimination Act, Australian Standards AS1428 Building Code of Australia	accessible parking, inappropriate ramp gradients, paving and benches - subject to budget availability	Design reviewed	Business Enterprise Manager – Airport	Short term (1-2 years)	On target	<p>The terminal has been designed by our architects (MODE Design) to meet requirements of AS1428, with specific access and mobility features incorporated into the design including:</p> <ul style="list-style-type: none"> -Provision of compliant ambulant and disabled amenities to both the male and female landside and airside areas. -Compliance with thresholds, walkways, ramps and landing grade requirements -Continuous accessible paths of travel and circulation space -Provision of low-height DDA compliant check in counter and car rental service desk -Provision of low-height DDA complainant flight information display screen to departures lounge -Inclusion of hearing loops to the check in and departure lounge areas -Statutory signage inclusion.
2.6 Services and facilities provided by Council are compliant with the requirements of Disability Discrimination Act, Australian Standards AS1428 & Building Code of Australia	Review design of Airport Terminal Building upgrade for disability access considerations					

2.7 Improve access to beaches and outdoor recreational facilities	Investigate viability of an access mat trial which connects carpark to beach	Town Beach assessed for viability of an access mat trial	Group Manager Recreation & Buildings	Short term (1-2 years)	Completed review.	Reviewed. Access Committee decided not to proceed due to cost of mobi-mat (\$26k for 60metres), inefficiencies of set up and pack down requiring 4 x staff twice per day and beach tractor, and difficulties with high and low tide requiring different lengths of matting. During 2019/20 Recreation & Buildings to explore other options such as more permanent solutions with recycled tyre ramps.
	Review and scope signage about how to hire free beach wheelchair	Signage reviewed for promoting beach wheelchair		Short term (1-2 years)	Achieved	2018/19 Budget \$170 for 450 x brochures distributed to Visitor Information Centre, CSC's & disability groups.
					On target	2019/20 Budget \$200 for signage to be displayed at Shelly Beach.
2.8 All residents and visitors have access to beaches and outdoor recreational facilities	Review design for Wauchope Regional Sporting Fields to trial an adult change table at this venue	Facility complies with Australian Standards AS1428 & Building Code of Australia	Group Manager Recreation & Buildings	Short term (1-2 years)	Yet to commence.	This deliverable has been noted for ongoing detailed design of this facility.

2.9 To improve accessibility to playgrounds for all residents and visitors	Lake Cathie Playground access improvements	Accessible play equipment and fence installed	Group Manager Recreation & Buildings	Short term (1-2 years)	Achieved	Completed \$50k DIAP budget allocated for wheelchair-friendly carousel and playground fencing completed November 2018.
2.9 To improve accessibility to playgrounds for all residents and visitors	Liberty wheelchair swing	Accessible play equipment and fence installed	Group Manager Recreation & Buildings	Short term (1-2 years)	Achieved	\$10k DIAP budget contribution to Liberty Swing, Town Beach completed 2017/18.
2.10 Scope, design and prioritise disability access improvements at community facilities	Port Macquarie Pool upgrade design to include disability access	Facility reviewed	Group Manager Recreation & Buildings	Medium term (2-4 years)	Not yet commenced	Project planning on going to determine site selection. Detailed design to follow, noting disability access to be included within the facility's design.
2.11 All Council-owned community halls within LGA provide equal access for people with disability	Scope, design and prioritise disability access improvements at community facilities - subject to budget availability	All facilities reviewed	Group Manager Recreation & Buildings	Medium term (2-4 years)	On target	\$30k DIAP budget allocated for new accessible toilet at Comboyne Community Hall completed 2018/19. All council-owned buildings and facilities have been scoped and prioritised for any access improvements. The Access Committee reviews this on an annual basis.

2018-2019 Disability Inclusion Action Plan

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						Port Macquarie Seniors Facility investigating costings to install compliant wheelchair-accessible amenities 20/21
2.12 To improve access to public spaces, buildings and infrastructure for all residents and visitors.	Proactive approach to selecting street and park furniture that includes a mix of accessible products	Report annually on accessible street and park furniture installed	Group Manager Recreation & Buildings Group Manager Transport & Stormwater Network	Medium term (2-4 years)	Achieved & ongoing	Park benches installed at Liberty Swing, Town Beach. \$20k DIAP budget allocated for Shelly Beach footpath and accessible picnic setting completed 2018/19 \$15k DIAP budget allocated to Kew wheelchair-accessible picnic table and shelter 2019/20
2.13 Roads & public transport are suitable for people with a disability	Access Committee to conduct an audit of all bus shelters and upgrade in accordance with Council adopted bus shelter improvement program	Apply for grants when appropriate Access Committee to prioritise location of new bus shelters	Community Participation Inclusion Officer	Short term (1-2 years)	On target	Auditing commenced with over 80 bus stops reviewed. In 2018-19 we installed 6 new bus shelters, funded via the NSW Government CPTIGS program, at: Beechwood x2 Port Macquarie x1 Wauchope x3.
2.14 Roads & public transport are suitable for	Investigate feasibility for a Taxi Zone to have a grate transition	Taxi Zone transition investigated	Group Manager Transport &	Medium term (2-4 years)	Completed. Kerb ramp installed instead.	Grate for Coles Port Macquarie taxi zone found to be not feasible and kerb ramp installed instead at taxi zone. Budget: \$3k

people with a disability			Stormwater Network			
2.15 There is an adequate level of accessible parking and its use is effectively monitored	Regularly police use of accessible parking spaces	Ongoing on a daily basis Report annually	Group Manager Compliance	Short term (1-2 years)	Achieved & ongoing	Rangers have continued to enforce illegal parking in disabled zones. A total of 47 infringements were issued in the 2017-18 year and 59 infringements for the 2018-2019 year for disability access offences. 6x accessible car spaces have been provided in the re-designed Town Square. 2 x new accessible car spaces have been installed on Clarence Street (Historic Court House) 1 x new accessible car space in Murray Street 3 x re-located car spaces in High Street, Wauchope
2.16 There is an adequate level of accessible parking and its use is effectively monitored	Access Committee to review locations and suitability of existing accessible parking throughout the LGA to ensure adequate and appropriate provision	Audit by Access Committee undertaken, map produced and to further investigate accessible parking solutions.	Community Participation Inclusion Officer	Short term (1-2 years)	On target 70% completed to date	Access Committee has audited 127 accessible parking spaces in Port Macquarie. An App is being developed with GIS to input data on accessible car parks in our LGA. Upon project completion in late 2019/20 this app will be available for the community and will be widely promoted.

2018-2019 Disability Inclusion Action Plan

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3 Focus area: Employment			Disability Inclusion Action Plan			
3 Focus Area	Action	KPI	Responsibility	Timing	Status	Supporting comment and \$ allocated budget
3.1 To develop greater awareness and build a positive attitude towards access issues. Staff have the appropriate level of skills and knowledge to provide equitable services and an accessible environment	Provide EEO training to raise awareness of the legislative requirements to ensure discriminatory practices are eliminated from the workplace	Inclusiveness Training provided via general awareness training modules	Human Resources Manager	Medium term (2-4 years)	On target	During 2018/19, work commenced on drafting an Equity and Diversity Strategy to outline initiatives to promote diversity and inclusion within Council's workforce. Supportive practices are used in Council's recruitment processes, to remove potential barriers to employment.
3.2 To develop a more disability-friendly workplace	Assist line managers and supervisors to work effectively with staff with a disability and ensure that occupational health and safety requirements are met	Compliance with WHS Safety Measures Modifications in the workplace where appropriate	Human Resources Manager	Medium term (2-4 years)	On target	Introduction of Health Plan template and process. A health plan is a tool that supports reasonable adjustment in the workplace and documents adjustments and support for employees who may have a temporary or permanent disability or medical condition that requires support.

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3.3 To develop a more disability friendly workplace	Provide opportunities for redeployment and retraining where a disability is acquired in the workplace if possible	Report annually on the number of staff with an acquired disability that have been reassigned to other duties	Human Resources Manager	Short term (1-2 years)	Achieved & ongoing	During 17/18 there have been 11 employees who have been provided with flexible working arrangements, adjusted duties and other supports due to temporary and permanent disabilities acquired.
3.4 Employer of choice	Review our obligations under the Carers Recognition Act and implement appropriate practices	Employees aware of flexibility provisions	Human Resources Manager	Short term (1-2 years)	On target	Carer's Leave Procedure reviewed and adopted June 2018. New Flexible Working Arrangements Policy is currently in draft, with consultation with staff expected during 2019/20.
4 Focus Area: Systems and Processes						
4 Focus Area	Action	KPI	Responsibility	Timing	Status	Supporting comment
4.1 Provide council inform-	Audit and revise council's	Accessibility of council's website	Communications Manager	Short term (1-2 years)	Achieved.	Council's website is compliant with the WCAG 2.0 AA checklist.

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ation in a range of formats that provides best practice accessibility to services and support for people with disability	website to be compliant with WCAG 2.0AA	against WCAG 2.0AA				Web page reviews occur every 12 months for all pages to ensure the content on the website is updated and maintained accordingly.
4.2 To provide equitable access to appropriate and responsive services across the LGA. The process of information dissemination and communication with all customers is improved	Provide training to staff in National Relay Service use and protocols	1 Training workshop completed	Customer Service Team Leader	Medium term (2-4 years)	Achieved.	Training scheduled for 2018/19. CS Team leader has investigated training options and will proceed with online training module provided by National Relay Service. Budget: FREE training provided by National Relay Service
4.3 Information is provided in 'user-friendly' accessible formats	Provide Council information and publications in alternative formats on request and promote availability	Report annually the number of requests for information in alternative formats and the average response time	Communications Manager	Short term (1-2 years)	Achieved and ongoing.	No requests have come in for an alternative format to receive information. We distribute information in pdf format, recognised universally as the most accessible format to receive information.

2018-2019 Disability Inclusion Action Plan

4.4 Appropriate services are provided to meet the needs of people with a disability and frail older people	Continue to develop and promote the spoken word and large-print book collections at libraries	20% of the Library collection budget is allocated to large print and audio books.	Library Manager	Short term (1-2 years)	Achieved and ongoing.	\$34,000 allocated to large print in 2018-19. \$18,000 allocated to audio and \$5000 to downloadable audio. Continue Port Macquarie delivery service for people who are housebound.
4.5 Appropriate programs are provided to meet the needs of people with a disability to access arts and culture	Continue to develop, promote and deliver the art and dementia program and the Digital Art program	20 sessions delivered per year	Glasshouse Venue Manager	Short term (1-2 years)	Achieved and on going	12 sessions delivered in 2018-19 with 94 participants. Annual Budget for this programme is \$2,720.
4.6 To improve access to public spaces, buildings and infrastructure for all residents and visitors	Integrate people with a disability into Glasshouse audiences and activities	Report annually the number of companion card tickets issued	Glasshouse Venue Manager	Short term (1-2 years)	Achieved and on going	237 companion card tickets issued in 2018-19.
4.7 Appropriate services are provided to meet the needs of people with a disability	Promote and continue to provide assisted waste collection services for residents who are unable to take their bins to the roadside	Report annually the number of assisted residents	Group Manager Environmental Services	Ongoing	Achieved and on going	JR Richards currently provides "Wheel In Wheel Out" services to 67 residents and the service is available to any residents that require it (based on an assessment).

2018-2019 Disability Inclusion Action Plan

4.8 Appropriate services are provided to meet the needs of people with a disability	Plan & scope considerations for disability friendly council event experience	Provide and promote suitable viewing areas and amenities	Community Participation Officer – Community Events	Short term (1-2 years)	On target Each community event that is planned, staged and delivered by Council is held on Council-owned land that provides access to amenities.	<p>-Opportunities will continue to be explored to include better viewing areas or platforms for future event design plans if the site permits.</p> <p>-Ground level viewing areas were made available for Wheelchairs and Mobility Scooters at two screenings of the Hastings Moonlight Movies during 2018/2019.</p> <p>-Ground level viewing areas made available at side of VIP tents/side of stage at Australia Day Celebrations held in Wauchope and PMQ.</p> <p>-Collaboration between SailAbility NSW - PMQ Branch and PMHC to stage aquatic activities on Australia Day providing an inclusive sailing experience for all along the Hastings River.</p> <p>-Ground level viewing areas made available on Town Green as part of Council's Annual Countdown to Christmas Celebrations held on Town Green.</p>
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**Communities
& Justice**

Port Macquarie Community Corrections
Level 2, 75-77 Clarence Street
Port Macquarie NSW 2444
Tel: 02 5534 3200
Mobile: 0421 127 595
Email: david.gray@justice.nsw.gov.au

To Port Macquarie Hastings Council;

Port Macquarie Community Corrections have enjoyed a working relationship with Port Macquarie Hastings Council for the past 18 months.

The Community Service work scheme allows offenders the opportunity to complete work and to somewhat repay their debt to the community for their offending behaviour. Most importantly the work conducted by the community work team enables jobs to be completed which would normally not occur due to the enormous geographical nature of the Hastings area.

The Community work team are supervised at all times by a trained supervising officer and the work groups are kept to an optimal number so work tasks agreed on with the Council are completed in a professional manner. The Port Macquarie team now have a trailer, equipment and a small bus which means the team is fully mobile and is cost effective to the ratepayers of the Hastings area as the funding is derived from other areas of the NSW State Government budget.

We are very pleased that the Council is considering continuing the program and perhaps extending the number of projects on offer to Community Corrections. We value the working relationship that currently exists and have received positive feedback from some sections of the community when they observe work being completed in their area.

Yours sincerely

David Gray
Community Corrections Manager
Port Macquarie Community Corrections
26 August, 2019

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SERVICE LEVEL AGREEMENT

Extension 2019 - 2022

Between

PORT MACQUARIE CORRECTIVE SERVICES NSW

And

PORT MACQUARIE - HASTINGS COUNCIL

Port Macquarie - Hastings Council and CSNSW - Community Services Workers Partnership

08.08.2019

1. Agreement Overview

This Agreement represents a Service Level Agreement between Corrective Services NSW (CSNSW) and Port Macquarie Hastings Council (PMHC) to establish a formalised partnership that provides Community Service workers the opportunity to undertake community service activities that contribute positively to the local community.

This Agreement remains valid for three (3) years or earlier should either party choose to exit.

This Agreement outlines the parameters of all works and responsibilities covered by both parties as they are mutually understood by the primary stakeholders. This Agreement does not supersede current policies and procedures of PMHC or CSNSW unless explicitly stated herein.

2. Goals and Objectives

The Service Level Agreement is designed to ensure that the following elements and commitments are in place to provide a consistent level of service delivery and support from all stakeholders including;

- Foster a positive working relationship between CSNSW and PMHC and to work together for the benefit of the broader community by allowing offenders to provide a level of restitution to the community for the disruption and damage caused by their actions.
- Develop a desired spirit of cooperation between CSNSW and PMHC.
- Represent an overarching intent that can be supplemented by specific work program documentation.
- Promote and support community service initiatives provided to the community by CSNSW and PMHC.
- Ensure community service workers are provided adequate training and supervision to undertake the required work.
- Ensure that PMHC risks regarding CSNSW workers are mitigated.
- Ensure that the CSNSW and PMHC understand clearly their respective responsibilities regarding the partnership and work together to ensure the scheme is well managed.

3. Service Scope and Definition

The following Service Scope is covered in this Agreement;

- PMHC will support CSNSW workers through the provision of vegetation maintenance work activities in the local community in accordance with site specific locations as appointed by PMHC.

Port Macquarie - Hastings Council and CSNSW - Community Services Workers Partnership

08.08.2019

- The number of CSNSW workers required on site will be dependent on the work activities identified by PMHC and agreed by both parties, however the ratio of workers to supervisors will be monitored by CSNSW.
- The partnership will promote the sharing of resources relating specifically to the services provided to the community by CSNSW and PMHC.
- A storage container will be provided by PMHC to house the resources in a secure and safe manner, accessible for the CSNSW workers.
- PMHC will undertake regular site inspections to ensure works undertaken by CSNSW meet the requirements of PMHC.
- PMHC will supply a key to the CSNSW Supervisor for access to the Wayne Richards Oval amenities and the shipping container located on Koala Street. The CSNSW Supervisor will maintain responsibility for the oversight of workers accessing both locations and advise PMHC of any damages or theft.
- It is anticipated this will be an evolving relationship and that changes to the program will be made by mutual agreement (as detailed in item 6).

4. Governance

The General Manager of PMHC (or their delegated authority) and the Manager from the CSNSW (or their delegated authority) will evaluate the progress and success of the partnership on a bi-annual basis, in addition to informal discussion as required, to manage the development of the relationship.

In the event of conflict between the two agencies, and cannot be mutually resolved, the matter should be referred to the Director of CSNSW and/or General Manager of PMHC.

The PMHC volunteer coordinator will monitor the performance of this service agreement as per section 6 of this agreement.

5. Responsibilities

The Port Macquarie Community Corrections Division of Corrective Services NSW agrees to:

1. Assess the suitability of all offenders in line with legislation to participate in the program as well as ensuring that the following offenders are not placed with the project.
 - All Sexual offences

Port Macquarie - Hastings Council and CSNSW - Community Services Workers Partnership

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- Serious Violence Offenders
 - Weapons Offenders
 - Any offence related to children / minors
2. Conduct an induction program for offenders commencing community service work in conjunction with PMHC Volunteer Coordinator to ensure a safe work site and safe working methods.
 3. Have, at a minimum, weekly contact with the supervisors to monitor progress and any behavioural issues of the assigned workers, respond to any issues and to comply with a formal request that an individual worker be removed from the program.
 4. Manage the number of CSNSW workers required on site depending the work activities identified by PMHC and agreed by both parties, however the ratio of workers to supervisors will be managed and monitored by CSNSW and be compliant with CSNSW policies.
 5. Provide PMHC the supervisor's telephone numbers and names of contact persons who will be available at all times while the work gangs are operating.
 6. Ensure CSNSW supervisor identified and manages risks as per the CSNSW policy.
 7. Providing PMHC with a current copy of public liability insurance and ensure insurance cover is relevant for offenders undertaking community service work approved by the Commissioner.
 8. Conduct annual site inspections as per CSNSW policy to assess risk and task allocation.
 9. Have public liability insurance at the minimum of \$20,000,000 and make that available to PMHC.
 10. Conduct random drug testing of offenders every three months (as a minimum).

Port Macquarie - Hastings Council agrees to:

1. Work with CSNSW regarding site specific volunteer inductions in accordance with the Volunteer Handbook; however PMHC does not accept liability in anyway related to matters of individual training and/or competence for CSNSW Supervisors or eligible CSO team members.
2. Provide suitable work sites as agreed with CSNSW. At no time will the PMHC be responsible for any CSO team member without a CSNSW Supervisor present.
3. Provide CSNSW access to vegetation maintenance work activities in the local community in accordance with the site specific locations and times as appointed by PMHC.

Port Macquarie - Hastings Council and CSNSW - Community Services Workers Partnership

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4. Advise the CSNSW CSO Organiser if they wish to have an individual worker removed from the program and the reasons leading to this decision. CSNSW CSO Organiser will be responsible for the removal of and all associated duty of care responsibilities of the individual worker when identified.
5. Work with CSNSW to promote the value of the project within the broader community.

6. Periodic Program Review

The Agreement is valid for 3 years from the signature date outlined below.

CSNSW and PMHC are jointly responsible for facilitating regular reviews of this document. Contents of this document may be amended as requested by either stakeholder, provided mutual agreement is obtained and communicated to all affected parties.

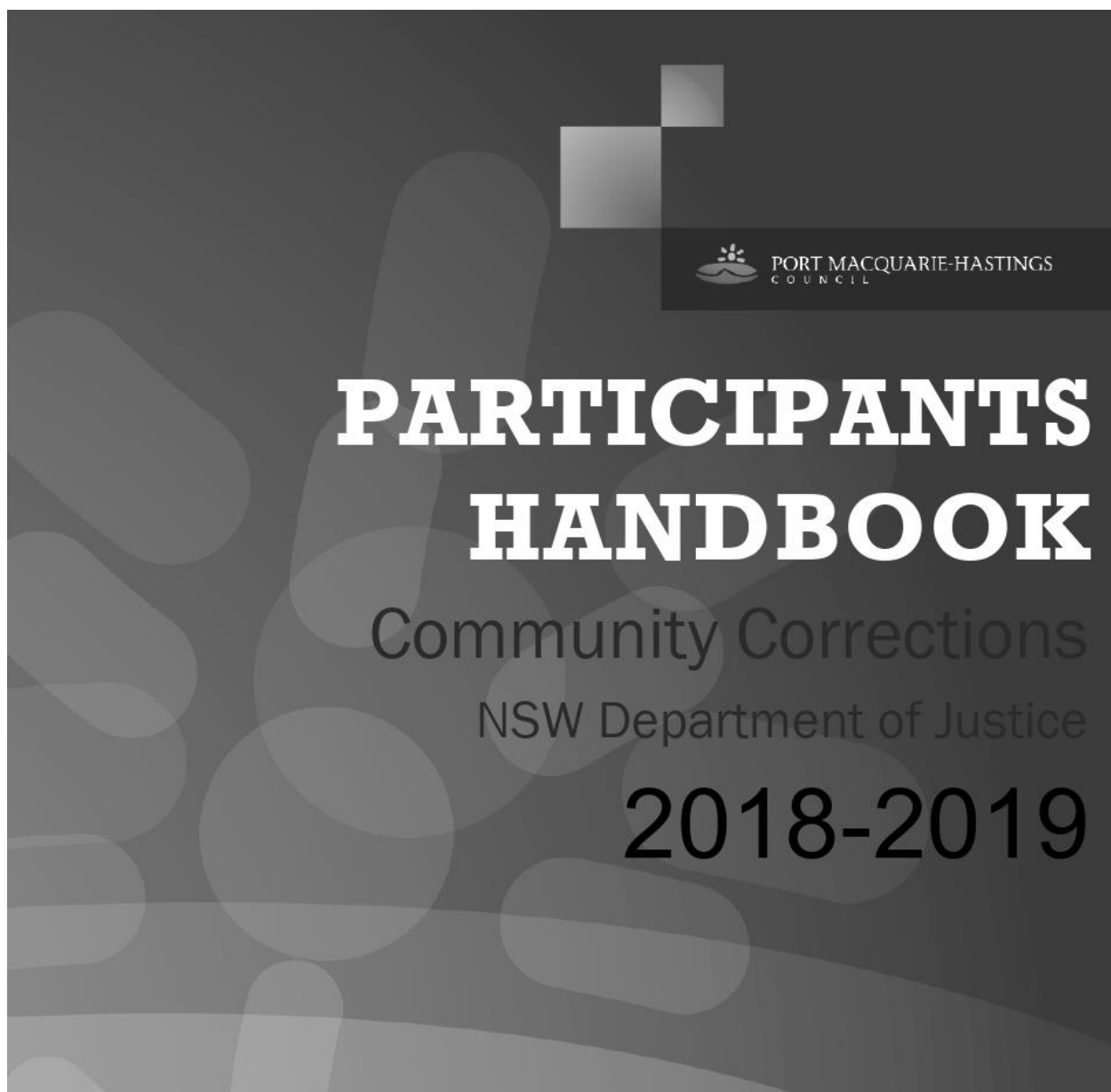
7. Termination

Participation in the program may be terminated by either party giving the other party four weeks' notice.

For and on behalf of Port Macquarie - Hastings Council	For and on behalf of Corrective Services NSW
Name:	Name:
Title:	Title:
Signature:	Signature:
Date:	Date:

Port Macquarie - Hastings Council and CSNSW - Community Services Workers Partnership

08.08.2019



Justice
Corrective Services

pmhc.nsw.gov.au

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Community Corrections NSW Department of Justice

Dear Participants,

Thank you for participating in the Community Corrections NSW Department of Justice program.

Please find within this handbook information regarding your role site procedures, contacts and our safety induction.

If you have any questions, please do not hesitate to contact Nateaka Blake, Volunteer Coordinator at Port Macquarie-Hastings Council on (02) 6581 8040 or nateaka.blake@pmhc.nsw.gov.au

We look forward with working together with you to achieve this project.

Kind regards,

Nateaka Blake
Volunteer Coordinator
Port Macquarie-Hastings Council
PO Box 84
PORT MACQUARIE NSW 2444
(02) 6581 8040
(02) 6581 8123 (Fax)

Port Macquarie-Hastings Council Responsibilities

Name	Title	Duties	Contact Details
Lucilla Marshall	Group Manager Community Place	Project Sponsor – Community Place <ul style="list-style-type: none"> ❑ Sponsor & asset owner. ❑ Provide approval(s) on scope, budget or program changes in relation to the proposed works. ❑ Reports project status, key issues and other items of note to PMHC senior leadership team & Councillors (as required). 	(02) 6581 8011
Nateaka Blake & Trent Arnold	Project Manager	Project Manager <ul style="list-style-type: none"> ❑ Plan, implement, monitor and report the progress of activities to key stakeholders. ❑ Manage and administer procurement activities associated with the project. ❑ Keep project sponsor & senior executives informed on project progress and status (as required). ❑ Site surveillance and quality control of works. <p>Seek approvals from project sponsor for any changes arising during works that affects the scope, budget or delivery program.</p>	(02) 6581 8040
Nateaka Blake & Trent Arnold	Project Team Leader	Plan and Manage Daily Operations Onsite. <ul style="list-style-type: none"> ❑ Coordinate works activities and sequencing of work to optimise production. ❑ Apply and implement WHS practices and principals onsite. ❑ Communicate with crews, project manager and other stakeholders to perform daily activities. 	0438 169 831

Nateaka Blake	Participants Coordinator	<ul style="list-style-type: none"> ❑ Collecting, verifying and filling volunteer insurances. ❑ Ensuring participants have been provided with PPE. ❑ Providing the Safety officer with a copy of the Participants booklets, ❑ Site induction, Hazard and Incident Report Forms, ❑ Inspecting equipment. ❑ Attending inductions and getting sign off. ❑ Collecting and filling site registers, incident/ hazard forms and any additional volunteer related documentation. 	(02) 6581 8040
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Participants Role Description

Roles	Duties	Name	Contact
Site Supervisor	<ul style="list-style-type: none"> ❑ Communicate with PMHC Team Leader regularly ❑ Brief volunteers of works to be performed. ❑ Supervision of all participants and personnel onsite. ❑ Coordinate participants to perform onsite works in an orderly, safe and professional manner. ❑ Supervision participants processes, quality assurance of work. ❑ Implementation and management of Environmental controls and issues. ❑ Responsible for the ensuring WHS signage is in place for the works performed. ❑ Overall responsibility for WHS including Safe Work Method Statement (SWMS). 	Shane Pratt	0476 859 592
Safety Officer	<ul style="list-style-type: none"> ❑ Ensure all participants are inducted to the site, sign on and off daily on the site register. 	CS NSW Supervisor – Don White	0417 327 644

	<ul style="list-style-type: none"> ❑ Ensure all participants understand and are signed on to appropriate SWMS (seek advice from PMHC Team Leader). ❑ Perform Daily Toolbox talk with volunteers. ❑ Ensure daily risk assessments are performed prior to commencing work. ❑ Ensure all participants are signed onto the daily risk assessment. ❑ Implementation and monitoring SWMS during work. ❑ Management of potential hazards, risk and incidents. ❑ Inform and manage volunteer First Aid requirements. ❑ Ensuring any incidents near misses or accidents to participants are reported to the Site Supervisor and safety officer. 		
Participants Manager	<ul style="list-style-type: none"> ❑ Managing all participants onsite, ensuring adherence to the safety processes. ❑ Managing the sign in and out of participants to site. 	Don White	0417 327 644
General Participants	<ul style="list-style-type: none"> ❑ Complete Sign in / out register daily. ❑ Understand and complete daily risk assessment prior to commencing work. ❑ Participate in daily Toolbox Talk ❑ Understand and sign on to appropriate SWMS (seek advice from PMHC Team Leader). ❑ Work in a safe manner, wearing appropriate PPE. ❑ Load and unload equipment ❑ Perform General Landscaping Duties Preparation of surfaces allocated in site map. ❑ Keep work site clean and tidy 	Don White	0417 327 644

	<ul style="list-style-type: none"> ❑ Work within designated volunteer work area. ❑ Maintain 10 m separation from working plant and equipment ❑ Work within Port Macquarie Hastings Council guidelines ❑ Participate in site and safety processes and meetings. ❑ Abide by all reasonable directions given by PMHC Team Leader and Site Supervisor/ Manager ❑ Report any incidents near misses or accidents to Volunteer Manager/ Site Supervisor and safety officer. 		
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Work Method Statement

PPE

- Sun Smart Clothing
- Flat Bottomed enclosed shoes with good grip
- Sunscreen
- Hat
- Bring water bottle with 1 Litre Container
- Sunglasses are recommended
- Hearing Protection & Eye Protection as provided by PMHC
- Gloves
- Hi Visibility Vests as provided by PMHC

Note: First Aid Kit and Sharps Disposal Kit provided by PMHC

Safe Work Methods

- Wear PPE at all times including Sun Protection, Hat, Sunscreen, long sleeves, and closed shoes when working outdoors.
- Please keep your eyes and ears open to all hazards.
- Stay as far away from moving traffic as possible

- Put your own safety first.
- Report hazards directly to the site manager or contact the people listed below; do not try to solve the hazards yourself unless it is ABSOLUTELY safe to do so, instead report the hazard and keep other people safe from the hazard by keeping them away.
- In an emergency, keep yourself safe and ring 000 and then contact Volunteer Coordinator or another PMHC staff member as outlined below.
- When lifting or carrying items, please ensure that you use correct manual handling lifts (bend at the knees).
- If an item is heavy, please use a two person lift.
- If you become unwell or are not feeling well, please report to the onsite First Aid manager for the day.
- Water is available at the first aid station.

If you feel threatened or at risk, please proceed to the first aid station and report.

Contacts

NAME	CONTACT
Shane Pratt – CS NSW Manager	0476 859 592
CS NSW Supervisor – Don White	0417 327 644
Graham Chandler (WHS) - PMHC	(02) 6581 8601
Lucilla Marshall - Group Manager Community Place - PMHC	(02) 6581 8063
Nateaka Blake – Volunteer Coordinator PMHC	(02) 6581 8040
Emergency - Police/ Fire Ambulance	000
Police station	(02) 6581 3099
Port Macquarie-Hastings Council	(02) 6581 8111
Port Macquarie-Hastings Council - After Hours Emergencies	(02) 6583 2225

Safety Induction

Port Macquarie-Hastings Council is fortunate to have a large number of community members who have chosen to volunteer their time to assist in the provision and enhancement of some of Council's services.

Volunteers currently work in areas such as:

- Parks & Recreation
- Community
- Environment
- Special Events

It is anticipated that the use of volunteers will continue to be expanded into other areas of Council as the town/area continue to grow. Volunteers should not have expectations from their time as a volunteer for any future employment with Council.

Definition

Following is the adopted definition of a 'volunteer' for Port Macquarie-Hastings Council.

"Any person undertaking agreed unpaid work or activities on behalf of Port Macquarie-Hastings Council, and / or agreed activities on or in Council owned sites or those sites under Council's care and control; or where a volunteer is determined by legislation"

Rights and Responsibilities of PMHC

- Acknowledge the extent and importance of contributions.
- Increase awareness both internally and externally of the contribution of participants.
- Actively promote volunteers and group activities.
- Establish adequate volunteer recruitment processes.
- Conduct relevant induction for participants.
- Provide information on Council policies and procedures impacting activities as required.
- Provide clear operational guidelines for each activity.
- Ensure staff provide open and honest information and respond to concerns and queries.
- Provide clear guidelines on the relationship between staff / volunteers and Councillors.



- Consult on matters that will impact on participation.
- Provide opportunities to engage in worthwhile activities.
- Regularly review the role of participants
- Maintain EEO policies in engaging participants.
- Provide a safe working environment.
- Provide relevant insurance cover.
- Provide adequate resources to conduct activities.

Rights and Responsibilities of CSNSW

- Complete the work that you are participating for, working within own physical limits and area of skill.
- Be willing to learn and go on learning, be dependable and work as part of a team.
- Accept the aims of Council and work within accepted policies and procedures.
- Be loyal to Council by offering suggestions in an appropriate manner.
- Promote Council positively in the community.
- Ask for help when needed / ask questions when more information is required.
- Welcome supervision in the spirit in which it is meant, simply to get the job done most effectively & safely.
- Respect confidentiality of users / clients and the Council.
- Record details in an attendance register on each occasion.
- If required, undertake a Prohibited Employment Declaration as per the Child Protection Prohibited Employment Act, 1998.

Recruitment and Health

How Volunteers can be recruited

Volunteers will be required to complete a Registration form to Work with Council as a Volunteer if they are direct volunteers with Port Macquarie-Hastings Council (PMHC). If they are working with an incorporated group then volunteers must register with that group. If registered as a PMHC volunteer then prior to acceptance as voluntary labour, each person will be assessed from details supplied on the registration form to establish the person's current skills and ability to adequately undertake the task that they are nominating for.

Health and physical fitness when working

Work in the community covers a wide range of activities e.g. mowing, snipping, tree planting, weeding, fencing, boardwalk construction just to name a few. All these activities require different levels of physical fitness to complete the task safely. It is the responsibility of the participant to assess his or her own health, fitness and physical limits to safely carry out work.

If you have a medical condition or restrictions, such as an old injury, allergies, or on medication such as insulin or heart tablets, or your health and/or fitness deteriorates during your time as a participant, which prevents you from safely carrying out activities, you may put yourself or others at risk, therefore, it is important that you let Council and your Supervisor know. If an incident should occur we can manage the situation better if we know of your condition. Council's Volunteer Program Manager can reassess activities in your work area and find ways you can contribute safely. If you are not sure, please consult your doctor about the type of activities or work you are undertaking and this will help assess your capabilities. Should you start to feel unwell whilst working, take a break and have a rest; inform your group contact or other members of the group and advise them if you need to organise a lift home or to see a doctor. In an emergency call 000 and ask for an ambulance.

Prohibited Employment Declaration

All people looking after children have a responsibility to provide a safe environment for them. The laws around Working with Children Checks have recently changed, and completing a Working With Children Check is a prerequisite for paid and unpaid child-related work. Under the Child Protection (Working with Children) Act 2012, child-related work is defined as work in a specific, child-related role or face-to-face contact with children in a child-related sector.

Do you need a check?

To find out whether your work qualifies for a check, please refer to www.kids.nsw.gov.au. The Working with Children Check is free for Volunteers! It is an offence for a prohibited person to apply for volunteer employment that primarily involves direct contact with children where that contact is not directly supervised. It is therefore the responsibility of a prohibited person NOT to apply for any such position.

Registration and Cessation of Duties

Registration Form

Persons wishing to volunteer for Council will be required to complete a "Volunteer Registration Form" which can be located on pmhc.nsw.gov.au.

All volunteers must complete the form prior to their commencement of their volunteer work. The details on these forms will be entered into Council's Volunteers Register database.

Cessation of Duties

In instances of misconduct or breaches of volunteer responsibilities, the Council Volunteer Program Manager or Council Section Manager has the right to cease Volunteer duties.

This may include:

- Theft or misuse of property or funds.



- Intoxication through alcohol or other substances whilst or during volunteering.
- Verbal or physical harassment of any other participants, clients, public or Council staff.
- Disclosure of confidential information regarding the Council and/or clients.
- Malicious damage to Council or community property.
- Not working in a safe manner or wearing personal protective equipment.
- Breaching any other responsibilities set out by Community Corrections.

Work Health and Safety

Council's WHS Responsibility

When satisfied that the activity is appropriate for participants, Council is to ensure the following matters are addressed before the activity is commenced:

- A risk assessment has been completed, potential hazards have been identified and risk management controls put in place.
- Consultation has been undertaken with the volunteers regarding safe work methods.
- Participants have been provided with information, instruction and training with regard to risk management procedures.
- Any plant or equipment to be used by participants is safe for operation.
- There is a system of work in place for the safe handling, use, storage and transport of plant & equipment or any chemicals & substances to be used during the activity.
- At the location for the activity, there are safe means of entry and exit which is communicated.
- First aid and emergency procedures (including known assembly point) information is communicated.
- Arrangements are in place for the appropriate monitoring and supervision of the activity where required.
- Records are kept of attendance (Sign On / Off Register), tasks undertaken and information on injury & incidents including near misses.
- Participants have been supplied Tools & PPE and will be inspected and maintained where required to ensure equipment is safe to use.

Participants Responsibility

While undertaking activities on behalf of Council, volunteers have responsibilities for health & safety. In particular volunteers, through their actions or omissions, are not to place themselves or other persons at risk while undertaking Council related activities. Depending upon the nature of the activity the responsibilities for volunteers may include the following:

- Be aware of and follow approved risk management procedures for the activity to ultimately “work safely”.
- Follow the directions of the person in charge of the activity.
- Use and maintain plant or equipment in accordance with the correct procedures.
- Bring to the attention of the appropriate person any matter which could affect the safe undertaking of the activity.
- Report to the appropriate person as soon as practical, any incidents or near misses which relate to health & safety of the activity.
- You must wear all PPE identified to complete the activity safely.
- You must take reasonable care for the health & safety of your co-volunteers and members of the public who may be affected by your actions.

Training and Employment Opportunities

Council has the responsibility to ensure volunteers are provided with appropriate training which, depending on the activity, may include the following:

- WH&S induction training, hazard identification, first aid.
- Responding to an emergency, emergency evacuation drills.
- Use of communication equipment (where required).
- On the job and/or formal training specific to the activity.
- On the job training in specific risk management procedures as required.

Equal Employment Opportunities

Council is committed to promoting a working environment that recognises and values the diverse social profile of its volunteers. Council will develop, implement, monitor and evaluate policies and procedures for all volunteers, both existing and potential, that are fair and do not discriminate unlawfully, either directly or indirectly, against any volunteer. Council is also committed to recognising and responding to the diverse needs of its volunteers. In all policies and practices of Council, there shall be no discrimination or harassment in voluntary employment, with regard to: Race (including colour, nationality, descent, ethnic, ethno-religious origin), Sex, Pregnancy, Marital Status, Disability, Homosexuality, Age, Transgender (commonly known as Tran sexuality) or Carer's responsibilities. Volunteers are expected to comply with Council policy and refrain from engaging in any discriminatory or harassing behaviour. Discrimination and/or harassment will not be tolerated. Where instances of discrimination and/or harassment occur, they will be investigated in a 'confidential manner'. If proven, the person responsible may be dismissed from their voluntary engagement.

Code of Conduct

Volunteers, participants & Community Committee Members Responsibilities

- All volunteers, participants and community committee members are responsible for their own good conduct when providing services to / for Council. All parties providing services to / for Council are expected to know and understand the standards in the Code of Conduct.
- When providing services to/for Council you should at all times be courteous towards the public, Council staff, Councillors, other volunteers, participants and community committee members and should not bring the Council into disrepute. You must also obey all relevant laws.
- The Council is committed to providing an environment free of harassment or discrimination and you are expected to contribute to this environment.
- Council has community, environmental and legal responsibilities and you are expected to honour them when doing work with or on behalf of Council.
- Safety is paramount and therefore, all persons doing work with, or for Council should protect their own safety and the safety of others in the work environment and the public arena.

Alcohol & Other Drugs

No one should come to work for Council, or return to work, under the influence of alcohol or other drugs that could impair their ability to carry out their work or cause danger to the safety of themselves or others.

Confidential & Personal Information

- You must take care to maintain the security of any confidential or personal information you become aware of in your work with Council.
- You must abide by the privacy legislation governing the collection, holding, use, correction, disclosure or transfer of personal information obtained through your dealings with Council.
- Personal information is any information about a person where you know who the person is or you can guess who the person is.
- No one should access, use or remove from Council premises any Council information or personal information, unless they need it for their work with Council and have authorisation to use or disclose the information.
- Any breach of the security, or misuse of Council's confidential or personal information must be reported to Council's Director Community & Cultural Development.

Conflicts of Interest

- If a conflict of interest in your work with Council exists or arises, you must disclose it to Council.
- A conflict of interest arises if your own interests, or those of other people close to you, conflict with your obligations to the Council. A conflict would exist where you have a personal interest, or your relative, company, employer or other person known to you has an interest that could lead you to be influenced in the way you carry out your duties for the Council.

Council Resources

- Council resources may only be used for Council purposes unless appropriate approval is sought.
- Council resources include Council staff, material, equipment, vehicles, documents, records, data and information.

Gifts or Benefits

Gifts or benefits must not be offered to any Council official, or community committee member, which is designed to gain any advantage for yourself or the group you may be representing, or which the public could reasonably see as likely to cause that Council official, or community committee member to depart from his or her proper course of duty.

Token gifts may be given or accepted if the gift is not likely to be seen as compromising. Token gifts would include such things as ties, scarves, tie pins, chocolates, flowers and small amounts of beverages.

You should not accept any gift in relation to your work for Council, which could influence, or be seen to influence your impartiality in relation to the work or services you are providing to/for Council.

Cash should not be, in any circumstances, offered to, or accepted by, a Council official or community committee member.

Note: If a gift or benefit is offered to a Council official or community committee representative to influence the way they do their work, they must report it immediately under the Council's policies and procedures.

Offers of Secondary Employment to Council Staff

As a community committee member, if you offer a Council staff member a second job or contract work, whilst they are still employed with Council, the Council staff member will need to seek approval from Council's General Manager in accordance with Council's "Paid Work Outside Council" policy.



Approval will not be given if the second job, or contract work, could conflict with their official duties with Council.

Public Comment

As a volunteer, participant or community committee member you must not make any public comment or statement that would lead anyone to believe that you are representing Council, or expressing its views or policies. This includes comments or statements made at public and community meetings, via the media, or when it is reasonably foreseeable that the comments, or statements, will become known to the public at large.

Reporting Corruption Maladministration and Wastage

When providing services to/for Council as a volunteer, participant or community committee member, you have a responsibility to report any suspected instances of corruption, maladministration or serious and substantial waste to Council.

Alternatively, you can report any suspected instances of corruption to the Independent Commission Against Corruption (ICAC) or maladministration to the Ombudsman.

Breaches of the Code Failure to comply with this Code of Conduct may result in Council no longer allowing you to provide your services to/for Council.

Port Macquarie-Hastings Council's Commitment

Council is committed to the standards in this Code of Conduct. They reflect the high standards expected by our community and you are expected to maintain these standards and principles when providing your services to/for Council.

If you have any questions, or are unsure about any matter relating to this Code of Conduct, you can contact Council on 6581 8111 and ask for Group Manager - Governance

Privacy Act and External Organisations

Privacy and Personal Information Protection Act

Council will obtain personal information from volunteers & participants including names; address, telephone numbers and other contact details. Personal information obtained by Council is governed by the Privacy and Personal Information Protection Act 1998 (PPIPA). This legislation provides direction for the collection, protection, storage, disposal, access and use of personal information by Council.

Council will take reasonable care to protect personal information from misuse, loss, unauthorised access, modification or disclosure. To ensure that personal information held by Council is current, please notify Council if any of your details change.

External Organisations

The principles of this induction information apply to all External Organisations activities where they are undertaken on land owned or under the control of Council:

It is acknowledged that Independent Organisations within Port Macquarie-Hastings are incorporated bodies and therefore hold certain insurances which require each group to exercise due diligence.

Council in granting approval to carry out any works on land under its ownership and /or control, expects that the nominating Independent Volunteer / Organisations shall accept all lawful responsibilities for its actions and endeavours. Further it is understood that volunteers are acting for and on behalf of their respective Organisations. It is not intended that such volunteers be required to seek additional Voluntary status from Council for activities. Council at all times reserves its rights to monitor and act upon any event arising that is in conflict with the intent of this information.

Public Liability and Personal Accident

Council's registered volunteers are covered under public liability and personal accident when engaged correctly. In this instance "Council" means, employees, Councillors, Sec 355 Committee Members, participants and volunteers.

Insured community organisations

Insured community organisations are not covered by Council's public liability or personal accident insurance and therefore must hold their own insurances. Community organisation must hold their insurance appropriate to the activity being conducted. This insurance will be a minimum of \$20,000,000 of public liability insurance and may also preferably include personal accident insurance (volunteer insurance). Community organisations must evidence Public Liability Insurance, noting Council as an Interested Party for its respective rights and interests. A Public Liability Certificate of Currency issued by an Insurer, or the Community Organisations Insurance provider will suffice.

Grievance Procedure

If a volunteer has a grievance about any aspect of their tasks, other volunteers or Council staff, the following process should be followed:

Step 1 If you feel comfortable to approach the person directly to discuss the issue, do so.

Step 2 The volunteer can approach the Coordinator of the area they are working within, for discussion and advice on how to best resolve the issue. This discussion should be treated as strictly confidential.

Step 3 If Step 2 does not help resolve the problem, then the issue can be raised with the Department Manager.

Step 4 If the Department Manager cannot resolve your grievance you should raise the issue with the Director responsible for the Department. You will be informed of a decision, as soon as possible, following investigation of the issue by the Director.

Volunteer Recognition

Volunteers are entitled to request a statement of tasks that they have undertaken in their role with Council.

Volunteers may be provided with an invitation to Council functions specifically held to thank volunteers.

Use of Council Equipment

Participants have been provided with Council equipment to assist in performing various activities. If a license or qualification is required to operate plant or equipment, a participant must provide evidence of such qualification or license. All care should be taken to ensure that equipment is used correctly and within the guidelines or instructions provided by Supervisors.

Damage to Council equipment by participants whilst working under the care and control of Council is covered by Council's Insurance. Council's policy does not cover any wilful or deliberate damage to Council property.

If equipment is damaged, the Supervisor must be notified immediately and an incident report completed and returned to Council's Insurance Officer and Plant Manager

Health and Safety

Manual Handling

- Firstly – can Mechanical handling / Lifting occur?
- Determine if the weight is too much to lift before attempting the lift and if so, plan a team lift.
- Keep your work area clear of trip hazards
- Plan your lift
- Bend your knees not your back
- Maintain your balance
- Keep the weight to be lifted in close to your body and use both hands
- Avoid unnecessary twisting, reaching or bending



Team Lift

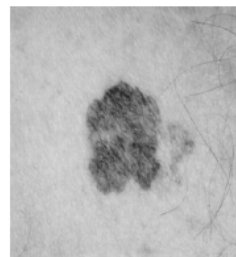
When organising a **team lift** it is important to ensure the following:

- There is an adequate number of persons in the team
- One person coordinates the lift
- Team members have similar lifting capacity
- The lift has been planned.
- The area is clean and clear of trip hazards

UV Protection - Sun Protection

- When working outside wear a long sleeve shirt, sunscreen, sunglasses, wide brimmed hat and drink plenty of water.
- When taking your break sit indoors or in the shade.

- **Two in Three** Australians will be diagnosed with skin cancer by the time they are 70.
- **1830** Australians die from skin cancer each year.
- **Melanoma** - The most serious form of skin cancer. Melanoma may suddenly appear without warning but it may also begin in, or near, a mole or other dark spot in the skin.



Accidents, Injuries and Near Misses

All accidents, injuries & near misses must be reported and recorded immediately!

It is hugely important that “near miss” incidents are reported so that an investigation can take place to ensure that training, equipment, procedures and or safe work method statements are adequate.

In the case of an accident or near miss an “**Injury and Incident report form**” must be completed

Hazard Reporting

Report any site hazards to Port Macquarie-Hastings Council immediately so corrective action can take place to prevent injury.

In the case of a hazard a “**Hazard report form**” must be completed

Thank you!

If you have any questions, issues or advice relating to safety and or the site in general please do not hesitate to bring it to our attention immediately.

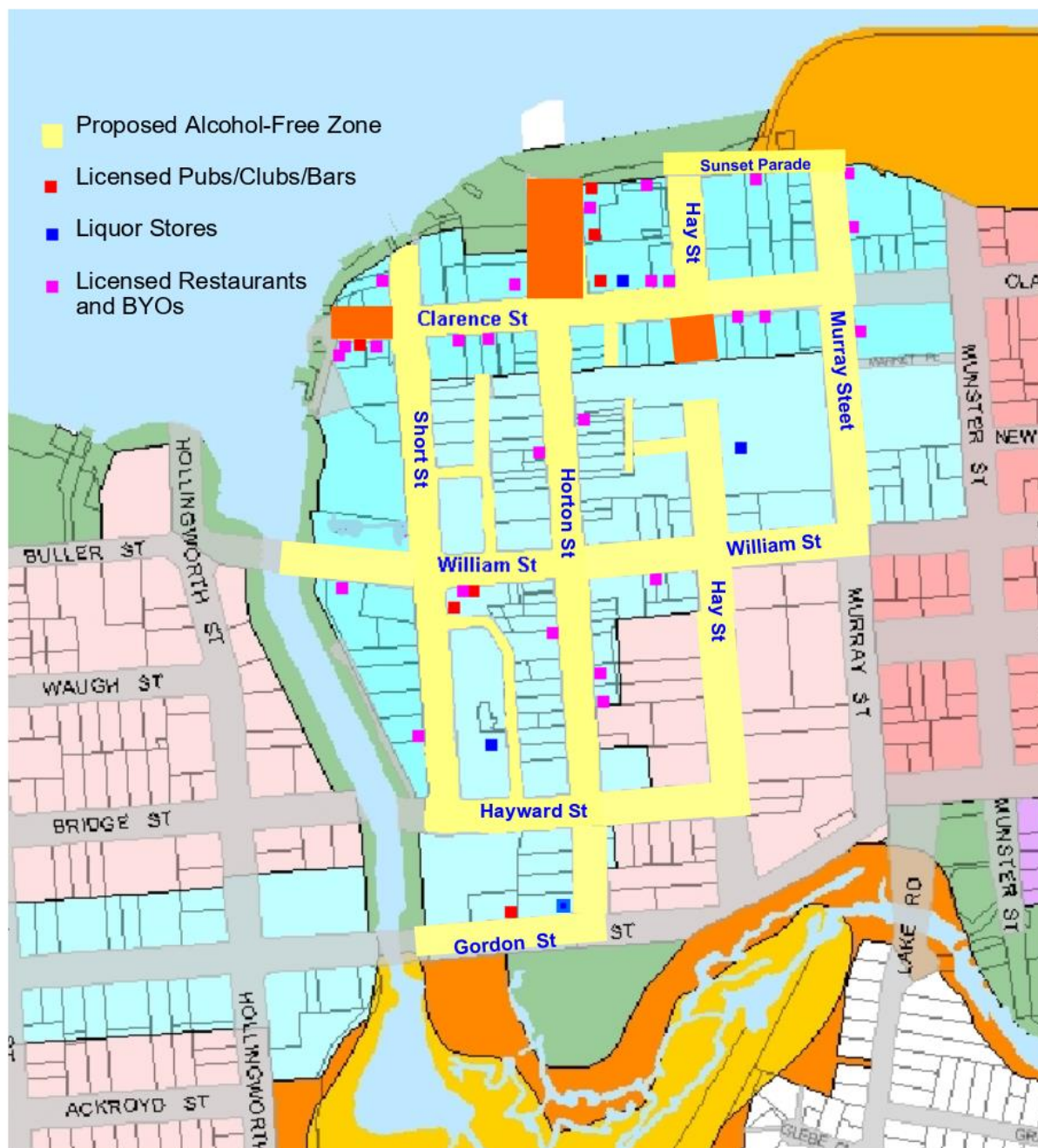
Safety Is Everyone's Responsibility!



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PhotoMaps by nearmap



Port Macquarie CBD Map - Alcohol Free Zone - 2019- 2023



8th July 2019

Port Macquarie-Hastings Council
Group Manager – Community Place
Strategy and Growth

Dear Ms Lucilla Marshall,

Please be advised that the Hastings Liquor Accord endorses the Re-establishment of the Alcohol-Free Zone in the CBD for a further four years from October 2019 to October 2023.

Please do not hesitate to contact us if you require any further information.

On behalf of the Hastings Liquor Accord.

Kindest Regards,

Mrs Jacqueline Cudmore

A handwritten signature in black ink, appearing to read "Jacqueline Cudmore", written over the printed name.

Connect and Discover

Port Macquarie-Hastings Library Strategic Plan 2019-21

1. Summary/Introduction

Port Macquarie-Hastings Library Service is an industry leading, future focused library service, highly valued by its community and recognised for its provision of modern, high quality programs and services¹. The library provides access to valuable resources for the whole community regardless of socio-economic status or areas of disadvantage. In addition to the more traditional library services Port Macquarie-Hastings Library Service includes innovative programs to promote life-long learning and discovery, including access to new and emerging technologies, a seed library and community garden, tech savvy seniors groups, as well as a creative studio space.

Public libraries operate within and for the needs of their broader community, and adhere to a universal philosophy of providing free access to information in a safe and welcoming place. Increasingly the public library is seen as a place of social interaction – a place to connect not only with information, but with people. Indeed the public library is home to all manner of social and professional connections - study groups, business meetings, community initiatives, book clubs and more. As society moves ever further online, it has fallen to public libraries to cater to and support this inherent human need for social connection. The provision of events and author talks, the facilitation of various interest groups, and a breadth of family and children's programs accommodates that need.

Rapid changes in technology have also meant there is an ever-widening digital divide between those that are digitally literate and those that are not. While government departments transition their services online in the name of convenience, many in the community - and in particular older people - are getting left behind. The library plays a vital role here in supporting those that are without these necessary skills to access essential government services.

The library is one of the few places left where an individual can go to research, gather information, interact with others, and deepen their connection with their broader community without the expectation of a commercial transaction. Libraries generate enormous social capital.

1.1 Council vision

A sustainable high quality of life for all.

1.2 Council mission

Building the future together – people, place, health, education and technology.

1.3 Library vision

Connect and discover - a library service for all.

1.4 Library mission

¹ Identified through annual State Library of NSW statistics and industry networks.

To be a cultural hub for the community through access to collections, spaces, and experiences.

2. Strategy development

2.1 Context

Port Macquarie-Hastings Council serves a population of around 81 000, covering a large geographical area of 3686km² on the Mid North Coast of NSW. The population is forecast to grow to 104 000 by 2036². The Port Macquarie-Hastings area has a considerably higher proportion of residents over the age of 65 than the state average, with over 27% of the population over 65 ([ABS Census 2016](#)).

Port Macquarie-Hastings Library Service consists of five service points – a central library in Port Macquarie, two outer branch libraries at Laurieton and Wauchope, a mobile library van that visits rural and remote areas, and a self-service loans stand at Port Macquarie Airport. Port Macquarie-Hastings Council has a longstanding cooperative agreement with Kempsey Shire Council to share resources and acquisitions responsibilities.

The **Port Macquarie-Hastings Council Community Strategic Plan (CSP)** outlines four main community themes; Leadership and Governance, Your Community Life, Your Business and Industry, and Your Natural and Built Environment. The library service falls under community theme 2 – Your Community Life:

Your Community Life <u>What we are trying to achieve</u> <i>A healthy, inclusive and vibrant community</i>	
What the result will be	How we will get there
Community hubs that provide access to services and social connections	2.1 Create a community that feels safe
A safe, caring and connected community	2.2 Advocate for social inclusion and fairness
A healthy and active community that is supported by recreational infrastructure	2.3 Provide quality programs, community facilities and public spaces, for example – community halls, parks and vibrant town centres
A strong community that is able to identify and address social issues	2.4 Empower the community through encouraging active involvement in projects, volunteering and events
Community participation in events, programs, festivals and activities	2.5 Promote a creative and culturally rich community

² <https://forecast.id.com.au/port-macquarie-hastings>

Delivery Program Reference Number 2.3.5.4 of the current **2017-2021 Port Macquarie-Hastings Council Four Year Delivery-Program and 2018 Operational Plan** states:

- *Plan and deliver innovative library services that cater for new technology and growing population.*

Within the **2018/19 Port Macquarie-Hastings Council Operational Plan** the following actions are identified for the library service;

- 2.3.5.1 - Provide a range of library programs and lending services across the local government area.
- 2.3.5.2 Purchase of library books.
- 2.3.5.3 Library development – new spaces.
- 2.3.5.4 Undertake development of a library strategic plan.
- 2.3.5.5 Library – webpage upgrade.

Port Macquarie-Hastings Library Strategic Plan 2019-21 is also a subset of the broader **Cultural Plan 2018-21**. Section 1.5 of the Cultural Plan, 'Library strategic direction', states:

- *Investigate ways to enhance the delivery of innovative library services across the LGA.*

As part of the development of this Strategic Plan various national and state documents were reviewed for best practice guidelines and future library trends³⁴.

2.2 Current situation

Port Macquarie-Hastings Library service maintains its reputation as an innovative, high-functioning service, and accordingly library visitation is significantly higher than the NSW average demonstrating the high value that our community places on the network of libraries across the LGA. Notwithstanding, Port Macquarie-Hastings Library Service is below State standards in other comparative areas as tabled below:

Port Macquarie Hastings Library (June 2017)		NSW average (June 2017) ⁵
Total visits	455,956	393,732
Circulation per staff member	36,035.85	17,007.30
Staff (FTE)	20.5	25.61 (SLNSW recommendation 25.8)
Expenditure per capita	36.45	52.08 (SLNSW recommendation 56.35)
Total expenditure	2.88m	3.66m
Library programs	333	942

The central Port Macquarie Library branch was built in 1999 and covers an area of 2100m². This now falls below the State Library of New South Wales' recommended minimum floor space of 2590m² (as at 2016). Projections show the local catchment area of Port Macquarie to be 52 794 by 2036, which should represent an area of 3179m². The current building does not meet that requirement. Ongoing requirements for the library will need to be developed and budgeted through future works programs, and indeed any future facilities and services are predicated on the availability of appropriate resources.

³ Guidelines, Standards and Outcome Measures for Australian Public Libraries - ALIA, APLA, NSLA, July 2016

⁴ People places: a guide for public library buildings in New South Wales, 3rd ed. 2012

⁵ Public Library Statistics 2016-17

The **Port Macquarie-Hastings Library Strategic Plan 2019-21** aims to address a current shortfall in resourcing, disproportionate funding and address future community needs.

2.3 Scope

With changing technology and a growing population, the nature of future library services need to be determined to ensure the library service stays current and meets the increasingly diverse needs of its community.

Council's Delivery Program and **2018/19 Operational Plan** require the development of a new library strategic plan as part of a Council-wide service review. Council has Development Contributions Plans in place which will provide for community facilities with access to Library services in new urban release areas at Lake Cathie/Bonny Hills and at Thrumster (Urban Growth Management Strategy 2017-2036, vol.2).

Relevant reports and literature were reviewed to assess how Port Macquarie-Hastings Library Service is tracking against State Government and Council planning documents⁶⁷⁸⁹¹⁰¹¹. Port Macquarie-Hastings Library Service has focused on outcomes that are clearly aligned with Council's **Towards 2030 Port Macquarie-Hastings Council Community Strategic Plan (CSP)** and **Operational Plan 2018-2019**, that maximise opportunities to lead in building vibrant communities.

With additional opportunities for library services in new and growing communities, consideration of the whole service moving forward needs to be determined to assist in future planning. The plan will look at - required library services now and into the future, library spaces, resources required, and timing of the rollout of future services.

The **Port Macquarie-Hastings Library Strategic Plan 2019-21** identifies objectives that will further develop the service, align with the library's vision and mission statements, and deliver on the broader responsibilities outlined in the Community Strategic Plan. These objectives fall under five main categories. These are:

1. People
2. Programs
3. Spaces
4. Collections
5. Technology

3. Objectives

3.1 People

'A safe, caring and connected community' (Community Strategic Plan)

⁶ Integrated Planning and Reporting Guidelines for Local Government in NSW 2013

⁷ PMHC Towards 2030 Community Strategic Plan

⁸ PMHC Four Year Delivery Program 2017-2021 and One Year Operational Plan 2018-2019

⁹ PMHC Cultural Plan 2018-2021

¹⁰ PMHC Urban Growth Management Strategy 2017-2036

¹¹ PMHC Economic Development Strategy 2017-2021

Port Macquarie-Hastings Library Service is renowned for its exemplary customer service and provision of high quality programs and resources (CSP 2.3). As user needs change, the nature of the service must respond accordingly.

How

- Customer focus - strengthen customer satisfaction levels. Integration with broader PMHC Customer Experience project.
- Staff expertise – up-skill existing staff, recruit with changing landscape in mind.
- Increase staffing and opening hours to cater to broader range of users.
- Be responsive and adaptive to changing needs as they arise.
- Use social media channels to communicate and promote the library service.

3.2 Programs

'Community participation in events, programs, festivals and activities' (Community Strategic Plan)

Port Macquarie-Hastings Library Service delivers an array of programs and events that cater to a wide range of interests and needs. It is seen by many as the heart of the community. As the community continues to grow and diversify so should the range of programs the library provides.

How

- Facilitation of interest groups, events.
- Provide programs that reflect local need, e.g. job search, adult literacy, tech savvy seniors, lifelong learning.
- Children's services covering ages 0-18 with special emphasis on early literacy development.
- Community partnerships – local artists, writers, creatives sharing skills and knowledge. *('Raise the skills and capacity of our local creatives to foster a vibrant cultural community' – Cultural Plan 2018-21)*
- Use the library van to provide pop-up programs, storytelling sessions, IT in rural areas.
- Explore opportunities for new and unique program delivery particularly to targeted groups such as seniors and the Aboriginal community.

3.3 Spaces

'Community hubs that provide access to services and social connections' ((Community Strategic Plan)

Port Macquarie-Hastings Library Service has modified existing spaces to satisfy evolving needs. The creation of study rooms, a community garden, The Portal and the Imaginarium studio have all been completed within the existing footprint. Library spaces are at capacity. There is a need to develop a future plan for the Port Macquarie-Hastings Library Service, which will include an option to expand the Port Library or build a new one.

How

- Port library expansion/redevelopment – explore viability of extending building – creation of new children's area, meeting rooms, performance space, makerspace, technology hub.
- Establish 'satellite libraries' in identified urban growth areas– i.e. library-sponsored community spaces (self-service – loans, wifi, printing, meeting rooms) – from development contributions. Explore development of these hubs as innovation centres in line with the **Economic Development Strategy 2017-21**.
- Develop a template for areas of future development.

- New library van to provide services to new precincts as interim measure.
- Consistent branding and signage across all service points.

3.4 Collections

'Investigate ways to enhance the delivery of innovative library services across the LGA'
(Cultural Plan)

The library's openness to new ideas has seen the introduction of such varied new services as a seed library and community garden. A number of unique collections are also available for loan such as ukuleles, gym equipment, seeds, and energy saving kits.

How

- Streamline collections to reflect community needs. Move to focus on key subject areas.
- Look for new collection opportunities.
- Further enhance local history content...digitisation, oral histories.
- Facilitate community content creation.
- Extend our Aboriginal Collection.
- Extend online collections.

3.5 Technology

'Plan and deliver innovative library services that cater for new technology and growing population'
(Operational Plan)

As part of its commitment to providing modern and innovative library services, Port Macquarie-Hastings Library Service has long been in the forefront of new technologies. It has been an early adopter of ebooks, Wi-Fi and RFID. It actively seeks to challenge the accepted image of the traditional library. Continued focus on emerging technologies will solidify its reputation as an innovative hub for digital services.

How

- Innovation. Continue to be at the forefront of emerging technology.
- Access and assistance – provide the community access to online facilities, services and training.
- Up-skilling existing staff.
- Provide technology based programs to address digital literacy issues.
- Creation of new, mobile friendly library website, managed and maintained by library staff.

Objective ¹²¹³	Strategies	Actions	Indicators
3.1 People	<ul style="list-style-type: none"> Staffing requirements for future library services Customer focus Staff skills Increase staffing and opening hours Be responsive to changing needs Use of social media 	<ul style="list-style-type: none"> Review of staffing levels Staff trained in key areas of change Monitor trends and action user feedback Annual customer satisfaction surveys 	<ul style="list-style-type: none"> Target satisfaction rate \geq 75% Increased membership \geq 10% per year Move towards SLNSW benchmark of 25.8FTE and appropriate hours of operation. 5% Increased online engagement across all channels Rise in per capita expenditure
3.2 Programs	<ul style="list-style-type: none"> Facilitate groups and events Provide locally focused programs Children's services Technology based programming Community partnerships Explore new opportunities 	<ul style="list-style-type: none"> Provide wide ranging programs to cover 0-18yrs Minimum of 6 children's programs per annum 250 sessions. Provision of structured content to educate users with low digital literacy Delivery of cooperative programs with local businesses and NFPs Engagement on future library services by June 2019 	<ul style="list-style-type: none"> Presence/attendance up by 10% per year 5% Increased use of website and services as flow-on Rise in per capita expenditure
3.3 Spaces	<ul style="list-style-type: none"> Port Library expansion/redevelopment Establish satellite libraries New library van Consistent branding/signage agreed with Communications 	<ul style="list-style-type: none"> Development of Civic Precinct Master Plan by June 2021, increasing Port Library floor space to meet or exceed minimum recommendation. Develop concept plans for additional libraries/community hubs in key urban growth areas by June 2021. Includes cost modelling to implement and resource New library van will extend services by June 2020. New branding implemented. 	<ul style="list-style-type: none"> Plan developed New Van in service. Rise in per capita expenditure
3.4 Collections	<ul style="list-style-type: none"> Streamline collections New collection types Enhance local studies content Facilitate community content creation Extend Aboriginal collection Extend online collections 	<ul style="list-style-type: none"> Review collection development policy on an annual basis to streamline collections based on community need Fill collection gaps with community-appropriate content Digitise material based on current copyright legislation New aboriginal collections with increased usage Proactively seek out new digital services Content created in house and hosted on library website 	<ul style="list-style-type: none"> Increased traffic to the website 5% increased use of identified collections Material digitised Skilled staff to manage website Rise in per capita expenditure
3.5 Technology	<ul style="list-style-type: none"> Innovation Access and assistance Up-skill staff Library website 	<ul style="list-style-type: none"> Monitor trends to keep abreast of and showcase emerging technologies. Provide access to internet facilities and digital literacy services Provision of structured content to educate users with low digital literacy 	<ul style="list-style-type: none"> Staff trained in key areas of change Website created by June 2019 5% increased use of website and services as flow-on Rise in per capita expenditure

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¹² Operational Plan 2018-19 performance measures and State performance guidelines
¹³ Any changed to required library services now and into the future, including library spaces, resources required, and timing of the rollout of future services will need to be determined, and will be dependent on financial allocations and Council prioritisation.

2019-2020 Environmental Grant Assessment													
ID	Name	Pub Lab Y/N	Info Y/N	Acquit Y/N	Quotes Y/N	Lease Y/N	DA Y/N	Fin Subs Y/N	Letters Y/N	Project Title	Grant Sought	Description	Criteria 1: Objectives & SWPs, Criteria 2: Evidence of need, Criteria 3: Capacity Organisation
27	Port Macquarie Landcare Group	Y	Y	Y	Y	na	na	Y	Y	Volunteers and Contractors maintaining our Reserves	\$5,000	Bush Regeneration Contractor removing weeds, litter removal and planting native herbs, shrubs and trees.	Criteria 1: strong links to Towards 2030 Criteria 2: strong evidence of the need this group is making in the local community. Criteria 3: over 400 hours of in-kind volunteer hours towards 2030. Criteria 4: Great track record.
28	Friends of Koobong Creek Nature Reserve	Y	Y	Y	Y	na	na	Y	Y	Bush Regeneration and Litter Removal	\$5,000	PPE Gear and Chemicals	Criteria 1: strong links to Towards 2030 Criteria 2: strong evidence of the need this group is making in the local community. Criteria 3: over 400 hours of in-kind volunteer hours per annum. Criteria 4: Great track record.
29	Port Macquarie Landcare Group	Y	Y	Y	Y	na	na	Y	Y	EQUIP AND PROTECT VOLUNTEERS TO BENEFIT THE COMMUNITY AND THE ENVIRONMENT	\$5,000	Establishing 3 new Landcare Groups	Criteria 1: good links to Towards 2030. Criteria 2: good evidence of need. Criteria 3: PPE Gear & quotes provided. Criteria 4: Purchases only
30	Hastings Landcare	Y	Y	na	Y	na	na	Y	Y	Vauchoppe, Combeone & King Creek Landcare Establishment	\$1,891		A good application, Establishing new Landcare Groups and supporting volunteers
											\$16,891		
											\$16,891		

3 Your Business and Industry

18/09/2019

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

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Port Macquarie Health & Education Precinct

Post Exhibition Master Plan



Project and report	Port Macquarie Health and Education Precinct master plan
Job No.	180063.00
Client	Port Macquarie-Hastings Council
Document location	K:\180063.00\Docs\C_Client\001_Working\UrbanDesignReport
Version and date issued	Issue A (Internal draft) - 1/07/18
	Issue B (Preliminary Draft to client) - 3/8/18
	Issue C (Draft Issue to Council) - 13/08/18
	Draft for exhibition - 18/10/18
	Post Exhibition - Issue E - 26/08/19 DRAFT
	Post Exhibition - Issue F - 2/09/19
	Post Exhibition - Issue G - 6/09/19 Final
Report contact	Greg Burgon Principal, Urban Design and Planning
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Executive Summary

Why plan for this precinct?

Planning for the future of the Health and Education Precinct (the HEP) is part of Council's wider vision for a thriving regional city and a strategic focus in Council's Urban Growth Management Strategy (the UGMS):

“The growth of the health and education sectors presents an opportunity to increase the number of young people in the community, provide economic diversification, increase labour force participation and build on Port Macquarie's growing status as a regional city”

The Port Macquarie region is experiencing a 100,000-strong growth in its population, with a predicted 9.3% growth in the local health sector. The HEP is a key part of Port Macquarie's future growth.

The aim is to transform the precinct into to a centre of excellence for education, training and health. The HEP will help position Port Macquarie as an increasingly competitive destination for university students, health care professionals and the broader community. Key to success is encouraging appropriate development that will support and foster a range of learning models and health-related services within an accessible, high amenity, attractive public realm.



The HEP at a glance

The precinct is home to the Port Macquarie Base Hospital, Charles Sturt University, the Shared Health, Research and Education Campus (SHREC) supporting CSU, UNSW and University of Newcastle initiatives, St Columba Anglican School, and the Lake Innes Shopping Village.

Major institutions across the precinct are investing to enhance their capabilities, and recognise the opportunity to connect with one another and share some facilities to enhance activity across the precinct.

Land owner	Current population / facilities	Future population
Base Hospital	37,000 patients per annum 200 beds, 1,500 staff	Not expected to grow significantly in size
University of Newcastle	SHREC 20 student rooms	Modest increase in scale
Lake Innes Shopping Village	4,000 m ² of retail	Looking to expand
CSU	900 students (100 international) 150 staff 100 of 250 beds available	2,600 students (500 international) 300+ staff, 600 beds (Total population of 6,000 at completion)
SCAS	1,100 students	1,200 students in 2019
Airport	226,000 passengers per annum – doubled since 5 years ago	New terminal commencing 2018, new runways planned

Executive Summary



Why a master plan?

This project comprises an Enquiry By Design (EBD) and Master Plan for Port Macquarie's Health and Education Precinct (HEP). The two are inextricably linked: the EBD is the primary source and driver of the key master plan moves towards a successful and sustainable HEP.

The EBD and master plan together are a timely intervention to promote Council's vision. The recommendations have been developed to foster "a vibrant and well-connected health and education precinct [that] will be integral to long-term success."

Document structure

This report, like the methodology, steps logically through:

- the broad setting – historical, cultural, strategic and physical
- the Enquiry By Design process and outcomes
- global trends for success, including a comparison of different building types and sizes to house different (and complementary) functions
- the issues and opportunities for the precinct
- the vision
- design objectives and principles
- design strategies (master plan concepts)
- process (implementation) strategies.

Key moves

The master plan proposes:

- a new pedestrian spine through the precinct
- a new bus loop around the precinct
- two new road connections into the precinct
- a balance of facilities, services and activities in the precinct
- a green, healthy, vibrant identity for the precinct.

"a vibrant and well-connected health and education precinct will be integral to long-term success."



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01 Introduction

This section introduces the project, the process, and the setting. It gives a snapshot of the historical, strategic, and character setting and thus provides background to the analysis that follows.



Introduction

1.1 This project

1.1.1 Study area

The study area is loosely bounded by John Oxley Drive to the west, Lake Road to the north, the industrial area and Lake Innes Nature Reserve to the east, and the southern boundary of St Columba Anglican School. It excludes residential properties between John Oxley Drive and Major Innes Road, and it takes in some additional areas where the HEP needs to 'stitch in' to its context: between John Oxley Drive and Oxley Highway, and around Merrigal Road.



Introduction

1.2 Methodology

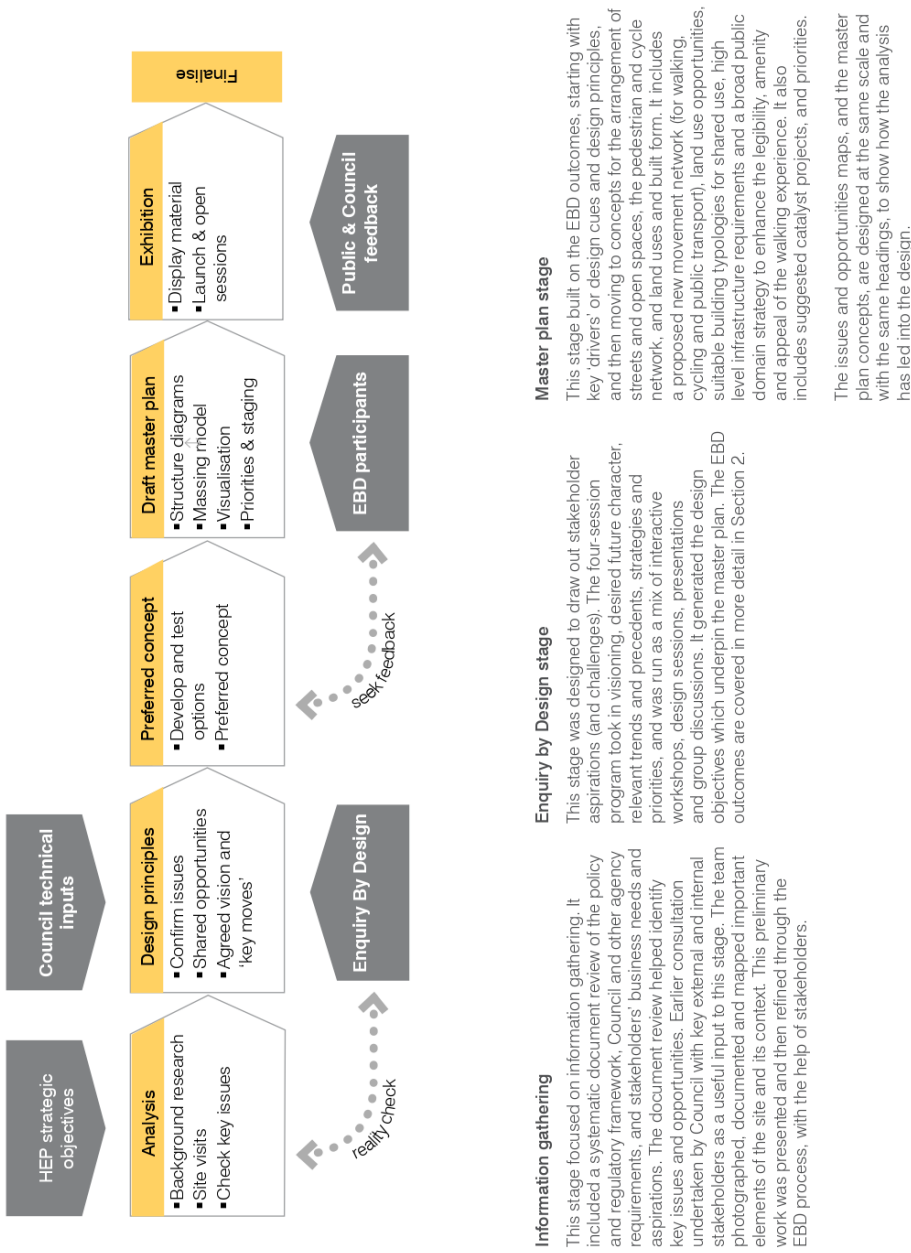
1.2.1 What is Enquiry By Design?

Enquiry By Design is an intensive engagement process over several sessions, bringing all stakeholders and the designers into the same room to work together. For this project the aim was not to emerge with a finished master plan, but rather to optimise information gathering in a compressed timeframe. We called it 'Design by Enquiry' rather than 'Enquiry by Design', acknowledging the importance of gathering key inputs through shared investigation, and then foregrounding those inputs in the Master Plan vision, principles and design strategies. The process allowed for 'real time' testing and re-testing of key issues and constraints, and discussions about shared aspirations.

1.2.2 What is a master plan?

Building on the EBD, the HEP master plan is 'owned' by everyone involved. It is:

- a visioning document. The job of the Master Plan is to create a vision that goes hand in hand with Council's local and regional aspirations, a vision that will enable the continuing success of the HEP;
 - a tool that supports a compelling case for participation, funding and investment. The vision has to be backed up with a solid understanding of the current and future activities across the precinct – so the master plan must be pragmatic as well as aspirational, functional as well as innovative;
 - a flexible, sustainable framework of clear connectors, useable development areas, and appealing public spaces.
- The staged approach moved from 'big thinking' down to the detail. The main steps were:



Introduction

1.3 Historical setting

1.3.1 Aboriginal history

Green, fresh forests and clear waterfalls. Wide brown rivers winding to the sea. Rolland's Plains, Port Macquarie, Wauchope, Wingham, Comboyne, Taree, Forster, Bago Mountain, Ellenborough Falls, Sea Acres Rainforest. There are so many different places in the Birpai nation. Wallabies, Kangaroos, Koalas, Snakes, Goannas, Birds, Echidnas, Dolphins and Fish. A beautiful place. Our home.

by Dylan Small & Tyreek Brown,
Birpai Yarns: listening, learning and writing the next chapter (2011)

Evidence of Aboriginal occupation in the Port Macquarie area stretches back to at least 1600. The original inhabitants were the Birpai people, the traditional custodians of the coast, inland forests and hinterland, whose land

"extended from the watershed of the Maria River in the north where they were bordered with the Dughutti, to at least as far south as the watershed of the Manning where they were bordered with the Worimi. Their south-western boundaries were shared with the Geawegal, their mid-western boundaries with the Gamillroi, and their north-eastern with the Ainawan."

Birpai – Beyond the lens of Thomas Dick, John Heath, Port Macquarie Historical Society, 2018

There was an abundant food supply from the sea, the hinterland and the mountains.

"The port abounds with fish, the sharks were larger and more numerous than I have ever before observed. The forest hills and rising grounds abounded with large kangaroos and the marshes afford shelter and support to innumerable wild fowl. Independent of the Hastings River, the whole country is generally well watered, there is a fine spring at the very entrance to the Port." [John Oxley, quoted in Heath]

There are few histories written from an Aboriginal viewpoint. However, *Birpai Yarns* gives some insights into the relationship of people to the land, then and now. This was a story telling project designed to revive oral traditions and build literacy skills for school children, and it includes a Birpai Dreaming creation story by William (Uncle Bill) O'Brien, retold by Dylan Small:

Before the Dreaming, the Birpai people believe that there was a man called Goonambi who made the land and rivers with the help of the Birpai animals. When they finished making the land and rivers, this was a beautiful place with crystal clear waters and many different plants and animals.

Mid north coast co-operative library service
(<http://mncilibrary.org.au/birpai/>)

Traditional Birpai life was altered forever following the mapping and naming of the mouth of the Hastings River as Port Macquarie on October 11 1818, by HM Surveyor-General to NSW, Lieutenant John Oxley.



Thomas Dick was an amateur scientist and photographer who lived in Port Macquarie and created staged re-enactments of Aboriginal people undertaking daily activities. The images date from around 1910–1930 but Dick dressed his subjects in pre-European clothes, using traditional tools and implements. His writing suggests an unusual level of empathy for the people, but at the same time the photographs are an uncomfortable reminder of a European lens on Aboriginal life and culture as spectacle and other.

Refer to John Heath, *Beyond the Lens of Thomas Dick*, 2018, Port Macquarie Historical Society

1.3.2 Colonial history

John Oxley's journey began commenced on 14 June 1818 as a failed attempt to discover an inland sea. It led him north from Bathurst into the Hastings. On 23 September 1818, Oxley and his party of 15 men

"broke through dense undergrowth on the summit of a mountain and saw the sea 50 miles to the east. Below him was a river, snaking its way to the ocean through a wide green valley. It was the route he and his party would take to the coast ... initial ecstasy at the sight of the sea turned to dismay when it took them more than a fortnight to reach it..." [Heath]

On 5 October the expedition party came into direct contact with the Birpai. It is recorded that Oxley acquired one of the Birpai's canoes in exchange for a tomahawk so that the party could cross the river at its mouth. The party set up camp on what is now the foreshore near Town Beach, which Oxley called "a beautiful point of land, having plenty of good water and grass, and commanding a fine view of the interior of the port and the surrounding country". [Heath]

John Oxley's report to Governor Macquarie recommended Port Macquarie for penal settlement due to its advantages that included additional remoteness than Newcastle, accessibility by sea, and the extensive cedar and hardwood forests. Following this recommendation, Captain Francis Allman was commissioned to establish the settlement. He arrived on 17 April 1821, along with 60 convicts (selected for their steadiness and good conduct), 41 troops and three Aboriginal men (from outside the Birpai lands) to assist in tracking and capturing runaway convicts.

The original penal settlement was surveyed and laid out by James Meehan. By September 1821, the first streets were laid out, timber barracks erected, the provision store and granary was stockaded, and the Commandant's residence built and its garden established.



Port Macquarie in 1825, Augustus Earle, NSW State Library

Introduction

1.3.3 Port Macquarie's development history

Port Macquarie's convict population peaked in 1825. On 13 August 1830 Port Macquarie was proclaimed open to free settlement. Anticipating growth, the town was re-surveyed on a new regular alignment which remains today. A map of Lake Innes and environs c.1840 illustrates the expanding settlement north, west and south from Port Macquarie. The map shows Wauchope Road extending west towards Thurnston, an unnamed road extending northward towards Blackmans Point, and Lake Cottage Road connecting the farming settlement of Flagstaff, located between Lake Innes to the west and Innes swamp to the east.

Following its establishment as a free settlement, Port Macquarie, and supporting infrastructure, grew rapidly. The population doubled between 1830 and 1836. One of the first free settlers, whose land and business holdings shaped much of the area, including the HEP, was Major Archibald Innes. Innes used his access to free convict labour to help build the old Wood Road (now the Oxley Highway) between Port Macquarie and the New England tablelands. Having renamed Burrawan 'Lake Innes' he planted out 2,500 acres around it, introducing a variety of exotic plants (reportedly including lantana) to his garden at Lake Cottage.

From 1837 onwards, increasing land grants saw the growth of the town. New roads, churches and schools were opened through the 1840s. In 1887 the first Port Macquarie municipal council was formed, followed by the Hastings Shire council in 1906. In 1915 the North Coast Railway reached Wauchope.



Building the Oxley Highway, 1933. Pictures From the Past vol. 2, Port Macquarie Historical Society

1.3.4 Port Macquarie's recent history

The population of Port Macquarie-Hastings has grown from around 12,000 people in 1945 to around 80,000 in 2017. Port Macquarie has experienced significant growth during this same time period, rising from 2,900 to 50,000 (map sequence below illustrates this growth). The development of the HEP and surrounds has occurred relatively recently, starting in the early 1990s.

The original subdivision pattern of the HEP was large lots, on an east-west axis, extending from Oxley Highway and John Oxley Drive. The legacy of this original subdivision is evident in the existing land use patterns within the precinct, including a limited north-south road network.



Port Macquarie around 1830, p. 228 of *Port Macquarie Then & Now*, David Martin 2004. The 'Old Burying Ground' south of the town still connects through to the HEP via the Google track



Subdivision pattern of the HEP 1960s-1980 showing the very large single parcels that have driven the current road pattern



Introduction

1.4 Strategic setting

Port Macquarie is looking forward.

As one of four regional cities in the North Coast region, Port Macquarie already has a diverse and vibrant economy, and will continue to be a major focus for jobs, housing and regional investment. Its population is forecast to grow by more than 1,000 people each year to around 103,000 people by 2036. With growth, there will be opportunities to strengthen and diversify the economy, particularly around health and education. With more people living and working in the area, there will be a greater need for good transport, utilities and communications.

Port Macquarie-Hastings Council (PMHC) has three main strategic plans that reflect and support the implementation of the vision, goals and actions in the North Coast Regional Plan prepared by NSW Department of Planning and Environment. They are: Towards 2030 – Community Strategic Plan (CSP); the draft Urban Growth Management Strategy 2017-2036 (UGMS) and the draft Economic Development Strategy 2017-2021.

The Health and Education Precinct Master Plan is timely. It aims to capture the opportunities and address the pressures of a developing regional city, responding to Council's strategic plans and in turn to the North Coast Regional Plan 2036.



Introduction

1.4.1 North Coast Regional Plan 2036

This is the State Government's 20 year blueprint for the future. Relevant strategy directions (extracts) are:

Direction 6:

Develop successful centres of employment

Actions

- Facilitate economic activity around industry anchors such as health, education and airport facilities by considering new infrastructure needs and introducing planning controls that encourage clusters of related activity
- Promote knowledge industries by applying flexible planning controls, providing business park development opportunities and identifying opportunities for start-up industries

Direction 7:

Coordinate the growth of regional cities

Actions

- Promote new job opportunities that complement existing employment nodes around existing education, health and airport precincts;

Direction 10:

Facilitate air, rail and public transport infrastructure.

Actions

- Transport for NSW will work with bus operators to develop routes and timetables to improve and create services that meet the unique needs of each town, and a variety of other transport initiatives
- Provide public transport where the size of the urban area has the potential to generate sufficient demand.

This plan will be brought up to date with a pending Regional Action Plan that highlights health and education as a vital part of growing regional economies

1.4.2 Towards 2030 - Community Strategic Plan

This is Council's highest level strategic document. The CSP identifies the main priorities and aspirations of the community, and provides a clear set of strategies to achieve this vision for the future. The CSP incorporates the key directions of the NSW State Plan and North Coast Regional Plan. All other plans developed by Council must reflect and support the implementation of the CSP.

The CSP is about to be rewritten. The current Community Vision for Port Macquarie-Hastings is "a sustainable high quality of life for all". Its Mission is "building the future together – people, place, health, education and technology".



The four building blocks of the Community Inclusion Plan

Introduction

1.4.3 Urban Growth Management Strategy
2017-2036

The goal of the UGMS is “to identify opportunities for new economic development and housing that will meet the needs of our growing community.” This is to be achieved through well planned growth in the right places, that protects the unique qualities of the area. The two volumes of the UGMS set out, respectively, short term actions, and more detailed issues and actions to 2046. The HEP is a key aspect of the UGMS.

Area-wide:

The UGMS considers the following challenges in response to population and housing needs across the Council area:

- Providing sufficient land for new growth so that land can be developed in an efficient and affordable way
- Providing opportunities for new dwellings where they are needed
- An ageing population: in 2036 more than 35% will be over 60
- Creating opportunities for younger people to find work and further their education locally.

Airport

Port Macquarie Airport is a major regional airport and gateway for visitors to the North Coast. Like the HEP, the Port Macquarie Airport Business Park is identified as a key action area. Council will undertake planning for an expansion of the airport to create a technology and campus-style business park, aviation-related uses and service industries. This is relevant to the Master Plan in that the commercial uses could be complementary to the developing research / medical uses within the HEP.

The potential for a future link road connecting from Ocean Drive in the east to the airport, via the HEP (noting that the alignment is not determined), strengthens the opportunity for the HEP to benefit from proximity and connection to the airport, and vice versa.

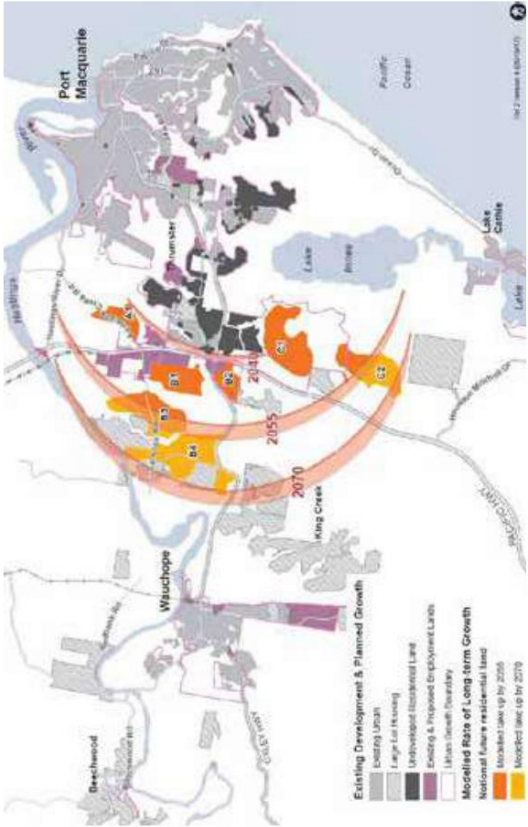
Health and Education Precinct (HEP)

The UGMS singles out the HEP, acknowledging the rapid growth in health care, social assistance and education to date, along with planned expansion in the future. The UGMS presents an early vision for the Precinct (which has informed the EBD visioning process) with opportunities for:

- Future expansion of key facilities like the Base Hospital and CSU
- A mix of associated business uses and support services
- Housing (e.g. for key workers and students)
- Vibrant public spaces
- Safe and efficient connections (e.g. footpaths and cycleways) & public transport
- New infrastructure, and
- Protection of local environmental values.

The UGMS identifies the “aim to promote a range of housing types between detached houses and high rise apartments in central, well-connected locations, like the proposed Health and Education Precinct”

The HEP has a neighbourhood centre strategically located between the CBD, the airport and the growing neighbourhoods to the west. Volume 2 (p.72) of the UGMS also notes that there are “opportunities for additional small-scale, mixed-use retail in addition to the Major Innes Shopping Centre, to help create an active, vibrant and well-connected Precinct in the future”



Future Urban Growth, UGMS Volume 2

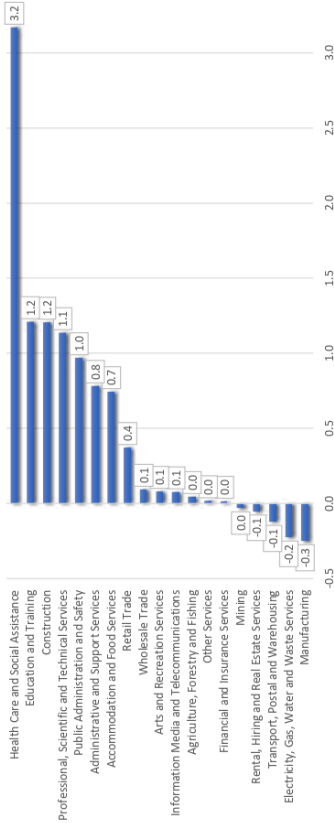
Introduction

1.4.4 Economic Development Strategy
2017-2021

The draft Economic Development Strategy has been developed to position the Port Macquarie-Hastings region as a place where people want to live, learn, work, play and invest.

The Strategy places a priority on precinct planning to encourage business investment and jobs growth. It specifically includes an action to finalise the Health & Education Precinct planning, noting recent and projected employment growth in these industries.

Mid North Coast Projected Employment Growth
Five years to May 2022 (,000)



Health Care and Social Assistance, and Education and Training, are the top two sectors for employment growth. This shows the strategic importance of the HEP for Port Macquarie's employment future. Refer p 16 of the Draft Economic Development Strategy

1.4.5 Port Macquarie-Hastings LEP 2013

The existing controls for the precinct comprise -six different land use zones, three different height of building controls (applied to half the precinct) and limited FSR controls. In summary:

Land zoning

- R1 General, and R2 Low density residential
- B2 Local centre
- SP2 Health services, waste management facility
- RU1 Primary production
- Interestingly, educational uses are prohibited in the RU1 Primary Production zone that encompasses St Columba Anglican School.

FSR

- Parts of the site have an FSR of 0.65:1:
 - R1 zoned land along Highfields Circuit
 - B2 Lake Innes Village Centre
 - R1 (CSU campus)

Height of buildings

- No controls SCAS, vacant land north, waste transfer facility
- 14.5m Hospital, light industrial area
- 8.5m Highfield Circuit, Kingfisher Road
- 11.5m Lake Innes Shopping Centre, CSU

Minimum lot size

- 700sqm: Lyrebird Place residential
- 3000 sqm: Hospital, Highfields, Kulai, south of Kingfisher
- No minimum: Shopping Centre, existing CSU campus, Council Waste Transfer Facility and landfill

Flood planning

- Impacts limited to land immediately north of SCAS, south and west of landfill site, and in the area bounded by the Oxley Highway and John Oxley Drive.

Bushfire prone land

- A combination of Category 1 and Vegetation Buffer

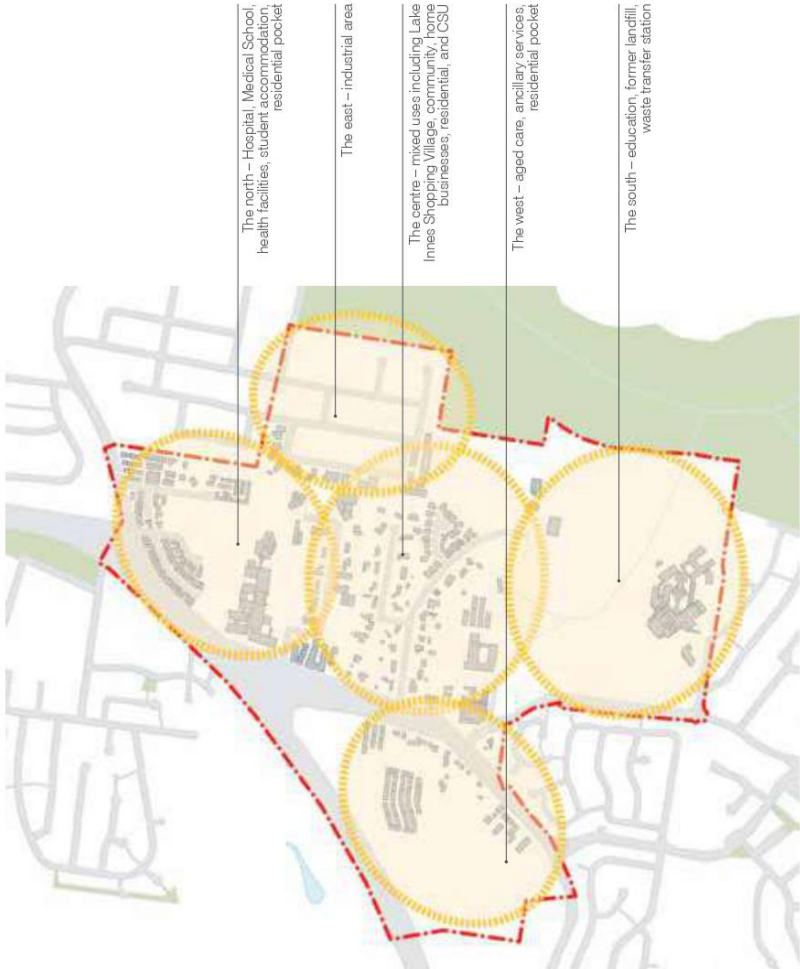
Proposed LEP controls and DCP guidelines are presented in Section 8 Implementation.

Introduction

1.5 Character setting

The existing Health and Education Precinct is loosely divided into five character areas. The boundaries are blurred, because current uses and the building types are changing. However, describing the character was a useful part of the EBD process to frame a discussion with participants about what they liked in the precinct, and what qualities they would like to see carrying forward. This in turn informed the vision statement.

The descriptions below therefore set the scene for the desired future character—land use, built form scale and type, connections, and public domain improvements.



Character area: north

Introduction

1.5.1 The north

The large landholding of Port Macquarie Base Hospital defines the character of the northern part of the Health and Education Precinct. The hospital land lies between small scale residential pockets to the north, and the large lot residential subdivision around Kingfisher Road to the south. Remnant mature eucalypts along Wrights Road, at a high point in the precinct, effectively create a visual boundary to the Highfields Circuit properties. To the east this area is bounded by the industrial precinct, but connected to it only by a narrow pedestrian path to Merrigal Road.

The centrally located, shallow valley of council owned land offers views between Lake Road and the hospital. This is currently under-utilised open space. The street pattern – as for the whole HEP – drives from the original subdivision of very large land parcels accessed from the major roads. It is characterised by disconnected, undulating dead end roads; single access points from the north and west do not join up within the area. There are few footpaths.

The hospital buildings and the UNSW Rural Clinical School are of institutional scale, with large footprints. They are set in a 'sea of car parking'; the hospital approach and entry is currently vehicle dominated. Highfields Circuit is incrementally changing from single detached dwellings to a greater mix and density of uses including student accommodation, aged care facilities, health services and shared education facilities like SHREC (Shared Health Research and Education Campus). With this change in use has come a change in character, as heavily treed sites give way to large areas of surface parking. On Highfields Circuit itself the grassed verges are typically also parked out during working hours. This part of the Precinct is becoming a more identifiable part of the medical hub than part of a residential neighbourhood.



Aerial looking view north-west



Introduction

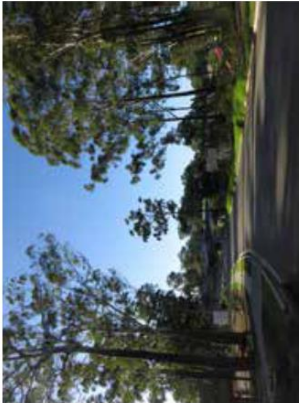
1.5.2 The centre

At the intersection of Major Innes Road and John Oxley Drive a mixed use hub of commercial and community services offers residents and workers day-to-day necessities. Lake Innes Village Shopping Centre is conveniently located between the intersection and Charles Sturt University. The recently completed CSU courtyard building and adjacent student accommodation link the village centre to the education hub to its south.

Along tree-lined Kingfisher Road, the character is relaxed and informal. This main east-west connection traverses the ridge line of the precinct and offers street vistas to the western hills, framed by its dense mature tree canopy. Native vegetation is mainly intact due to wide green verges and the fragmented private ownership of single detached dwellings on large (around 2000 m²) lots, whose generous back yards and front setbacks have preserved canopy trees in the private domain. Some native vegetation has been identified as koala habitat.



Aerial view looking north-west

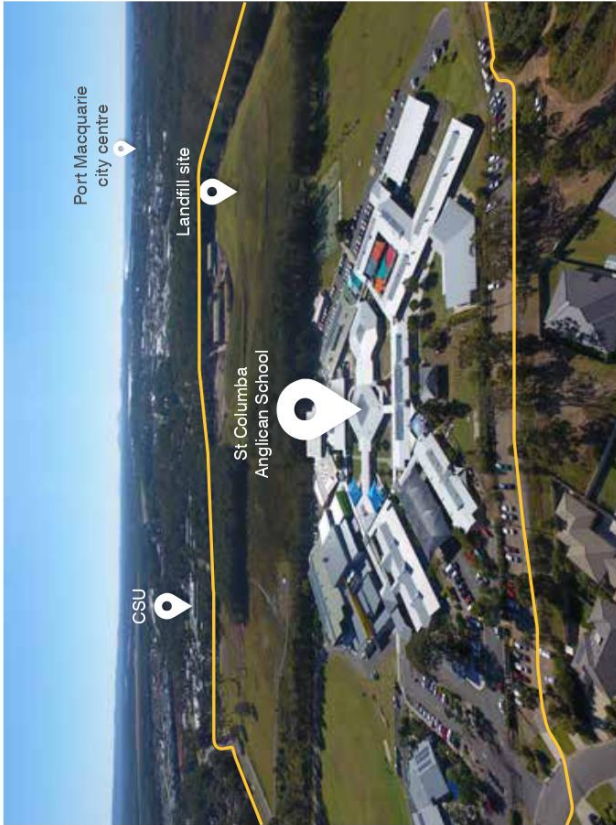


Introduction

1.5.3 The south

This part of the precinct is in three ownerships: Council, CSU and SCAS. It is bounded to the south by a services easement, and to the east by National Park (Lake Innes Nature Reserve) which creates a strong green edge; there are links into and through the National Park via connections to the Goolgik Track. There is no internal public street network. The former landfill site rises above the area and provides something of a local 'marker' behind the open spaces. Council's assets also include a detention basin / wetland on Major Innes Road and Waste Transfer Facility. The Waste Transfer Facility is accessed via residential streets and is a somewhat anomalous use in the area.

The school at the south, and CSU to the north provide education 'anchors' that bookend this area. The CSU campus redevelopment earmarked for Stage 2 will expand into this southern part. This land is largely cleared of trees with only remnant pockets of native forest remaining. Between their respective institutional buildings, the current character is open and low-lying, with wide views from Major Innes Road across CSU land and the SCAS school fields.



Aerial view looking north



Introduction

1.5.4 The east

The industrial zone between the medical hub and Lake Innes Nature Reserve offers a wide range of employment opportunities and services. Long north-south roads create focused street vistas, albeit framed by a mix of low-rise 'shed' type buildings with varying setbacks. The industrial and commercial buildings are typically simple in form, internal-facing, with driveways, loading docks and outdoor storage areas directly onto the street. These all combine to create a vehicle-dominated, functional environment that is hostile to pedestrians.



East-west connections into the Health and Education Precinct consist only of limited informal paths through private properties; the interface with the industrial area is of 'back of lots' against each other. The intensive industrial use of this zone has meant wholesale removal of the native tree canopy. However, long street vistas south towards the dense vegetation of Lake Innes Nature Reserve still link the area visually to its natural setting.



Aerial view looking north



Introduction

1.5.5 The west

This area is isolated by the major road corridors – Oxley Highway and John Oxley Drive – that bound it. The northern tip is edged by high noise walls to the Oxley Highway that give a ‘motorway’ feel to the approach. The area has a mixed character: large swathes of undeveloped land, small scale light industrial businesses, detached houses on very large lots, and the Sienna Grange aged care facility with single-storey townhouses built ‘down the lot’, and multi-storey buildings under construction. The large area of currently vacant land to the north has a Bunnings superstore under construction. With this development a new signalised crossing will link this area across John Oxley Drive into the main part of the HEP.



Aerial view looking south





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02 Understanding the people

A key strategy in formulating this master plan was to engage early, and deeply, with stakeholders in the precinct. Rather than a traditional EBD process which culminates in a draft design concept, the focus of the charrettes in this study was on information gathering and sharing, agreements around opportunities, visioning and key objectives, and most importantly on building trusted relationships between stakeholders and with Council.



Understanding the people

2.1 Session 1 – visioning

Four half-day workshop sessions were held: three back to back on April 30, May 1 and 2, and the fourth the following week on May 8. The main outcomes were to identify 'big moves' to take forward for testing and refining. The following stakeholders were represented:

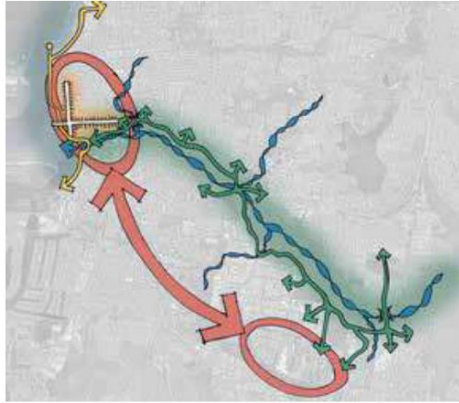
- St Columba Anglican School (who also hosted the event)
- Charles Sturt University (including local and international students)
- Lake Innes Shopping Village
- RMS
- Busways
- Port Macquarie Airport
- University of Newcastle
- Highfields Development Pty Ltd
- Port Macquarie Base Hospital
- Port Macquarie-Hastings Council.

The workshops provided an enormous amount of useful material to inform the master plan. Each session had a different focus:

- Session 1 – Visioning
- Session 2 – Issues and impacts
- Session 3 – Strategies for place
- Session 4 – Moving forward.

In Session 1, the positive qualities of the precinct were identified, along with how people use the precinct now, and how that might change in the future. This included reviewing precedents of health, education and innovation campuses, shopping centres with mixed uses, and public open spaces and connections. The participants worked in small groups (maximum 6 people per table) and came together throughout the session. They agreed:

- The big issues are lack of character, lack of connections, lack of activity
- There is a lot to like: proximity to airport and town; variety of services; natural setting; great community-minded institutions
- There are shared aspirations for collaboration, co-location, innovation, and identity
- Paths to success include affordable accommodation, supporting small business start-ups, work experience for international students, and alignment between university / IT / medical / health initiatives.



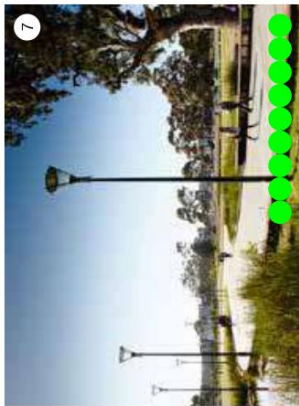
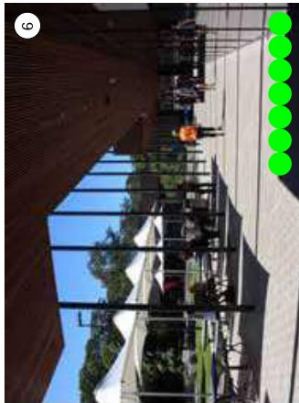
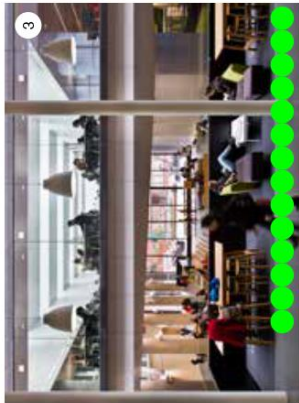
Analysis diagrams presented and discussed at Session 1 (clockwise from top left).
The HEP in relation to the city centre
The pattern of vegetation, buildings and car parking areas
Big picture opportunities
Big picture challenges

Understanding the people

Precedents from around the world showed how other precincts, campuses and town centres are developing, in the areas of:

- 1. Streets for people
- 2. Trends in health
- 3. Student-centred learning
- 4. Neighbourhood hub
- 5. Innovation incubator
- 6. Outdoor learning spaces
- 7. 'Stitched-in' landscape.

These were presented and voted on at the EBD – both the 'liked' and 'disliked'. The most popular are shown with their positive 'green dot' scores given by participants.



Understanding the people

2.2 Session 2 – Issues and impacts

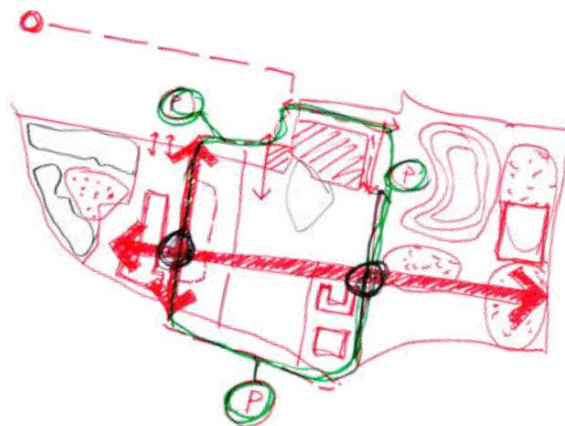
In Session 2, the focus was first on individual stakeholders who presented the particular impacts of regional growth on their organisations and operations, and described key aspects of their future (master) plans. Then, in 'theme tables', participants explored how those plans were impacted by the regional and local issues – both in terms of constraints and opportunities. Specialist staff from Council were present to offer technical expertise as required.

A session around desired character confirmed the qualities that people wanted to see as part of their future in the precinct:

- A destination with a clear identity
- Has a consistent (public domain) design theme
- Draws on features from CSU quad (intimate spaces, human scale, lots of planting)
- Green – existing (native trees) and new
- Connected – physically and virtually
- Walkable and bikeable (including supporting facilities)
- Alive into the evening
- Healthy.

This session concluded with the whole group identifying key opportunities for the whole precinct. The main ones were:

- A north-south pedestrian spine
- A public transport circuit inside the precinct
- removing cars from the precinct
- Rationalised and shared parking solutions
- A unifying design theme for the public domain
- A sense of arrival – particularly strengthening the link to the airport
- Locating a future southern orbital road south of the school
- Leveraging off the proximity of the industrial area for medical / science manufacturing



Sketch of opportunities developed with participants on Day 2: pedestrian spine, transport loop, parking areas, industrial link

2.3 Session 3 – Strategies for place

In Session 3, participants broke into two tables loosely based on location: the northern part of the precinct including the Hospital, University of Newcastle, and landowners; and the central / southern part including Lake Innes Shopping Village, CSU and SCAS. This exercise was to work across ownership boundaries and start to explore joint initiatives. At the end, the whole group identified desired projects and processes. The priorities for implementation were:

Short-term:

- Upgrade pedestrian connections between the hospital, the SHREC and the industrial area
- Open up the CSU-owned land between the campus and Kingfisher Drive to make a through-block pedestrian link
- Upgrade hospital bus and parking areas
- Develop a concept to rationalise parking and pedestrian movement around Highfields Circuit
- Provide a child care facility within the shopping centre
- CSU and SCAS share active recreation spaces
- Complete the north south pedestrian spine and encourage activity notes along it

Medium-term:

- Complete the public transport loop and associated parking nodes at the edges of the precinct.

Long term:

- Build an aquatic centre (on detention basin land) for the whole community to use



Understanding the people

2.4 Session 4 – Moving forward

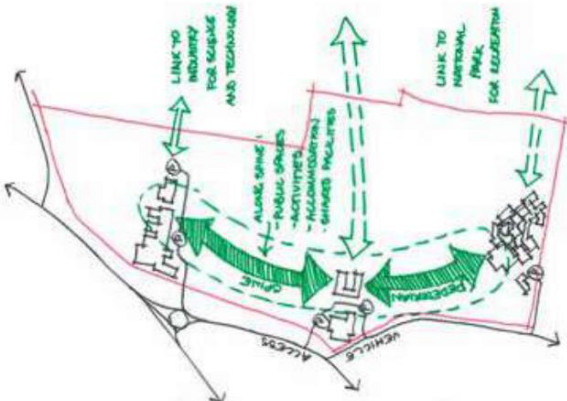
In Session 4, all this work came together to set the direction and the 'big ideas' or 'key moves' for the master plan. As a whole group, participants confirmed that their identified issues and opportunities had been captured.

We discussed how people move through the precinct, noting that although that it feels bigger than it is because the connections are not there – and that the distances between key destinations, as the crow flies, are generally not more than 400 metres. This was seen to reinforce the 'big move' of a pedestrian spine facilitating more direct, easier links from north and south to the centre.

We then worked in smaller groups to draw out suggested vision statements, whether for 5, 10 or 20 years into the future. This was done through capturing ideas and key words on individual post-it notes, grouping them on large sheets of butcher's paper, and then presenting them back to the wider group.

From all the individual responses, the following words and / or themes were the most popular. They are arranged in descending order of importance to the participants.

Connectivity and accessibility
Vibrant, activated and attractive
Innovative and creative
Education and research
Culture, sharing and welcoming
Destination
Health, sporting and wellness
Economy and business
Collaboration and interaction
Unique identity



How activity in the precinct could be enabled and enhanced by key linkages

Four statements were received particularly well in the room:

The precinct will be...

...a vibrant and innovative centre of excellence connected locally and to the world

...accessible from anywhere in the world

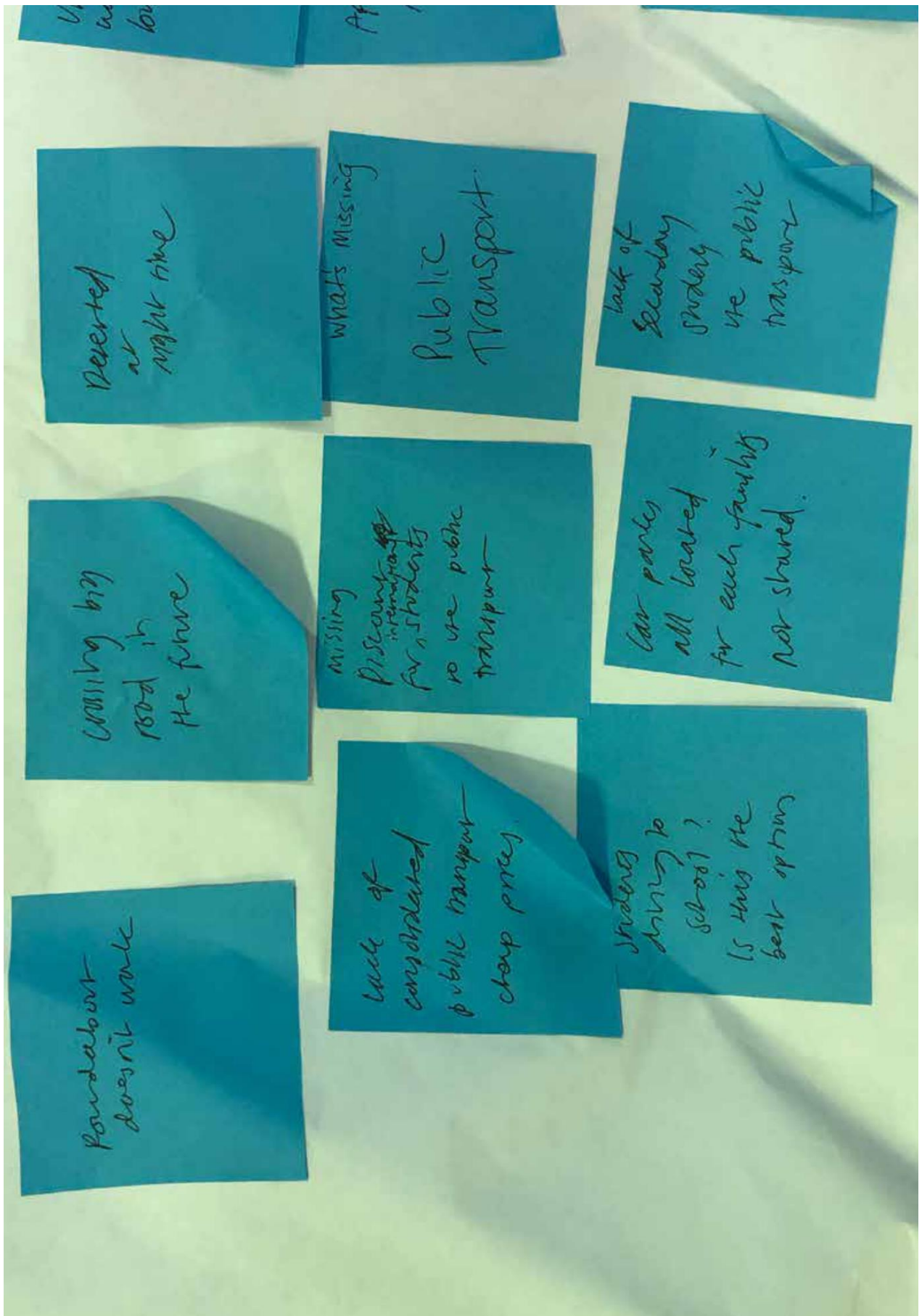
.. a hub for complementary services, open to all

... and will have the capacity to evolve, and the flexibility to adapt as the region changes.

Draft master plan objectives were presented and agreed to take forward into design principles (refer to Section 6.2). Finally, stakeholders at different tables tested their own master plans against the vision for the precinct, to identify where and how they could be aligned, to create the 'big moves'. These moves, first developed in Session 2, were re-confirmed as the foundation of the master plan.



Translating the opportunities into big moves



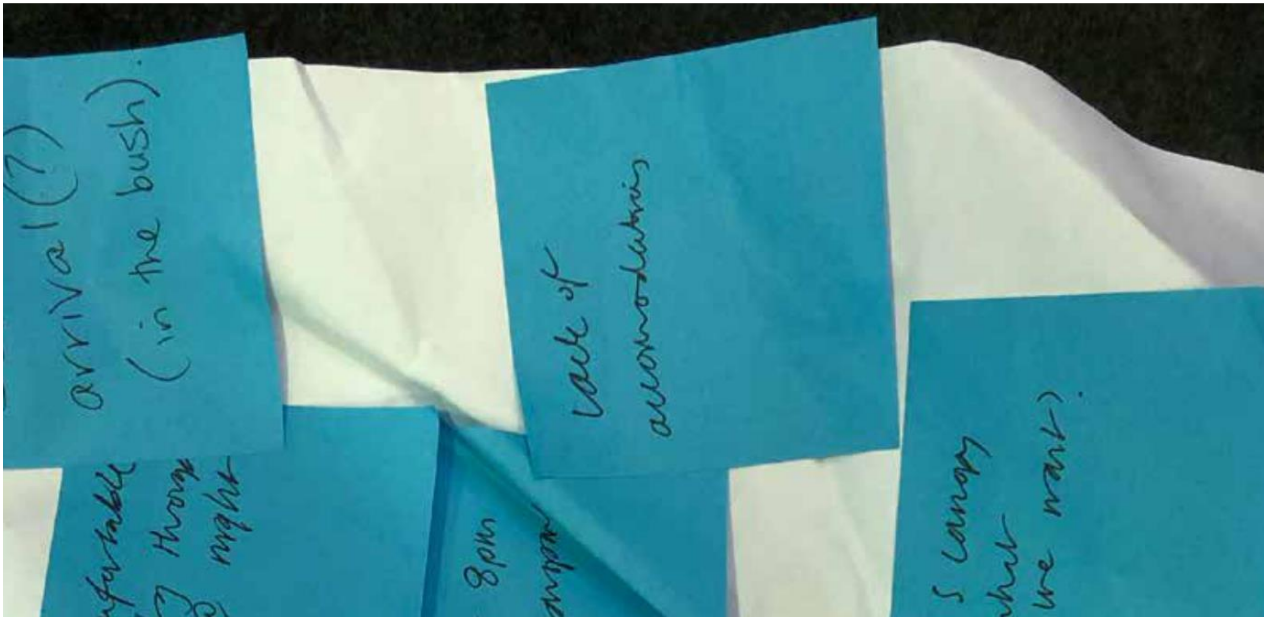
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03 Understanding the place

This section of the document builds on the work of the charrettes, as well as site observation, background research, and discussions with technical specialists. The analysis is not just 'what is,' but 'what could be'. It sets up the design process.

There are four themes:

- underlying structure
- movement network
- the community
- the character.





Understanding the place: underlying structure

3.1 Topography, views and landmarks

Issues

- The undulating topography combined with a poorly linked street network makes it difficult to 'read' where you are in the precinct – there are no strong street vistas
- Conversely, there are glimpses through blocks (where there are no formal connections) to pedestrian destinations, making for frustrating detours
- There are areas of floodprone land that limit accessibility (eg. to the Googik Track)
- Locating views from higher points are limited: generally filtered by trees or not accessible (eg. top of the landfill)
- There is no sense of arrival (by road) traveling from Port Macquarie CBD. Institutions have some (small) road signage but nothing distinguishes the precinct as a 'place'
- Oxley Highway at the northern entry (John Oxley Drive) is edged by high noise fences that constrain views beyond the road corridor, adding to a sense of disconnect from the landscape.

Opportunities

- Protect trees on ridges / high points as these are key character-giving elements for medium and more distant views
- Design new built form to respond sensitively to the environment, particularly to retain and capture views to areas of native bush
- Introduce street tree planting to frame views towards the skyline and treed ridgelines
- Use wayfinding and information signage to highlight and direct views (and movement) towards important features (both natural and built).

Understanding the place: underlying structure



View south from Lake Road over houses and Council-owned land towards the Hospital, showing the treeline along Wrights Road



View north from the UNSW Rural Medical School towards Toorak Crescent, a potential formal connection to Lake Road



The industrial area is glimpsed along the informal path between Highfields Circuit and Merrigal Road



The street vista looking west along Wrights Road offers long distance views towards the hills of the hinterland



Street vista looking west along Kingfisher Road is framed by mature vegetation on each side of the road



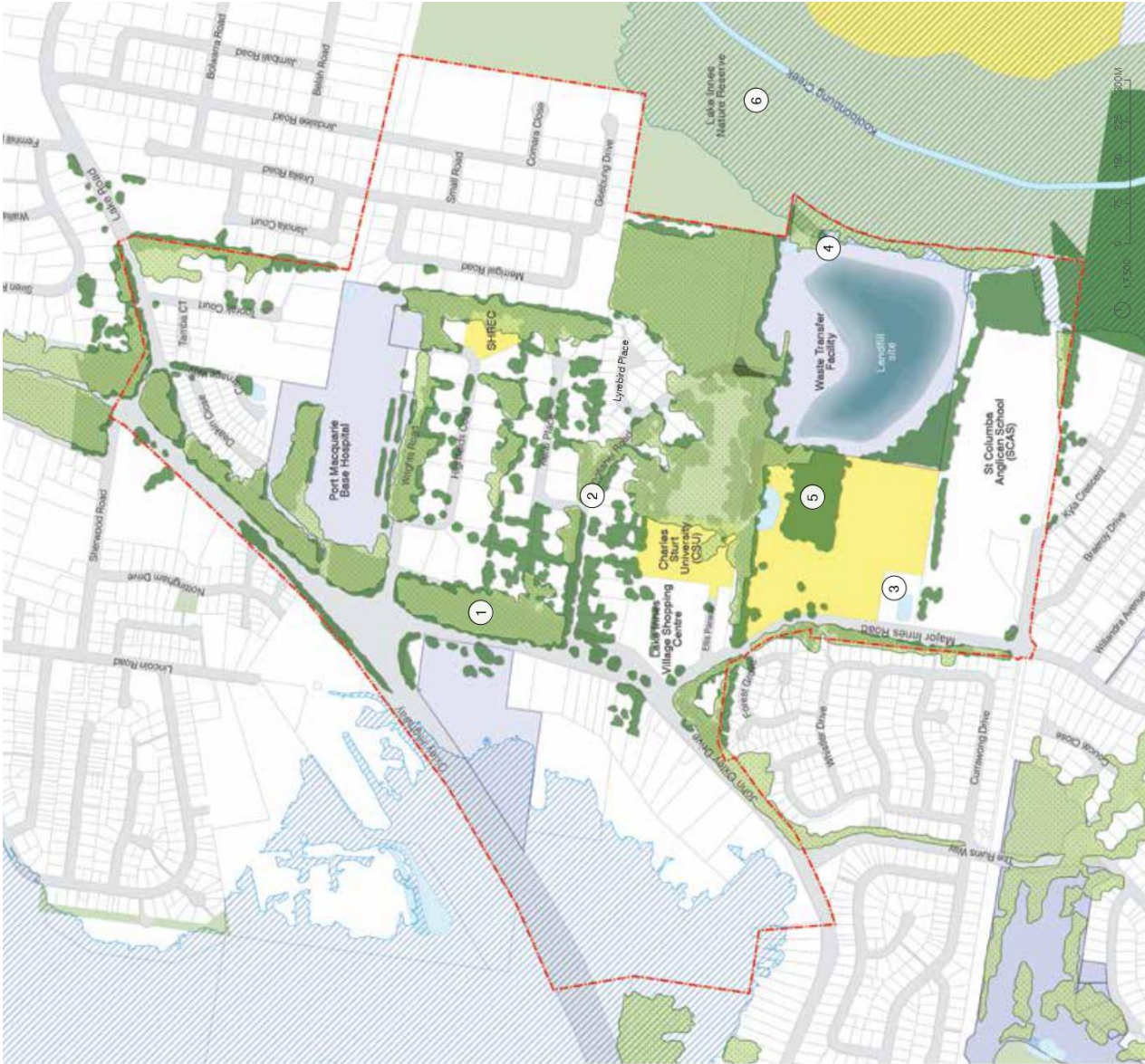
Looking south from the CSU parking lot over land to be developed for the University's Stage 2 Master Plan, a strong green edge and dense tree canopy to the west



View east from Major Innes Drive towards SCAS, with the mature vegetation of Lakes Innes Nature Reserve in the background



From the top of the former landfill site over the Lakes Innes Nature Reserve the residential areas and distant hills east of the precinct can be seen



Understanding the place: underlying structure

3.2 Landscape and ecology

Issues

- The precinct's development has seen the slow erosion of native vegetation; this was identified by EBD participants as typical of a wider regional issue for Port Macquarie-Hastings.
- Tree canopy is a defining and appreciated element, at risk from development / intensification of uses
- Koala habitat restricts development in some areas: along Oxley Highway and Deakin Close, and east of SCAS (preventing the school from putting sport facilities in this location)
- Proposed southern orbital alignment potentially impacts on the National Park, and generally on trees and koala habitat
- Unknown condition of landfill site constrains activity on or near it (gas monitoring is under way). Current buffer of 250m applies for any development except groundworks
- Waste Transfer Facility (WTF) increasingly at odds, as a land use, with encroaching new development around it. Areas of WTF land are contaminated, limiting ability to reconfigure the site
- Toe of landfill extends into site occupied by Waste Transfer Facility, effectively reducing useable land (other than for groundworks)
- Environmental Management Plans are required for development applications associated with some properties, potentially constraining development.



Understanding the place: underlying structure

Opportunities

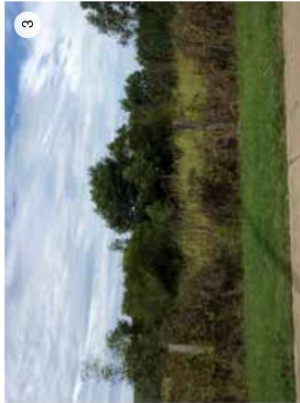
- Preserve key corridors of canopy trees and identify where other non-essential existing tree canopy could be thinned or removed
- Offset tree canopy / koala habitat loss with compensatory planting in better locations
- Consider innovative future uses for the landfill site
- Develop a management plan for the WTF on a reduced footprint, eventually to be moved offsite and the land used for parking / access.
- Existing forested land east of SCAS has low environmental value
- Provide guidance for new development around planting of endemic species that support local fauna
- Draw on presence of koalas to help differentiate this campus from others, particularly to attract overseas students
- Introduce street tree planting that strengthens / extends green corridors into and through the precinct (for ecological, visual and amenity benefits).



Dense tree canopy in the road reserve along John Oxley Drive is identified as Koala habitat, which is at risk from road upgrades



Kingfisher Road is framed by mature trees that give identity to the precinct and should be preserved



The council owned detention base has been identified as a suitable location for development as an aquatic centre



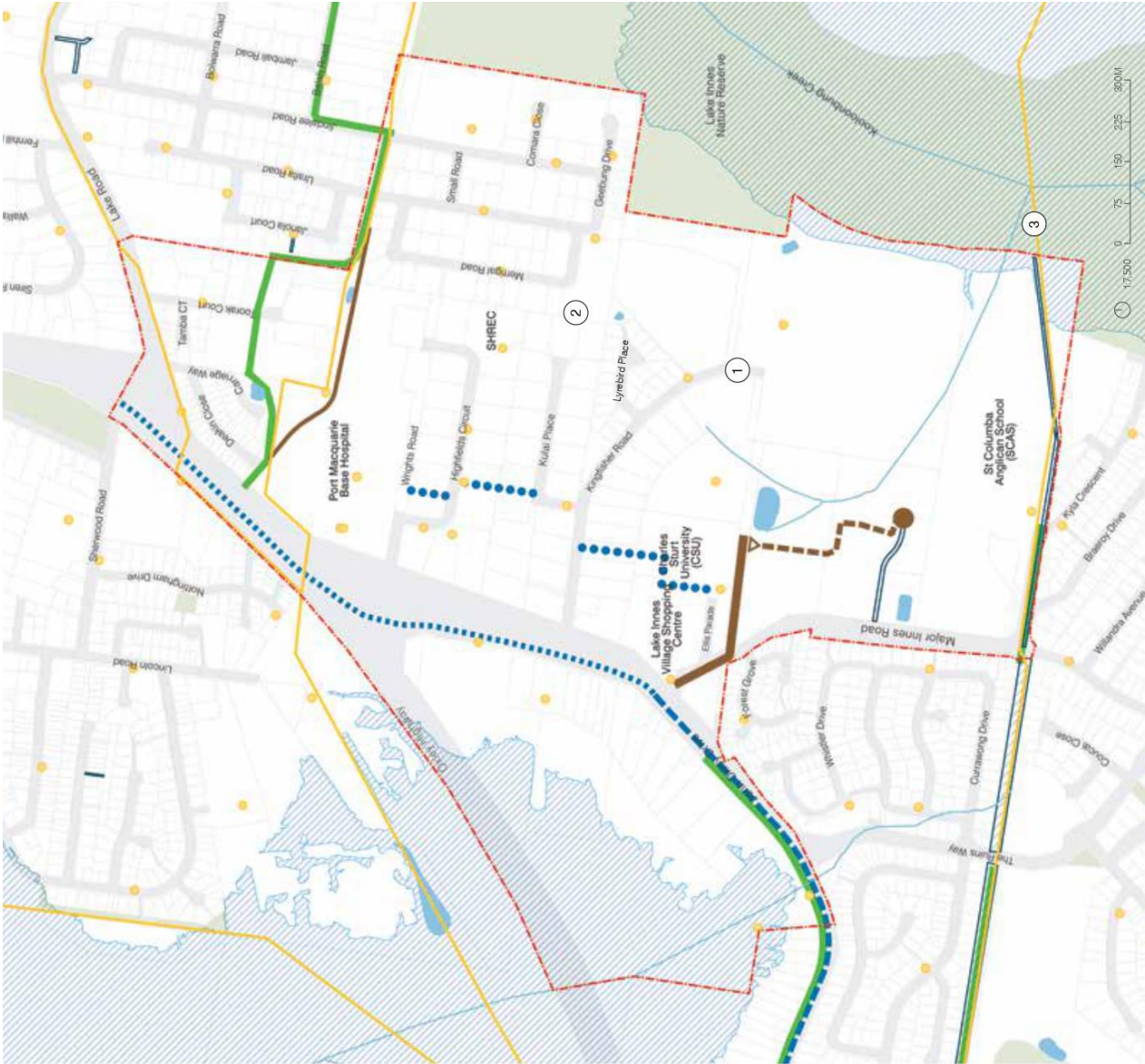
There is currently a buffer zone around the former landfill site, preventing development. However, recreational opportunities could be explored (eg similar to Sydney Olympic Park)



Existing forested land south-east of CSU and the adjacent student accommodation is flood-prone and not identified as koala habitat: it offers opportunities for redevelopment



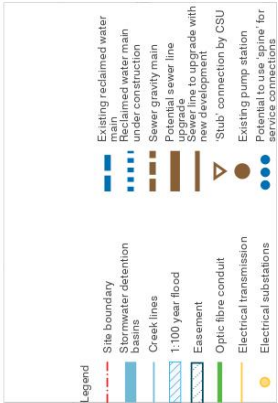
Lakes Innes Nature Reserve is accessible via the Google track, offering a regional walking / ecological experience



Understanding the place: underlying structure

3.3 Services and infrastructure

- Issues**
- The precinct is a 'black spot' for communications: fibre optic is only provided to the northern part (Base Hospital); and internet connection and speed is intermittent and / or poor through the rest of the area
 - Stormwater runoff is an issue – parts of the precinct are muddy swampland when wet – and systems will need to accommodate increased population and larger areas of hard surface compared to the current extent of deep soil that contributes to stormwater infiltration
 - CSU will require services for significant growth in their Stage 2 Master plan, including for teaching facilities, science / sports / nursing labs, and a tiered theatre convention centre. Related accommodation needs will increase, putting pressure on services infrastructure.
 - Trees and a gas line between SCAS and the landfill site constrain development of that land, as does a current landfill monitoring buffer zone of 250m
 - The current sewer network is undersized in terms of facilitating additional development
 - The EPA have indicated they do not support any words or alterations to the former landfill site
 - There is poor road / utility access to the Waste Transfer Station and competing use on roads between residents and users of the Facility.



Understanding the place: underlying structure

Opportunities

- The easement along the southern boundary of SCAS is a potential alignment for a future Southern Orbital road connection
- Provide stormwater infrastructure to manage run-off and flooding while maintaining the established 'green' character
- Design stormwater infrastructure to address water quality and quantity, considering the area drawings to surrounding wetlands and Lake Innes Nature Reserve
- Upgrade the local sewer network to provide capacity for future development
- Council and Essential Energy work together to determine the location of substations and linear power infrastructure that does not preclude implementing new connections and development parcels
- Link the precinct's learning and health institutions to regional, national and global networks, so that they can function and compete in the virtual space.



Access to the Waste Transfer Facility is through the residential neighbourhood



Stormwater easement south of Merrigal Road – an opportunity for enhancement / naturalisation



Electricity poles and wires along the Powerline Trail that traverses Lakes Innes Nature Reserve from west to east, passing south of SCAS land

Understanding the place: movement network

3.4 Street network, vehicle movement and parking

Issues

- At the broader scale (refer Section 1.5) the airport has only a single, flood-prone access road that is a risk in case of blockage or emergencies
- Intersections are at capacity at Oxley Highway deviation, resulting in journey delay and unreliability during peak times
- Proposed Southern Orbital alignment, if located north of SCAS, is challenging with impacts on the school, residents and the environment. There are process issues associated with the alignment through the National Park (would likely take two years to get the required Act of Parliament)
- Along Oxley Hwy and south of Deakin Close are identified koala habitat areas which would be impacted by road widening / street upgrades
- Pick up and drop off congestion at SCAS at the beginning and end of the school day is putting pressure on local streets and intersections
- Parking is seen to be at a premium throughout the precinct:
 - Streets through the centre are overlaid with parking associated with Hospital
 - The Shopping Village parking area is being used by all-day workers, not just shoppers
 - The Hospital has identified the need for up to 200 more parking spaces for staff and visitors
- New parking proposed by SCAS along southern easement would conflict (in the longer term) with the proposed Southern Orbital location.
- Similarly new parking proposed by the Hospital on the currently unmade portion of Wrights road would conflict (in the longer term) with a street connection into the industrial precinct
- The pedestrian network is not well defined and uses informal access points.



Legend

- Site boundary
- Arterial/road
- Sub arterial road
- Collector road
- Future parking
- Existing parking
- Future transport hub
- Future signalised crossing
- Potential new connections for active transport
- Bus removed by road widening
- Existing bus stop
- Bus stop widening
- Bus stop relocation

Understanding the place: movement network

Opportunities

- Align investment in roads by local and state government to optimise benefits for the area
- Enhance existing roads and streets (for example with kerb and guttering, clearly marked lanes and parking zones)
- Take freight off John Oxley Drive (prioritise the Oxley Highway) to better support precinct uses
 - Improve access points to the hospital
- Locate the future Southern Orbital south of SCAS to keep the school within the precinct
- Consider purchasing land for sale between John Oxley Drive and the Oxley Highway to accommodate future Southern Orbital road and / or parking node
- Link the precinct with the industrial area to assist movement in and out of the precinct, connect to parking / public transport nodes, and to employment areas
- Provide decentralised parking linked to the pedestrian spine
- Rationalise parking across the precinct. Consider coordinated approaches to providing and managing parking (eg. between institutions, the Shopping Village and private practitioners)
- For the Hospital, consider a range of measures to manage pressures on parking, in association with improved pedestrian and cycle access
- Enable community access to SCAS facilities, including sports field and clubhouse.



All residential streets within the precinct are cul-de-sacs, like this example at Carriage Way. The consequently disconnected precinct is hard to navigate and forces traffic to detour



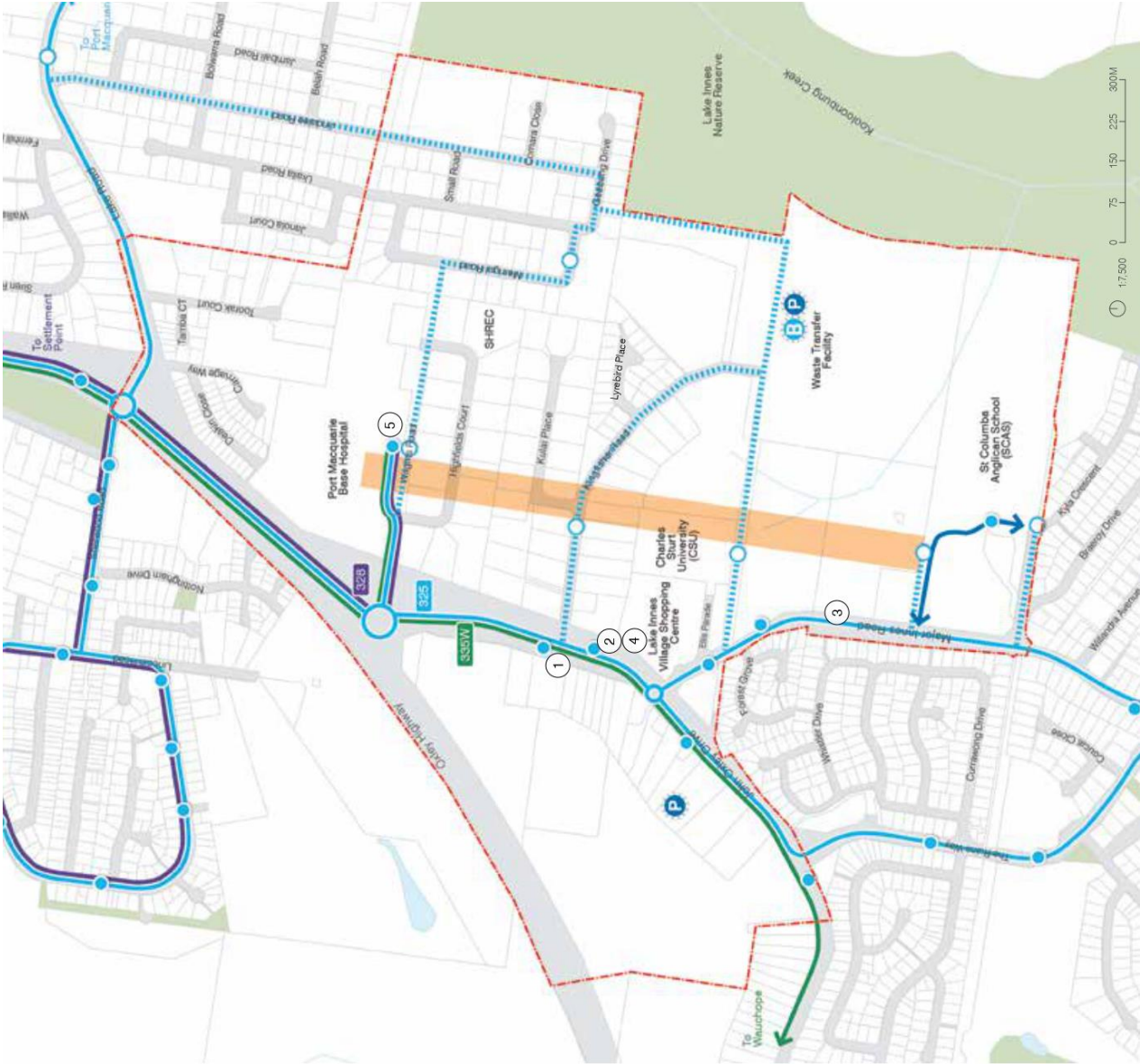
Relocating the helicopter pad on top of the Hospital Emergency Department would free up land for better access and parking arrangements



There is high demand for parking throughout. vehicles are parked on site and on unused private land



Cars are typically parked on grass verges along Highfields Circuit



Understanding the place: movement network

3.5 Public transport

- Issues**
- Bus services are infrequent and routes are indirect, particularly between key destinations (precinct / city centre and residential catchments). This is of particular concern to school and international university students
 - There are many bus stops, but poorly located
 - none within the precinct, and those on the main roads not well connected to safe and direct pedestrian crossing points
 - Footpaths around bus stops are lacking, or terminate in the middle of grassed verges
 - There are no transport interchanges / park and ride facilities close to the precinct, increasing reliance on private vehicle use.
- Opportunities**
- Create (vital) links between the precinct and the CBD
 - Integrate car parking with public transport hubs to enable people to park on the edge of the precinct and walk to destinations
 - Align public transport routes and stops to origins and destinations to support walkability
 - Design public transport routes and stops to support a 'healthy precinct', in particular linked to a pedestrian spine that connects institutional anchors, and also supporting pedestrian 'walking loops'.
 - On-demand buses to service the university and hospital (through Busways)
 - Rationalise the existing bus stops and routes to provide more, and more direct, services between the precinct and the city centre in particular.



Understanding the place: movement network



This bus stop on the eastern side of Oxley Highway is an example of footpaths around bus stops that terminate in the middle of grassed verges.



On the western side of Oxley Highway, the bus stop closest to the shopping centre has no footpaths connecting to it and lacks a safe and direct pedestrian crossing across the busy road



The bus stop south of CSU, on the eastern side of Major Innes Road, is located next to currently vacant land, at least a 5-10 minute walk from the closest destinations and dwellings. A safe pedestrian crossing to the residential areas is missing



This timetable at the bus stop next to the shopping centre shows that bus services are infrequent and go to limited destinations



Large buses have difficulty navigating around the narrow corners of the Hospital parking lot



Understanding the place: movement network

3.6 Pedestrians and cyclists

Issues

- There are safety issues on major roads where the lack of footpaths and crossings creates potential vehicle-bicycle-pedestrian conflict. John Oxley Drive is a major barrier, with heavy traffic creating a 'pedestrian unfriendly' environment. Sienna Grange residents are particularly isolated from amenities and shops
- The street network is not 'joined up', making it hard to know where you are going, and how to get there. This contributes to a perception that the distances between destinations are longer than they are, and leads people to drive when they might walk
- The quality of the pedestrian and cycle path network is generally poor, with footpaths that are narrow, incomplete and of variable quality (where they exist at all). It is difficult to negotiate for many pedestrians, and effectively inaccessible for others
- Some informal through block links are not well located in relation to destinations ("bush bashing" is ad hoc and sometimes through private land).
- Informal connections are somewhat isolated and lack passive surveillance (eg. the 'Goat Track' between Kingfisher Road and Highfields Circuit parallel to John Oxley Drive is reasonably pleasant during the day but uncomfortable after dark)
- Every major institution (Hospital, CSU, SCAS) has its entrance direct from its car park, reducing their visibility as well as their 'inviting' quality for pedestrians
- The Google Track is muddy and wet in places; in others cyclists are forced to dismount to negotiate barriers. The biggest issue however is its lack of visibility and connections back into the precinct
- Oxley Highway and Lake Road are barriers to movement beyond the precinct
- The Lake Innes Shopping Village is a 'drive to' destination (apart from CSU students).



Understanding the place: movement network



John Oxley Drive is a major barrier and unsafe to walk along without any footpaths and crossings



Lack of pedestrian crossings across John Oxley Drive and Kingfisher Road



Footpath on Toorak Crescent is narrow and segmented by private drive ways that receive priority



Shared path west of the hospital is somewhat isolated, pleasant enough during the day but does not feel safe after dark



Narrow footpath on Wrights Road ends in the verge - typical of the precinct



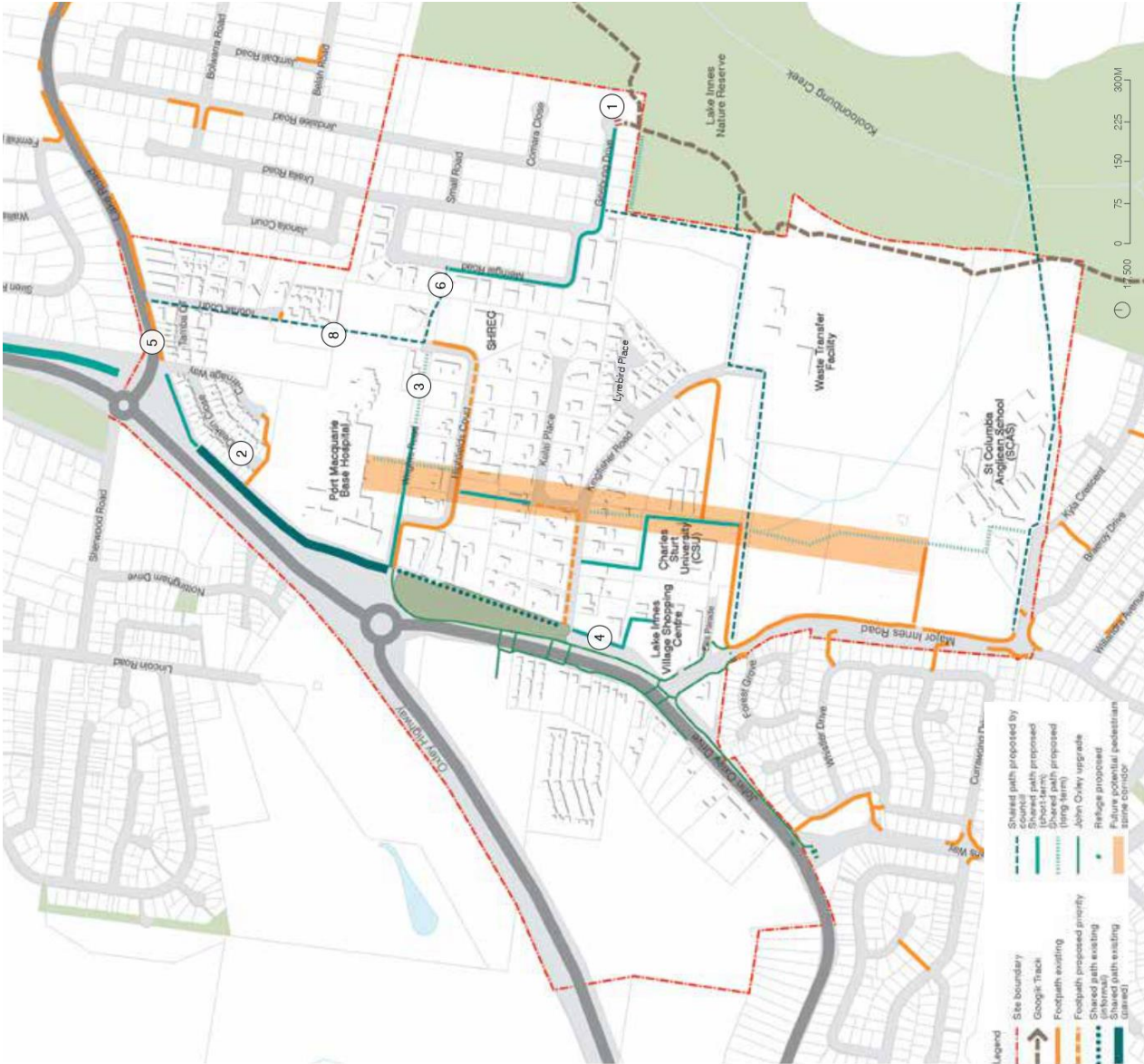
Poorly located light pole in recently completed footpath (leading to CSU student accommodation) is problematic for prams or wheelchair users



Entry to the Hospital is vehicle dominated



CSU has its entrance directly from the shopping village car park, undermining a sense of arrival and identity



Understanding the place: movement network

Pedestrians and cyclists

Opportunities

- Create opportunities for walking and cycling safely along and across John Oxley Drive (noting that the Bunnings development currently under construction includes a new footpath from Wrights to Kingfisher Road)
- Increase awareness and use of the Googik Track both within and beyond the precinct
- Enhance / formalise missing pedestrian connections in the network
- Enable longer term new pedestrian connections:
 - A north-south pedestrian spine linking the institutions and facilities through the precinct
 - Connection from CSU into SCAS grounds (subject to legal and safety requirements)
 - From the precinct to the industrial area (with any new streets)
- Complete missing pieces of footpath
- Enhance public space within the Shopping Village for pedestrians to sit and relax
- Add facilities to support walking and cycling at key points, for example: water fountains, seats with views, outdoor gym equipment stations, shelter elements, activity areas, info / wayfinding features
- End of trip facilities at major institutions (showers, change rooms, bike storage, secure lockers) for growing student and working population.

Understanding the place: movement network



Opportunity to formalise the connection into the Google track from Geebung Drive, generally connections and wayfinding from the HEP and industrial area can be enhanced



Residents drew a pedestrian crossing across Deakin Close, suggesting a desire for better pedestrian priority and safety



Opportunity to utilise Rotary car park, to extend pedestrian connection along Wrights Road towards Merrigal Road



Informal desire lines have formed in the absence of paths, as here from the shops north, parallel to John Oxley Drive – opportunity to create new connections reflecting them



Recently completed footpath along Lake Road is a rare example of a sufficiently wide path



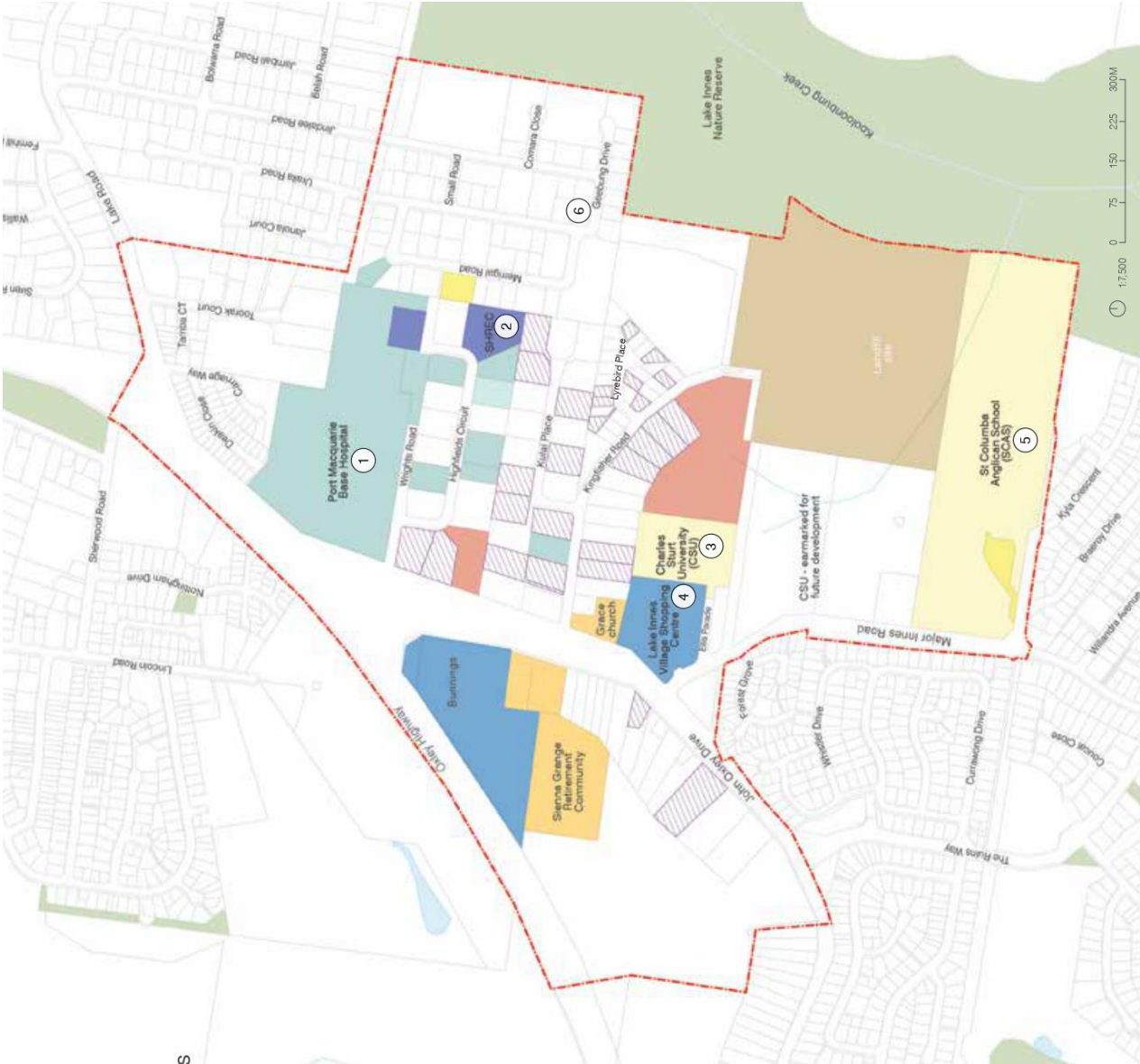
Informal path from Highfields Circuit to Merrigal Road is neither very visible, nor fully accessible – opportunity to enhance



Cyclists have to dismount at some points to continue along the Google track: review accessibility for all users



Informal path from Toorak Crescent to the Hospital is only accessible through a break in the fence at the Hospital car park - opportunity to formalise a pedestrian / cycle link



Understanding the place: the community

3.7 Land uses, activity nodes and shared facilities

Issues

- Land use zoning limits the full range of health / education / research uses in parts of the precinct, and complementary uses (such as entertainment, accommodation and support services) in others
- Regional growth means increased use of the Lake Innes Shopping Village by surrounding communities, putting pressure on traffic and parking
- Land west of John Oxley Drive is strategically located but ownership patterns and approved DA (Bunnings approval is out of step with HEP-related aspirations (supporting uses for the precinct)
- The Waste Transfer Facility is not a good fit with aspirations for the precinct. Access to it is currently through lower-scale residential area, and impacts will become greater as the precinct develops with more, and more intense, residential and commercial uses
- Both CSU and SCAS have identified the Council-owned detention basin site as suitable for part of their master plan aspirations
- Lake Innes Shopping Village is currently limited to providing for basic food / supermarket needs; and no after-hours offerings (eg. cafés, restaurants, bars) or community facilities
- Creches in or near the precinct are at capacity.



Understanding the place: the community

Opportunities

- Encourage uses that reinforce distinct but supporting character areas
- Strengthen the perceived and physical relationship with the airport both for its role as the first 'gateway' to the precinct, and to capitalise on its future role as a business hub connected to the precinct's agglomeration of land uses
- Align individual master plans to achieve:
 - co-location of services infrastructure;
 - more shared spaces between CSU/SCAS
 - sporting, cultural and technical easier link between SHREC, CSU campus and hospital
 - shared facilities for health / medical research / education eg. library, meeting, study and teaching spaces
- Diversify the range and 'reach' of land uses:
 - Increase number and variety of shops and businesses to service the precinct and surrounding residential neighbourhoods
 - Provide for short-term accommodation and hospitality
 - Shared management and use of child care
 - Small-scale, including temporary, 'pop up' uses eg. small bars, coffee carts, market stalls, along a central north-south pedestrian spine, where it meets destinations
- Design new streets as 'places' not just movement corridors.



The Port Macquarie Base Hospital as a major land use plays a large role in the precinct



The SHREC is a good example of shared facilities for health / medical research / education, with a variety of useable spaces



CSU is a major tertiary education facility with plans for extension in the precinct



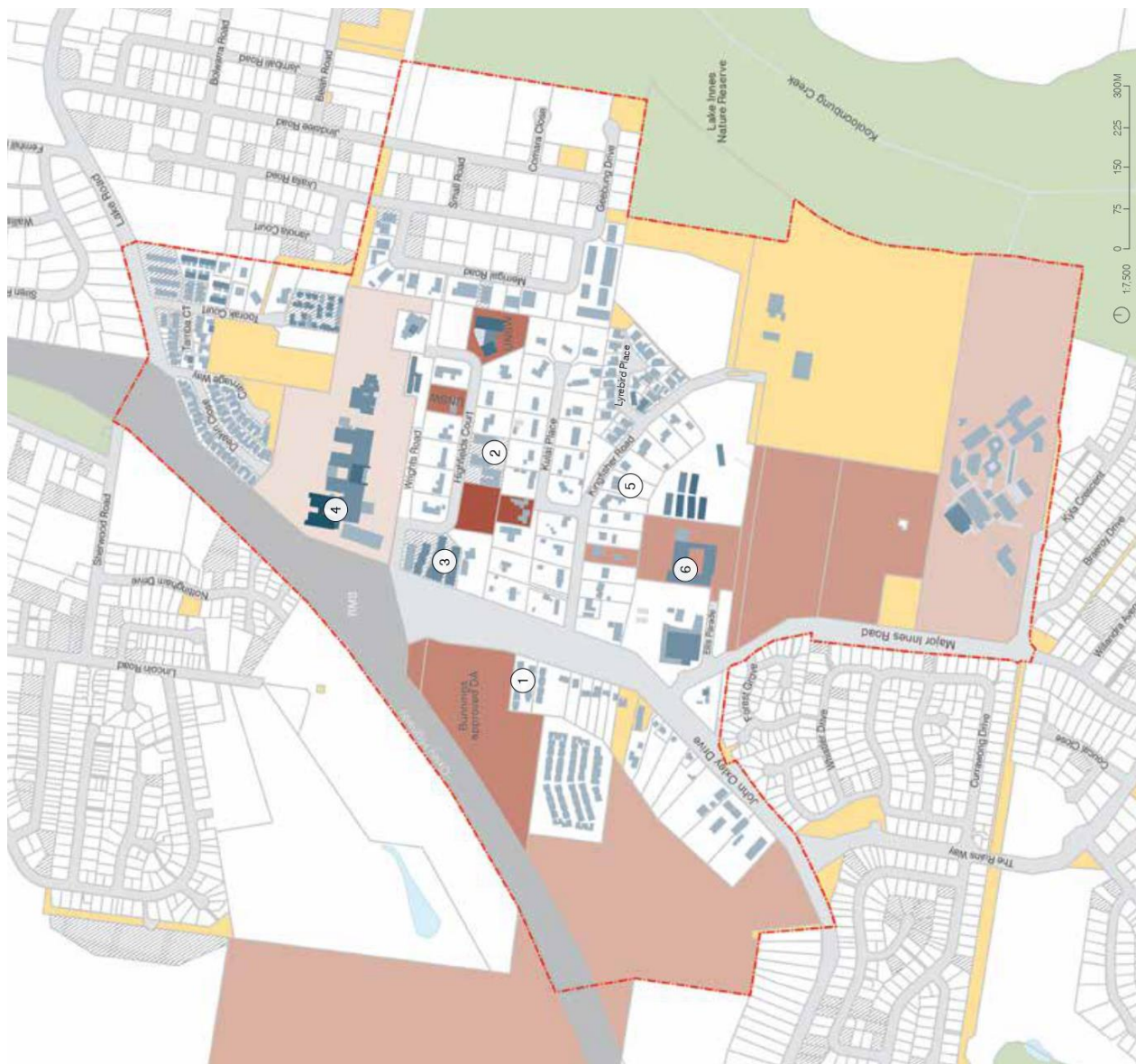
Lake Innes Shopping Village is currently limited to providing for basic food / supermarket needs; and no after-hours offerings (eg. cafés, restaurants, bars) or community facilities



SCAS is a major educational facility with plans for a shared aquatic centre and sports grounds in the precinct



The Little Brewing Company on Geabung Drive shows the potential for more creative industry, micro breweries, coffee roasters in the industrial zone



Understanding the place: the character

3.8 Land ownership and built form

Issues

- The large Bunnings store under construction has been identified as a non-complementary use; it is not compatible with the health / education / research aspirations of stakeholders
- Transition to different uses with larger footprint building types has already resulted in tree loss on large (2000 m²) residential lots
- Student accommodation building types do not facilitate social interaction.

Opportunities

- Build on the great campus character with car-free areas
 - Create a north-south pedestrian spine unifying and activating the precinct, coordinating:
 - CSU-owned site linking to Kingfisher Road
 - sites between Kulai Place and Highfields Circuit
 - Council-owned land facilitates:
 - new and enhanced connections for pedestrians within the precinct
 - new road connections including the Southern Orbital and linkages with the industrial area
 - open space north of the Hospital being developed for public use
- The CSU Stage 2 master plan concept can accommodate a pedestrian link through buildings, and an additional external 'spine' link.
- Retain large trees and shrubs edging Burnings site to soften the Oxley Highway interface
 - Land within the western area could support future Southern Orbital and / or parking and public transport node
 - Council-owned land currently used as a detention basin is a suitable location for an aquatic centre which could serve SCAS, CSU and the wider community.



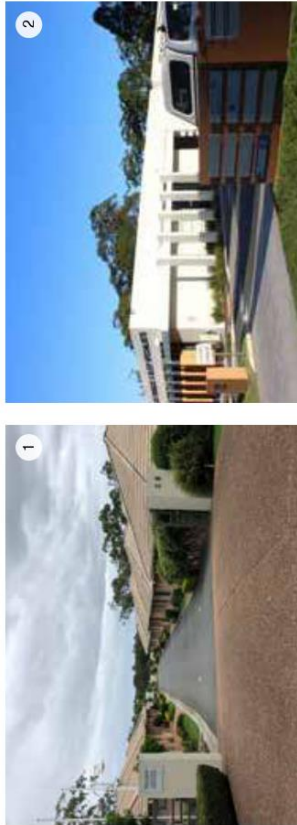
Understanding the place: the character

Confirmed needs and aspirations

Through the EBD process, key stakeholders shared their aspirations for their future. These are heads of consideration for future built form opportunities.

Future needs of key stakeholders

Land owner	Current population / facilities	Future population	Implications for needs
Base Hospital	37,000 patients per annum 200 beds 1,500 staff	Not expected to expand significantly in size but keen to grow research and innovation	Sufficient building stock (for the immediate future) but insufficient parking areas to support it
University of Newcastle	SHREC 0 student rooms	Modest increase in scale	Stronger links with hospital around research to grow the hospital's research capacity
Lake Innes Shopping Village	4,000 m ² of retail	Looking to expand	Limited space to expand horizontally for buildings and parking. Expansion to support the UGMS (10 year horizon / 10,000m ² commercial across the whole precinct)
CSU	900 students (100 international) 150 staff 100 of 250 beds available	2,600 students (500 international) 300+ staff 600 beds	Existing accommodation full in 3 years Requires substantial development to accommodate projected student numbers Currently, very limited work opportunities for overseas students within the precinct (and inadequate public transport to access work outside it)
SCAS	1,100 students	1,200 students in 2019	Plans to enhance existing and develop new facilities: registered conservatorium; environment centre; netball courts; front and rear oval refurbishment with grandstands and amenities, pool
Airport	226,000 passengers per annum	New terminal commencing 2018, new runways planned	2010 master plan & addendum for: Expanded airside facilities 39 hectare business technology park 600 car spaces 13 hectares residential New flood-free access road Infrastructure / servicing upgrades



1
Townhouses built 'down the lot' tend to result in large areas of driveway, blank side walls to the street, and little in the way of tree canopy; this building type is not preferred



2
The growing number of health / medical suites on Highfields Circuit are typically 1-2 storey buildings with car parking on-site – covering most of the site



3

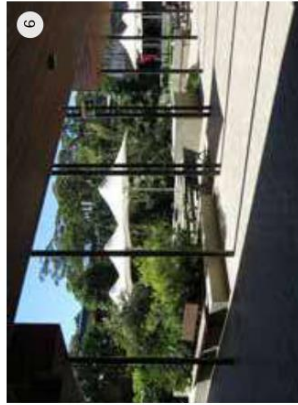


4
Hospital facilities are housed in a range of buildings up to 4 storeys, with larger institutional footprints on a strong presence



5

6
Student accommodation should provide a range of housing types to support a diverse population, including mature students with families



7
Kingfisher Road remains predominantly residential, single houses in generous gardens with mature vegetation including tall trees

8
The CSU courtyard is a good precedent for future campus development: a well defined, high amenity gathering space



Understanding the place: the character

3.9 Streetscapes and public spaces

Issues

- There are no public spaces in the precinct, although the Shopping Village offers some small areas for sitting
- Streetscape character varies from vehicle dominated along main corridors (the Highway and John Oxley Drive) to very informal in the residential streets (no kerb and gutter, verges set to grass, a mix of high, low and no front fences). Neither condition supports easy, comfortable pedestrian access
- Streetscape character is inconsistent. There are few street trees in the formal sense; most of the canopy and other vegetation is on large (mostly private) blocks of private residential land. Some large eucalypts have simply not been removed forward of the front boundary
- Private areas and fenced off areas not intended to be accessed are being used informally by members of the public. They are generally narrow, overgrown and not level; they are also not overlooked and do not feel safe.

Opportunities

- Develop a themed approach to streetscape treatments, including a palette of suitable street trees, pedestrian facilities, and street furniture.
- Develop the streetscape 'theme' to both relate to the Port Macquarie 'family' and also create and strengthen an identity for the precinct
- Prioritise a new pedestrian spine as the main open space 'collector' of activity
- Introduce fully accessible, 24-hour public open spaces and locate them at key nodes, including along the spine, to support a lively, vibrant and connected community
- Turn Council's northern parcel of undeveloped land into a public open space, serving people beyond the immediate area: local residents, the Hospital, and the Lake Road Industrial area
- Reconfigure Hospital car parks to fulfil the need for outside spaces where people (patients, staff, visitors) can go to have conversations.

Understanding the place: the character



The western side of John Oxley Drive, in contrast to the lush vegetation on the east, is bare of trees



The approach to the precinct has a motorway character, treating the large roundabout and tall noise walls would create a more inviting identity



Large eucalypts in the verge on Kingfisher Road are remnants of stands of native bush, they could be supplemented to create strong avenue planting



Lack of footpaths and a low curb along Kulai Place are an opportunity for a shared space that would form part of a future pedestrian spine. Street trees could be planted in the wide verge



Outdoor spaces at the Hospital are limited, this terrace overlooks the car park



CSU has some publicly accessible, robust and simple benches, a good precedent for casual seating elsewhere



The Shopping Village offers some small areas for sitting as there are no public spaces (in public ownership) in the precinct



Opportunity to turn Council's northern parcel of undeveloped land into an open space for both passive and active recreation



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04 Strategic drivers

This short section summarises the 'cues' from each stage of the process – the research, EBD, and subsequent testing of opportunities.



Strategic drivers

These are the overarching design drivers for the precinct. They lead directly to the vision, and from there to the design principles and strategies.



From the historical research:

- draw on the cultural, physical and land use history of the precinct for place-specific design
- acknowledge and respect the original inhabitants' relationship to the land
- celebrate and connect to the landscape: the topography, indigenous plantings and native animals
- break down the large subdivision pattern to link through the precinct-
- be part of Port Macquarie while retaining the distinctive features that have formed the character.



From the strategic setting:

- give effect to the Regional Plan and Urban Growth Management Strategy and the Economic Development Strategy
- provide for appropriate infill development that supports Port Macquarie's growth
- enable the key health and education uses that are the backbone of the local economy

Strategic drivers



From the precedent research:

- to thrive and be competitive, institutions need to work together to share spaces, facilities, and access to services
- a cooperative governance approach is key to successful implementation of the master plan
- interim 'incubator' buildings are catalysts for social change as well as for the ultimate vision
- campus models have changed: flexibility, adaptability, open learning, are expected
- the HEP already has some features of successful innovation precincts: its location, mix of land uses, quality of institutions and appetite for collaboration but needs a coherent vision to bring these together



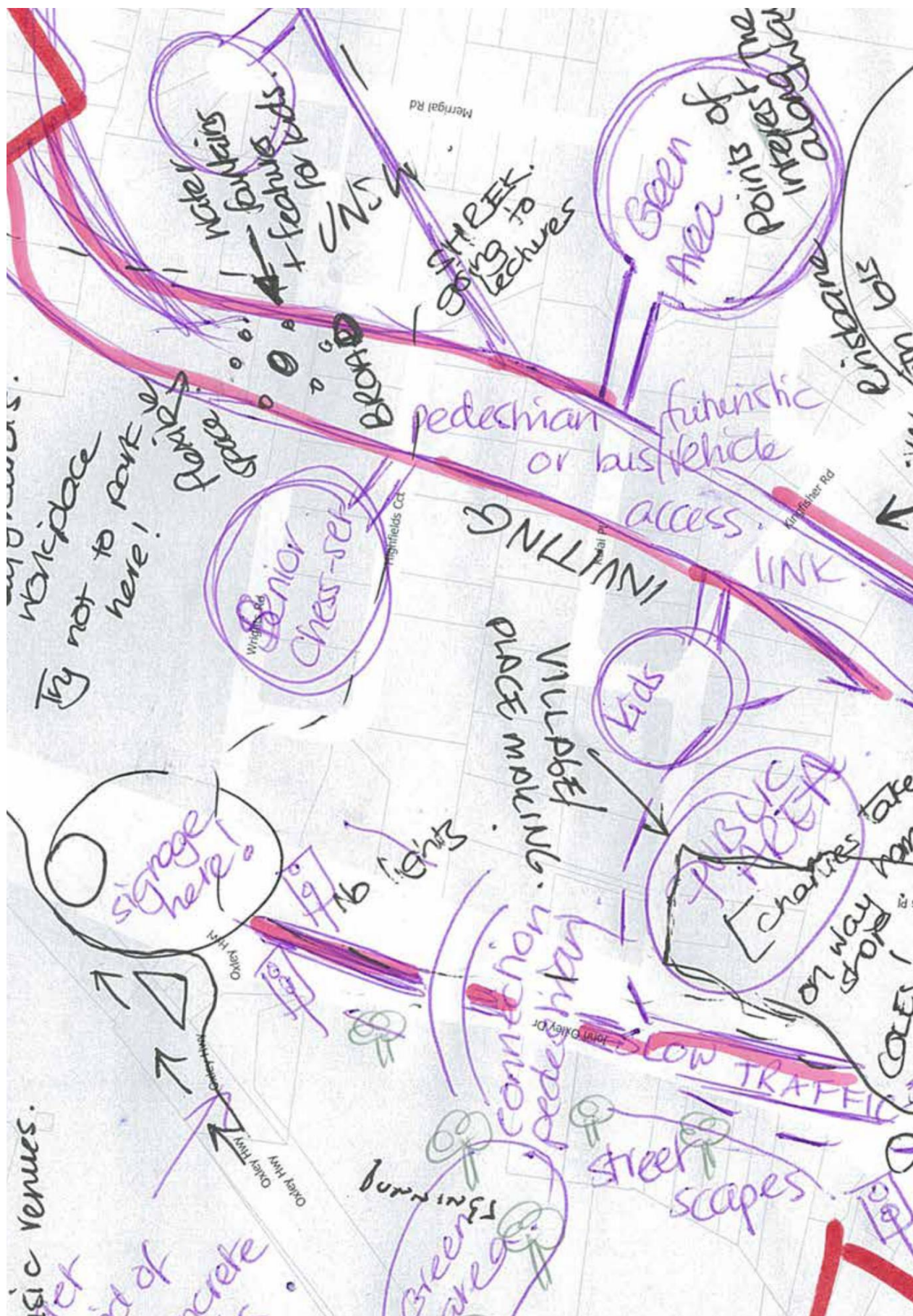
From the Enquiry by Design process:

- the major institutions are positioning to cement a reputation for excellence and their regional, national and international visibility to attract staff, students, and funding
- physical and virtual connections between institutions need to be stronger to create genuine synergies around learning and research, to support that reputation for excellence
- growth in student numbers will be substantial and rapid, and they will need more social, economic and recreational activities than are currently on offer in the precinct
- workers and visitors also need more to do and more places to go, in keeping with a healthy and active lifestyle
- road access and parking for the major 'attractors' (hospital, universities, school, shopping centre) is under pressure
- there is a strong desire to create a more pedestrian and cycle friendly environment while also providing for vehicle access and parking



From the supporting analysis:

- the precinct is vital to Port Macquarie's sustainable growth and regional role; its core health and education role needs to be supported but it also needs more diversity and 'reach' of land uses
- there is a tension between maintaining the natural environment (mature trees, koalas) which is the most positive character-giving feature of the precinct, while enabling new development. Balancing these is a key driver
- the precinct can and should be better connected to the airport, the CBD, the national park and to other regional facilities – to both benefit from and contribute to them
- the quality of the built environment is mixed and an identifiable and attractive identity should be established
- the precinct is already in transition. Change is happening fast; there is a risk of losing the ability to deliver a well-connected and high quality environment for stakeholders and the community



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05 Vision

The EBD process generated some definite 'likes', opportunities, and individual and shared hopes for the future. It culminated in strong vision statements that have been developed in this section. The vision is equally about the place and the people—what kind of place will it be? Who will live, work, visit and study here? And what are the design principles that will support it?





- Healthy by design
- Premier destination for health, research and innovation in Australia
 - Wellness as a priority
 - Colourful, peaceful, tranquil
 - Uniquely connected to nature
 - Vibrant centre for healthy living

A place of excellence

5.1 Vision for place

The precinct will be...

A vibrant and innovative centre of excellence connected locally and to the world

Accessible from anywhere

A hub for complementary services, open to all
And will have the capacity to evolve, and the flexibility to adapt as the region changes.





- Connected locally and to the world
- People sharing spaces with no boundaries
 - Connected to Port Macquarie and beyond
 - Linked to the industrial area and widely to industry
 - An accessible, campus-style destination
 - Connectivity is both physical and technological



Flexible

- Forward looking and agile
- Continually planning for the next future
- Capacity to evolve
- Flexibility to adapt as the region changes



A hub for complementary services

- For older people
- For younger people
- Workplaces, community places, play places, living places
- Economic powerhouse fostering research and innovation
- Interactive, collaborative,



Vibrant

- A social hub, an attractive centre for opportunity
- Flexible spaces where things happen spontaneously
- Points of interest along the way
- Lots of seating
- Active and alive day and night
- Safe, welcoming, accepting

Vision

We belong here....

A life of excellence

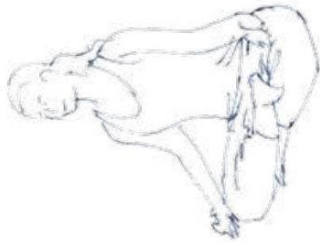
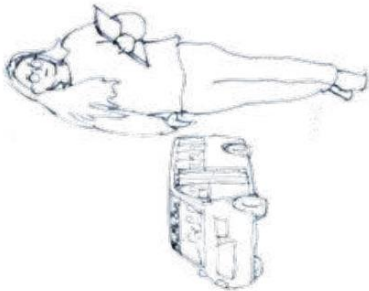
5.2 Vision for people

The people will be...

...diverse

... able to benefit from all the services,
connections and facilities

... proud of this place where they live,
work, study and relax



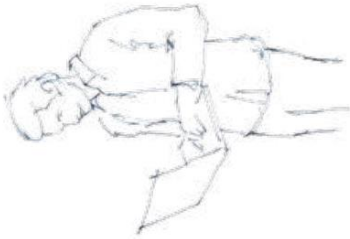
University Student

- An international student from Nepal
- Lives in CSU student housing
- Uses hospital, SHREC, CSU, shops
- Wants to be part of a community
- Wants activities within walking distance
- Wants a regular bus service into town for beach and entertainment

Nurse

- Lives in town
- Uses hospital, creche, shops
- Wants to walk to the shops, have a space for meditation

Vision



Carer

- Lives in Wauchope, with parents in aged care
- Uses hospital, shops, support services
- Wants more opportunities to meet with friends near the hospital
- Wants a reflective and tranquil space

Researcher

- Lives in Sydney
- Uses hospital, SHREC, and industry (researching a robotic walking frame)
- Wants better short-term accommodation options in the precinct
- Wants convenience of entertainment and food near accommodation

High School Student

- Lives in Greenmeadows
- Uses SCAS, shops (as a hangout), SCAS music facility
- Wants a cycling path to school over Kooloonbung Creek, and convenient access to a local library
- Wants to grab a snack on the way and space to chill out

Koala

- Lives in the trees near SCAS (likes the sound of children playing)
- Meets other Koalas near Kooloonbung Creek
- Would like safer access to the trees near the hospital (to enjoy the sea breezes)

Vision

5.3 Design principles

The design principles were presented to stakeholders and finalised with their feedback.

Design principles do two things: they are a call to action – they ask for something to be done. They also carry the vision – embedded in them are the desired design outcomes for the precinct.

Design principles are important because they provide for design direction while enabling some flexibility. While the design itself might change or develop, it should always be tested against these outcomes.

Core principles

Role and identity

- Support a functional, productive and vibrant economy that reflects the shared aspirations of stakeholders and Council
- Draw on the unique character of the precinct to celebrate and enhance its national reputation for innovation and excellence
- Foster understanding of the role of the importance of the precinct for Port Macquarie and the region
- Increase visibility of the 'complete' offering of health, education, research, commercial and community uses within the precinct

Vision



Underlying structure

Topography, views and landmarks

Enhance vistas and street views that reveal the topography, and the relationship between the precinct and surrounding areas

Landscape and ecology

Be an exemplar for the sustainable co-location of nature, community and business

Services and infrastructure

Deliver high quality, high capacity, reliable communications to support the technical delivery of health, education, and research.



Movement network

Street network, traffic and parking

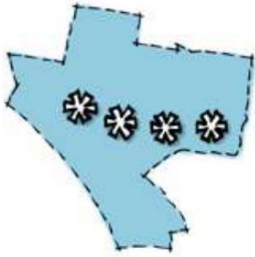
Balance traffic access and parking requirements with a pedestrian and bicycle friendly environment

Public transport

Enhance the quantity, quality and connectedness of public transport options to support walking and reduce vehicle dependence

Pedestrian and cycle network

Enhance and extend opportunities for pedestrians to move safely and comfortably through the precinct



The community

Land uses

Provide mixed and shared land uses to promote community life and vibrant local economies

Activity nodes and shared facilities

Create a lively and active network of streets and public spaces with high amenity, safety and security



The character

Built form

Provide sensitive, high quality and integrated urban, landscape and architectural design that works for multiple users

Streetscapes and public space

Create a range of high quality public spaces, with access to key institutions and public transport.





Design strategies

This section of the master plan takes the opportunities, vision, design objectives and principles, and turns them into urban design strategies. It 'zooms in' to areas that are particularly sensitive or could provide quick wins. It illustrates the design outcomes sought for the precinct.

Design strategies

Benefits

This table shows how the master plan will deliver benefits for the precinct in line with the vision and design principles.

Underlying structure

Principles	Delivered
Topography, views and landmarks	<ul style="list-style-type: none"> avenue planting frames views and vistas 'marker' treatment of John Oxley / Highway roundabout
Landscape and ecology	<ul style="list-style-type: none"> protection of deep soil zones for tree canopy hundreds of new street trees and pedestrian spine trees koala habitat protection
Services and infrastructure	<ul style="list-style-type: none"> north-south pedestrian spine integrates services and below-ground conduits

Movement network

Principles	Delivered
Street network, traffic and parking	<ul style="list-style-type: none"> new streets: Highfields to Merrigal (50m); Carriageway to Toorak (100m) on-street parking formalised and managed 2 parking hubs at the edges new pedestrian spine doubles as shared street on Kulai Place, Ellis Parade
Public transport	<ul style="list-style-type: none"> bus loop on existing roads and 900m of new road 7 bus stops at 'front doors' of institutions and Shopping Village plaza bus / parking hub location identified
Pedestrian and cycle network	<ul style="list-style-type: none"> a north-south pedestrian spine linking the major 'attractors' in the precinct 700m of new walking and cycling paths 150m of improved footpaths 5 new connections to local streets 3 new signalised crossings

The community

Principles	Delivered
Land uses	<ul style="list-style-type: none"> catalyst sites to assist in delivering the north-south spine zoning reinforces health and education uses activation of the north-south spine with retail / active uses focus for supporting commercial development associated with hospital and education uses across the precinct additional residential and temporary accommodation within the precinct to support additional visitors and residents permitting residential within the Shopping Village above ground floor retail

The character

Principles	Delivered
Built form	<ul style="list-style-type: none"> large front and rear setbacks to preserve and consolidate mature tree planting: "buildings in the landscape" up to 6 storeys enabled for commercial uses (excluding Hospital and Shopping Village) range of residential housing types provided for, from single detached to apartment dwellings up to 6 storeys Up to 6 storeys enabled for Shopping Village, Kulai Place on spine
Streetscapes and public space	<ul style="list-style-type: none"> 1 km pedestrian spine street trees reinforce existing canopy and east-west streets; contrasting tree species reinforce north-south pedestrian spine 1 large plaza linking CSU and the Shopping Village, and extended to the spine 2 smaller entry plazas for the Hospital and Aquatic Centre

Design strategies





Design strategies

Underlying structure

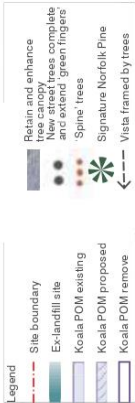
6.1 Topography, landscape and ecology

Design drivers

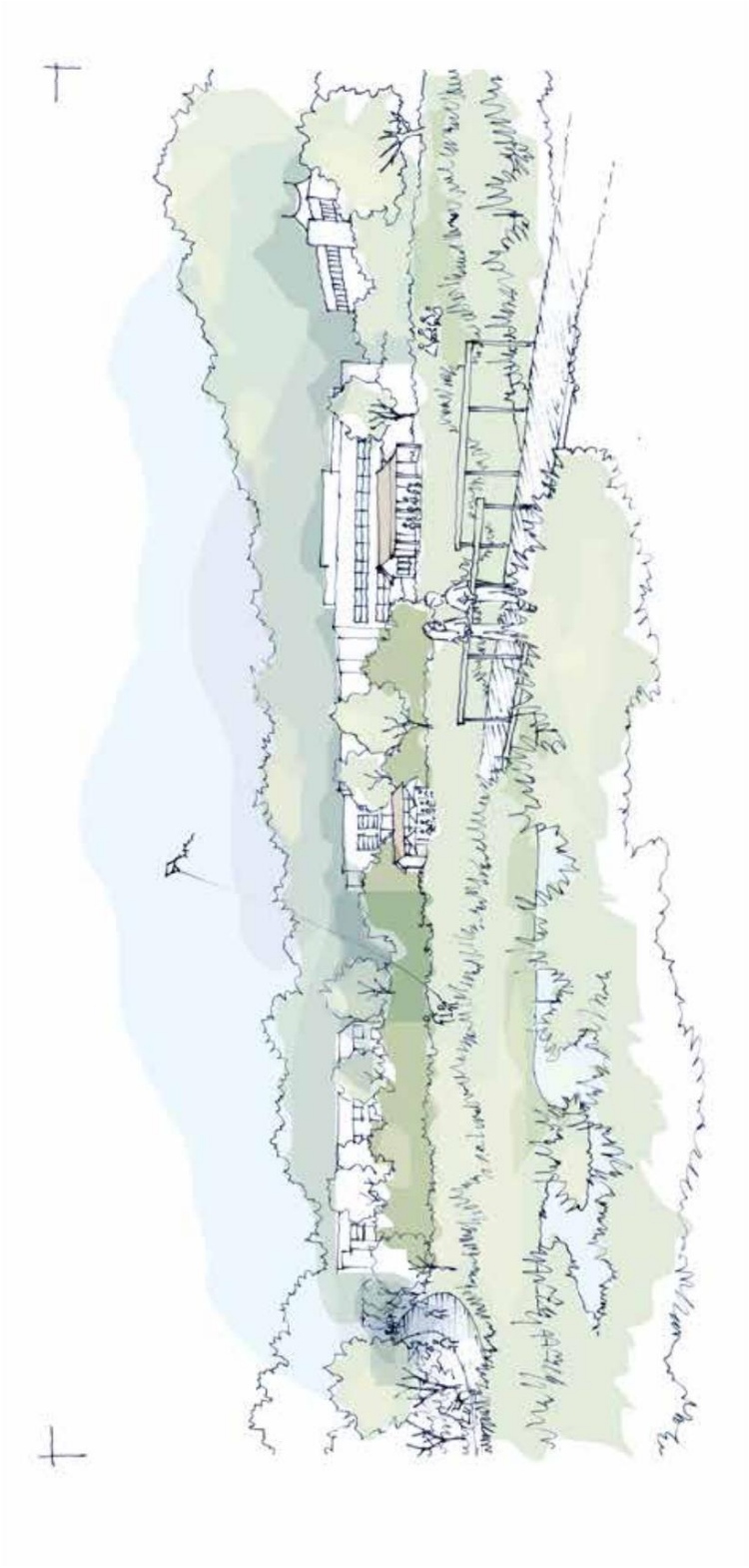
- Maintain and enhance the 'green' qualities of the natural environment, including large stands of mature trees
- Protect and enhance important views and street vistas framed by trees
- Protect and seek to consolidate remaining koala habitat.

Design strategies

1. Retain mature eucalyptus lining Kingfisher Road
2. Retain mature eucalyptus on both sides of the unformed portion of Wrights Road (foreshadowing its role as a formal east-west connection); these trees also contribute to a positive streetscape character for the private road into the Hospital
3. Use new street tree planting to create new, framed vistas and soften the interface with surrounding land uses:
 - 3.1 Toorak Court towards the Hospital (where space permits, eg. west side on Council land)
 - 3.2 West side of John Oxley Drive (north of Kingfisher Road) to balance the eastern side; on both sides south of Kingfisher Road
4. Align openings between buildings to protect or create new view opportunities towards areas of native bush and trees
5. Protect and share views of the tree canopy and towards surrounding hills from within buildings
6. Promote a healthy precinct environment by prioritising walking, social interaction, and connections with nature
7. Encourage landscaping and mature tree planting in the private domain, to provide green space and tree canopy to supplement street trees and to replace any vegetation lost to new development
8. Establish parameters for site cover and building zones to protect and strengthen remnant native vegetation, and to 're-stitch' the landscape corridors together
9. Engage with the EPA to investigate the potential for recreational use for the landfill site, through any combination of:
 - remediation
 - rehabilitation
 - managing stormwater runoff.



Design strategies



 Transformational project: Torak Place looking south-west towards the Hospital
Formalised pedestrian and cycle link in association with new parking and access for the Hospital

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Design strategies

6.2 Services and infrastructure

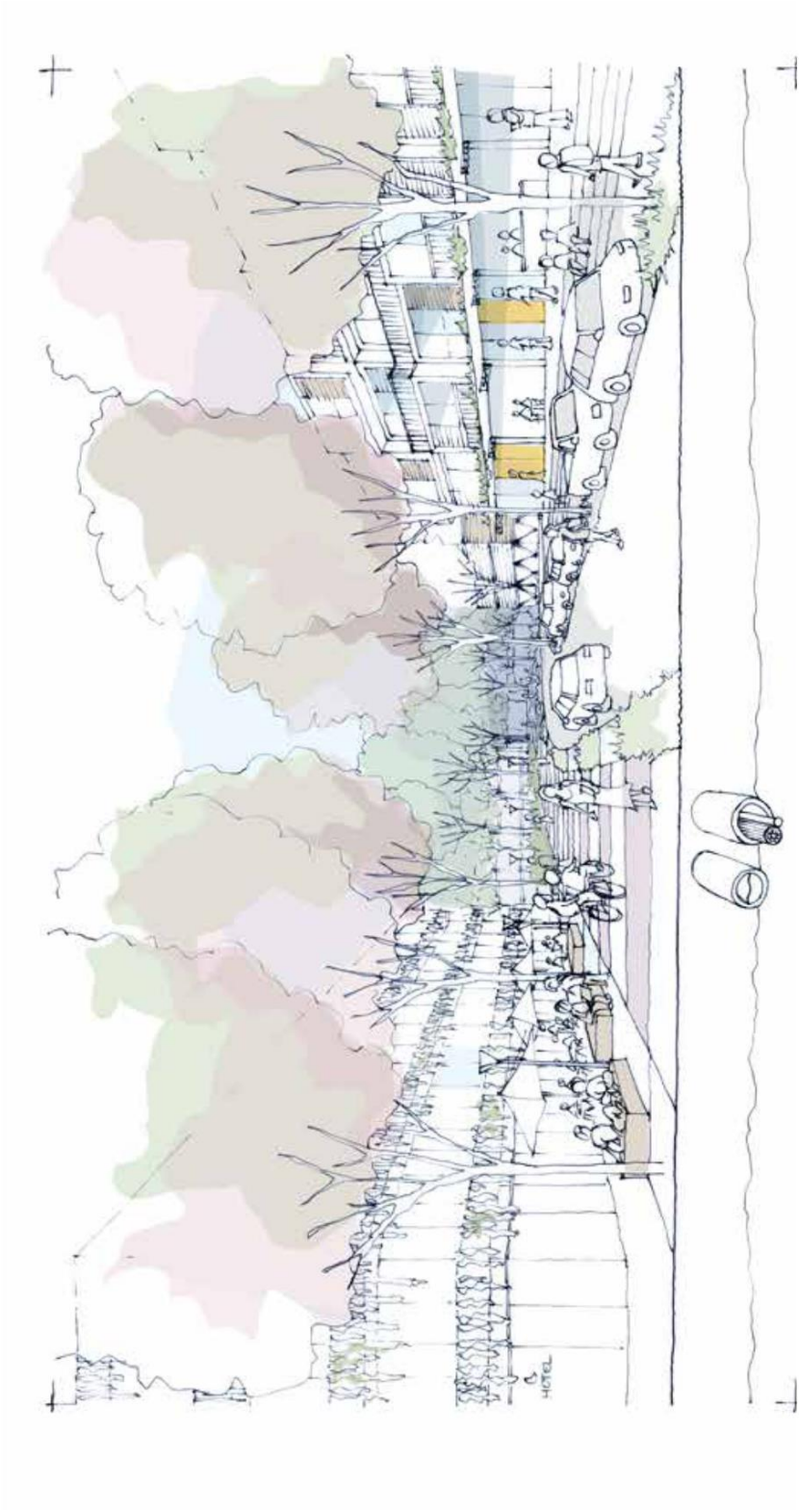
Design drivers

- Link the precinct's learning and health institutions to regional, national and global networks, so that they can function and compete in the virtual space
- Develop precinct-wide, sustainable and integrated systems to manage energy, water, and waste.

Design strategies

1. Create a fast, secure network of systems capable of servicing innovation hubs and multi-use shared facilities, by enhancing:
 - The fibre optic network
 - Internet connectivity and speed
 - Access to shared communications and research networks
2. Promote technology links between CSU, the hospital and the industrial precinct.
3. Design the pedestrian spine as a 'services corridor' that is future-proofed to support projected population growth and more intense land uses (refer artist's perspective)
4. Prioritise water-sensitive urban design to manage stormwater runoff, integrating 'soft' solutions like raingardens and planted swales into streetscapes and along the spine, rather than proprietary devices.

Design strategies



Transformational project: Kulai Plaza looking north from Kingfisher Road.
Shared street and hotel / accommodation / cafe and dining hub, the pedestrian spine as service corridor

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Design strategies

Movement network

6.3 Street network, vehicles and parking

Design drivers

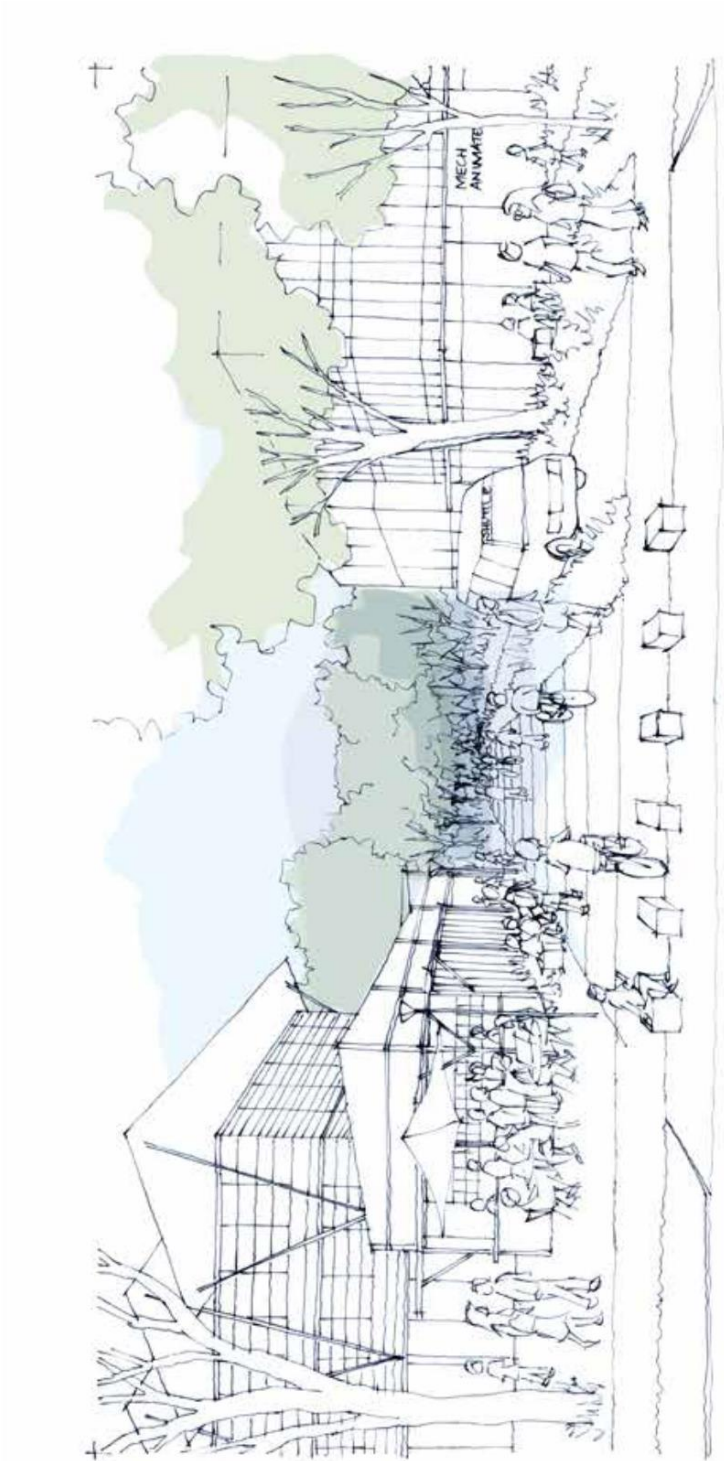
- Provide for improved vehicle circulation around the edges of the precinct and maintain vehicle access from main roads west and north, while making streets within the precinct more pedestrian-friendly
- Allow for a future southern orbital link and to the airport, south of SCAS.

Design strategies

1. With the road widening of John Oxley Drive, upgrade and extend pedestrian and cycle facilities, including: signalised crossings and new shared paths to create clear, direct, well lit and complete connections between Kingfisher Road and the Hospital. Consider kerb extensions on corners to reduce the width of crossing points
2. Locate and design vehicle access to on-site parking to promote pedestrian priority (eg. through the design of driveways to be clearly lower in the hierarchy than the footpath)
3. Rationalise, share and manage parking to provide for demand without compromising the functionality or character of local streets
4. For the Hospital, consider:
 - 4.1 Locating parking on land between Toorak Court and Highfield Circuit, in association with a formal pedestrian / cycle link
 - 4.2 Areas of managed (time limited and / or paid) parking
 - 4.3 Relocating the helicopter pad on top of the Emergency Department building to free up spaces (in the short term)
 - 4.4 Structured car parking, (in the long term)
5. Create road access to the industrial area (Merrigal Road and Geebung Drive) to assist movement in and out of the precinct, connect to parking / public transport nodes, and link with employment areas
6. Create a new connection between Carriage Way and Toorak Court to support future residential development and a positive edge to public open space
7. Provide parking at the edges of the precinct including associated with the bus loop
8. Minimise the number of direct access points onto John Oxley Drive

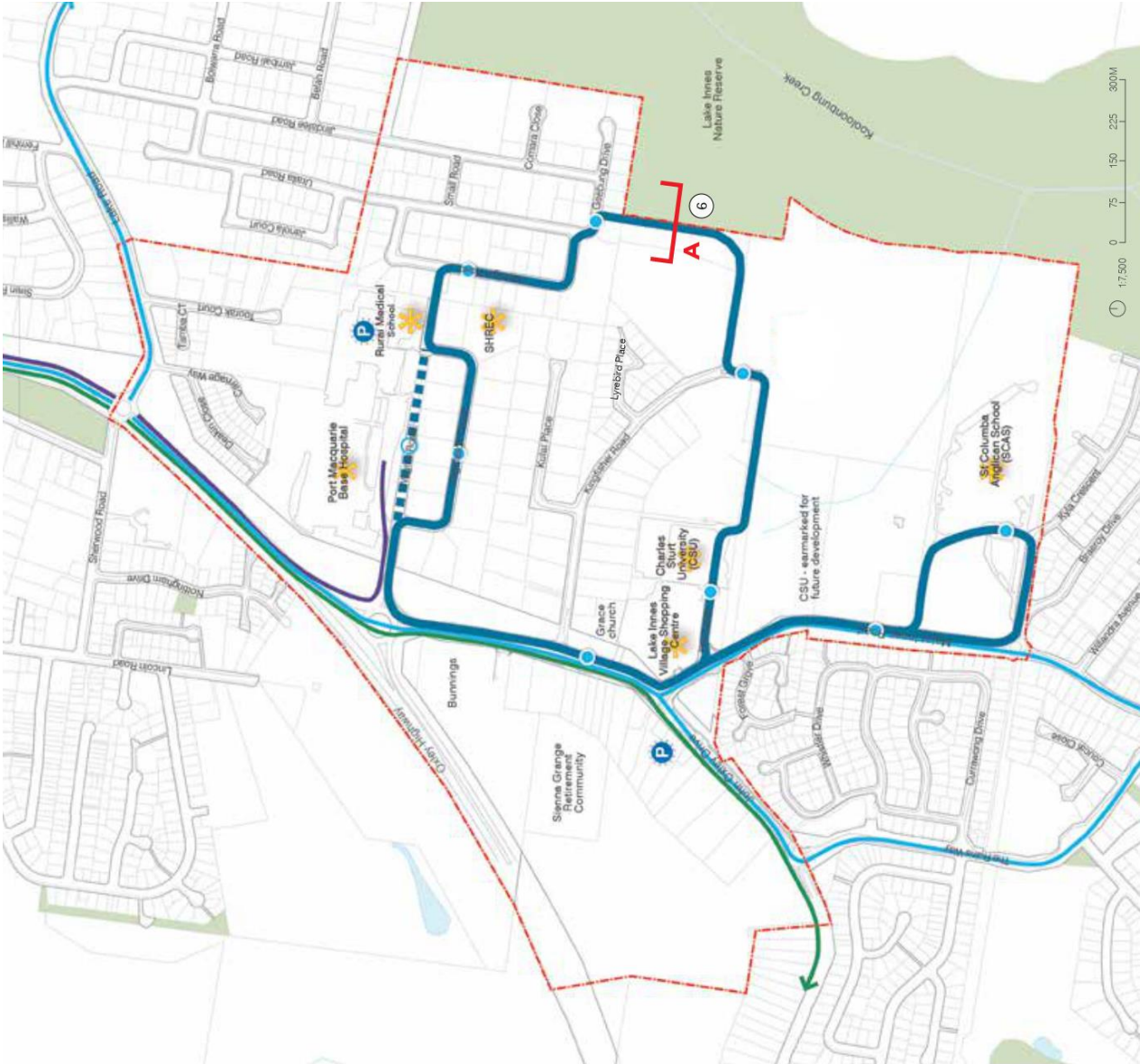


Design strategies



Transformational project: Looking west from Merrigal Road towards Wrights Road along the new road connection
A new link to the industrial area, for the bus loop, pedestrians and cyclists

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Design strategies

6.4 Public transport

Design drivers

- Easy access to the services and facilities within the precinct will be a strong contributor to its success as a destination and to the functionality and attractiveness of its institutions.

Design strategies

1. Create a one-way shuttle bus loop that serves nodes and major institutions
2. Reduce vehicle speeds through the precinct to support a pedestrian and bicycle friendly environment
3. Provide route and timetable options that facilitate travel between the precinct and the town centre; the precinct and the airport; and the precinct and residential areas to the west and south
4. Locate bus stops close to the pedestrian spine and to activity nodes – with a clear path of travel to main entries – and fully accessible to them
5. Design bus stops and shelters to create safe, generous and protected waiting areas for transport users
6. Design the bus loop to also provide for safe and pleasant walking and cycling (refer Section A)
7. Provide parking at the edges of the precinct including associated with the bus loop



Design strategies

Section A: Bus Loop

Section A shows the recommended typical minimum width and layout of the bus loop. In this location the loop is on Council-owned land and follows the topography to minimise impacts on the landscape.

The design is for enough width to minimise pedestrian cycle conflict, and separates them from the bus lane.

- Amenity zone: 2m
- Shared path: 5m
- Planting buffer: 1m
- Bus lane: 3.5m
- Shoulder / services: 0.5m
- TOTAL: 12m





Design strategies

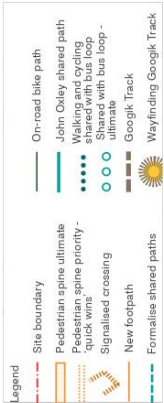
6.5 Pedestrians and cyclists

Design drivers

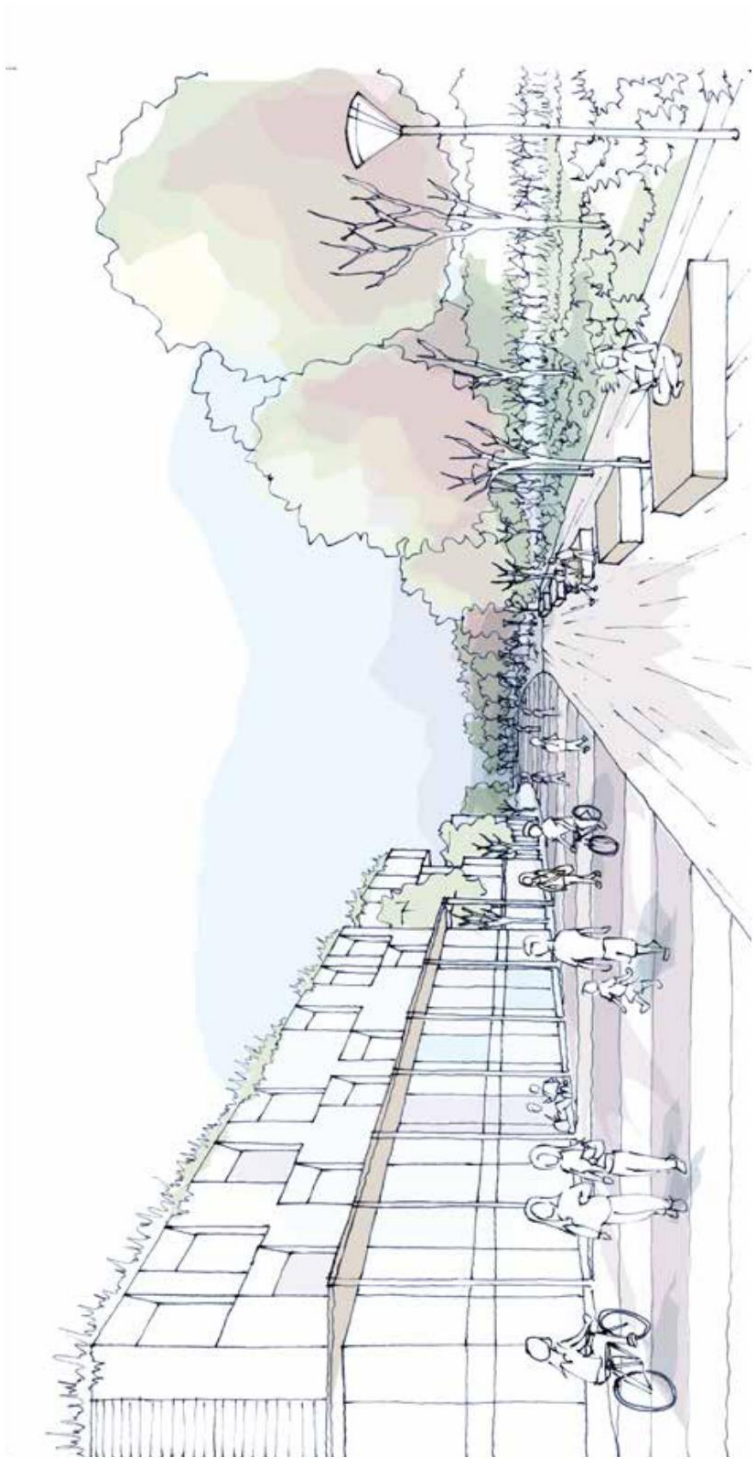
- Complete and extend the walking and cycling network to connect people to their destinations, and link to public streets.
- Create clear, legible, generous and open pedestrian connections along key desire lines
- Create opportunities for casual overlooking and activity around public open space
- Minimise the potential for conflicts between vehicles, cycles, pedestrians
- Enable a high quality shared path between the precinct and the CBD.

Design strategies

1. Provide a generous, fully open and accessible north-south pedestrian 'spine' through the precinct between the hospital and SCAS
2. Upgrade John Oxley Drive to include multiple signalised crossings and pedestrian / cycle paths connecting to the Hospital
3. For the Google Track:
 - 3.1 improve wayfinding from the major institutions
 - 3.2 complete missing links into the precinct and on the track itself
 - 3.3 formalise the Powerline alignment across Kooloonbung Creek to Greenmeadows
4. Enhance / formalise missing pedestrian connections in the network:
 - 4.1 CSU to Kingfisher Road through CSU land
 - 4.2 Kulai Place to Highfields Circuit (longer term on alignment with the pedestrian spine: shorter term via SHREC and adjacent land)
 - 4.3 Highfields to Merrigal Road
 - 4.4 Kulai Place to Merrigal Road
 - 4.5 CSU to Google Track
 - 4.6 Carriage Way to Toorak Court
 - 4.7 Highfields Circuit to Hospital front door (a refocused pedestrian entry)
5. Utilise Rotary car park to connect along Wrights Road towards Merrigal Road (longer term)
6. Maintain the Goat Track for daytime use to complement new shared path
7. Complete missing pieces of footpath (prioritise those that facilitate the pedestrian spine)
8. Create accessible connections from Carriage Way and Deakin Close into Council owned land, as and when it is developed
9. Add facilities to support walking and cycling at key points, for example: water fountains, seats with views, outdoor gym equipment stations, shelter elements, activity areas, info / wayfinding features
10. Promote the provision of end of trip facilities at major institutions (showers, change rooms, bike storage, secure lockers) for growing student and working population.



Design strategies



Transformational project: Looking north along the pedestrian spine past CSU (future stage)

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Design strategies

The community
6.6 Land uses

Design drivers

- Enable a range of opportunities for health, education and research, including for shared facilities and initiatives
- Achieve 'critical mass in expertise' by attracting experts (eg. post-doctoral research fellows, visiting specialists), drawing on ease of access to the airport)
- Provide adequate local open space to support local businesses and institutions whose staff use the precinct for shopping and services.

Design strategies

1. Encourage uses that reinforce distinct character areas:
 - 1.1 Scientific / medical technology' in industrial area - supporting Hospital and employment opportunities for CSU students
 - 1.2 Ancillary medical / health facilities west of John Oxley Drive
 - 1.3 Accommodation near Highfield Circuit and the pedestrian spine eg. for visiting medical staff and families
 - 1.4 Student accommodation clusters
 - 1.5 Aged Care and residential to the east
 - 1.6 Medical suites around Highfields Circuit
 - 1.7 Larger scale medical / research cluster on John Oxley Drive
 - 1.8 Shared recreational facilities, both indoor and outdoor, in the southern part of the precinct, including an aquatic centre on detention basin land, including 50m and therapy pools, with co-located parking for CSU; and more use of SCAS facilities
 - 1.9 Phase out Waste Transfer Station for public transport hub, parking and new connections to the industrial area
 - 1.10 Expand the mix of uses at the Shopping Centre to include residential; enable child care and other supporting uses
2. Enable structured car parking (long term) for the Hospital
3. Encourage small scale mobile uses (eg. coffee carts, food stalls, temporary markets, leisure activities, night-time bars and dining) ancillary to the Lake Innes Shopping Village at key nodes along the pedestrian spine, to contribute to an active and lively public realm
4. Encourage uses on activating sites that will help create lively and well used public streets to encourage pedestrian activity
5. Investigate the potential of Council's northern landholdings for a mix of uses including residential (between Toorak Court and Carriage Way) and public open space for local residents, the Hospital, and the Lake Road industrial area.

Design strategies



Transformational project: Looking south over the new plaza between the Lake Innes Shopping Village and CSU
A redeveloped precinct core that links to the pedestrian spine and to the bus loop

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Design strategies

6.7 Activity nodes

Design drivers

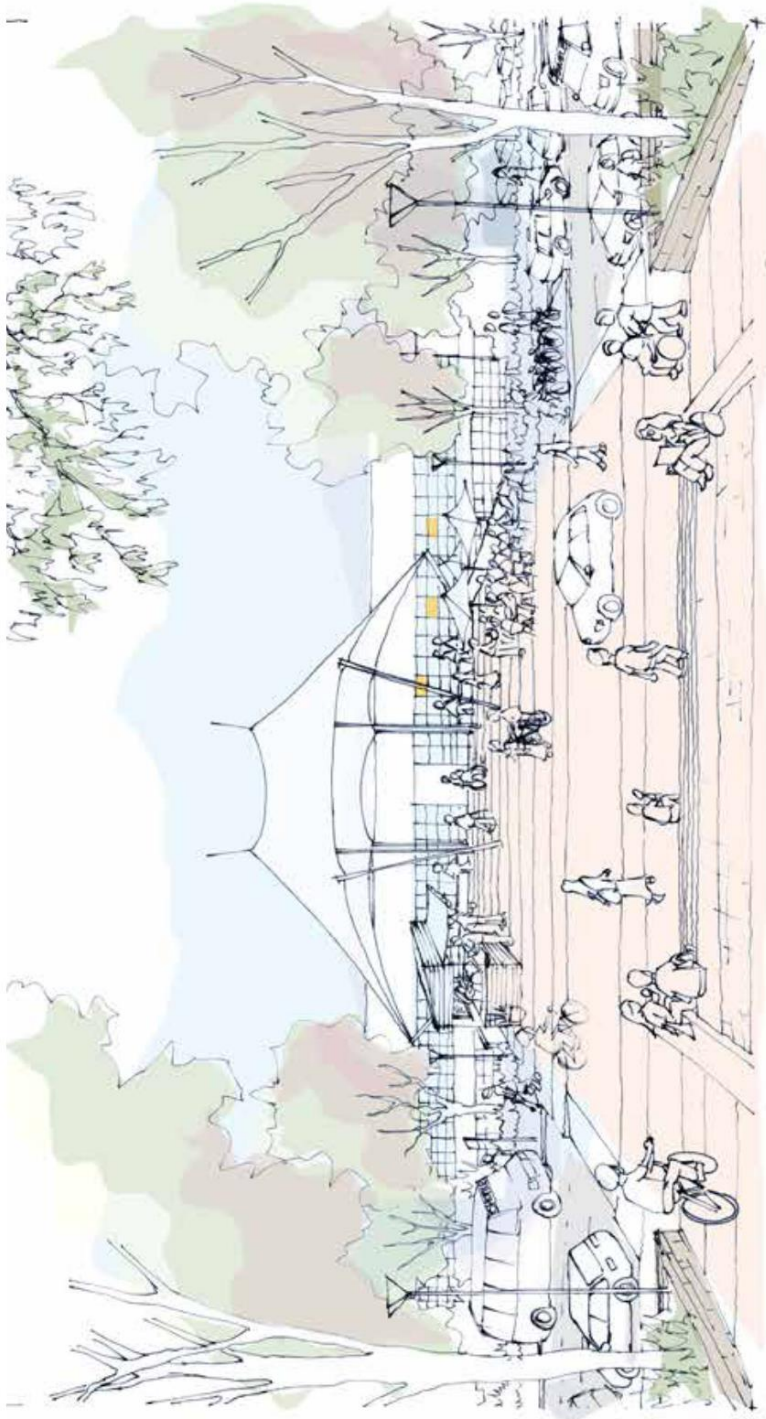
- Create a gathering space / series of spaces where people can go.

Design strategies

1. Activate and enliven streets and public spaces to improve safety and security, and the perception of safety and security
2. Improve the experience of arriving and being in the precinct
3. Link public open spaces to create a legible and accessible network
4. Create clear and inviting connections to community facilities and public transport
5. Enhance public space within the Shopping Village for pedestrians to sit and relax
6. Connect with the range of opportunities for recreation and relaxation within and adjacent to the precinct, including the Googlei Track / Regional Park, SCAS sportsfields, CSU courts / facilities, and northern open space
7. Provide a new public pedestrian spine as a linear plaza, located for optimum amenity and accessibility, and linked with and the focus of the pedestrian network
8. Create a public plaza linking CSU with the (redeveloped) Shopping Centre and to the pedestrian spine
9. Encourage hotel, cafe/dining, bar and venue-type uses on Kulai Place.



Design strategies



Transformational project: The pedestrian spine terminates at a revamped entry to the Base Hospital
A shared zone where the bus loop, pedestrians and cyclists, and hospital access come together

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Design strategies

The character

6.8 Built form

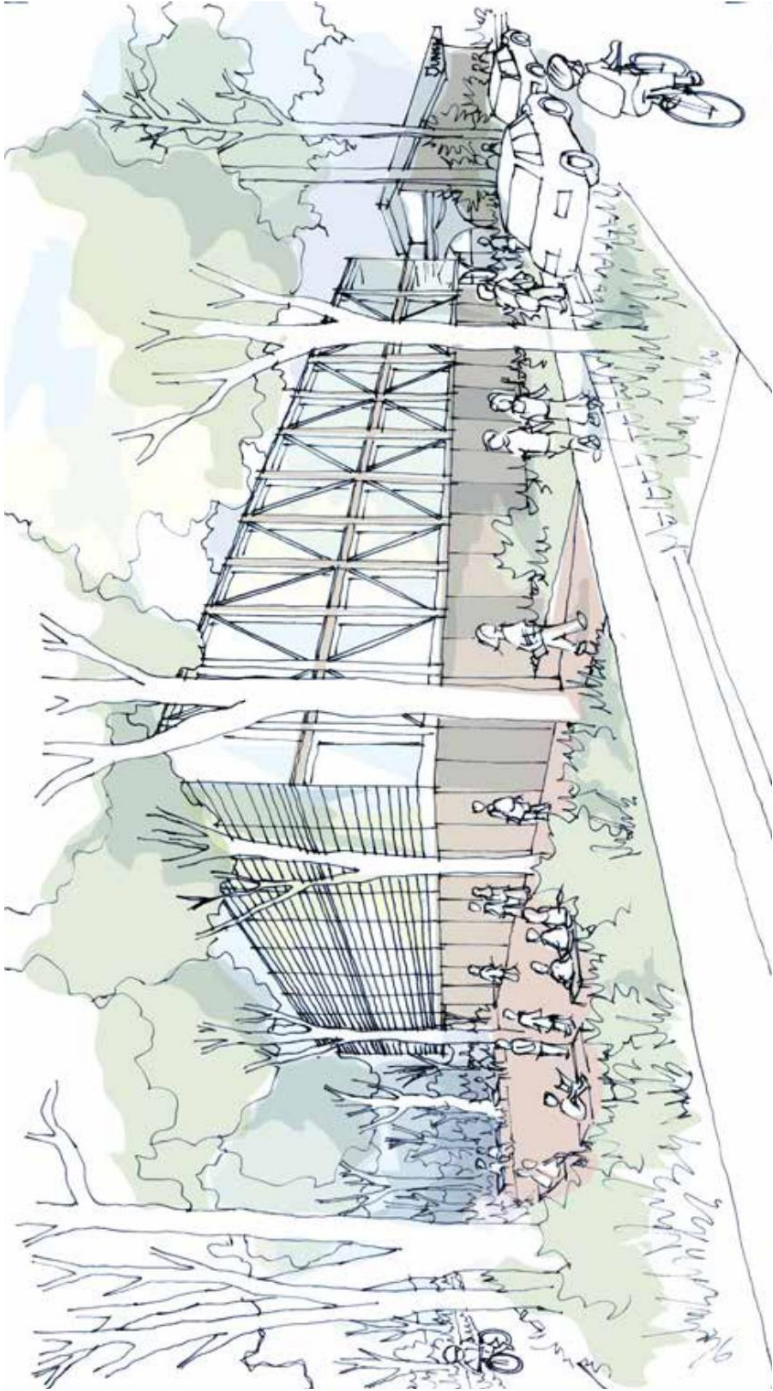
Design drivers

- Encourage high quality, environmentally responsive contemporary design that responds to the local climate, the site orientation and setting
- Choose building types that encourage flexible learning and 'brand' innovation and research, that can accommodate a range of uses, to encourage co-location and sharing spaces
- Let the existing tree canopy be dominant on the skyline – retain and respond to the existing moderate 'human scale' of buildings and spaces.

Design strategies

1. Design built form to define and enhance a relaxed and inviting 'campus' character
2. Scale and locate built form to protect and enhance views towards important features, in particular towards the treeline or distant hills
3. Locate and orient built form to protect the character, amenity and outlook of public open spaces, particularly sun to the pedestrian spine
4. Locate and orient buildings (and clusters) to protect stands of mature trees, particularly through mid-block (rear of sites)
5. Encourage high quality landscape design of the public-private interface – the setting for buildings that is visible from the public domain
6. Set back from the pedestrian spine in places to enable small retail / activity nodes
7. On large / consolidated lots, ensure that the scale, massing and proportions of new development do not dominate the streetscape
8. Select materials and colours that complement the natural setting and desired 'high tech' character: for example, a palette combining timber, stone, concrete and aluminium
9. Integrate green roof and facade systems
10. Create incentives for enabling sites to help deliver the pedestrian spine (refer Section 8 Implementation)

Design strategies



Transformational project: Looking south-east along Highfields Circuit towards the SHREC
An activating site alongside the new road link to Merrigal Road, with a building that adds to the 'life on the street'

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Design strategies

6.9 Streetscapes and public spaces

Design drivers

- Establish different characters for public spaces, whether pocket parks, plazas or part of the new pedestrian spine, that reflects their location and function in the precinct:
- Relief and relaxation (north, associated with the Hospital)
- Social and lively (central, associated with students and the shopping village)
- Recreational (SCAS).

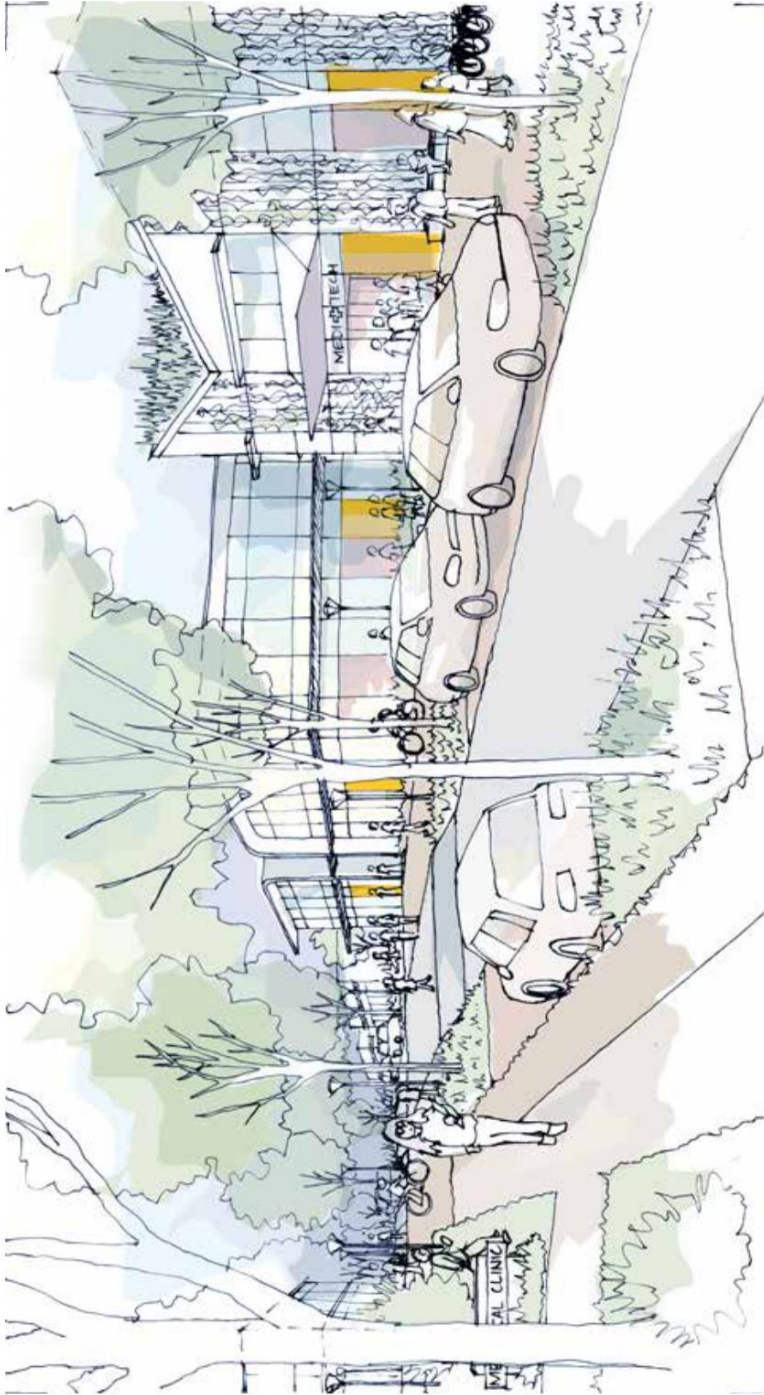
Design strategies

1. Formalise through-block links as genuinely public spaces
2. Use large street tree planting to visually reduce the width of wider roads and moderate the impact of bulky built form
3. Design 'positive' spaces at the entries to major institutions, particularly when integrated with public and active transport nodes, to:
 - 3.1 Be accessible 24/7
 - 3.2 Have high amenity (eg. comfortable, sheltered, with seating)
 - 3.3 Allow for different functions
 - 3.4 Feel safe and secure (eg. benefit from casual surveillance)
4. Optimise the strategic location of the northern entry with:
 - 4.1 'green wall' / art treatment of the noise walls at the tip of the western area
 - 4.2 landscaping to the Oxley Highway roundabout including signature Norfolk Pine
5. Enhance the southern entry with future development of the Shopping Village, by creating a strong and active presentation to the road
6. Use streetscape planting and public domain elements including signage and wayfinding to contribute to a unified character for the precinct
Draw on a 'natural' palette of materials including timber and stone, and responding to Port Macquarie's climate
7. Investigate the potential of Council's northern landholdings for a mix of uses including residential (between Toorak Court and Carriage Way) and public open space for local residents, the Hospital, and the Lake Road industrial area



Transformational project: Enhance the northern entry to the Precinct
Landscape the roundabout including a Norfolk Pine, green and/or art treatment of Oxley Highway noise walls

Design strategies



Transformational project: Streetscape upgrade to Highfields Circuit
Street tree planting, footpaths, rain gardens and managed parking



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Design strategies

Pedestrian spine

The pedestrian spine is the centrepiece of the master plan.

- It connects the major institutions with each other, with the shopping centre, and with recreational opportunities
- It enables and encourages walking and cycling while reducing car dependence
- It is a marker for health and wellbeing
- It supports social interaction
- It provides an attractive setting for a range of public and private uses: retail, commercial, accommodation, learning, health, recreation. It highlights and supports those functions.
- It lifts the profile of the precinct: it is a 'draw' for people outside the area and an identity for those inside
- It links to and promotes the use of regional open space networks
- It pulls everything together.

The main drawing is indicative.

The accompanying images show the desired character of the pedestrian spine: the spaces, materials, and something of the relationship with surrounding built form. They are not meant to be definitive but they are to illustrate the quality sought.

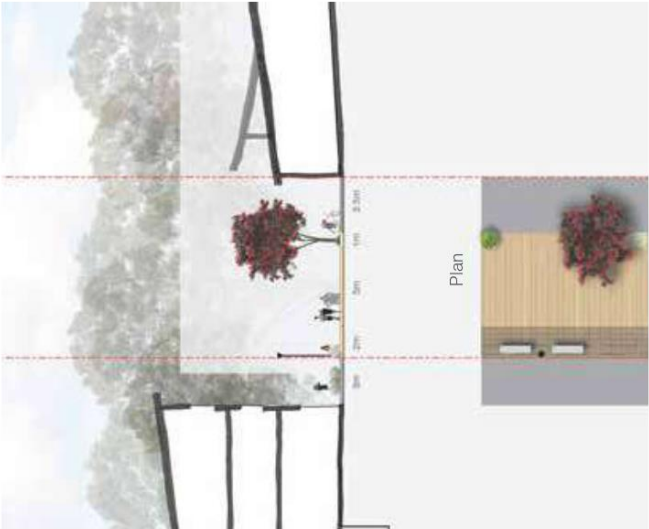


Design strategies

Section B: Through-block spine

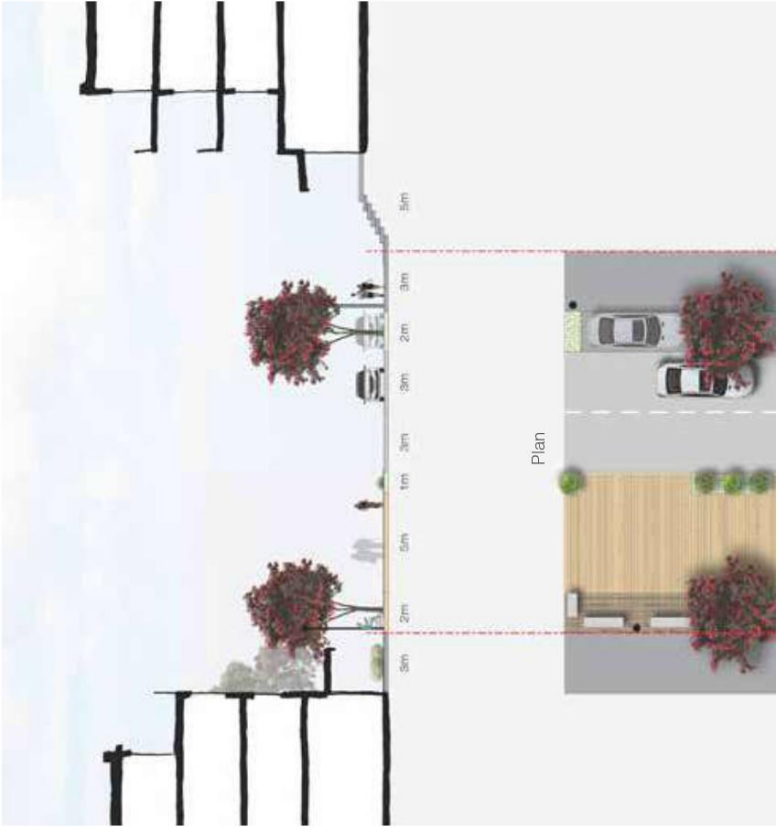
Section B shows the typical width of the pedestrian spine through blocks, at its narrowest, allowing for one row of trees. 'Amenity' includes lighting and seating

- Amenity zone: 2m
- Main shared path: 5m
- Planting zone: 1m
- Footpath / buffer to existing development: 3.5m
- TOTAL: 11.5m



Section C: Activity node spine
Kulai Place needs to accommodate vehicles as well as pedestrians and cyclists. Adjacent buildings should overlook and activate the public domain. Setbacks are therefore required to establish the desired quality.

- Amenity and tree zone: 2m
- Main shared path: 5m
- Buffer / planting zone: 1m
- Carriageway: 6m
- Parking and tree zone: 2m
- Footpath: 3m
- TOTAL: 19m



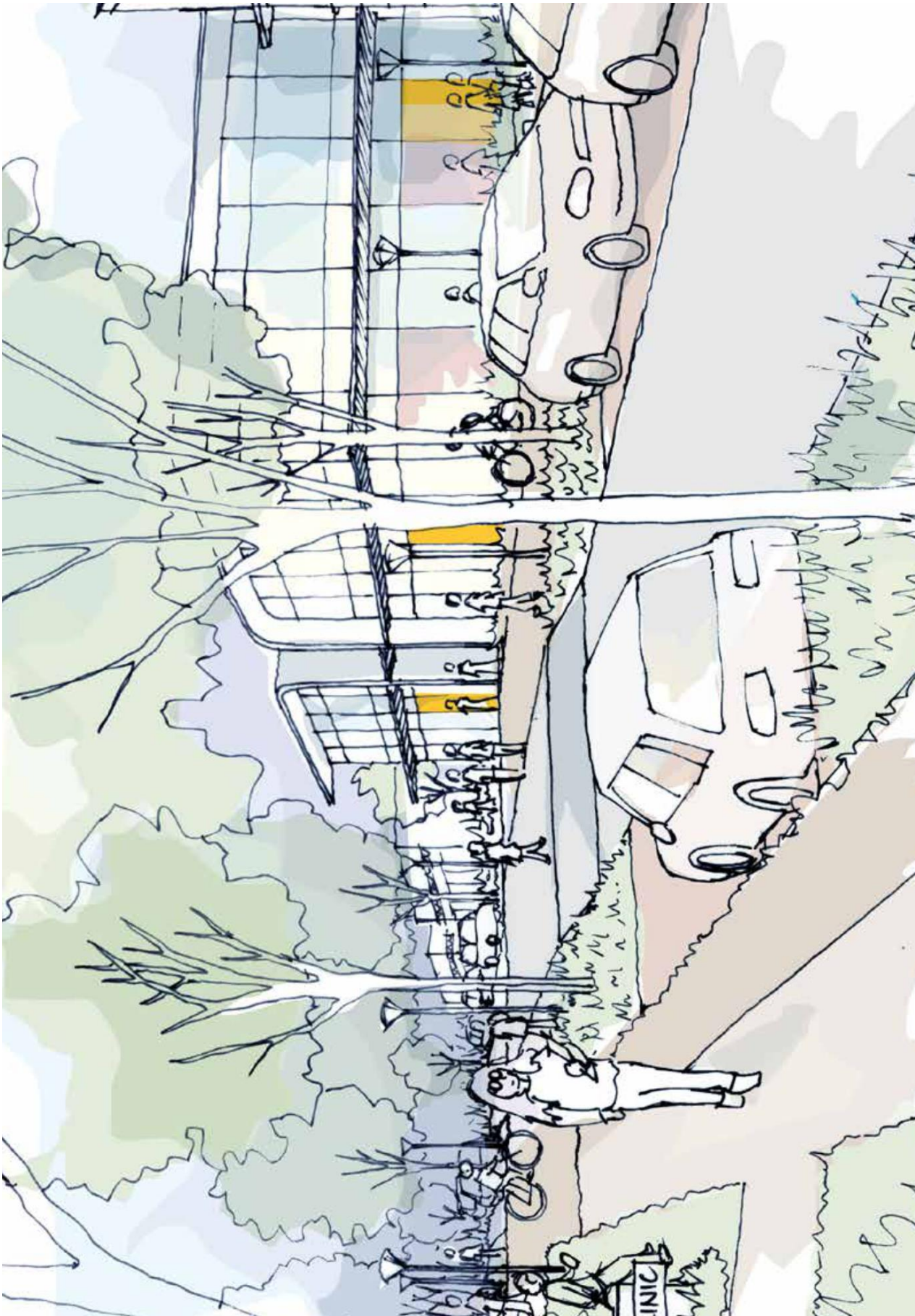
Design strategies

Section D: CSU / recreational spine

In this more open part of the precinct, the spine treatment can be more simple and flexible, but establishing a buffer to the proposed care park is required to protect amenity for pedestrians, cyclists and building users.

Main spine: 8m
Amenity / tree zone: 4m
TOTAL: 12m





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07 Implementation

This section discusses the mechanisms to deliver the master plan. These include planning controls and design guidelines, as well as collaboration and agreements. It sets out priority projects drawn from the EBD and subsequent investigations, as 'quick wins' and catalysts for further development.



Implementation

The previous sections of the Master Plan set out and illustrate the vision for the Health and Education Precinct. This section looks at the tools available to help deliver it. Change typically happens through a combination of planning controls, design guidelines, property acquisition and re-subdivision, planning agreements and contributions planning – and through the determination and collaboration of key stakeholders.

7.1 The big moves

The master plan has two 'big moves' at the heart of the vision for the vibrant, connected precinct of the future. These are:

a new pedestrian spine through the precinct

a new bus loop around the precinct.

All of the design strategies in Section 6, and the projects and projects in this section, aim to deliver on these two big moves.

7.2 Priority projects

The EBD process highlighted areas where stakeholders are willing to work together towards creating the pedestrian spine and the bus loop. The catalyst projects that came out of the EBD process are set out below, as they were described by stakeholders. An additional 'quick win' from the master plan process is also noted. They are all cross-referenced to the design strategies in the Master Plan and the themes used throughout. -

The community

The character





Theme

Underlying structure

Movement network

Priority project / process from the EBD	Short, Medium, Long term	Master Plan reference strategy no.	Theme
The pedestrian spine			
Make the pedestrian spine "not just a school, a hospital... a place to teach the community" – linear community hub with markets, stalls etc... potential to create jobs for international students. This could be staged, with 'pop-up uses' to start with	S-L	6.5, 6.7, 6.9	  
Upgrade pedestrian connections to get people moving and test how well used they are – not too formal – priority is between SHREC and Hospital, and SHREC and CSU	S	6.7, 6.9	
CSU to open up their existing land between Kingfisher and Kulai to support north-south pedestrian movement	S	6.9	
North-south link between Kulai and Highfields	M	6.9	
Create a parallel open, public spine to supplement CSU's semi-public north-south link	M	6.9	

Implementation

Priority project / process from the EBD	Short, Medium, Long term	Master Plan reference	Theme
The bus loop and parking			
Bus loop to connect with industrial area 1) using Highfields Circuit 2) extension of Wright's Way	S-M M-L	6.3, 6.4	 
Transport – bus interchange just south of Ellis Parade – a circuit using industrial area – bus to front door of major institutions	M-L	6.4	
Highfields Circuit – rationalise parking – investigation stage then delivery	S	6.3	
Upgrade hospital bus / parking areas	S	6.3	
Investigate parking station options across the Hep Precinct to consolidate parking and link to shuttle service. This would be working in partnership with key stakeholders to achieve outcomes	S	6.3	
The land uses			
Hotel, conference centre, bars, venue, cafe/dining etc to be located along spine to activate it: focus between Kingfisher and Highfields	L	6.6, 6.7, 6.8	
Residential zoning – recommend new planning controls / guidance	S	6.6, 6.8	 
Create a better relationship from the Hospital to lower end of industrial precinct as/when science / technology-based industrial uses develop.	L	6.6	
Part of Council's northern landholding to be investigated to deliver outcomes for the HEP	S	6.6	 
Investigate potential for a child care facility within the shopping precinct	S	6.6	
SCAS and CSU share more of the school's active recreation spaces	S	6.6	
The identifying characteristics			
Strengthen Google track connections; identify locations for wayfinding	S	6.9	  
Improve northern entry: landscape John Oxley Drive / Oxley Highway roundabout and 'green' the Highway noise walls [this project was developed after the EBD and shared with stakeholders]	S	6.9	

Implementation

7.3 Proposed LEP controls

Recommended changes to the LEP are intended to deliver opportunities for a diverse range of health, education, housing and supporting commercial, retail and community uses. Integral to the rezoning process is the continuation and enabling of health and education uses within the precinct. Broadly, the LEP will:

- protect and incentivise health and education uses
- update land use zoning to be more specific where required for activity nodes
- update FSR controls to drive appropriate built form and scale and to provide Council a level of control during the DA process

- establish precinct-wide building height controls to respond to the site context, the land uses, to ensure appropriate height transition, to ensure the amenity of the public domain, and to encourage built form that contributes to the physical definition of the street network and public spaces

The recommendations include maximum building heights, floor space ratio controls and suggested koala habitat management.

Land use zoning is not prescribed in this master plan; rather, the desired outcomes and rationale are included, along with options for how those could be delivered. The options will be considered by Council, who will ultimately recommended any changes.

The table below explains the rationale for possible land use zones to support the desired uses. These are shown graphically on maps overleaf.

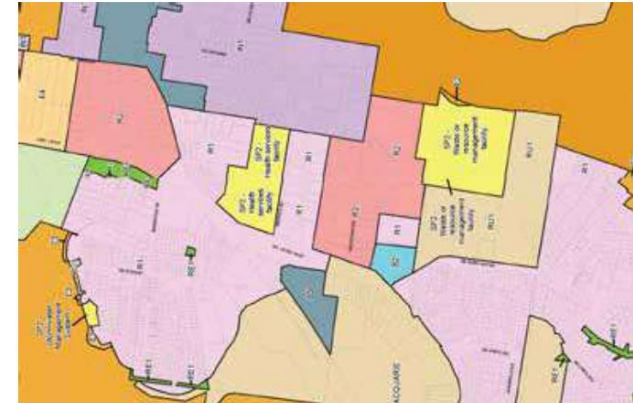
7.3.1 Land use zoning rationale

Key	Statement of intent	Range of uses	Zone options
1	A precinct plan to be developed following a detailed study that considers the highest and best use for this area, that coordinates access off John Oxley Drive in consultation with affected land owners, and considers the finalisation of the Southern Orbital location.	Permit a range of uses that are complementary to low to medium density residential uses in the precinct.	– Subject to future study
2	Improve the amenity of the existing location through the provision of open space.	Mix of uses including residential and public open space for residents, hospital, and the Lake Road industrial area.	– R1 General Residential – R3 Medium Density Residential
3	Enable the evolution of the Base Hospital.	Health services facilities.	– SP2 (Health Services Facilities)
4	Enable a diverse mix of residential, hotel/motel/serviced apartment accommodation, and commercial options that provide strong activation of the central pedestrian spine.	Mix of uses including: – Diverse residential options (residential flat buildings, multi-dwelling housing, seniors housing, aged care, student housing) – Diverse accommodation options for visiting staff (university & hospital), visiting family (hospital, and university) in the form of motel, hotel or serviced apartments – Health and education facilities – Commercial uses; including business/office, retail and food and drink premises.	– B4 Mixed Use
5	Balancing the operation of existing industrial uses while enabling transition to high technology industries (type of light industry).	Mix of uses including: – Existing industrial uses – Scientific/medical technology (high technology industries).	– IN1 General Industrial – B7 Business park (prescribed zone in ISEPP and Education SEPP, therefore health and education facilities permissible with consent; consider however the potential impact of B7 on the viability of existing general industrial uses)

Implementation

Key	Statement of intent	Range of uses	Zone options
6	Provide flexibility, enable and support outcomes such as mixed use development which incorporate educational facilities as the primary use.	Mix of educational establishments including: – A school (St Columba Anglican School) – A tertiary institution (CSU Stage 2) – Shared recreational facilities, both indoor and outdoor.	– R1 General Residential – SP2 (Educational Establishment)
7	Protect flora and fauna in the precinct.	Allow for residential uses while maximising retention of existing canopy trees.	– R2
8	Provide future corridor for internal loop road.	Allow for the provision of the future internal loop (road).	– RE1 Public Recreation – E3 Environmental Management
9	Maintain the existing operation of the waste transfer facilities, in addition to other compatible public uses.	Allow for uses ancillary to the waste transfer facility.	– SP2 (Waste or resource management facility)
10	Potential to protect existing flora and fauna on site (consistent with aspiration of Council).	Protect the existing value of flora and fauna in this location of the precinct.	– E3 Environmental Management (allows some development – residential dwellings, community facilities etc.) – E2 Environmental Conservation (prevents most development, permits environmental facilities (walking tracks, seating, shelters, board walks, observation decks etc.)
11	Complement commercial and retail functions to the east and be compatible with the residential to the south.	Allow for a range of compatible uses including health and education facilities, medium density housing.	– R1 General Residential – B4 Mixed Use

Implementation



Existing LEP land use zoning



Proposed LEP Land use zoning approach
Note: B4 to have maximum retail shop size of 250sqm. The intent is to allow some ground level activation.

Implementation

7.3.2 Maximum height of buildings

A range of building heights is proposed across the study area. Heights have been determined based on the desired future character of the area, including topography, and the envisaged land uses.

The proposed maximum building heights across the precinct (not including additional height for catalyst sites) are:

- Maximum of 8.5 metres for R1 zoned land north of Port Macquarie Base Hospital (as per existing)
- 10 metres for R1 zoned land located in the centre of the precinct (proposed increase from 8.5m).
- Maximum of 13 metres for the two lots on Kulai Place fronting the pedestrian spine.
- Maximum of 14.5 metres for B4 zoned land for the Lake Innes Village Shopping centre and immediate surrounds. (increase from 11.5m)
- Maximum of 8.5 metres for R1 zoned land surrounding Lyrebird Place
- Maximum of 13 metres for SP2 zoned land that includes the CSU Stage 2 site and St Columba Anglican School. (currently no height control)
- Maximum of 11.5 metres for B5 zoned land on the western edge of John Oxley Drive (currently no height control for these sites).

Existing LEP height of buildings



Design guidelines: height of buildings up to a maximum of 22m (6 storeys) subject to existing trees 10m height or greater, providing deep soil area minimum 20%, 30% tree canopy, minimum lot size of 3,000sqm and maintaining 2 hours solar access to adjoining lots during the winter solstice.

Proposed LEP Height of buildings



Implementation

Typical non-residential typology on Kulai Place

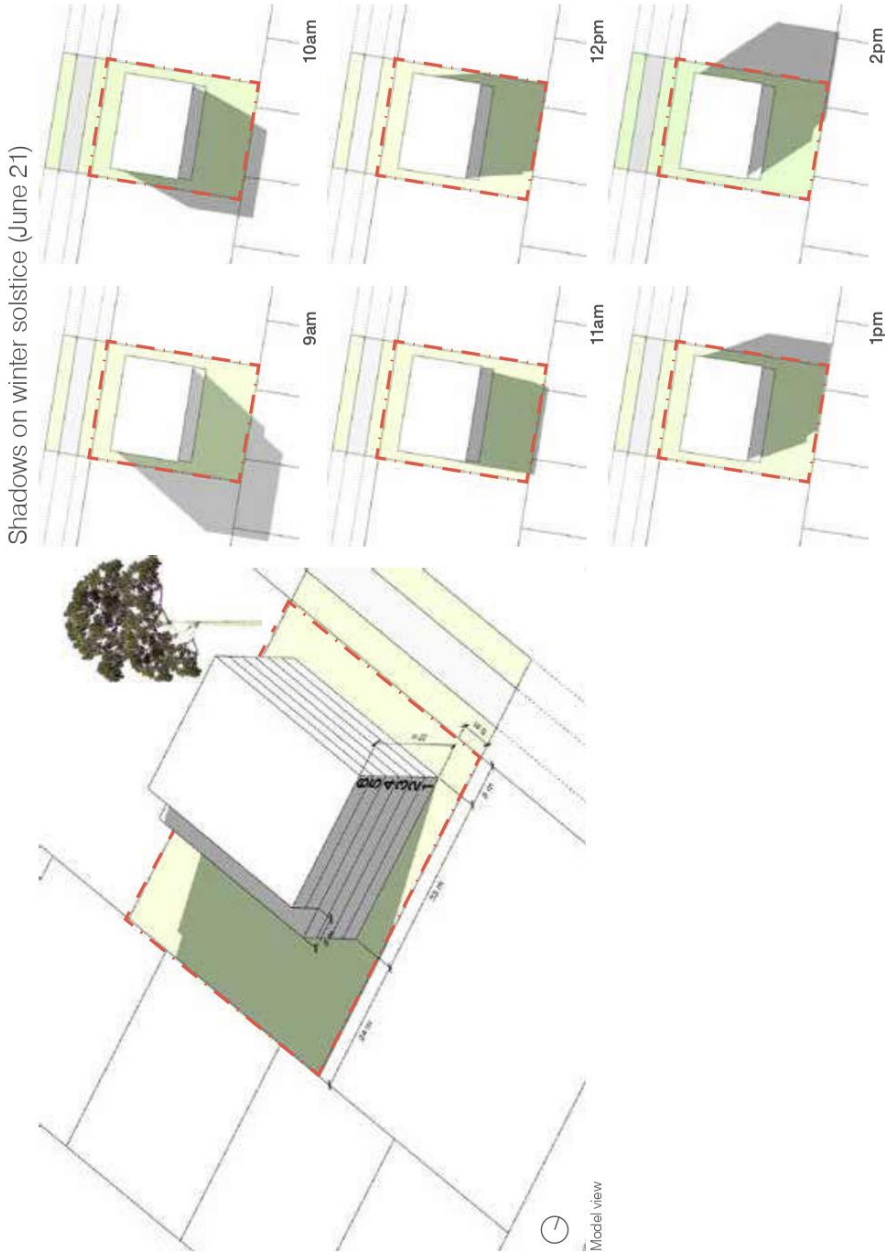
A typical lot on Kulai Place of 50m street frontage and 65m depth was tested to determine an appropriate building envelope for a typical residential and non-residential typology.

Following controls were assumed for both typologies:

- min. 8m front setback;
- min. 6m side setbacks;
- min. 15m rear setback;
- max. 40% site coverage;
- building height below tree canopy; and
- no additional overshadowing to southern neighbouring lots on Lyrebird Street for at least 2h on winter solstice (June 22nd).

This results in a typical non-residential typology with:

- 40m width;
- 33m depth;
- 6m upper 2 storeys setback to the rear;
- serviced by a central core; and
- maximum FSR 1.8:1.



Implementation

Typical residential typology on Kulai Place

In addition to the controls for both typologies, compliance with the Apartment Design Guide (ADG) for NSW was considered.

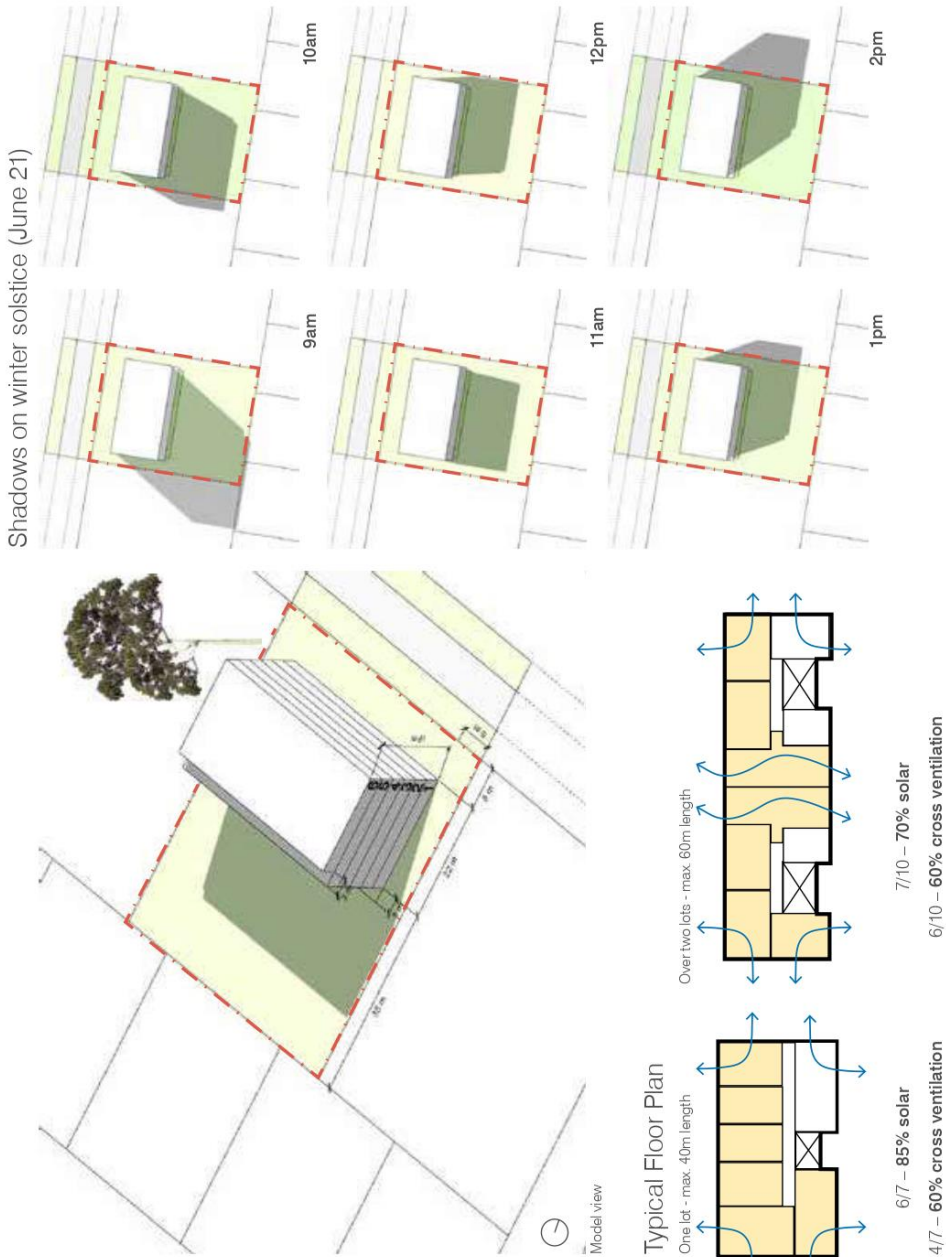
Following ADG guidelines were assessed:

- at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm in midwinter
- at least 60% of apartments are naturally cross ventilated in the first 9 storeys

This results in a typical residential typology with:

- 40m width
- 22m depth,
- serviced by a central core at the southern facade, and
- maximum FSR 1:1.

In case of lot amalgamation, the building width fronting the street should not exceed 60m. A typical floor plan for this typology would include two cores for vertical circulation, as shown in the diagram on the right. The building envelope will still be able to meet ADG requirements.



Implementation

7.3.3.3 Floor space ratio

The proposed FSR controls range from 0.5:1 to 1:1 across the site. They are based on a design-led approach that balances the need to deliver commercially viable development with protection and enhancement of the desire character of the precinct. This included considering the nexus of building heights (number of storeys) and site cover. In particular, the desire to keep the 'green' canopy through the centre of the precinct was a key consideration.

The proposed FSR controls are maximum controls except for identified catalyst sites that may be eligible for an additional 0.35:1, to be determined through an appropriate development contributions mechanism (TBC).

A suggested new clause in PMHC LEP 2011, under Part 7 Additional local provisions "Height and floor space – Health and Education Precinct" is:

b. FSR "Despite subclause 4.4, the gross floor area of a building that is in an Area in the Health and Education Precinct may exceed the maximum permitted as a result of the floor space ratio shown on the map for the land on the Floor Space Ratio Map, by an amount no greater than sum of the existing control plus 0.35:1"

For a limited number of sites, future development will also need to consider design requirements in State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development, which will inform the scale and built form.

7.3.4 Koala habitat

it is recommended that PMHC amends (or incorporates into the Draft) the Coastal Koala Plan of Management and relevant provisions and maps within the PMHC LEP 2011 to reflect the most recent development in the precinct and the proposed master plan.



Existing LEP Maximum FSR



Proposed LEP Maximum FSR

Design guidelines: FSR up to a maximum of 1.81 for non-residential development and 1.81 for residential development subject to a maximum site coverage of 40%, retaining existing trees 10m height or greater, providing a deep soil area minimum 20%, 30% tree canopy, minimum lot size of 3,000sqm and maintaining 2 hours solar access to adjoining lots during the winter solstice.

Implementation

7.4 Development Controls

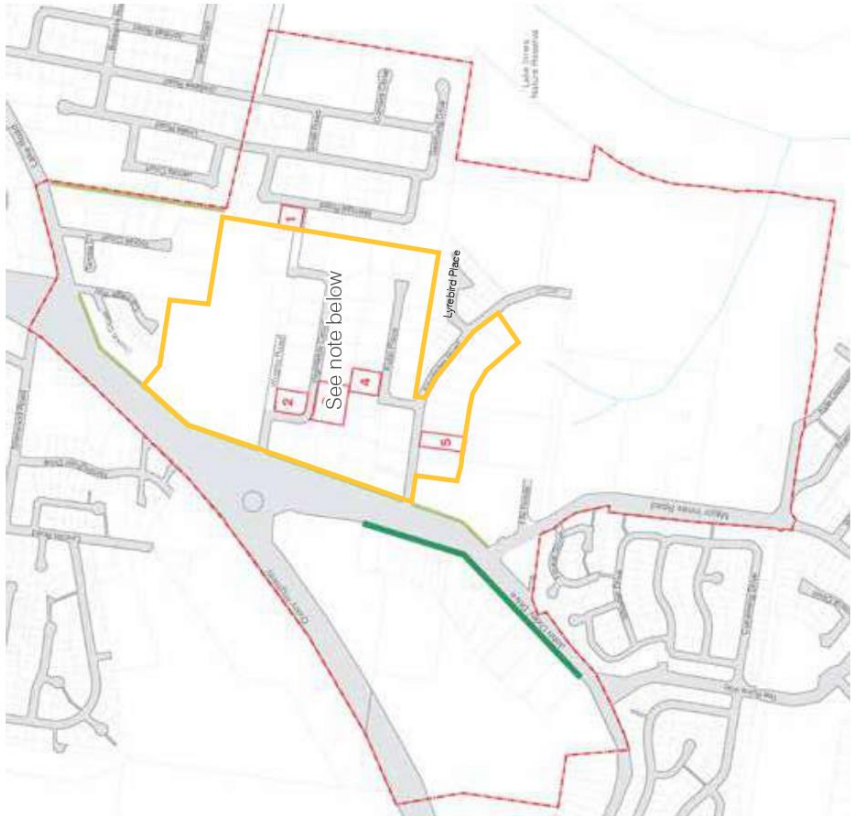
Development Control Plans are important because they provide the 'finer grain' design guidance that supports the desired future character, the 'look and feel' of a place and a high quality design. The Master Plan report's design principles and strategies have been framed to be able to be translated into DCP design guidelines. A precinct-specific DCP (or section) is recommended to capture the intent of the Master Plan. Alternatively Council may choose to endorse the Master Plan, once finalised, as a policy document.

Recommended development controls captured in the Master Plan include height in storeys and active frontages, and convey the intent to retain and strengthen tree canopy on streets and mid-block. These are supported by proposed controls for setbacks and site cover.

7.4.1 Setbacks

The setbacks proposed are for both the front (street) and the rear of some lots. They are for ecological, environmental and amenity reasons. The intention is to protect existing vegetation that is an important part of the area character and to enable and encourage strengthening of these east-west 'green fingers'. This is to provide for habitat, allow for stormwater infiltration (thereby minimising run-off and pressure on proprietary stormwater devices), and encourage tree planting for shade, outlook and streetscape character.

The parcels of land outlined in red are for 'setback and dedication'. It is recommended that a detailed plan with dimensions of the pedestrian spine through these sites is included in a future DCP (noting that the minimum dimension recommended is 11.5m (refer Section 7: Pedestrian spine above)



- min. 8m front setback;
- min. 6m side setbacks;
- min. 15m rear setback;
- max. 40% site coverage;

Proposed Setbacks



Implementation

7.4.2 Minimum lot size

It is recommended that

- No minimum lot sizes are applied to the land to the west of John Oxley Drive, to allow flexibility in how the land may be developed. This is in part a response to the potential for a range of future uses in this area, including the large Bunnings site and existing Aged Care. The existing very large lots with single dwellings could change as the Shopping Centre and adjacent uses develop, and the land parcels could support ancillary health, medical or other commercial uses.
- The four lots on the corner of Kingfisher Road and John Oxley Drive may be considered for a site specific master plan for a health-related (potentially also aged care) facility given their strategic location next to the Shopping Centre, access to the road network, and their ability to be developed as a group.
- Elsewhere, testing of the built form against existing lot sizes suggests that no change to the controls is needed. The subdivision pattern can support the master plan vision.

7.5 Development Contributions**7.5.1 Options considered**

Depending on the chosen mechanism, amendments may be required to include the addition of a new clause / special provision and new LEP map. Options considered were:

1 Voluntary Planning Agreement

- For proposed catalyst sites (proposed active spine occupies a portion of the site), a special provision in the LEP provides bonus FSR (+0.35:1 – base 0.65:1) and bonus height (+3 metres – base 10m) if the proponent provides works in kind or equivalent monetary contribution to fund the proposed active spine, plus the dedication of land free of cost to Council.

- Mechanism would be a VPA (Section 74 EP&A Act)

2 Incentive Provision in LEP

- Special provisions map identifies sites
- DCP identifies location and width of active spine
- Sites eligible for bonus height and FSR if identified land for active spine is dedicated free of cost to Council

3 Compulsory Acquisition

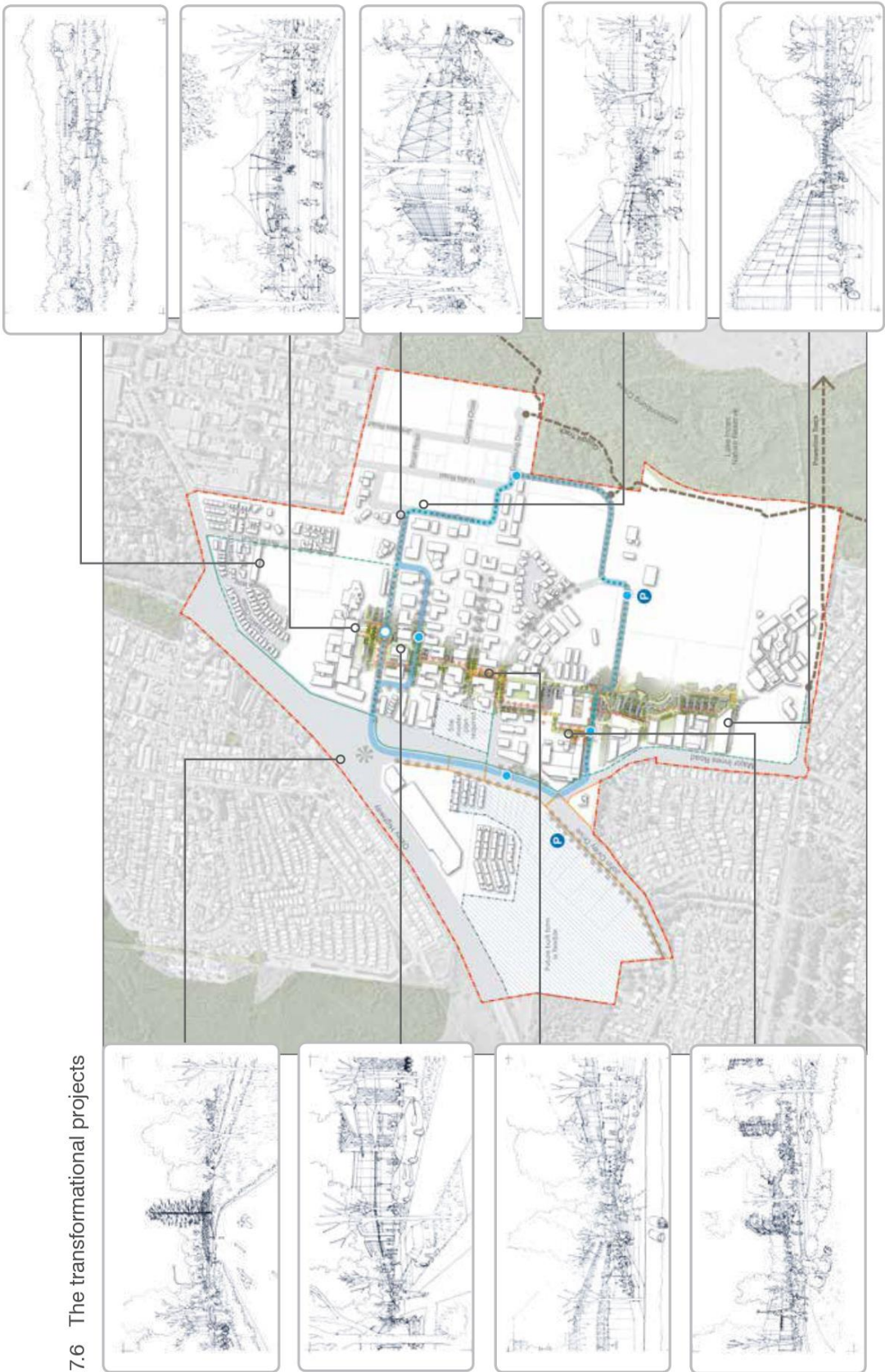
- Reserve catalyst sites in PMH LEP
- Requires compliance with Local Government Act 1993 or the Roads Act 1993.
- Refer
 - Local Government Act 1993, Chapter 8, Part 1, Clause 186-190
 - Land Acquisition (Just Terms Compensation) Act 1991 No 22
 - Part 2 Acquisition of land by compulsory process
- <https://www.legislation.nsw.gov.au/#/view/EP/2013/541/parts/c15.1>

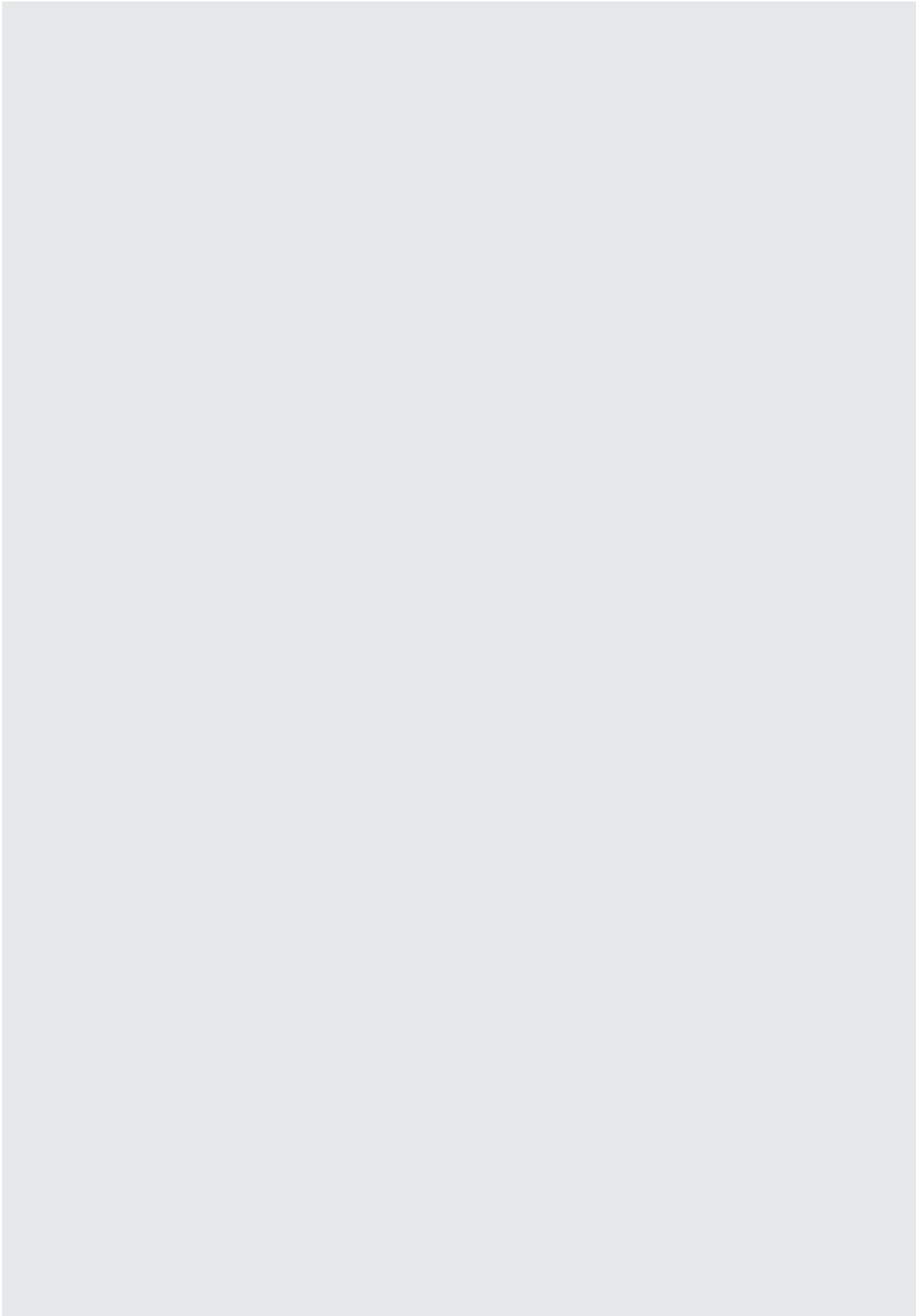
7.5.2 Local contributions plan

Recommendation: A land owner of a site identified as Area 1, Area 2, Area 3, Area 4, or Area 5 (the catalyst sites) in the PMHC LEP FSR and HOB maps is eligible for a reimbursement of s 94 or s 94A contributions providing the identified setback is dedicated to Council. This would require an amendment to Council's Local Contribution Plan.

Implementation

7.6 The transformational projects





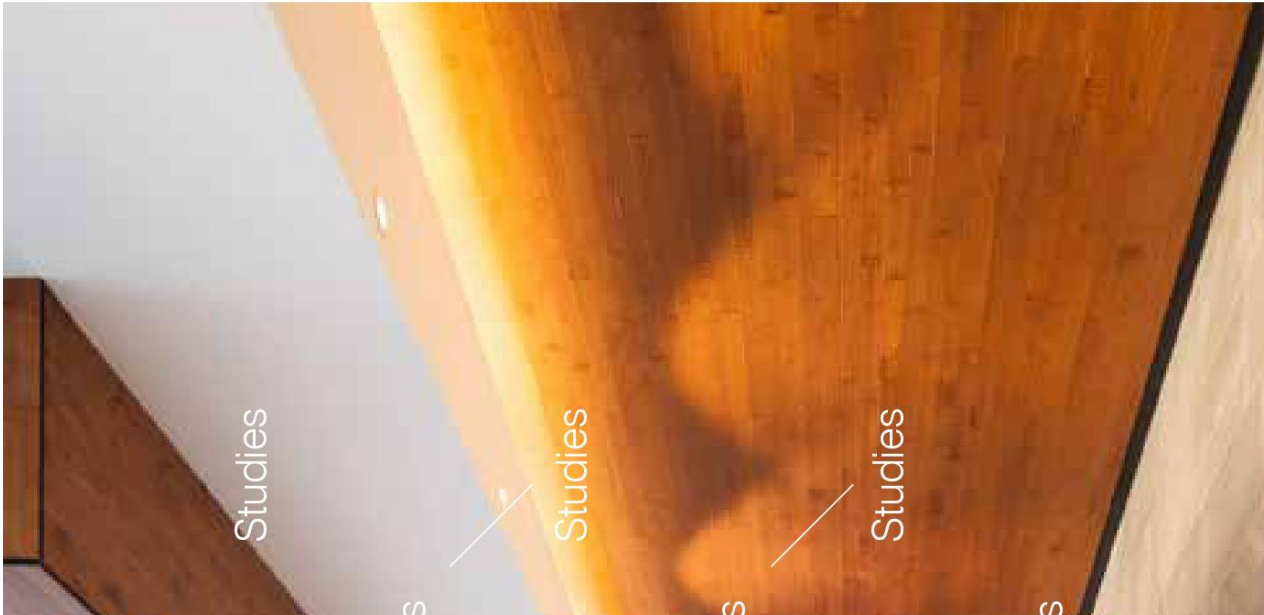




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A Understanding global trends

Preparing for the EBD process, we researched best practice examples of contemporary practice in design for education, health, research and innovation precincts. Afterwards, and drawing on the EBD outcomes, we identified the most suitable (and most liked) built examples for the HEP. This section summarises the research and also presents the building typologies recommended for best 'fit'.



Implementation

“Advances in technology are transforming just about every part of our lives, from the way we work to the way we communicate and access services... The pace of change, supercharged by new and emerging technologies, has never been so great, nor so disruptive”

Australian Government. 2015, National Innovation and Science Agenda Report

As part of the Enquiry By Design (EBD) process, participants reviewed a range of precedents: projects from Australia and around the world that are recent examples of good design for education, health, research and innovation hubs. Those that were best received were characterised by a mix of spaces and facilities supporting not just different activities within one institution, but different institutional needs. This section of the master plan report summarises further research and findings from national and global case studies. It supplements the EBD material with a greater level of detail about the example building types, scale, layouts, and relevant features. In doing so it provides stakeholders with a tool to test what kind of built form could fit on their land – or conversely, what sort of land parcel would be needed to support a desired use.

Global trends

Katz & Wagner in *The Rise of Innovation Districts* (2014) suggest that a new geography of innovation is evolving around the world, ignited by emerging economic trends and demographic preferences:

- “Innovation districts are the manifestation of mega-trends altering the location preferences of people and firms and, in the process, re-conceiving the very link between economy, shaping, place making and social networking”
- “Innovation districts constitute the ultimate mash up of entrepreneurs and educational institutions, start-ups and schools, mixed-use development and medical innovations, bike-sharing and bankable investments – all connected by transit, powered by clean energy, wired for digital technology, and fuelled by caffeine”
- Successful innovation districts need more than caffeine: they all contain “economic, physical, and networking assets, that combine to create an innovation ecosystem”. Three models referenced by the authors are:

- (1) ‘Anchor Plus’ – City Centre (e.g. Kendall Square in Cambridge, Cortex district in St. Louis)
- (2) ‘Re-imagined urban areas’ – urban renewal of waterfronts & industrial areas (e.g. Boston’s South Boston waterfront, Seattle’s South Lake Union area, 22@ Barcelona, Surry Hills Sydney)
- (3) ‘urbanised science park’ – densification of suburban/exurban areas (e.g. Macquarie Park, Sydney, North Carolina’s Research Triangle Park)

National trends

“We [government] will change funding incentives so that more university funding is allocated to research that is done in partnership with industry; and invest over the long term in critical, world-leading research infrastructure to ensure our researchers have access to infrastructure they need”

The Australian Government’s 2015 publication, National Innovation and Science Agenda Report, identified that “innovation and science are critical for Australia to deliver new sources of growth, maintain high-wage jobs and seize the next wave of economic prosperity”. The report observes that innovation is about new and existing businesses creating new products, processes and business models; and also about creating a culture that backs good ideas and learns from taking risks and making mistakes. In Australia, there is room for improvement: we are renowned for smart ideas, but we often fail to back them and turn them into commercial realities; and Australia’s rate of collaboration between research and industry sectors is the lowest in the OECD.

It concludes – similarly to the EBD participants – that we need to encourage Australia’s world-class researchers and businesses to collaborate to shape our future industries and generate wealth; and it proposes government policies (among others) to:

- Equip Australians with skills relevant to 2030: create a world-leading, flexible and diverse education system that provides future-ready citizens, including skilled workers and entrepreneurs
- Apply bold thinking to solve challenges and facilitate innovation through service delivery and procurement
- Increase the translation and commercialisation of research. Incentivise collaboration to better connect knowledge creation and application
- Enhance and inspire fresh thinking to solve national challenges.

NSW trends

“We need a rethinking of the way that we educate, and provide health services and research in an age of digital disruption and emerging technologies and industries”

PwC, 2017, Reimagining the Liverpool Innovation Precinct

The Greater Sydney Commission is leading metropolitan planning for the Greater Sydney region. While their recommendation to grow and invest in health and education precincts is place-specific, their background investigations took a broader viewpoint and are relevant to Port Macquarie. They found that:

- Health and education precincts are drivers of export services
- Education is the largest export service industry in NSW – with international enrolments growing at a faster rate than domestic enrolments
- Government investment in, and the growth of health and education precincts will:
 - Diversify job opportunities
 - Facilitate jobs closer to home
 - Strengthen the international competitiveness of the economy, particularly in the area of innovation
 - Differentiation from other precincts is key.

Implementation

Factors for success

"University precincts have suffered from a focus on institutional property management overshadowing the creation of synergies between researchers and private enterprises"

Getting the governance of innovation districts right.
SGS Economics & Planning, 2017

SGS set out the key characteristics of successful innovation precincts, which are relevant to the vision for the Health and Education Precinct. Some of these exist already and can be built on (X). Those that are developing (<) or missing (X) are actively addressed by the Master Plan:

Characteristics of successful innovation precincts

- ☒ Highly accessible location
- ☒ Credible and reputable anchor enterprises/institutions
- ☒ A critical mass of related enterprises – drawing on collaboration and creation of synergies between researchers and private enterprises
- ☒ Vibrant, amenable and walkable physical environment
- ☒ Well-connected digital environment
- ☒ Open and democratic operating environment (a mindset for collaboration)
- ☒ Shared spaces that facilitate collaboration
- ☒ Flexible design that promotes scalability and continual evolution
- ☒ Governance arrangements that nurture the precinct's vision and its long-term economic development objectives.

Factors for governance

Delivering an innovative health, education and research precinct involves not only its physical development, but also 'the ongoing and long-term operation of the precinct, delivery of infrastructure and activating the public domain'

Getting the governance of innovation districts right.
SGS Economics & Planning, 2017

Applying the learnings from successful innovation districts to Port Macquarie means considering different governance models from conventional urban development. At its most developed, this would mean creating a precinct-wide entity to both 'own' and drive the master plan, one that is responsible for the functions, key elements, and funding of initiatives. EBD participants themselves addressed this in a discussion about creating an Alliance of key stakeholders. Like the EBD process itself, this could include representatives of Council, agencies, major institutions and community organisations, working together to track, review and align projects within the precinct to the master plan vision.

Resources

- <https://www.sgsep.com.au/publications/getting-governance-innovation-districts-right>
- <https://www.brookings.edu/essay/rise-of-innovation-districts/>
- <https://www.brookings.edu/blog/metropolitan-revolution/2017/09/08/12-principles-guiding-innovation-districts-2/>
- <https://www.pwc.com.au/agendas/cities/reimagining-liverpool-aug17.pdf>
- <https://industry.gov.au/industry/Industry-Growth-Centres/Documents/Sector-Competitiveness-Plan-Overview.pdf>
- <https://industry.gov.au/industry/Industry-4-0/Pages/default.aspx>
- <https://industry.gov.au/Innovation-and-Science-Australia/Documents/Australia-2030-Prosperity-through-Innovation-Full-Report.pdf>
- <https://www.innovation.gov.au/page/national-innovation-and-science-agenda-report>
- <https://www.thechamber.com.au/Media/New-Vision-to-Transform-Liverpool-into-a-World-Lea>

Implementation

Education Campuses



- 01 The Macquarie University Incubator (Architectus, 2017) needed to accommodate diverse and changing needs of its occupants, to be relocatable and to be built in a short time frame. The design supports collaboration and interaction between individual start-ups, in addition to privacy for each start-up to operate as its own business.
- 02 NeW Space by Lyons Architects, The University of Newcastle, 2017
The NeW Space building is a landmark the University of Newcastle in the heart of Newcastle's CBD. Developed as a technology-rich and engaging demonstrator site, NeW Space provides space to test innovative teaching, collaboration and socialising experience. There is a dedicated 'gathering' space and campus green for university and community use, as well as a series of 'urban rooms' connecting building users to key Newcastle landmarks.
- 03 James Cook University Education Central Building (Wilson Architects, Townsville, 2014) has taken its design cues from contemporary retail service models and contains large-scale active learning spaces and social learning areas, encouraging peer-to-peer learning and extending learning beyond the traditional classroom environment.

“Unlike traditional academic design, incubators are more likely to resemble co-working spaces and start-ups offices, offering augmented flexibility, inspiring collaboration and providing greater autonomy”

National Innovation and Science Agenda Report, Australian Government, 2015

Today's education landscape is transforming as a competitive, high risk/high reward marketplace encourages entrepreneurship. In this context, in an attempt to remain relevant and enable emerging thinkers to pursue new innovative pathways to success, universities are introducing campus spaces where students can connect to fellow entrepreneurs and interested financiers.

These new places are identified as academic incubators and challenge the conventional design of the university campus and internal learning environments. They are regarded as the 'missing middle' between campus and workplace.

The rise of academic incubators is consistent with National and NSW State Government directions to rethink the traditional education system to ensure the Australian workforce is qualified to seize the next wave of economic prosperity.

In addition, universities are beginning to view their relationship to industry and the wider community in a more inclusive and expansive way. To support and accommodate this cultural change, design that provides a range of spaces for individual focus, informal communication and collaboration, and spontaneous connection is required.

Student-centred
learning |
Collaboration |
Adaptable space

Implementation

Health facilities



- 01 Sayanmoto Clinic by Yamazaki Kentaro Design Workshop, Saga - Japan, 2014
Against a context of an ageing population, this mental health clinic specialises in the treatment of patients with dementia. It has special "learning" common space where patients, staff and families can interact. An outdoor garden is designed to create a sense of familiarity by recalling the local scenery of rice fields and mountains.
- 02 Ballarat Community Health Centre by DesignInc, 2014
A whole-of-life design concept, based on the benefits of interaction with nature and community. In addition to the multiple allied health services provided on-site, the Centre includes a gymnasium, cafe, conference facilities, meeting and event spaces for community use, all around a central indoor atrium.
- 03 Frick Chemistry building by Hopkins Architects, Princeton University, 2010
The aim of the laboratory building is to reinvigorate the Department of Chemistry at the University and integrate teaching and high-level research spaces in a facility which seeks to enhance interaction, collaboration and creativity.

"Health will be as much about mathematicians and engineers and physicists as it is about actual doctors, that's what medical research is showing us"

Former NSW Health Minister Jillian Skinner

Science made visible |
Indoor-outdoor design |
People-centred

Health care delivery
A growing focus on patient experience, improving operational efficiency, collaboration, and recognition of the therapeutic impacts of environmental design on wellness and recovery, is influencing the provision of health care services and facilities.
Key trends and research outcomes include:

- Co-locating of allied health services in response to operational efficiency and outpatient satisfaction and the rise of micro-hospitals
- Growing need for collaboration spaces, larger exam and meeting areas as clinics become more education focuses and are often tied to academic institutions
- As building uses are likely to change over time, designers are working to provide flexibility and adaptability

- Focus of patient experience: convenient parking, intuitive wayfinding, and a non-stressful and welcoming feel
- Specialised outpatient hospital, providing tailored recovery services, with cafes and retailers
- Landscape and therapeutic gardens: cumulative research outcomes demonstrated beneficial outcomes e.g. shorter postoperative days, need for fewer potent pain drugs. Poor design can lead to psychological and physiological discomfort, whereas good design hinders negative effects.

Medical Research

Emerging trends in the design and function of medical research facilities and buildings include:

- Increasing cross disciplinary collaboration, requiring laboratories to support flexible and

- adaptable teaching and research activities
- Demand for service intensive spaces that can accommodate sometimes large, frequently changing pieces of equipment, and changes in research focus and protocols
- Rise in institutions offering community outreach classes for primary and secondary students, requiring functions such as adjustable bench heights, preparation areas and storage space
- Putting 'science on display': making laboratory spaces visible, integrating display and collaboration areas, inclusion of cafes to make the science buildings more approachable, interesting and enjoyable

Implementation

Innovation precincts



Flexible | Bold |
Connected

A growing emphasis on
collaboration is contributing to a
new geography of innovation.

The recent Australian Geography of Innovative
Entrepreneurship report (2016) prepared by the
Department of Industry, Innovation and Science,
Australian Government identified that the presence
of research organisations with known industry
collaboration was positively linked with significant
increases in innovation activity in a region (by an
average of 350 per cent above the national average).

01

Tonsley Innovation District, Adelaide, South Australia was
founded on a desire to create an environment for industry
to innovate and grow through connection to research and
education institutions. It aligns with the State's Strategic
priorities that include commercialisation of research and the
student experience, growth through innovation, showcasing
South Australia (SA) as the best place to do business. The
Innovation District is 61ha mixed use precinct that houses a
range of high value light industry and commercial business,
retail and civic space, in addition to Flinders University,
engineering, science and technology schools, and TAFE
SA's Sustainable Industries Education Centre.

South Australia's first driverless shuttle bus is in operation
at Tonsley, transporting Flinders University students and the
public around the Innovation District as part of a five year
trial

Implementation

Temporary activation



Multi-purpose |
Small scale |
Catalyst | Interactive

There has been increasing attention and incidence across international settings on temporary use projects as a tool for activating underutilised urban space.

In a context of economic uncertainty, temporary use projects provide a viable alternative to significant financial investment. They can play in the evolution of a precinct, suburb or city, by creating convivial urban spaces.

Temporary use projects that are underpinned by quality urban design and relevance to a particular locality present an opportunity to enhance the urban experience, provide a means for testing ideas and incubating start-up businesses, to instill a greater confidence in an area, and in the process reveal the possibilities of space and fill the gaps prior to future formalised development.

- 01 Macquarie University Campus Common by Architectus, Macquarie University, 2017
The MU Campus Common is a temporary event and retail space including retail and food outlets, located along the North-South spine of Macquarie University. Using shipping containers (like the REStart project in Christchurch post-earthquake) and tensile fabric, the Campus Commons provides a dynamic and welcoming hub for students to socialise.
- 02 Nomadic Bookstore by AA Museum Lab, Milan, 2017
Designed by Diploma students at the Architectural Association School of Architecture in London, the project is a manifesto of the relevance of books in the context of the expansion of the digital. The project activates an underutilised urban street corner during the day and night (after dark the structure is illuminated), and fosters spontaneous connection between the local community.
- 03 The Movement Cafe by Studio Myerscough, Greenwich, London, 2012
This was part of a larger project to regenerate the former Greenwich Industrial Estate, and served as a gateway threshold to the Olympic borough during the 2012 Olympic Games in London. The cafe is run by the Greenwich Co-Operative Development Agency, a local not-for-profit organisation that works with disadvantaged communities across London.

Implementation

Building typologies

- These precedents provide valuable lessons for the Port Macquarie Health and Education Precinct:
- Mixing uses and activities facilitates community interaction and activities, both in the short term and long term.
 - Entrances and atria into and through buildings encourage walking circulation around the broader campus environment.
 - Healthy precinct design and planning can be reinforced with healthy architectural design
 - The building types shown here are suitably sized and scaled for the HEP lot pattern.

Mixed-Use Town Centre
Cammeray Square, Sydney



Short-Term Activation
Campus Common, Macquarie University, Sydney



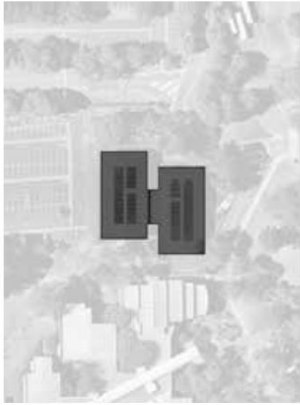
Shared Learning Space
The Incubator, Macquarie University, Sydney



- Developer: Stockland
Year of completion: Unknown
Size: 14,600sqm GFA (approximate)
- Mixed-use development with shops, restaurants, a Harris Farm market as an anchor tenant, a medical and dental centre, early learning centre, 3 storeys of apartments, and basement parking.
 - The retail ground floor provides active frontages outwards to the streets as well as inwards to a 1,500sqm open space which is furnished with art, lighting, and landscaping.



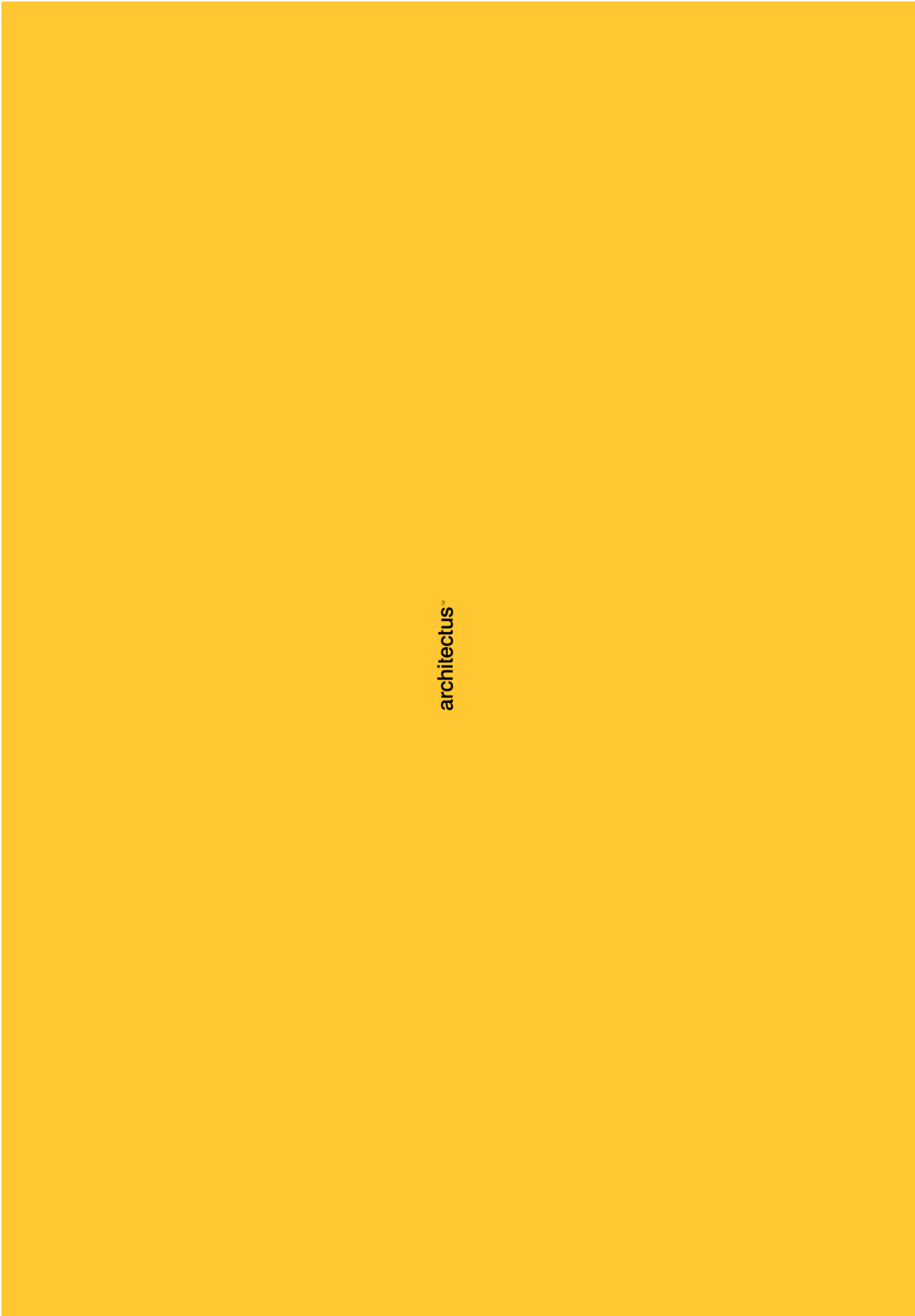
- Architect: Architectus
Year of completion: 2017
Size: 2,100sqm GFA
- Temporary event and retail space formed from shipping containers for structure and tensile fabric for shelter.
 - Relatively fast and cheap construction enabled quick provision of bar and entertainment facilities while other campus buildings are redeveloped.
 - This facility may be adaptively reused and / or relocated, either as a whole or in components.



- Architect: Architectus
Year of completion: 2017
Size: 943 sqm GFA
- A vibrant and accessible space for students, researchers, staff, and small-medium sized enterprises (SMEs), entrepreneurs, and start-ups who are working on research or an idea that can be commercialised.
 - Incubator was conceived as a pair of pavilions, each with flexible layouts that lend themselves to the future / changing functions of start-ups.

Implementation

<p>Education Services and Support <u>The Chancellery, University of the Sunshine Coast</u></p>		<p>Shared Health Services Clinic <u>Ballarat Community Health Primary Care Centre</u></p>		<p>Advanced Technologies <u>Australian Future Fibres Research and Innovation Centre (AFFRIC), Deakin University, Geelong</u></p>		<p>Hotel / Multi-Storey Parking <u>Little National Hotel, Barton, Canberra</u></p>	
<p>Architect: Architectus Year of completion: 2006 Size: 2,700 sqm GFA</p> <ul style="list-style-type: none">- Creates new campus hub and student focus- Civic and education functions- Building includes 14 tutorial rooms, 40 academic offices, 600sqm of student services, 251 seat theatre and cafe		<p>Architect: DesignInc Year of completion: 2014 Size: 2,850sqm GFA</p> <ul style="list-style-type: none">- A whole-of-life health philosophy is promoted by bringing natural light and greenery through the building, creating an comfortable and enriching environment for people.- A full height atrium provides circulation through the building and encourages community engagement.		<p>Architect: GHD Woodhead Year of completion: 2013 Size: 5,286sqm GFA</p> <ul style="list-style-type: none">- This advanced materials research facility is part of a collaborative project between the university, CSIRO, and the Victorian Centre for Advanced Materials Manufacturing.- The "Link Building" houses specialist testing facilities aimed at advancing the composites and bio-medical industries.		<p>Architect: Redgen Mathieson Architects Year of completion: 2015 Size: 4,400sqm GFA (approximate)</p> <ul style="list-style-type: none">- Two storeys of hotel rooms enjoy great city views from atop four storeys of car parking.- Perforated black metal panels with gold-coloured edges provide an attractive facade while hiding the parking structure and avoiding disturbance to a local colony of golden sun moths.	



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4 Your Natural and Built Environment

18/09/2019

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

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19/06/2019

Item: 13.01

Subject: PROPOSED ORBITAL ROAD PROJECT

Presented by: General Manager, Craig Swift-McNair

Alignment with Delivery Program

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.

RECOMMENDATION

That Council:

1. Note the information provided in:
 - a) this Proposed Orbital Road Community Engagement Council report and
 - b) the RPS Proposed Orbital Road Community Engagement Report, Attachment 1.
2. Thank the community for the feedback received during the engagement period in relation to the proposed Orbital Road and request the General Manager advise those who made submissions of Council's determination in this matter.
3. Request the General Manager to proceed to the next stage of the proposed Orbital Road process, being the development of a Strategic Business Case, known as "Gate 1" (incorporating a Needs Confirmation Summary, known as "Gate 0") as identified in the NSW Infrastructure Investment Assurance Framework.
4. Note that the Strategic Business Case will include a review of (but will not be limited to):
 - a) Findings to date (e.g. Orbital Road Feasibility Study and recent community engagement)
 - b) Project specific traffic studies
 - c) Environmental impact investigations
 - d) Social and economic impact investigations
 - e) Investigation of alternate routes
 - f) Planned road upgrades to the existing road network
 - g) Engage and partner with:
 - i) Roads and Maritime Services (RMS)/Transport for NSW (TfNSW);
 - ii) NSW Office of Environment & Heritage (OEH);
 - iii) NSW National Parks & Wildlife Service (NPWS);
 - iv) NSW Department of Planning & Environment (DPE);
5. Request the General Manager to make this Council report (including any attachments) and the subsequent Council resolution available to the public, through appropriate communication channels.
6. Request the General Manager to make this Council report (including any attachments) and the subsequent Council resolution available to State agencies as listed above such as TfNSW, OEH, NPWS, DPE and

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Attachment 1

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- any others deemed applicable, as well as to local State and Federal Members of Parliament.
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 are represented on the Committee.
 8. Request the General Manager to develop a communications and engagement plan to cover the period of the development of the Strategic Business Case, as a way of keeping the community informed, including via the Community Consultative Committee, to enable transparently and in a timely manner in relation to progress of the project.
 9. Request the General Manager to develop a plain English version of the Port Macquarie-Hastings Council Area Wide Traffic Study, which is then to be made available to the public via the Council web site.
 10. If Council resolve in line with Item 3 above (i.e. proceed to development of the Strategic Business Case), request the General Manager to write to the State member for Port Macquarie, Leslie Williams MP, seeking ongoing support and \$400,000 in grant funding as a co-contribution towards the estimated \$800,000 cost to develop the Strategic Business Case, with Council also contributing \$400,000.
 11. In parallel with the commencement of the Strategic Business Case, request the General Manager to investigate the implications for the overall proposed Orbital Road project of separating what is known as the flood-free Primary Airport Access Road from the proposed Orbital Road project (at the appropriate time), separate to the East-West Link (Ocean Drive to Oxley Highway) and the North-South Link (Oxley Highway to Boundary Street).
 12. Request the General Manager to table a report at the September 2019 Council meeting detailing progress on the resolutions of Council as they relate to this Proposed Orbital Road Community Engagement report.

Executive Summary

This report brings together the summary of recent community engagement regarding the proposed Orbital Road, which consists of the collective east-west link (Ocean Drive to Oxley Highway), the north-south link (Oxley Highway to Boundary St) and the flood-free Primary Airport Access Road (Oxley Highway to Hastings River Drive). It also presents a summary of the planning and investigation work completed to date on future needs in terms of our local transport network.

The report also provides detailed information and outcomes regarding the work undertaken by Council staff in response to the 21 November 2018 Council resolution to "*commence community and stakeholder engagement on the viable route options for the Orbital Road*" and "*actively seek external funding for preconstruction activities required to progress the planning for the Orbital Road*". It also follows on from the May 2015 resolution of Council in which Council resolved to "*endorse the investigation and planning for new road links and upgrades within the Local Government Area including (a) new North-South and East-West links (b) additional links to Port Macquarie regional Airport ...*".

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Council has undertaken a large body of work in recent years in relation to investigating proposed new links. It has also delivered a large body of work for road network improvements since 2013 totalling \$72.5 million.

As resolved on 21 November 2019, Council engaged the RPS Group to support an extensive community and stakeholder engagement program regarding the Proposed Orbital Road from November 2018 - March 2019. In the attached engagement report (**Attachment 1**), RPS have aimed to accurately and fairly capture the feedback provided during the engagement period. As a single project, this has received the highest level of community engagement and feedback ever experienced by Council.

The feedback received from the community is extensive and has been explained under 'key themes' in the attached report (**Attachment 1**). Further, RPS presented twelve recommendations, which have been considered by Council staff, with the responses, detailed in this report.

In presenting, the RPS Community Engagement Report Council is now at the point in this process where it needs to consider whether or not to proceed to the next step in the project planning process and the development of a Strategic Business Case.

While not required for Council projects, Council is working to ensure this project process aligns as closely as possible with the NSW Infrastructure Investment Assurance Framework. The Framework includes a series of "gates" as review and decision points. In aligning this project development and management process to the NSW Government Framework, Council will ensure that the project may be suitable for consideration for NSW Government funding or construction support in the future.

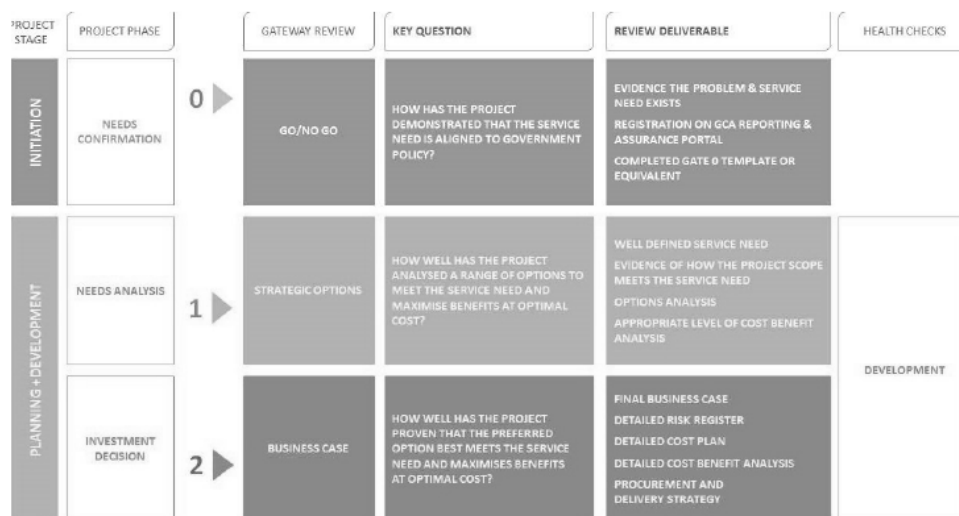


Figure 1 - Snap shot of Infrastructure NSW Investment Assurance Framework summary

Whilst the initial proposed, Orbital Road engagement program mapped a draft project process and timeline that focused strongly on the proposed Orbital investigation area and routes identified from the Engineering Feasibility Study, Council has listened to the community's desire to consider a broader range of options - both other options for new links (some of which have been received as submissions) and potential further upgrades to the existing road network. For this reason, this report recommends that Council proceed to the development of a Strategic Business Case, with the scope of

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this work to include a review of options, including but not limited to the following matters:

- Alternative link road routes/options - both those presented by Council during the recent community engagement and those suggested by the community during this time; and
- Council has continued its upgrade program, including the Lake Road, Ocean Drive upgrades and working with the Roads and Maritime Services (RMS)/ Transport for NSW (TfNSW) on improvements to the Oxley Highway, noting this is a State controlled road.

At the conclusion of the Strategic Business Case, the intent is that Council will have a more detailed appreciation of the preferred option(s) to alleviate traffic congestion via better dispersal of traffic across the network. This may include short, medium and long-term options to improve the existing Port Macquarie road network (both widening roads and intersection upgrades) and/or provide new links.

A Communication and Engagement Plan will be developed for the Strategic Business Case to ensure timely updates to, and engagement with, the community as work progresses. As recommended by RPS, the establishment of a Community Consultative Committee will also be part of this Plan.

This report recommends that Council proceed to the development of a Strategic Business Case through collaborating with the community and key state partners.

DiscussionWhat is the role of Council?

One of the key strategic functions of a Council is to adequately manage the road network. As an area grows, the demand on the road network changes, not only the volume of road users but the pattern of travel and user types. Constructing new roads and upgrading existing roads ensures that the efficiency, capacity and safety of the network is maintained and where required improved.

Port Macquarie is identified as a Regional City in the NSW Government's North Coast Regional Plan and is one of the fastest growing regional centres in NSW. The introduction of Charles Sturt University in 2015, continued expansion of the Base Hospital since 2013, upgrades to the Port Macquarie airport, growth of the broader education sector, expansion of the CBD and shopping precincts, and increased residential development have all contributed to the growth of the Port Macquarie-Hastings area. Continued growth is expected to see our population reach an estimated 104,000 by the year 2036.

The Port Macquarie road network has limited capacity to continue to facilitate and respond to a fast rate of growth with critical elements of the network already experiencing reduced levels of service as identified in a range of previous studies and traffic assessments. This limited capacity is centred on the Oxley Highway, Ocean Drive, Lake Road and Hastings River Drive areas and the need to facilitate effective east-west and north-south movements and improved access to key areas. Current designed network upgrades are only likely to provide additional capacity in the short term (5-10 years). This limited capacity will have impacts on the region's economic development and the level of service provided to the community as Port Macquarie continues to grow.

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Since the 1980's it has been recognised that Port Macquarie requires adequate road corridors to connect current and future urban areas recognising the Lake Innes Reserve as being a geographical divider. This was further outlined in the 2002 Hastings Roads and Traffic Study. Many improvements to the existing road network have been implemented responding to traffic demands experienced due to growth however; with continued expansion of the urban area, the road network remains largely incapable of handling current traffic volumes.

Significant upgrades that have occurred to support the area's growth since the 2002 traffic study include the upgrade of the Oxley Highway from the Pacific Highway into Port Macquarie as the key gateway, duplication and upgrade to Ocean Drive and the linking of Ocean Drive to Gordon Street.

Upgrades to a number of key intersections including the intersection of Oxley Highway/Ocean Drive/Gordon Street/Hastings River Drive and the Hastings River Drive/Boundary Street intersection have also been completed.

Corridor upgrades that are continuing include the duplication of Hastings River Drive between Gordon and Boundary streets and the duplication of Lake Road between Ocean Drive and Oxley Highway.

Below is a summary of investigations informing the strategic need and routes for the Orbital Road to date.

Planning for Urban Growth 1989 - Outer Orbital Link	Plan developed for an outer Orbital link as part of the planning for the beaches and southern areas of Port Macquarie
The Hastings Road and Traffic Study (2001)	The Hastings Road and Traffic Study was completed following adoption of the Hastings Urban Growth Strategy (2000) with a major outcome of the work being the recommendation that the Port Macquarie-Hastings plan for the provision of an 'Outer Link Road' to cater for future traffic generated from both new and existing development areas. The conceptual Outer Ring Road was identified as linking Ocean Drive through to Hastings River Drive via the Oxley Highway.
Innes Peninsula Traffic Study (2002)	The traffic study indicated the need for road links to the Oxley Highway and the incorporation of plans for an Outer Ring Road from Ocean Drive as the existing collector system was inadequate for the expected growth in traffic.
Port Macquarie Outer Link Roads route feasibility and selection study (2005)	Building on the recommendations presented in the Hastings Roads and Traffic Study, Port Macquarie-Hastings Council commissioned environmental consulting firm ERM to undertake an Outer Link Road route feasibility and selection study. Preliminary road corridor options assessed included an East-West route, linking Ocean Drive and the Oxley Highway and a North-South route, linking between the Oxley Highway and Hastings River Drive.

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Port Macquarie Outer Link Options – Traffic Assessment (2006)	Following the Outer Link Road route feasibility and selection study, SMEC undertook traffic network modelling assessment of seven north-south options, four east-west options and a combined link road option. Results confirmed the links would provide travel timesavings across the local road network; however, greater timesavings would be achieved with the continuous link.
Port Macquarie Revised Route Options Report (2007)	In 2007, ERM prepared a revised route options report for consideration by Council in its September 2007 determination of preferred routes to be exhibited for community comment.
September 2007 Council Resolution - Outer Link Road Route Options	<p>At the 17 September 2007 Ordinary Council meeting, it was resolved as follows:</p> <p>ADOPTED: 17/9/07</p> <ol style="list-style-type: none"> 1. That EW link 3E/3A be the preferred option to cater for long term traffic relief from Lake Road (Oxley Highway to Ocean Drive) and an environmental approval and concept design for this route be pursued to further investigate a link to the industrial area within the next 3 to 5 years, as part of Council's future Transport Infrastructure Works Programme. 2. That the upgrade of Lake Road, Ocean Drive to the Oxley Highway, be the preferred option to cater for the short to medium term east/west movement of traffic between Ocean Drive and the Oxley Highway. 3. That the upgrade of Lake Road be limited to a four (4) lane carriageway (two lanes in each direction plus kerbside parking lanes) until EW link 3E/3A, or an alternative EW link is implemented. 4. That in the event of Council being unable to obtain an environmental approval for EW link 3E/3A (or an alternative EW link nominated by Council), upgrade of Lake Road to a six (6) lane carriageway be pursued to cater for long term traffic movements between Ocean Drive and the Oxley Highway. 5. That NS link 3C be the preferred link to cater for longer term north/south traffic movements between Area 13 and Hastings River Drive via the Airport precinct and that the final alignment of this link reviewed as part of the Area 13 and Airport Precinct planning. 6. That NS link 4A be the preferred option to provide a link between Area 13 and Hastings River Drive and further development in the Sancrox precinct. 7. That Clifton Drive, Widderson Street and Findlay Avenue continue to operate as local collector roads and traffic conditions within these roads be monitored to determine necessary upgrades to be further considered for inclusion in Council's Transport Infrastructure Improvement Programme. 8. That copies of ERM Australia Pty Ltd and all Workshop reports be made available as part of the public exhibition.

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	<p>9. That the outcomes of the public exhibition be reported for Council to resolve a position with respect to proceeding with the outer link road investigations.</p> <p>10. That the changes required to the report, as outlined by the Director of Infrastructure Services, be adopted.</p>
Port Macquarie Outer Link Roads Final Route Options Report (2008)	The Outer Link Roads Final Route Options Report updated the revised route options report with additional traffic modelling results, updated road and bridge construction costs and revised distribution of future population.
May 2008 Council Resolution - Port Macquarie Outer Link Road Route Options	<p>At the 07 May 2008 Ordinary Council meeting, it was resolved as follows:</p> <p>ADOPTED: 7/5/2008</p> <p>1. The Upgrade of Lake Road be the preferred option to cater for the east/west movement of traffic between Ocean Drive and the Oxley Highway.</p> <p>2. A detailed concept design and strategy for the upgrade of the Lake Road corridor be further reported to Council during 2009, including opportunities for rezoning of adjoining lands, improved parking, staging and a funding plan.</p> <p>3. NS link 3C be the preferred link to cater for longer term north/south traffic movements between Area 13 and Hastings River Drive via the Airport precinct and that the final alignment be reviewed and further reported to Council, as part of Area 13 and Airport Precinct land use planning.</p> <p>4. NS link 4A be deleted from further consideration due to the marginal economic impacts of developing this route and the high environmental impacts that would need to be ameliorated.</p> <p>5. Clifton Drive, Widderson Street and Finlay Avenue continue to operate as local collector roads and traffic conditions within these roads be monitored to determine necessary upgrades to be further considered for inclusion in Council's Transport Infrastructure Improvement Programme.</p>
Port Macquarie-Hastings Infrastructure Gap Analysis (2014)	In 2014, PSA Consulting Australia undertook a capacity assessment of Port-Macquarie Hastings transport and telecommunications infrastructure. Informed by stakeholder input and strategic analysis of anticipated needs, the report recommended consideration of new transport provision from Oxley Drive to Boundary Street and Oxley Highway to Ocean Drive.
May 2015 Council Resolution - Road Network Planning	<p>At the 20 May 2015 Ordinary Council meeting, it was resolved as follows:</p> <p>ADOPTED: 20/5/2015</p> <p>That Council:</p> <ol style="list-style-type: none"> 1. Endorse the investigation and planning for new road links and upgrades within the Local Government Area including: <ol style="list-style-type: none"> (a) new North-South and East-West links (b) additional links to Port Macquarie Regional Airport

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	<ul style="list-style-type: none"> (c) new link between Central Road and Acacia Avenue (d) options for additional access to the southern section of the Lake Road Industrial area through to Kingfisher Drive/Wrights Road area (e) upgrade of Lake Road to two lanes in each direction between the Oxley Highway and Ocean Drive. <ol style="list-style-type: none"> 2. Consider the proposed link road investigations in the preparation of the Urban Growth Management Strategy (UGMS) review and prior to commencing any investigations for the future rezoning of land that may be affected by future link roads. 3. Actively seek external funding for the preconstruction and construction activities required for the upgrade of Lake Road. 4. Consider funding the preconstruction activities in 2016 - 2017 budget if other funding is not forthcoming.
Port Macquarie Orbital Road Engineering Feasibility Investigation (2015-2018)	An engineering feasibility study for the Orbital Road commenced in 2016 to determine the most feasible route from an engineering perspective, looking at environmental constraints, project costs and other more recent infrastructure and land constraints that have been introduced in the last 10 years. The investigation identified a viable route for the proposed Orbital Road, which informed the investigation corridor for the community consultation undertaken by Council.
Port Macquarie- Hastings Area Wide Traffic Study (2015-2018)	The Area Wide Traffic Study undertaken by Council, in partnership with RMS, identified that the proposed Orbital Road project would remove through traffic from the Inner Port Macquarie area, and allow easier access for local traffic.

Following a period of Administration Council was returned in September 2012. Subsequently in March 2013 Council resolved as follows in relation to priority Roads Infrastructure projects:

RESOLVED: Intemann/Levido

That Council, in relation to Roads Infrastructure projects:

1. Allocate the highest priority to the Stingray Creek Bridge Upgrade; reconstruction of Houston Mitchell Drive; the Hastings River Drive upgrade to four lanes from Gordon Street to Boundary Street and commence reconstruction of Beechwood Road.
2. Write to the Minister for Roads and Ports, the Hon. Duncan Gay, seeking to meet with him regarding traffic congestion and safety program funding for Hastings River Drive.
3. Allocate appropriate funding in the 2013/14 budget for works as discussed in the report for the Stingray Creek Bridge Upgrade, Houston Mitchell Drive, Hastings River Drive and Beechwood Road, as discussed in this report.
4. Seek assistance from NSW Treasury Corporation (T-Corp) to review Council's financial position based on proposed borrowings outlined in this report.

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CARRIED: 8/0

FOR: Besseling, Griffiths, Hawkins, Levido, Roberts, Sargeant, Turner and
Intemann

AGAINST: Nil

In accordance with that resolution, Council has substantially completed works as prioritised, from 2013 to 2019, to the value of approximately \$54.5 million, being:

Beechwood Road upgrades - 2014-2019	Reconstruction and rehabilitation of Beechwood Road (Waugh Street to Neville Road) completed in stages from 2014 to 2019 at a total cost of \$6.6 million.
Hastings River Drive/ Boundary Street intersection upgrade - 2014	Intersection upgraded to traffic signals completed in 2014 at a cost of \$2.3 million.
Duplication of Hastings River Drive 2016	Duplication of Hastings River Drive (Gordon to Aston Street) completed in 2016 at a cost of \$5.9 million.
Houston Mitchel Drive upgrade 2017	Upgrade of Houston Mitchell Drive completed in 2017 at a cost of \$8.3 million.
Stingray Creek Bridge upgrade 2017	Upgrade of Stingray Creek Bridge completed in 2017 at a cost of \$28.8 million.
Hastings River Drive / Newport Island Road intersection upgrade 2018	Construction of dual lane roundabout at the Hastings River Drive / Newport Island Road intersection completed in 2018 at a cost of \$2.6 million.

In addition to the works identified in the 2013 resolution, Council has also undertaken a broad program of road network improvements across the Local Government Area, including works on Lake Road.

Major improvement projects, delivered since 2013, are outlined below:

Saltwater Creek Bridge upgrade - Pembroke Road 2013	The upgrade of a single lane timber bridge on Pembroke Road to a dual lane concrete bridge completed in 2013 at a cost of \$1.5 million.
Loggy Creek Bridge upgrade - Pembroke Road 2014	The upgrade of a single lane timber bridge on Pembroke Road to a dual lane concrete bridge completed in 2014 at a cost of \$1.0 million.
The Boulevard and Dunbogan Tip Road upgrade 2015	The upgrade of The Boulevard and Dunbogan Tip Road to improve flood access for the Dunbogan community

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	completed in 2015 at a cost of \$2 million.
Lake Road - Blackbutt Road Intersection upgrade (roundabout) 2016	The upgrade of the Lake Road / Blackbutt Road intersection to a dual lane roundabout completed in 2016 at a cost of \$3.2 million. This project also included minor modifications to the Lake Road / Jindalee Road roundabout to achieve two west bound through lanes.
Gordon Street upgrade 2017	The upgrade and safety improvements to Gordon Street (Horton Street to Lake Road) completed in 2017 at a cost of \$1.4 million.
Hyndman's Creek Bridge upgrade - Comboyne Road 2017	The upgrade of a narrow timber bridge to a full dual lane concrete bridge on Comboyne Road completed in 2017 at a cost of \$1.6 million.
Bulli Creek Bridge upgrade Comboyne Road 2018	The upgrade of a single lane timber bridge to dual lane concrete bridge on Comboyne Road completed in 2018 at a cost of \$2.0 million.
Harty's Creek Bridge upgrade - Comboyne Road 2018	The upgrade of a narrow timber bridge to a full dual lane concrete bridge on Comboyne Road completed in 2018 at a cost of \$1.8 million.
Albert Street Bridge upgrade 2018	The upgrade of a single lane timber bridge to a dual lane concrete bridge on Albert Street, Kendall, completed in 2018 at a cost of \$0.9 million.
O'Neill's Bridge upgrade - Batar Creek Road 2018	The upgrade of a narrow timber bridge to a full dual lane concrete bridge on Batar Creek Road completed in 2018 at a cost of \$0.9 million.
Lake Road Duplication (Toorak Court to Oxley Highway) 2018	Duplication of Lake Road (Toorak Court to Oxley Highway) completed in 2018 at a cost of \$1.7 million.

These projects were undertaken with funding from Council and with the support of other levels of government.

Engagement

Due to the complex nature of this community engagement project, availability of limited internal skills and experience for engagement at the proposed scale, along with the sensitive nature of the Orbital Road project, a 'reverse brief' style of proposal was determined as the most appropriate procurement method.

It was determined that the most effective procurement method in the circumstances. Accordingly, the Local Government Procurement panel arrangement – Professional Consulting Services (LGP1208-3), was reviewed and two specialist communication consultants were identified as suitable.

The benefit of using a Local Government Procurement panel arrangement directly for procurements over \$150,000. Is that Local Government Procurement has met the

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requirements of Section 55(3) of the Local Government Act 1993 (NSW), with Local Government Procurement being a "prescribed organisation". As a result, there is no requirement for Council to undertake a formal Tender process for these services.

The Request For Quote (RFQ) documentation was subsequently issued to two appropriately experienced and qualified consultants seeking detailed proposals on 14 August 2018.

The project delivery was divided into a two (2) phases, with Phase 1 being a direct appointment based on the outcomes of the RFQ process. Phase 2 option was the subject of a separate Council resolution, at its sole discretion. Further information on key items for each of the Phases is as follows:

Phase 1 – Advice on commencing the community engagement prior to a Council decision to engage:

- Appropriate media release statements and supporting visual product as required to inform the public prior to Council report about the project and Council's intent to engage; and
- Appropriate content for a Council report (public document) to initiate the community engagement
- The commencement of a Community Aided Telephone Interview (CATI) Survey

Phase 2 (Subject to Council decision to proceed) – Plan and lead the community engagement process for the next stages of planning and development for the Orbital Road project:

- Produce a comprehensive engagement plan;
- Produce appropriate support products - Fact sheets, feedback surveys, map products, information for Council's online 'Have your say' website, etc;
- Facilitate community information sessions;
- Collate and document feedback and submissions received; and
- Produce a comprehensive engagement report.

On the 14 September 2018, RPS/Straight Talk Pty Ltd were engaged to undertake the Phase 1 component of the project. With Phase 2 being subject of the Council decision at the November 2018 Council meeting.

Council, with the support of RPS, delivered an extensive community and stakeholder engagement program for the proposed Orbital Road. The consultation and engagement period began November 2018 and concluded on 30 March 2019.

The RPS engagement program was designed to:

- raise awareness about the proposed Orbital Road, including communicating the history of the project
- invite and encourage submissions from the community and other stakeholders to inform Council's
- decision whether to further the progress the project
- provide accurate and timely information about the proposed Orbital Road and the planning process
- understand and access valuable local knowledge from the community and stakeholders
- promote a comprehensive and transparent approach
- establish communication channels so stakeholders are kept informed throughout the corridor planning process

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On 21 November 2018 in a Confidential Report to Council, Council resolved to progress investigations for the proposed Orbital Road as follows:

*RESOLVED Alley /Dixon**That Council:*

1. *Accept the quote from RPS Manidis Roberts Pty Ltd trading as Straight Talk for Phase 2 of the Orbital Road Communications Strategy and Community Engagement project for \$106,525.00 (inclusive of Project Management Fees- exclusive of GST).*
2. *Note that the total cost for engaging RPS Manidis Roberts Pty Ltd trading as Straight Talk for the Orbital Road Communications Strategy and Community Engagement project(Phase 1 and Phase 2) will total \$181,275.00 (inclusive of Project Management Fees- exclusive of GST).*
3. *Pursuant to Section 55 (3) (a) of the Local Government Act 1993, resolve to not invite tenders for the Orbital Road Communications Strategy and Community Engagement project.*
4. *Affix the seal of Council to the necessary documents.*
5. *Maintain the confidentiality of the documents and consideration in respect of Tender T-18-43.*
6. *Request the General Manager to commence community and stakeholder engagement on the viable route options for the Orbital Road.*
7. *Request the General Manager to actively seek external funding for preconstruction activities required to progress the planning for the Orbital Road.*

The engagement was required to be undertaken in accordance with advice from RPS and delivered in a number of stages. All attempts were to be made to engage with the broader community in addition to those within the investigation area. However, as is often the case with this type of project, the bulk of the feedback received has been from the potentially effected community members.

- **Engagement process**

The engagement process prior to the November 2018 Council meeting, commenced with a Computer Assisted Telephone Interview (CATI) survey of 604 residents to gauge the community's attitudes toward traffic across Port Macquarie, explore travel habits and behaviours and understand levels of awareness of the concept for an Outer Orbital Link Road, as it had been described historically.

The results from the CATI survey can be found in the RPS Community Engagement Report - Section 2.3.4 (**Attachment 1 and 2**). The CATI report was part of the initial RPS methodology as part of Stage one of the engagement actions. This was to assist in understanding and awareness of the project in the broader community, noting the survey questions were not route specific.

Following the 21 November 2018 Council resolution Council staff commenced doorknocking 414 properties within the investigation corridor to provide initial project information relating to the proposed Orbital Road.

Communication material delivered included:

- An addressed letter to the resident/landowner/business owner
- FAQ document
- A map of the investigation corridor

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To coincide with Council's decision to progress investigations for the proposed Orbital Road, a project information webpage was launched on Council's Have Your Say website. Community members were encouraged to provide feedback to Council on the proposed Orbital Road through the website.

During the broader engagement program, face-to-face and online engagement tools were used to inform community and stakeholders about the project and to facilitate the expression of their opinions, concerns and ideas. A range of opportunities to provide feedback and seek information were available. These included:

- posts on the Port Macquarie-Hastings Council Facebook and Twitter pages
- video messages from the Mayor and Deputy Mayor
- project information brochure, frequently asked question sheets and maps were distributed to properties
- within the investigation area, and emails and letters to stakeholders and directly and indirectly affected landowners.
- key stakeholder and landowner meetings, including meetings with local action groups
- six community drop-in information sessions and multiple pop-up information booths, held in a range of locations
- paper-based and online surveys about the proposed orbital road and broader issues about traffic and transport in the local area
- meetings and telephone conversation with community members.

During this time period, property owners, residents and business owners within the investigation corridor were also able to request a one-on-one meeting with Council's project team. Between 22 November and 10 December 2018, 30 requests for one-on-one meetings were lodged through the Have Your Say website.

A second letter box drop to property owners, residents and business owners within the investigation corridor was conducted prior to Christmas 2018. Material delivered included a project update letter from the Mayor, a project information brochure and fact sheet. The material was also made available to the community via the Have Your Say website. During the period from December 2018 through to February 2019 Council staff, the Mayor, Councillors and the General Manager continued to meet with residents, businesses and other community members.

From 26 February 2019 until 30 March 2019, in response to community feedback, Council developed a series of additional fact sheets which were made available on the Have Your Say webpage. The fact sheets included:

- Identifying a corridor for the Orbital Road
- Corridor Protection for Future Road Infrastructure
- Environmental Considerations for the Proposed Orbital Road

During this period, several community and stakeholder engagement activities were implemented including:

- A. Six community information sessions
- B. Eight stakeholder workshops (i.e. Environmental Groups, Real estate Agents, Business groups, Community groups etc.)
- C. Five community pop-up sessions
- D. Four meetings with residents and local action groups

During the engagement process, 42 meetings were held with individuals, businesses and residents outside the formal community engagement sessions. In addition, there

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were 17,500 unique visits to the Have Your Say project webpage, with over 46,350 page views, which is the total times a project page was loaded.

Since the November 2018 Council meeting there has been a high level of community interest in the project with eight community members also speaking at the following Council meetings:

- 12 December 2018
- 20 February 2019
- 20 March 2019
- 15 May 2019

Community attendance at the above-mentioned Council meetings was high.

- **Engagement Feedback**

Throughout the engagement process there was a high level of engagement. A summary of the engagement outcomes is included in the RPS Engagement Report Section 2.3 (**Attachment 1**). In summary this included:

- 1788 community members participated in face to face sessions 495 submissions received (including emails, letters and submission feedback forms)
- 604 local residents participated in a randomly-selected phone survey exploring initial perceptions, ideas and concepts about the proposed Orbital Road, and general views on traffic and congestion. A CATI survey was completed 1 – 9 November 2018
- 578 proposed Orbital Road community surveys completed
- clear themes emerged from the feedback received during meetings, at the community drop-in sessions
- Social media and media coverage

A list of submitters is included in **Attachment 3**.

Clear themes emerged from the feedback received via community feedback forms, emails, postal and online submissions and during community and stakeholder meetings as outlined in the RPS Community Engagement Report Section 3 (**Attachment 1**).

Below is an outline of the engagement themes and subthemes including the number of times the theme was raised through the submissions received. These are outlined in the RPS Community Engagement Report Section 4 (**Attachments 1 and 2**). The numbers displayed against each theme indicates the number of times the theme was raised through the engagement submissions.

1. Project Planning and decision making - 359
 - Benefits of the proposed Orbital Road
 - Trust in Council and the decision-making process
 - Project planning and decision making
 - Project need
 - Funding for the proposed Orbital Road
 - Project name
 - Timelines for the proposed Orbital Road
2. Collective Impacts - 232
 - Infrastructure and growth
 - Traffic congestion

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- The Health and Education Precinct
- Local infrastructure assets
- 3. Social Impacts - 193
 - Connections to place, lifestyle and amenity
 - Health and wellbeing
 - Community impacts
- 4. Environmental Impacts - 183
 - Flora and vegetation
 - Fauna and habitats
 - Flooding and evacuation
 - Noise and vibration
 - Wetlands and waterways
 - Acid sulphate soils and contamination
 - Geology
 - Lake Innes Nature Reserve and Kooloonbung Creek
 - Air quality and pollution
- 5. Infrastructure - 151
 - Impacts on existing infrastructure
 - Infrastructure upgrades
- 6. Community Engagement - 148
 - 2007 - 2008 community engagement
 - 2018 - 2019 community engagement
- 7. Property Acquisition - 128
 - Process and timing
 - Impacts to property values
 - Compensation for directly affected properties
 - Compensation for properties adjacent to the proposed Orbital Road corridor
- 8. Project alternatives - 119
 - Alternative alignments and recommendations
- 9. Investigation and evidence - 77
 - Engineering Feasibility Report
 - Area Wide Traffic Study
 - Calls for evidence to support the need and location of the proposed Orbital Road
- 10. Design - 57
 - Road design
 - Crossing Lake Innes Nature Reserve
- 11. Planning Policy - 30
 - Local and State planning documents
 - Alignment with recent planning decisions
- 12. Economic considerations - 29
 - Local businesses and organisations
 - Tourism

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13. Heritage - 18

- Local heritage buildings

- **Recommendations from RPS Community Engagement Report**

The RPS Community Engagement Report made 12 key recommendations to Council to consider based on key issues raised by the community and potential ways to mitigate the impacts of a project of this scale. These can be found in the Executive Summary and Section 5 of the RPS Community Engagement Report (**Attachment 1**).

These recommendations have been carefully considered and the proposed actions in response are detailed below.

Recommendation #1: Council to consider extending the corridor investigation area to include the area to the south of the golf course, and alternatives to crossing Lake Innes Nature Reserve.

The current corridor investigation area is of great concern to many members of the community. Primary concerns include the amount of development that has occurred within the area since 2008, Council prescribing a preferred investigation corridor for the Engineering Feasibility Study and the scale of impact the proposed road would cause on established communities.

Council staff response: As part of the Strategic Business Case, a review of alternate options, including upgrades to the existing road network and options provided by the community will be undertaken.

Recommendation #2: This document and its findings are publicly released and easily accessible for the Port Macquarie community.

It was evident in the findings that the proposed Orbital Road is of great interest to the local community.

Council staff response: The document will be publicly released with this Council report and included on Council's website.

Recommendation #3: The findings are shared internally with Council staff, specifically, those working on the Regional Integrated Transport Strategy

The local knowledge that the community have regarding their local environments cannot be underestimated. Feedback received from the community as part of this engagement program is relevant to other projects that Council is currently working on.

Much of the feedback received from the community is relevant to the RITS, especially Section 4.1.4, where comments and suggestions relate to alternate modes of transport including better public transport connections, improved pedestrian and cycleway infrastructure and mass transit options.

Council staff response: The findings will be used internally to assist in the further development of the Regional Integrated Transport Strategy.

Recommendation #4: The findings are shared with State Agencies including:

Roads and Maritime Service (RMS): Information relevant to RMS includes community feedback on the Primary Airport Access Road link into Fernhill Road and suggested upgrade of the Oxley Highway.

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The Office of Environment and Heritage (OEH): Information relevant to OEH includes Section 4.4 – Environmental impacts and 4.13 – Heritage.

National Parks and Wildlife Service (NPWS): Information relevant to OEH includes Section 4.4 – Environmental impacts.

Council staff response: Council will share the findings externally with key agencies including RMS, OEH and NPWS.

Recommendation #5: Port Macquarie-Hastings Council investigate establishing a formally recognised Community Consultative Group for the project. The purpose of this group would be for community members (through a formal nomination process) to be involved in the reviewing project information. Members would assist Council in making informed decisions that draw on local knowledge and expertise. Council could use the group to assist with communication and information sharing as well as testing approaches.

Many community members are concerned that decisions that affect their livelihood are made without their knowledge or input.

Council staff response: If the project proceeds as recommended, Council will establish a Community Consultative Committee, to support the project and act as key information sharing mechanism. The establishment of this Committee will include the development of a Charter, an expression of interest process and criteria for membership to ensure broad representation.

Recommendation #6: It is recommended that the Port Macquarie-Hastings Council Community Engagement Strategy and Policy are reviewed. Working with the community through a range of engagement means, Council should update the key principles of engagement to address transparency in the decision-making process.

Findings indicate that the community is concerned about the openness and transparency that Council proclaims.

Council staff response: Council routinely reviews its strategies and policies and there are lessons to be learnt from any engagement process. Council will, over the next 12 months, review its Engagement Policy and Procedures to ensure there are clear approaches for input into decision-making.

Recommendation #7: Council consider developing a positioning statement that addresses transparency in the decision-making process.

Council staff response: Council will, as part of the review of our Engagement Policy, consider a statement that addresses how to increase transparency in the decision making process.

Recommendation #8: Council evaluate the way that information is shared with the community, particularly outcomes from Council meetings. The information should be easily accessible to the community, with consideration that not all community members are regular users of the internet. It is recommended that Council remind the community that decisions are published on the website on the Friday following meetings. Additionally, Council could consider providing hard copy versions of Council decisions at the Council Administration Office and the local library, so those members of the community that do not use the internet can have access and visibility of decisions made by Council.

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From the findings, it appears that many community members were unaware of Council's unanimous decision during the May 2015 Council meeting to reinvestigate options for an orbital road.

Council staff response: Council will, as part of the review of our Engagement and Communications strategy and Policy, consider how information is shared with the community, particularly in relation to Council meetings and decisions. Council currently publishes the decisions of Council on its website and provides copies of the business papers at Council's Customer Service Centres and Libraries. Council will consider printing the minutes (with decisions) and providing these in our Libraries and Customer Service Centres.

Recommendation #9: That Council uses the Area Wide Traffic Study (AWTS) and conducts future traffic modelling scenarios that include the upgrade of Ocean Drive and Lake Road. This would enable the community to understand whether the proposed Orbital Road would still be needed if these works were undertaken.

The upgrade of Lake Road and Ocean Drive were consistently mentioned across submissions. Considering previous Council decisions to undertake this work and funding having been secured for Ocean Drive in 2012, Council need to prioritise the upgrade of these roads. Many community members who oppose the current proposal believe that if these projects were completed, the proposed Orbital Road would no longer be necessary.

Council staff response: Council intends to use the AWTS to assist in conducting future, more detailed, traffic modelling scenarios.

Recommendation #10: The Area Wide Traffic Study examined the road network at an LGA level. It is recommended that Council build on the AWTS to a comprehensive analysis of the Port Macquarie road network, with the aim of identifying solutions for future traffic congestion. This should include the examination of intersection upgrades.

Many community members suggested that roundabouts are not designed to handle the volume of traffic on Port Macquarie roads, particularly during peak periods. It was suggested that traffic lights would improve traffic flow.

Council staff response: Council intends to undertake additional traffic modelling at local level to support the development of future network plans to assist in identifying solutions to our current congestions and future needs.

Recommendation #11: Council develop a succinct report written in plain English that explains the outcomes of the Area Wide Traffic Study. It is recommended that questions raised in submissions are addressed in the report, specifically those outlined in Section 4.9.2 – traffic modelling and movements.

The outcomes from the Area Wide Traffic Study present challenges to those who are unfamiliar with traffic modelling. Many questions were asked about where traffic is going to and coming from across the entire Port Macquarie road network.

Council staff response: Council prepared a plain English explanation as part of the Council report to support the AWTS that was tabled at the Ordinary Council meeting in February 2019. However, this may have gotten overlooked in all the information surrounding the proposed Orbital Road. Council will review the summary to ensure a plain English, easily understood summary of the AWTS is

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available for the community and undertake a communication plan to circulate information broadly through the community.

Recommendation #12: Council inform the community about the program of works for road maintenance across the Local Government Area, specifically, what projects are priorities for Council. This should also include information regarding planning for growth and continuing to maintain current assets.

Reference was made to Council's road maintenance backlog.

Council staff response: Council provides regular updates to the community through a variety of channels including print media and the website regarding the road maintenance program. Council's priority projects are also determined through the Operational Plan process annually.

- **Engagement Analysis**

As detailed in the RPS Community Engagement Report, the community engagement program provided avenues for both qualitative (written submissions) and quantitative (surveys) data to be received by Council. This presents both benefits and challenges to the outcomes of engagement. High level analysis of CATI survey data indicates that for the initial telephone survey, 71% of respondents were supportive of the concept of an Outer Orbital Link Road, however, they were not provided with details of where such a road would be located.

Results from the proposed Orbital Road Community Survey indicated a clear division between those who support (48% of respondents) and those who oppose the project (48% of respondents). 3 % of respondents neither opposed or supported the project and 1% stated they did not know.

The 495 written submissions and feedback delved deeper into why the project was either supported or opposed by the community. As with many community engagement programs, it is often those who are likely to be impacted by a proposal, policy or plan that are most likely to take the time to provide feedback as they have a vested interest in the outcome. This presents a challenge in ensuring that broad community responses are received for such proposals.

The proposed Orbital Road engagement program reflects the nature of community engagement on projects that have the potential to impact on individuals, communities, and what they value about their local environment.

The majority of written submissions received either opposed the project outright or believed the road is needed and there were several submissions that supported the project. Accordingly, the RPS Community Engagement Report suggests a new alignment needs to be identified that minimises impacts to homes, businesses and the environment.

People who support the project believe it will create better connectivity across Port Macquarie, particularly for those living in the southern areas, and that the road would redistribute traffic across the network with the end result being the alleviation of congestion hotspots during peak periods. Conversely, many community members do not believe the proposed Orbital Road will alleviate and redistribute traffic across the region, and call for Council to present the evidence that this would be the result.

The community engagement program assisted in identifying the underpinning issues and concerns surrounding the potential impact the proposed Orbital Road would have on the local community, the environment and existing infrastructure.

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These findings provide Council with a deeper understanding of the social, cultural and environmental values tied to the local area and the potential impacts that the proposal will have on the community

Details of the community feedback, CATI Survey, community survey and all the information that was provided to the community during the engagement period are contained in the RPS Community Engagement Report and appendices (refer Attachment 1 and 2). A list of names of people who lodged submissions is also attached to this report at Attachment 3. The submissions, with identifying information redacted, are available on the Have Your Say page on Council's website.

Next Steps

If Council resolves to proceed to the next stage of the proposed Orbital Road project, this would be the development of a Strategic Business Case, known as Gate 1. The development of the Strategic Business case would also incorporate a Needs Confirmation Summary, known as Gate 0. This will generally be in line with the Infrastructure NSW Project Assurance Framework. Indicative project decision points are detailed in the figure below:



The Strategic Business Case will include a review of (but will not be limited to):

- Findings to date (e.g. Orbital Road Feasibility Study and recent community engagement)
- Project specific traffic studies
- Environmental impact investigations
- Social & economic impact investigations
- Investigation of alternate routes
- Planned road upgrades to the existing road network
- Engage and partner with:
 - Roads and Maritime Services/ Transport for NSW (TfNSW);

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ORDINARY COUNCIL
19/06/2019

- NSW Office of Environment & Heritage (OEH);
- NSW National Parks & Wildlife Service (NPWS);
- NSW Department of Planning & Environment (DPE);

The Strategic Business Case would include further detailed analysis of the existing road network. This would build on the work completed as part of Council's Area Wide Traffic Study and would see the development of a Port Macquarie-specific traffic model.

The work undertaken as part of a Strategic Business Case aims to:

- reconfirm the need for Council, to address traffic congestion and the need to improve our transport network to respond to and cater for growth;
- consider the cost benefit analysis of a full range of options and based on that, reduce the number of options to a preferred option or shortlist; and
- provide decision-makers with the information they need to determine whether or not to proceed to future stages of the project.

It is important to note that any improvements to the network across the short, medium and long term will need to be assessed with other viable improvements. The interconnected relationship of the road network means any one improvement may affect others and the timing of these improvements.

The Strategic Business Case analysis will enable deficiencies in the existing road network to be further understood and various improvement options to be tested in terms of their cost and benefit. Key considerations and objectives when reviewing the options would include:

- maximising traffic benefits by minimising travel times and delays;
- minimising construction cost;
- maximising road safety benefits;
- minimising environmental impacts;
- minimising social impacts;
- maximising future regional economic development opportunities; and
- maximising improvements to social connectivity.

If Council resolves to proceed to the Strategic Business Case stage, a specialist consultant will be engaged to complete the Strategic Business Case in consultation with Councillors, Council staff and relevant stakeholders such as Transport for NSW and Department of Planning and Industry. This process can be a lengthy one and is anticipated that it would take up to 24 months to complete. It is acknowledged that such a timeline will not give any certainty to residents within the current investigation area of a preferred route for some time. However, it is critical that Council undertake this detailed work in order to make the most appropriate decision for the future.

On completion, the Strategic Business Case would be reported to Council for consideration and with a recommendation on whether or not to proceed to the next stage of the Project and/or to determine a preferred approach to further address the traffic congestion problem. The intent being that at the conclusion of the Strategic Business Case, there would be an improved understanding of the most feasible option (s) (potentially short and long term) to alleviating traffic congestion via better dispersal of traffic across our network. It would be at this point in the process that there would be another decision point for Council to determine whether to proceed to the next phase (Gate 2) of the project, being determination of the preferred option(s) and development of a detailed business case on this option(s).

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19/06/2019

Refer to the fact sheet - Proposed Orbital Road - Strategic Business Case -
Attachment 4.

Options

Council may resolve as per the recommendations included in this report or Council may choose to resolve in some other manner.

Community Engagement & Internal Consultation

A comprehensive community engagement process was undertaken, as detailed in the report.

In preparing this report, significant internal engagement has also taken place.

Planning & Policy Implications

There are no immediate planning implications arising from this report. However as included in the recommendations there would be a requirement to review Council's Engagement Policy.

Financial & Economic Implications

Should Council resolve to proceed to the Strategic Business Case stage, funding of \$800,000 is included in the draft 2019/20 Operational Plan. It is recommended that Council seek a co-contribution of \$400,000 from the NSW government to develop the Strategic Business Case.

Any major infrastructure works such as new link roads or major improvements to the existing road network, will require significant investment from Council and likely, other levels of government.

Attachments

1. Proposed Orbital Road Engagement Report
2. Appendices - Proposed Orbital Road Engagement Report
3. Proposed Orbital Road Project - List of Submitters
4. Infrastructure - Strategic Business Case Fact Sheet

Port Macquarie-Hastings Council
PO Box 84
Port Macquarie
NSW Australia 2444
DX 7415
● council@pmhc.nsw.gov.au



ABN 11 236 901 601

25 June 2019

The Hon Leslie Williams MP
Suite 6/27 Grant Street
PORT MACQUARIE NSW 2444

Email: portmacquarie@parliament.nsw.gov.au

Dear Leslie

Proposed Orbital Road Support

Further to our previous correspondence on the subject of the proposed Orbital Road, the purpose of this letter is to seek your ongoing support for Port Macquarie-Hastings traffic network improvements. In addition to this, Council is seeking \$400,000 in grant funding as a co-contribution towards an estimated \$800,000 cost to develop a Strategic Business Case for the proposed Orbital Road, with Council to contribute the matching \$400,000.

The above request is the result of a Council resolution that came from the 19 June 2019 Council meeting, where Council considered a report on the proposed Orbital Road. A full copy of the Council resolution from the 19 June 2019 Council meeting can be found at Attachment A to this letter. A full copy of the Council report on the proposed Orbital Road can be found at Attachment B.

For background, I made an initial request for this funding support in a letter to you dated 28 February 2019. In your response dated 16 April 2019, you stated that it was premature to ask for such funding when at that stage Council had not made any decision around moving to the Strategic Business Case stage. You also stated in that letter that if Council made a decision to proceed to the Strategic Business Case stage that I should correspond further with you in relation to this funding request, hence the requests included in this letter.

As noted in resolution No.4 relating to the proposed Orbital Road from the 19 June 2019 Council meeting, the Strategic Business Case will include both a review and assessment of, but not be limited to the following:

- a) Findings to date (e.g. traffic network studies, Orbital Road Feasibility Study and recent community engagement);
- b) Investigation of alternate routes for an East-West link road (Ocean Drive to Oxley Highway) and a North-South link road (Oxley Highway to Boundary Street), including alternate upgrades to the existing road network assuming no alternate route crossing of the Lake Innes Nature Reserve;
- c) Planned traffic network improvements and upgrades to the existing road network, including Lake Road and Ocean Drive;
- d) Cost-benefit analysis of options to improve the traffic network;
- e) Project specific traffic studies;

pmhc.nsw.gov.au

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PORT MACQUARIE OFFICE
17 Burrawan Street, Port Macquarie NSW 2444

WAUCHOPE OFFICE
49 High Street, Wauchope NSW 2446

LAURIETON OFFICE
9 Laurie Street, Laurieton NSW 2443



- f) Environmental impact investigations (including heritage); and
- g) Social and economic impact investigations;
- h) Arrange value management workshops for the east-west link road options and north-south link road of the Orbital Road options to include Lake Road upgrade as an option to assist with ranking options on the basis of best value for the community, at a time determined by the General Manager within the strategic business case process.

It should be noted that the process Council is following for the project around the proposed Orbital Road, is in line with the NSW Infrastructure Investment Assurance Framework, where 'Gate 1' refers to the development of a Strategic Business Case.

You mentioned in your 16 April 2019 letter, that you had made a request of the then NSW Minister for Roads to have the RMS work with Council to fully explore feasible alternate options to minimise social and environmental impacts. As you are aware, the RMS have been a member of Councils Regional Transport Infrastructure Steering Group for several years and have played an advisory role in the development of the work to date around the proposed Orbital Road. Having said that, we are keen to deepen the involvement of the RMS / Transport for NSW in this project, particularly considering that a number of State controlled roads and intersections are having a substantial impact on traffic congestion issues in and around Port Macquarie.

As noted above, we are very keen to work with a range of State agencies in relation to the proposed Orbital Road; being Transport for NSW (TfNSW), NSW Office of Environment and Heritage (OEHS) NSW National Parks and Wildlife Service (NPWS), the NSW Department of Planning and Environment (DPE). We would also welcome your suggestions as to how Council should best go about partnering with these and any other State agencies you feel would be relevant.

I note that you mentioned in your 16 April 2019 letter (and you have stated publicly) that you do not support the currently identified route for the proposed Orbital Road. In light of this, if you have any suggestions as to what you consider to be a suitable alternate route, then we would be happy to meet with you to discuss further. It should be noted of course that the Strategic Business Case will investigate alternate routes for an East-West link (Ocean Drive to Oxley Highway) and a North-South link (Oxley Highway to Boundary St), including upgrades to the existing road network.

In closing, I would just like to repeat our request for \$400,000 in funding assistance from the NSW government as a co-contribution in the development of the Strategic Business Case for the proposed Orbital Road and we look forward to your response.



Your earliest attention and response to this letter would be appreciated. I can be contacted via return email at craig.swift-mcnair@pmhc.nsw.gov.au or on 6581 8020 if you would like to discuss any aspect of this letter further.

Yours sincerely

A handwritten signature in black ink, appearing to read "Craig Swift-McNair", written over the printed name.

Craig Swift-McNair
General Manager

Leslie Williams MP

MEMBER FOR PORT MACQUARIE ELECTORATE

6th August 2019

Mr Craig Swift-McNair
General Manager
Port Macquarie-Hastings Council
PO Box 84
Port Macquarie 2444

PORT MACQUARIE HASTINGS	
TRIM No	CRAIG No
19 AUG 2019	
Keyword	
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Dear Mr ~~Swift-McNair~~ *Craig*

I am writing in response to your correspondence dated 25th June 2019 regarding the resolution of Council to seek \$400,000 in grant funding from the State Government as a co-contribution to develop a Strategic Business Case for the proposed orbital road.

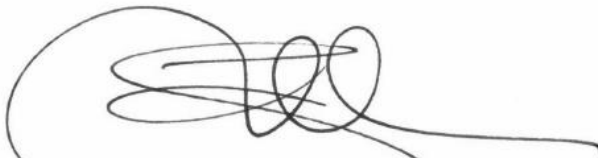
In consideration of that funding request, I arranged for you, Port Macquarie-Hastings Council Mayor Peta Pinson and Director Melissa Watkins to meet with the Minister for Regional Roads, the Hon Paul Toole MP at Parliament House to discuss a range of roads related issues including;

- Fixing Local Roads Funding Package,
- Fixing Country Bridges Funding Package and the Mid North Coast Joint Organisation (MNCJO) Timber Bridge Renewal Prospectus
- Duplication of Ocean Drive, Port Macquarie
- Transfer of Regional roads to State government
- Proposed Orbital Road, Port Macquarie

At that meeting, Minister Toole confirmed that the State Government has already allocated over \$67 million in the 2019-2020 State Budget for road projects in the Port Macquarie-Hastings area and that he would not support any additional funding being made available for the Strategic Business Case for the proposed orbital road.

I trust this clarifies the position for you, however if I can be of any further assistance, please do not hesitate to let me know.

Yours sincerely



The Hon. Leslie Williams MP
Member for Port Macquarie
Deputy Speaker

portmacquarie@parliament.nsw.gov.au

Suite 6, 27 Grant Street
Port Macquarie NSW 2444

ph 02 6584 0977



Leslie Williams MP

MEMBER FOR PORT MACQUARIE ELECTORATE

22nd August 2019

Mr Craig Swift-McNair
General Manager
Port Macquarie Hastings Council
P.O. Box 84
PORT MACQUARIE 2444

 PORT MACQUARIE HASTINGS	
TRIM No	CRM No
30 AUG 2019	
Keyword	
Activity	
Subject	
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Our Ref: LW24941

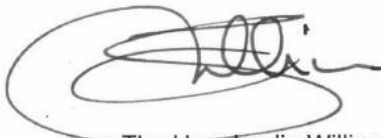
Dear General Manager *craig*

Following your recent correspondence, please find attached a copy of a letter from The Hon. Matt Kean MP, Minister for the Environment regarding his recent discussions with National Parks and Wildlife Service about the proposed orbital link road corridor.

I trust the Minister's letter clarifies the issue and concludes Councils investigations on the most viable route option for an orbital road in Port Macquarie.

If I can be of assistance with any other State Government matter, please do not hesitate to let me know.

Yours sincerely



The Hon. Leslie Williams MP
Member for Port Macquarie
Deputy Speaker of the Legislative Assembly

portmacquarie@parliament.nsw.gov.au

Suite 6, 27 Grant Street
Port Macquarie NSW 2444

ph 02 6584 0977





The Honourable Matt Kean MP
Minister for Energy and Environment

MD19/1896

The Hon Leslie Williams MP
Member for Port Macquarie
Suite 6, Grant Street
PORT MACQUARIE NSW 2444

By email: portmacquarie@parliament.nsw.gov.au

Dear Ms Williams

A handwritten signature in black ink that reads 'les'.

Thank you for your correspondence on behalf of Port Macquarie residents about potential impacts on Lake Innes Nature Reserve from a proposed orbital link road corridor.

I am advised that the National Parks and Wildlife Service (NPWS) has held discussions with Port Macquarie-Hastings Council (council) about the proposed road corridor. NPWS and council continue to engage on the proposal.

Earlier this year NPWS wrote to council during the community consultation to highlight the nature reserve's outstanding natural and cultural values including koalas and the potential impacts of the road project.

NPWS noted that the proposal corridor would separate the reserve's northern-most section. The reserve is known to contain important koala habitat and corridors. An increase in weed and pest species has also been identified as a risk. A green and golden bell frog population has also been recorded in the reserve in the immediate area of the proposed corridor.

I can also confirm that NPWS advised council about the requirements for the revocation of land reserved under the *National Parks and Wildlife Act 1974* (NPW Act). Lands reserved under the NPW Act will generally only be revoked as a last resort and where no other practical options are available. Only the NSW Parliament (through an Act of Parliament) can decide if land reserved under the NPW Act can be revoked.

Revocations may require offsets, typically in the form of land of suitable size and conservation quality to offset the loss of the revoked land from the national parks system.

In 2005 a small section of land was revoked from the Lake Innes Nature Reserve. The most recent revocations occurred under the *National Parks and Wildlife Amendment (Adjustment of Areas) Act 2016*.

If your constituents have any further questions about this issue they may contact Mr Russell Madeley, Director North Coast Branch NPWS, on 6561 6701 or email russell.madeley@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink that appears to read 'Matt Kean'.

Matt Kean MP
Minister for Energy and Environment

A handwritten date in black ink that reads '6.8.19'.

AGENDA

ORDINARY COUNCIL
21/08/2019

Item: 13.06

Subject: OCEAN DRIVE DUPLICATION PROJECT

Presented by: Infrastructure, Dan Bylsma

Alignment with Delivery Program

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.

RECOMMENDATION

That Council:

1. Note the current estimated Total Project Cost (Out Turn Cost) for the Ocean Drive Duplication is \$72.6million.
2. Note that the current project budget deficit of \$7.1million requires one or more funding sources allocated to enable approval of the Business Case by the Roads & Maritime Service (RMS) and subsequent release of committed project funding from the NSW Government.
3. Note the General Manager's letter to the Member for Port Macquarie - Leslie Williams MP of 8 Aug 2019 indicating Council's preference for the RMS to deliver the construction phase of the Ocean Drive Duplication project.
4. Request the General Manager write to the RMS Director Northern Region to outline Council's preference and support for the RMS to deliver the construction phase of the Ocean Drive Duplication project.
5. Request the General Manager table a report at the September 2019 Council meeting, detailing funding sources (Council and other) for the additional funding required for the completion of the Ocean Drive Duplication project.

Executive Summary

This report provides a status update on the Ocean Drive Duplication project between Greenmeadows Drive and Matthew Flinders Drive.

In March 2019, the Member for Port Macquarie, Leslie Williams MP announced a further \$50million commitment to fund the delivery of the Ocean Drive Duplication project. This announcement is in addition to the \$10million previously committed by Leslie Williams and is in addition to the \$5.5million previously committed by Port Macquarie-Hastings Council, bringing the total project funding commitment to \$65.5million.

It was reported to Council in August 2017 that the estimated total construction cost for the project was \$60million - see attachment. Since this time and through development of the final Business Case with the Roads & Maritime Service (RMS) it has been determined that the current (Jul 2019) estimated total project cost is \$72.6million. This estimated total project cost exceeds the total committed available budget for the project by \$7.1million. This report discusses the total project cost escalation and recommends an approach to addressing this budget shortfall.

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ORDINARY COUNCIL
21/08/2019**Discussion**

Council formerly submitted the formal Business Case to Roads and Maritime Services (RMS) on 13th June 2019. The Business Case surmises the project with a Benefit Cost Ratio (BCR) of 2.2 (at 4% discount rate) and Out-Turn Cost of \$72.6million based on construction completion in June 2022. The Business Case is currently being assessed by the RMS, however has not yet reached the RMS Assurance Review process.

The Out-Turn Cost is based on a construction methodology and cash flow program developed by an independent expert consultant and has been formally endorsed by RMS through the Ocean Drive Duplication Project Steering Group. This cost was escalated at 3.2% p.a. to 2019, 4% p.a. from 2019 to 2020 and 5% p.a. from 2020 to 2022 as directed by RMS (with sunk costs of \$2.1million excluded from the cost escalation). These costs provide the Out-Turn Cost of \$72.6million being reported in the Business Case.

With respect to the project delivery methodology, Council's General Manager wrote to the Member for Port Macquarie, Leslie Williams MP on 8 August 2019, as attached, following his meeting with the Minister for Regional Transport and Roads, The Hon, Paul Toole. This correspondence highlighted Council's preference and support for the RMS to deliver the construction phase of the Ocean Drive Duplication project.

The RMS has advised they have numerous projects in the region nearing completion (Rosewood Road Intersection Upgrade and the Spencers Cutting Upgrade) with internal resources available to establish and deliver the Ocean Drive Duplication project. Notwithstanding Council Infrastructure Delivery Sections, demonstrated success and experience in the delivery of major projects, it is recognised that an RMS led delivery model would be most suited to this scale of project noting particularly the local capacity presently available and RMS's recent experience in the delivery of projects of this size locally.

Through discussion with RMS Regional Planning Section management staff, Council officers have been informed that there is a low likelihood of the Business Case assessment progressing through the Project Assurance Review process and gaining subsequent approval whilst the project Out-Turn costs exceed the approved/available project funding. RMS staff have also confirmed that in previous similar cases, where the Business Case progressed for approval whilst subject to resolving the budget shortfall, an increased level of scrutiny and an extended assessment duration has been experienced.

It is on this basis that Council and RMS Planning and Programs Section staff are recommending to urgently address the funding deficit ahead of the Business Case formal submission for approval.

Options

Council can resolve in line with the recommendations included in this report, or resolve in some other manner.

AGENDAORDINARY COUNCIL
21/08/2019**Community Engagement & Internal Consultation**

There has been no specific community engagement in relation to this report, beyond the broader project updates and previous community engagement activities.

Planning & Policy Implications

There are no policy implications in relation to this report.

In the event that the project budget deficit is not able to be funded and the project does not proceed to construction, the Regional Transport Planning Strategy for the Ocean Drive corridor and other transport network projects will need to be reprioritised.

Financial & Economic Implications

In March 2019, the Member for Port Macquarie, Leslie Williams MP announced a further \$50million commitment to fund the delivery of the Ocean Drive Duplication project. This announcement is in addition to the \$10million previously committed by Leslie Williams and is in addition to the \$5.5million previously committed by Port Macquarie-Hastings Council, bringing the total project funding commitment to \$65.5million. At the time of this announcement (Mar 2019), the estimated total construction cost for the project was \$60million.

Since this time and through development of the final Business Case with the RMS it has been determined that the current (Jul 2019) estimated total project cost is \$72.6million. This estimated total project cost exceeds the total committed available budget for the project by \$7.1million, and the Business Case is not expected to be approved by RMS without the funding deficit being resolved.

Council proposes to work collaboratively with both the RMS and Member for Port Macquarie in seeking to urgently resolve this funding deficit, and a report is proposed for the September 2019 Council meeting, detailing potential funding sources (Council and other) for the additional funding required for the completion of the Ocean Drive Duplication project.

Attachments

1. Ocean Drive Duplication - August 2017 Council Report
2. Letter to Leslie Williams MP

AGENDA

ORDINARY COUNCIL
16/08/2017

Item: 12.03

Subject: OCEAN DRIVE DUPLICATION PROJECT UPDATE

Presented by: Infrastructure, Andrew Doig

Alignment with Delivery Program

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.

RECOMMENDATION

That Council:

1. Note the current status of the Ocean Dr Duplication project including the estimated construction costs of \$60 million.
2. Request the General Manager to write to the Local Member for Port Macquarie and the NSW Roads Minister seeking a funding commitment to progress to construction of this project.

Executive Summary

In 2013, the NSW Government, through the Roads and Maritime Services, provided a \$10million commitment to Council to fund the design and construction of the Ocean Drive Duplication between Greenmeadows Drive (South) and Emerald Drive, Port Macquarie.

Early project estimates deemed the funding insufficient due to the complexity of the proposed works. It was therefore deemed that this funding would be used to support the design, environmental assessment and planning approval for the project. A separate funding application would be required to supplement construction.

Council, through its external design delivery partner, has recently completed the detail design, environmental assessment, community consultation and final cost estimation for the project.

The Project Steering Group is seeking Council endorsement to apply to the NSW State Government Local Member and NSW Roads Minister for additional funding for the construction phase of the project.

DiscussionProject Governance

Following receipt of the State Government commitment of \$10million for the Ocean Drive Duplication in 2013, a Steering Group was formed to provide project governance to project staff. Key members of the Steering Group include:

- Councillor Justin Levido (Chair)
- Director of Infrastructure
- Council Chief Financial Officer
- Roads and Maritime Regional Manager
- Roads and Maritime Asset Manager

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16/08/2017

- Key project staff

Project Status

Council's external design delivery partner SMEC, recently completed the detail design, environmental assessment, community consultation and final cost estimation for the project. Although it is likely SMEC will provide design support during the construction phase, Council will finalise the current SMEC engagement over the coming months.

Through the Steering Group, Roads and Maritime have endorsed the final project documents providing confidence to the Steering Group that the project is in a position to commence construction phase planning. This would involve funding application, commencement of a significant Request for Tender process, Tenderer negotiation and the construction phase.

At this stage, it is anticipated the construction phase of the project would take approximately two (2) years to complete following confirmation of funding.

Project Staging

In May 2017, members of the Steering Group and key Roads and Maritime and technical staff were involved in a Project Staging Workshop. The intent of this workshop was to determine whether the 3.4km project could be split into separable projects while still providing a net community benefit.

Through analysis of a number of potential options, it was determined that the greatest community benefit for money spent is gained by construction of the entire project length from Greenmeadows Drive to Emerald Drive as a single project.

Project Costs

As the project progressed through the design phase, unit rate cost estimates were developed at key project milestones in accordance with the Roads and Maritime Project Estimating Manual. These estimates were reviewed by Roads and Maritime's Project Management Office and comments addressed by the project team.

The final cost estimate of \$58.53million was tabled at the April 2017 Project Steering Group Meeting and endorsed by the Steering Group in May 2017 following Roads and Maritime review and endorsement.

The above information is proposed to form the basis of the funding application to the NSW State Government for construction of the project.

Noting this project has not been identified as a current priority within Council's 2017-18 Operational Plan, no current internal resources have been allocated to the construction of the project this financial year. Consideration to an appropriate delivery methodology shall be carried out following any commitment to construction funding.

Options

Council has the option to accept these recommendations or propose alternate.

Community Engagement & Internal Consultation

Significant community and other stakeholder engagement has been carried out in conjunction with the detailed design development. At three separate periods during the design process, the community was given the opportunity to provide comment on

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16/08/2017**

the design and environmental reviews developed by Council. During each period, community feedback was encouraged via the Have Your Say website in addition to Project staff attendance at two separate face to face engagement sessions specifically for the community to ask questions to project staff. Feedback received from all media was considered during the project development and incorporated where appropriate.

The final engagement sessions were held at the Emerald Downs Community Hall on the 25th and 27th May 2017 to inform the community of the final design. Although some community members remained opposed to the upgrade, the majority of feedback received from the community was positive with most asking why construction has not been confirmed.

Planning & Policy Implications

There are no planning and policy implications in relation to this report.

Financial & Economic Implications

In 2013, the NSW Government, through the Roads and Maritime Services, provided a \$10million commitment to Council to fund the design and construction of the Ocean Drive Duplication between Greenmeadows Drive (South) and Emerald Drive, Port Macquarie.

As of July 2017, a total of \$1.83million has been expended on the design and preconstruction approvals for this project, with the balance of the \$10million allocation available for construction.

The final construction cost estimate of \$58.53million for the Ocean Drive Duplication was tabled at the April 2017 Project Steering Group Meeting and endorsed by the Steering Group in May 2017 following Roads and Maritime review.

It should be noted that additional costs associated with construction such as Biodiversity Offset Planting and additional consultation has not been included in this estimate, therefore a provisional allowance of \$1.5million is added to the final cost estimate for these expected additional costs. The total expected project cost is therefore in the order of \$60M.

Based on the final construction cost estimate, additional allowances and the balance of the original \$10million Grant, a further \$52million in funding is required.

Noting this project has not been identified as a current priority within Council's 2017-18 One Year Operational Plan, it is proposed that a representation be made to the NSW State Government for additional supplementary funding of \$52million to allow this project to proceed to construction.

Council may need to consider the priority and level of funding it is prepared to contribute to this project over existing works priorities as included in the current Operational Plan or give consideration to this project in future Operational Plans, should the NSW State Government not be prepared to fund the total cost of this project.

Attachments

Nil

AGENDA

ORDINARY COUNCIL
[Meeting Date dd/mm/yyyy]

Port Macquarie-Hastings Council
PO Box 84
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DX 7415
● council@pmhc.nsw.gov.au



ABN 11 236 901 601

8 August 2019

The Hon. Leslie Williams MP
Suite 6, 27 Grant Street
PORT MACQUARIE NSW 2444

Email: portmacquarie@parliament.nsw.gov.au

Dear Leslie

Ocean Drive Duplication Project

Firstly, sincere thanks for arranging and hosting a series of Ministerial meetings with Mayor Peta Pinson, Director Melissa Watkins and myself last week in Macquarie St. We found all meetings very worthwhile and we look forward to welcoming those Ministers to our area in the near future.

Secondly, in follow up to our meeting with Minister Toole where we discussed the Ocean Drive Duplication project, we committed to write to you to seek assistance from the Minister in determining whether the RMS would undertake the construction of the works associated with the Ocean Drive Duplication, hence this letter to you.

In support of the RMS taking the lead on this project, it has come to my attention that the RMS has previously shown interest in undertaking this work, as detailed in the attached letter from the RMS to me on 25 September 2015. I also understand that in recent discussions between Council and RMS representatives, that the RMS at a local Northern Region level, are still keen to undertake this project.

Noting that the business case for this project is currently working its way through the RMS approvals process, it would be opportune now to determine overall project management of this project so that the project can be structured appropriately from the outset and that once the business case is approved, the project can commence as seamlessly as possible. Confirming who will lead this project will also mean there is a clearer understanding of when a range of preconstruction tasks can commence on the site.

For your information, a report will be tabled at the 21 August 2019 Council meeting relating to the Ocean Drive Duplication project. This Council report will be an update report to Councillors and the community and will highlight the current outturn cost of the project being \$72.6 million. The report will also seek Council support for the RMS to undertake this project, plus the report will talk to the budget shortfall (\$7.1 million) that now exists for this project in light of confirmation of the outturn cost as mentioned above.

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Page 1

PORT MACQUARIE OFFICE
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WAUCHOPE OFFICE
49 High Street, Wauchope NSW 2446
☎ 02 6580 6500

LAURIETON OFFICE
9 Laurie Street, Laurieton NSW 2443
☎ 02 6550 0050



If you require any further information from me in relation to the above request, please let me know. Your earliest attention and response to this letter would be appreciated. I can be contacted via email at craig.swift-mcnair@pmhc.nsw.gov.au or on 6581 8020 if you would like to discuss any aspect of this letter further.

Yours sincerely

A handwritten signature in black ink, appearing to read "Craig Swift-McNair", written over the printed name.

Craig Swift-McNair
General Manager

Port Macquarie-Hastings Council
PO Box 84
Port Macquarie
NSW Australia 2444
DX 7415
● council@pmhc.nsw.gov.au



ABN 11 236 901 601



3 September 2019

Anna Andrews
RMS Director Northern Region
Email: anna.andrews@rms.nsw.gov.au

Dear Anna

Ocean Drive Duplication Project

Council submitted a formal Business Case to the Roads and Maritime Services (RMS) for the Ocean Drive Duplication Project on 13 June 2019. This Business Case is currently being assessed by the RMS however has not yet reached the RMS Assurance Review Process.


At the 21 August 2019 Council meeting, it was resolved to write to you outlining Council's preference and support for the RMS to deliver the construction phase of the Ocean Drive Duplication project.

I understand the RMS have previously shown an interest in undertaking this work, as detailed in the attached letter from the RMS to our General Manager on 25 September 2015. I also understand through recent discussions between Council and RMS representatives that the RMS Northern Region are still keen to undertake this project. It is recognised that an RMS led delivery model would be most suited to this scale of project, noting particularly the local capacity presently available and RMS's recent experience in the delivery of projects of this size locally.

We are at an opportune juncture in this project to determine the overall project management in order to appropriately structure the works from the outset and commence as seamlessly as possible once the business case is approved. Confirming who will lead this project will also mean there is a clearer understanding of when a range of preconstruction tasks can commence on site.

If you require any further information in relation to the above request please let me know. Your earliest attention and response to this letter would be appreciated. I can be contacted via email at dan.bylsma@pmhc.nsw.gov.au or on 6581 8058 if you would like to discuss any aspect of this matter further.

Yours sincerely


Dan Bylsma
Director Infrastructure

pmhc.nsw.gov.au

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ABN 11 236 901 601

8 August 2019

The Hon. Leslie Williams MP
Suite 6, 27 Grant Street
PORT MACQUARIE NSW 2444

Email: portmacquarie@parliament.nsw.gov.au

Dear Leslie

Ocean Drive Duplication Project

Firstly, sincere thanks for arranging and hosting a series of Ministerial meetings with Mayor Peta Pinson, Director Melissa Watkins and myself last week in Macquarie St. We found all meetings very worthwhile and we look forward to welcoming those Ministers to our area in the near future.

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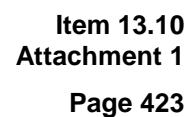


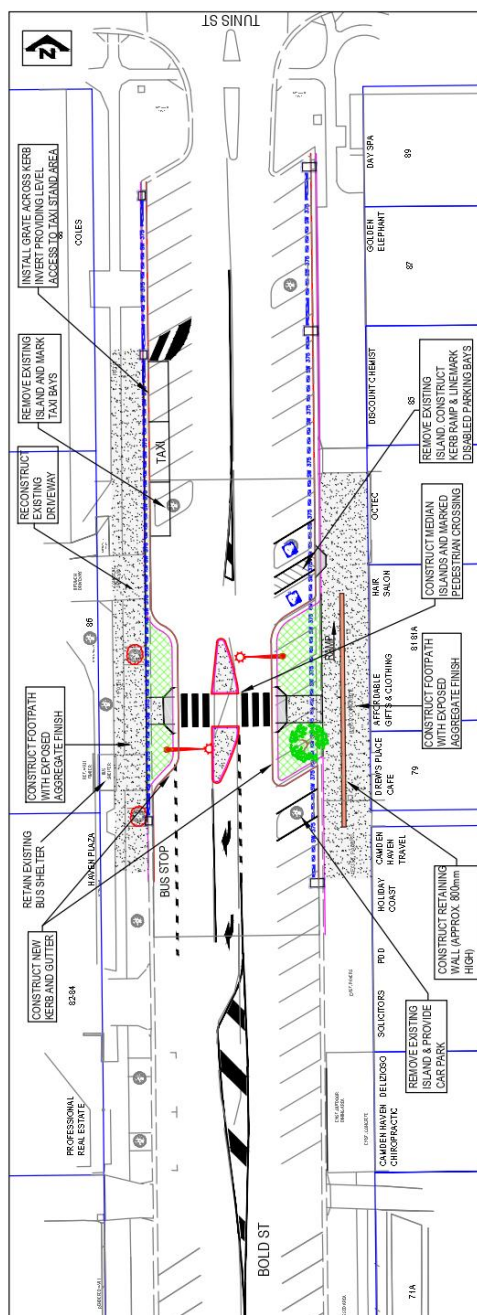
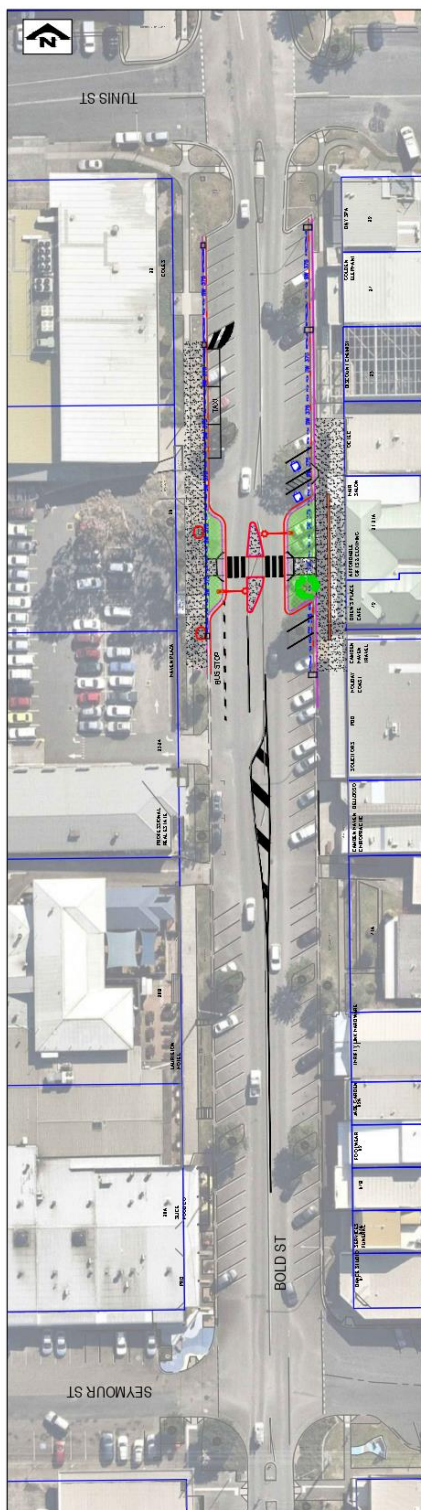
If you require any further information from me in relation to the above request, please let me know. Your earliest attention and response to this letter would be appreciated. I can be contacted via email at craig.swift-mcnair@pmhc.nsw.gov.au or on 6581 8020 if you would like to discuss any aspect of this letter further.

Yours sincerely

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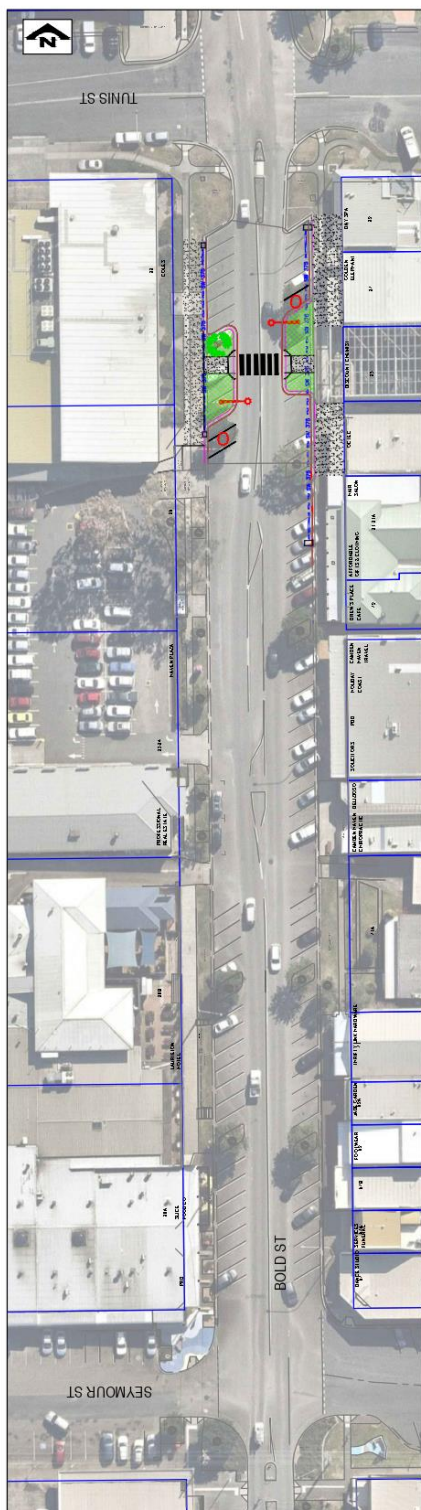
Craig Swift-McNair
General Manager



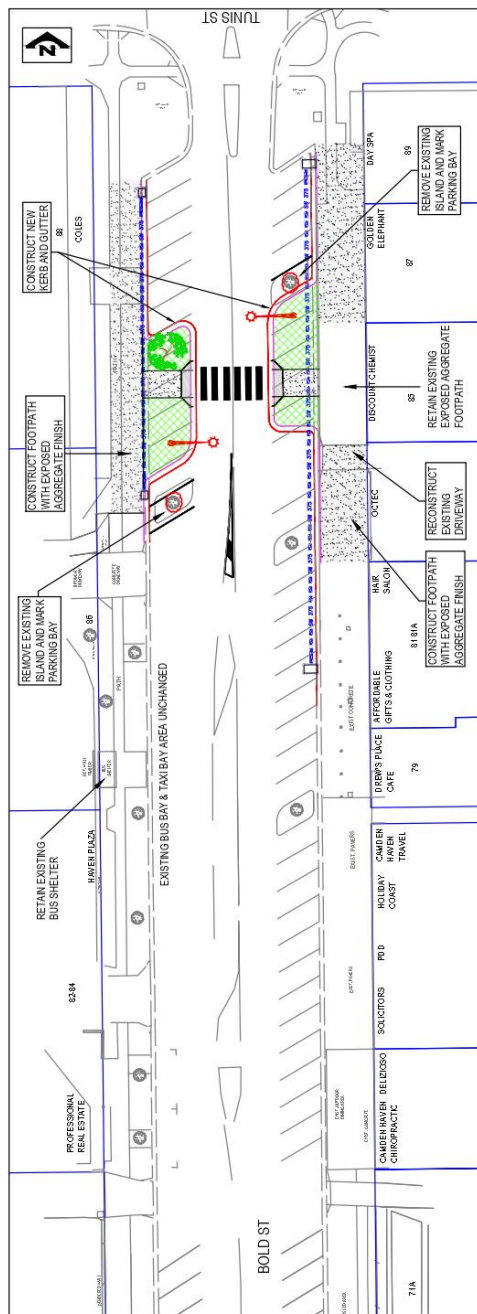


DETAIL - ALTERNATE LOCATION OPTION 1

[illegible]



PLAN OF ALTERNATE LOCATION OPTION 2 - PEDESTRIAN CROSSING LOCATED OPPOSITE CHEMIST



DETAIL - ALTERNATE LOCATION OPTION 2

REV	DESCRIPTION	INITIAL	DATE
A.	CONCEPTION REPARATION TRAILER OF COUNCIL	MJ	30/09/19

DESIGNED: MKU
DRAWN: MKU
SURVEYED: BKR

COORDINATE SYSTEM: NAD 83
ORDER OF LEVELS:
SSM 7666 R 5.43 14071

SCALE @ A1

1:500
1:400

FILE PATH: C:\msdcs\01\1232262626\01_1232262626\Drawings\Drawn By: T. J. R. 4/27/2007\Coordinate System: NAD 83 2-D Single Overlays

APPROVAL	DATE
	ENGINEERING DESIGNER	DATE
	DESIGN MANAGER	DATE
	GROUP MANAGER/IN-CHARGE	DATE

PROJECT:	MARKED PEDESTRIAN CROSSING BOLD STREET, LAURIETON	
DRAWING TITLE:	CONCEPT DESIGN MARKED CROSSING ALTERNATE LOCATION OPTION 2 - OPOSITE CHEMIST	SHEET 2 OF 2
PROJECT NUMBER:	RUL-AL-067	
REVISION:	A	

Bold Street Pedestrian Crossing Community Engagement Report



RECOMMENDATION

That Council:

1. Note the information provided in this Bold Street Pedestrian Crossing Community Engagement report; and
2. Thank the community and businesses for the feedback received during the recent consultation period regarding the Bold Street Pedestrian Crossing.

BACKGROUND

At the ordinary Council meeting held on 17 July 2019, Council resolved as follows:

RESOLVED: Intemann/Alley

That Council:

1. Note that Council staff recommend a mid-block (Option 1) alignment for the position of the Bold Street, Laurieton pedestrian crossing for the reasons as detailed in this report.
2. **Request the General Manager undertake additional community engagement for a period of 28 days from 22 July 2019, regarding the preferred location of the Bold Street, Laurieton pedestrian crossing, ensuring that the mid-block (Option 1) and the two alternate crossing locations are included in this engagement process.**
3. Request the General Manager provide a report to the September 2019 Council meeting summarising the outcomes of the community engagement.
4. Request the General Manager write to the Local Member for Port Macquarie, Leslie Williams MP requesting an extension to the current grant funding agreement for the Bold Street, Laurieton pedestrian crossing, to cater for the additional community engagement process and related timelines.

CARRIED: 9/0

FOR: Alley, Cusato, Dixon, Griffiths, Hawkins, Intemann, Levido, Pinson and Turner

AGAINST: Nil

Also noting that at the 15 May 2019 Ordinary Council meeting a Petition of over 600 signatures to locate the pedestrian crossing on Bold Street Laurieton and investigate the crossing being constructed between the entry and exit of the Coles Supermarket carpark and the Chemist Shop was tabled.

CONSULTATION APPROACH

The objective of this consultation was to:

- Seek feedback from affected businesses and transport operators on the preferred location of the pedestrian crossing and potential impacts on their business; and
- Seek feedback from the community on the preferred location of the pedestrian crossing.

The community was provided with the opportunity to put forth their preference for the location of the pedestrian crossing and why that is their preference. Businesses were visited for a face-to-face meeting to gauge any impacts on their business and what is their preferred location.

The community and businesses were given the opportunity to provide feedback on three options.

Option 1: Centrally located (Mid-Block). Opportunity for outdoor dining at restaurant. Removal of 9 car parks. Approximate cost \$580,000.

Option 2: Mid-Carpark crossing location. Relocation of taxi rank and shortening of bus bay. Removal of 11 car parks. Approximate cost \$620,000.

Option 3: Northern crossing location (Coles to Pharmacy). Safe direct route between Coles and Pharmacy. Removal of 11 carparks, six directly in front of the chemist. Approximate cost \$430,000.

COMMUNITY CONSULTATION TIMELINE

Date	Activity
Mon 22 July 2019	Submissions Open Have Your Say page published giving an overview of the project, comparison of options and a survey.
Mon 22 July 2019	Posters advertising the project and Pop Up Information Stall displayed in Libraries and Customer Service Centres.
Wed 7 August 2019	11am to 1pm Pop Up Information Stall at Haven Plaza (next to Coles)
Fri 9 August 2019	Project Team visited businesses for face-to-face meetings.
Sat 10 August 2019	9am to 11am Pop Up Information Stall at Haven Plaza (next to Coles).
Mon 19 August 2019	Submissions close.

CONSULTATION METHODOLOGY

The survey for the pedestrian crossing went on public display for four weeks from 22 July to 19 August 2019. Community members were encouraged to provide their feedback, leave comments and make submissions at the Pop Up Information Stall or via *Have Your Say* website, mail, email or printed survey forms to Council.

Council held two Pop Up Information Stalls at the Haven Plaza for the community to meet the project team and discuss the potential location and design.



(Photo: Mayor Pinson and the Project Team listening to the community)

The following communication channels were used:

Local Media Newspaper Advertisements	2 x public notices over 2 weeks in Camden Haven Courier
Local Media	Article in Camden Haven Courier
Letter to stakeholder businesses	Letter sent to all businesses impacted inviting to meet with project team or make a submission
Social Media	Council Facebook Post
Project Survey/Submission	Available at <i>Have Your Say</i> website, the pop up information stalls, Laurieton Library and Laurieton Customer Service Centre.
Email to Camden Haven Chamber of Commerce	Invitation to Chamber to promote to businesses and make a submission
Stakeholder face-to-face meeting	Meeting directly with businesses impacted.
Webpage – Have Your Say	Project page published 22 July 2019 with concept plans, comparison of options, July 2019 Council Report and opportunity to provide feedback and submissions.
Pop Up Information Stalls	Two Pop Up Information Stalls were held at Haven Plaza (Coles)
Posters	Displayed at Laurieton Library, Customer Service Centre, between Coles and Bakery and at Hair dresser window

COMMUNITY FEEDBACK

Have Your Say recorded 242 visitors to the project page. A summary of the engagement during this period is provided below:

A) **Business** 23 face-to-face meetings. Preferred location is:

Option neutral: 7
Option 1 (Central Mid-block Laurieton Hotel): 7
Option 2: (Bus stop): 2
Option 2 or 3: 2
Option 3: (Coles to Chemist): 5

B) **Stakeholder submissions.** 4 submissions were received.
Preferred location is:

Option 1 (Central Mid-block Laurieton Hotel): 2
Option 1 or 3: 1
Option 3: (Coles to Chemist): 1

C) **Residents written submissions.** 10 submissions were received.

Option neutral: 3
Option 1 (Central Mid-block Laurieton Hotel): 0
Option 2: (Bus stop): 1
Option 3: (Coles to Chemist): 6

D) **Residents** 100 submissions were received
37 submissions from *Have your Say* and 63 submissions were received via paper survey forms collected from the pop up information stalls and from Laurieton Customer Service Centre and Library.

Residents preferred location is:

Option neutral: 4
Option 1 (Central Mid-block Laurieton Hotel): 25
Option 2: (Bus stop): 9
Option 3: (Coles to Chemist): 61
Withdrawn submission: 1

A: BUSINESS AND STAKEHOLDERS FACE-TO-FACE MEETINGS

Option	Business	Face-to-Face meetings with Businesses
0	Funeral Services	No preference. Just want people to be safe
0	Fashion Store	No preference.
0	Fashion Store	No preference. Wherever you like.
0	Financial Services	No preference.
0	Entertainment	No preference. As long as it goes in.
0	Take Away	No preference. As long as it goes in.
0	Real Estate	No preference.
1	Hardware	Option 1 services all businesses, no bias towards one business. Away from Coles entrance. Other options would create traffic chaos, a lot of congestion. Bus and taxi rank a problem for option 2. People with a disability can park in front of chemist.
1	Health & Wellbeing Services	Option 1 mid-block is a good option. Option 2 not good as bus impinges vision.
1	Legal Services	Mid-block most sensible and outdoor dining. Option 3 seems a long way up and not mid-block.
1	Financial Institution	Traffic too congested for options 2 or 3 safety wise. Option 1 people cross for other businesses.
1	Food Services	Option 1 mid-block, less dangerous and chaotic, refuge is near chemist.
1	Laurieton Hotel	<p>Thank you for advising me of this unfortunate news. I write to acknowledge it, and to <u>express my objection</u>.</p> <p>As you are aware, I own and operate the Laurieton Hotel business. In addition to the hotel, we also operate the adjoining drive through bottle shop and motel. We are affected negatively by the proposed changes. I have discussed this with the building owner, Graeme Willmott, and he is also objecting to the proposed changes. Graeme also owns the mall that adjoins the hotel. I am aware he has phoned Tim to express his objections last week.</p> <p>After consultation with Council last August, I supported the project in its proposed location. It made sense to myself and others from a safety perspective, and also considering it was basically central to a range of businesses being accessed by pedestrians. Council's representative, Chris Favaloro explained all the reasons</p>

		<p>why it needed to be in that particular location (pedestrian safety, traffic protocols, fairness to affected businesses etc...).</p> <p><u>I strongly urge council to leave it in the originally proposed location.</u></p> <p>The new proposed location seems to only serve the Chemist that recently relocated. I would argue it is a more dangerous position because it is closer to the Tunis street intersection. Positioning it at one end of Bold street does not make sense for anyone, except the Chemist.</p>
1	Bold St Building Owner	Concerns about gradient and camber of footpath in front of Keune, Lotus Day etc. No to Option 2 as issues with gradient and loss of carparks. Is 40 km/hr in the street happening?
2	Pharmacy	Option 2. Coles carpark - suggest exit at rear. Encourage parking around the corner. Has there been a traffic study? Helped an elderly lady who fell over the kerb and was injured on the other side of the road and waited for ambulance with her.
2	Giftware & Clothing	Option 2. Coles exit is chaos / havoc
2 or 3	Business Services	Option 2 or 3
2 or 3	Travel services	Sight lines from buses v obscured. Will lose 2 to 3 car parks out front. Not option 1.
3	Food Services	As long as we get a crossing
3	Homewares & Fashion	No comment
3	Shopping	Shoppers desire Option3. Manager has helped on 2 occurrences when elderly ladies have tripped over the kerb and waited with them for an ambulance.
3	Employment Services	Option 3. Taxi stand should be re-located in front of pub to improve sight distances. Main pedestrian thoroughfare between Coles and the Chemist. An out of control car crashed into the shop (a few years ago)
3	Beauty Services	

Also noting prior conversations with owner of Delizioso (Italian Restaurant), who support Option 1. Option 1 would enable an expanded out-door dining option as part of the pedestrian landing area.

B: STAKEHOLDER SUBMISSIONS

Option	Stakeholder	Submission
1	Laurieton Taxi's Peter Cristoforo Director	<p>Thanks for reaching out to us in relation to the proposed pedestrian crossing in Bold St.</p> <p>We concur with Council that option 1 would be the most effective. Any crossing would need to be a distance away from the current exit driveway of Coles as it can be congested there at times with heavy traffic moving in and out of that area. Any introduction of a crossing near that immediate area (such as option 2) would be creating more risk for pedestrians.</p> <p>Option 3 doesn't seem to be sensible as it still wouldn't deter pedestrians taking the risk of crossing the road south of that crossing - it just seems too distant of a location and given that there are minimal businesses north of that proposed crossing it doesn't really make sense to have it located there.</p> <p>In relation to our own business we wouldn't welcome any change from our current rank position. The rank is obviously our place of work and acts as our business front and as such we need to be at the forefront of where people congregate. The current position also allows our drivers to assist elderly passengers when they see them waiting with the shopping bags. Moving us further north in option 2 would no longer give our drivers that line of sight to be able to assist.</p> <p>I hope this information is of some help, I can be contacted at any time to discuss further.</p>
1 or 3	Busways Malcolm Britt Network Infrastructure Officer – Central Coast & North Coast	<p>FYI buses are normally 12 metres long although they require up to 30 metres to allow for safe turning in and turning out.</p> <p>... we will require the standard 30 metres to allow for pick-ups and drop-offs, particularly in area that services disabled and elderly passengers.</p>
1	Access Sub-Committee	<p>Consensus: That the Access Committee recommend the Bold Street Pedestrian Crossing be located at Option 1, as this is mid-block and creates a safe link to all businesses.</p>

3	Taxi Driver Trevor Lewis.	<p>Hi Peta,</p> <p>I had a very slow morning on the taxi today and while sitting at the taxi rank I noticed a lot of people crossing the road near Coles. I decided to count the number of pedestrians the same way Peter and Lisa did a couple of weeks ago.</p> <p>I did speak to them on the day and suggested that holiday time and after midday was not a good time. They did say they would do another count earlier from 10.00am until midday.</p> <p>A lot of people had already crossed the street before I started the count. I have attached a list which I assure you is very accurate. I had good vision over the three areas.</p> <p>Most of the older residents in our area shop early and are home by around midday.</p> <p>I hope this is of use to you and I will pass it on to others.</p> <p>I have studied all 3 options for the crossing and I feel that Option 3 (Northern crossing location) would by far be the best for our elderly pedestrians.</p>
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PROPOSED PEDESTRIAN CROSSING FOR BOLD STREET LAURIETON

PEDESTRIAN COUNT FOR WEDNESDAY 31st JULY 2019

TIME OF COUNT	CROSSING NEAR COLES & CHEMIST	CROSSING NEAR CHIROPRACTOR	CROSSING NEAR BUS STOP
9.15am to 9.32am	26	0	1
9.43am to 10.05am	16	7	1
11.00am to 11.35am	52	9	5
11.37am to 11.47am	23	3	2
TOTALS	117	19	9

I declare that I carried out this count while waiting at the taxi rank for a fare during the times stated. I also declare that this is a true and accurate count of the pedestrians who crossed Bold Street, Laurieton on the times stated on Wednesday 31st July 2019.

Trevor Lewis (Taxi Driver)



Justice of the Peace 124498

C: RESIDENT WRITTEN SUBMISSIONS

Option	Resident	Submission
0	Resident	I see the need for a crossing but am surprised at the cost.why not a simple painted crossing well signposted from kerb to kerb taking only 2 car parks (one either side) in the area least likely to interfere with the busy car traffic going to coles.car spaces are always in demand <u>there.it</u> seems a pity to take so many away using any of the options suggested. Further the extravagant \$ 400-600,000 would be better spent towards a sports hall (next to car park at the tennis courts) as they have in port macq and in bermagui.
2	Resident	Hi I would like to have my say and suggest option two to be the safest option .
3	Resident	I just wanted to have my say I have been in laurieton for 3 months now and have noticed the main street is extremley dangerous for pedestrians you definatly need a crossing (coles end) to slow the cars down and make a 40km/h in the main street. Also a safe place for kids to ride to school as apparently they cant ride on the footpaths but its far to dangerous to ride on the road. I feel it will help with keeping kids healthy as its not always possible for parents etc to take them Maybe make the main street no cars allowed is another idea too. Make people walk/ ride more
3	Resident	I have only moved up here about 11months ago due to my husband having asbestosis we lived on Sydney Northern Beaches we moved for fresher air no planes and not so many burn offs also home is on flat ground. I used to have to quickly go to Coles and pick a script up and get back home to look after my husband I found it really irritating to try and cross the road from Coles to Chemist without being a fatality and not getting home to my husband. I did get some help after this but I really think for the sake of people in similar situations the pedestrian crossing should be outside Coles going straight to Chemist across the road. Thank You
3	Resident	To whom it may concern, I think the preferred crossing should be closest to Tunis Street opposite the Pharmacy. Thank you.
0	Resident North Haven	I read with interest Councillor Alley's comments concerning the proposed pedestrian crossing for Bold Street, Laurieton. In particular his flawed assertion that

		<p>11 car parking spaces will have to be lost, including 6 in front of the chemist.</p> <p>Could My. Alley please explain why this crossing would be so different from the crossing further along Bold Street, near the newsagents. I don't see 11 car parking spaces being taken up at this location.</p> <p>All council needs to do is remove the tree and flower bed near the exit of coles car park and put the crossing directly across the road to the chemist. This action would cost ratepayers no more than three to five thousand dollars. Not the three hundred thousand dollars indicated by council earlier in publications concerning this matter.</p> <p>This is typical council bungling no more, no less.</p>
3	Resident	<p>Dear Council Engineers, Designers and Traffic Planning People,</p> <p>First let me say that like most of you, I am flabbergasted that such a small project in such a tiny community has now developed into such an episode.</p> <p>OMG, it's crazy!!</p> <p>For me if we positively HAVE to have a pedestrian crossing it has to be Option 3 but unfortunately that too is still only the best of 3 evils.</p> <p>The critical thing PMHC needs to address, and its been lost in all the pedestrian crossing discussion, is that of the taxi rank and bus shelter. It is only a matter of time before there's a death because a motorist could not see to the south beyond the taxi vans or buses. They have to be relocated despite what pedestrian crossing option is chosen.</p> <p>PMHC needs to bite the bullet and realise that for the good of the town and everyone living in it the Coles car park needs to be relocated to the rear of the shopping strip where there is ample space to extend the rear car park and to make it all safer and easier. At the moment it's just a green field of grass nobody uses. Crazy! The Coles car park is a shambles and is a panel beater's dream. Way too congested for the number of vehicles accessing it and the age of the drivers using it. The current car park could be made into a park or put to some other community use. Should Coles even be there? Will Coles even last there? Don't put off the inevitable and don't just put a temporary band-aid on something that will need to change anyway.</p>

3	Resident	<p>Breakdown of costings required.</p> <p>Accessible to Coles & Pharmacy needed for the aged. As before re; Location.</p> <p>PLEASE <u>NOTE</u> costs of 4 bedroom home for \$196,900 on your land. This crossing is also on OUR land. Please explain.</p>
---	----------	--

Advantage series **LIVINGSTONE 22 MK3** **eden brae homes**
It's where you want to live.

Priced from **\$216,900** Autumn Sale Price **\$196,900**

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\$40k* PRESTIGE DOUBLES	\$30k* LIFESTYLE DOUBLES	\$25k* ADVANTAGE DOUBLES
\$30k* PRESTIGE SINGLES	\$25k* LIFESTYLE SINGLES	\$20k* ADVANTAGE SINGLES

ALSO AVAILABLE ON SELECTED HOUSE & LAND PACKAGES

SALE ENDS JUNE 30TH

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*The Livingstone 22 MK3 price is based on a standard four star with Robert Hughes (RHS) package (single carport) and is an estimate only. Prices are subject to change without notice. Please contact your local Eden Brae sales representative for more information. Prices are for the house only and do not include land. Prices are for the house only and do not include land. Prices are for the house only and do not include land. Prices are for the house only and do not include land.

Floor Plan Details:
 LIVING: 4.00 x 5.50
 KITCHEN: 3.00 x 3.00
 BATH: 2.00 x 2.00
 BED 1: 3.00 x 3.00
 BED 2: 3.00 x 3.00
 BED 3: 3.00 x 3.00
 BED 4: 3.00 x 3.00
 DOUBLE GARAGE
 PORCH
 TERRACE

Total Area 152.50m² (15.4sq)
 Length 18.70m Width 9.00m

The Mayor and Councillors

Port Macquarie Hastings Council

Re: Proposed pedestrian crossing in Bold Street, Laurieton

22 JUL 2019

PORT MACQUARIE HASTINGS	
TRIM No	CRM No
26 JUL 2019	
Keyword	
Activity	
Subject	
Folder SF 18/2756	

INTRODUCTION

John Simon is my name. I live in Laurieton and am very familiar with Bold Street. I had a career in Victoria Police spanning 38 years. I was a former representative on the PMHC Traffic Committee.

I understand Council's management team have been involved with the deliberations for a pedestrian crossing in Bold Street, Laurieton - near Coles.

FURTHER INFORMATION

For many years now I have observed the way pedestrians interact at marked pedestrian crossings. Some move briskly, some wander, some are on their phone and some just can't walk well. In other words a road crossing has to be constructed to accommodate the mobility of all pedestrians.

To accomplish this I suggest a pedestrian operated traffic control is the only complete solution. To put anything else in place would be a waste of time and money.

SWOT ANALYSIS

I have done a SWOT (Strengths, Weakness, Opportunities and Threats) analysis of this proposal which, in my opinion reveals the following:

Strengths

- lasting solution to an ongoing issue
- provides a higher degree of visibility
- ensures a better level of confidence in the users, both drivers and pedestrians

Weakness

- none of any consequence

Opportunities

- be pro active in providing a pedestrians with a modern crossing facility
- to develop pedestrian and traffic movements around a controlled road crossing

Threats

- additional spending now
- nothing is accident proof, however controlled/timed lights, are better than the threats from a signed only pedestrian crossing.
- members of the public who are opposed to any traffic control lights at all (those I know who think this way, do not have mobility issues!!!!)

CONCLUSION

I In my opinion PMHC has the opportunity to achieve an improved measure of pedestrian safety along with regulated management of traffic flow - by using a pedestrian controlled traffic light crossing with timing for traffic flow. Anything less would prove to be an unsatisfactory solution.

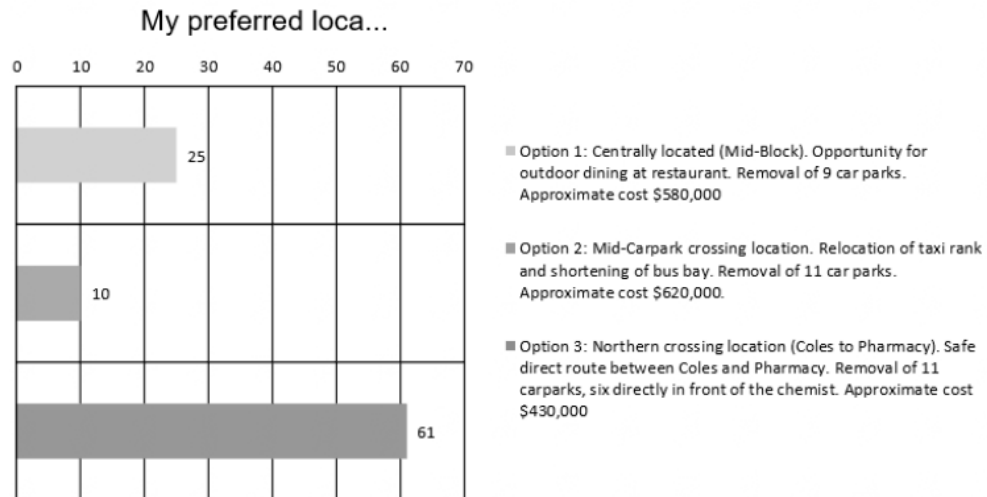
I recommend my comments receive serious consideration.

Regards



John Simon

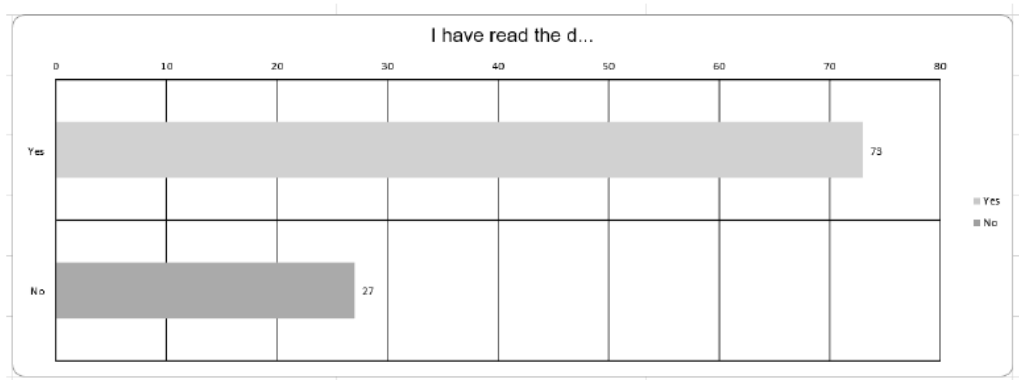


D: RESIDENTS SURVEY SUBMISSIONS

I have read the document "Bold Street Pedestrian Crossing - Comparison of Options" that outlines the feasibility of the three options, the approximate costs, and impacts to parking.

Yes = 73

No = 27



Name:	I have read the document	My preferred location:	Why is this your preferred location?
Resident	No	0	Shoppers can access chemist directly from Coles much easier for shoppers.
Resident	Yes	0	Make sense, safety factor.
Resident	Yes	0	
Resident	No	0	Makes sense.
Resident	Yes	1	
Resident	Yes	1	Outdoor dining, more opportunity for local business.
Resident	Yes	1	The visibility of pedestrians and motorists is safest in this location. The bus stop and taxi rank as well as Coles entry and exit are all problematic to safety.
Resident	Yes	1	Safer
Resident	Yes	1	Option 2: Vision of the crossing will be severely impacted by the bus stop. Also quite often there are 2 buses stopped at the same time, they won't fit. It also results in the loss of 13 main street car parks. Option 3: Loss of 10 car parks, especially outside the pharmacy. Also a crossing in this location serves only foot traffic from Coles to the Pharmacy. Nobody in the rest of the street will use it. Far better off with a mid street crossing. Will be far more utilised, less impact on parking. It's only 50m from the Pharmacy and Coles. Why not make the whole street a pedestrian area like Victoria Street in Taree. Drop the speed limit to 20km/h, encourage more pedestrians into the main shopping area
Resident	Yes	1	More centrally located than other options and therefore more beneficial to pedestrians and their safety
Resident	Yes	1	Central and outdoor dining.

Resident	Yes	1	<ul style="list-style-type: none"> - Benefitable to all businesses in the area. - Safer for pedestrians crossing the street (to accessed other businesses) outside normal business hours. - Important to keep the existing number of parking spaces at the front of the pharmacy.
Resident	Yes	1	Safety of pedestrians crossing, and traffic flow not adversely affected and fairness for all shop owners. The crossing should be mid block due to access to all shops, not just the chemist. There is a four way intersection at the northern end of the street, and traffic flow is already held up with cars parking outside the chemist, in fact there is sometimes queuing across that intersection.
Resident	Yes	1	Mid block crossing will be a safer option plus, accessibility to all shops not just the chemist. Traffic congestion is already high at the four way intersection, cars backing into spots and traffic backed up past the service station. A crossing that has no lights will be a hazard.
Resident	Yes	1	This is the ONLY logical and suitable location for a pedestrian crossing in Bold st, it will minimize congestion with the entry and exit from the Coles shopping complex. It is the MOST SAFEST location with both young and older people.
Resident	Yes	1	Least affect on main street parking, which is at a premium, kept away from the entry and exit of Coles complex.
Resident	Yes	1	Having the crossing midway in the block appears to be the safest and fairest spot for the crossing. It is central to all shopping. In saying this, I think many people will still cross from Coles to the Pharmacy and perhaps an island is required there instead of at the corner of Bold & Tunis streets. It's a difficult spot.
Resident	Yes	1	<p>Option 3 will result in increased congestion with cars trying to exit Coles directly onto a continually used pedestrian crossing.</p> <p>Option 2 will impact bus and taxi ranks without much gain</p> <p>Option 1 will require some modification in pedestrian behaviour but that will eventuate and we gain some outdoor seating. It might also be the safest option</p>

Resident	Yes	1	It prevents cars backing up within Coles car park and also gives drivers a clear view when entering Bold Street.
Resident	Yes	1	
Resident	Yes	1	Safety issue.
Resident	No	1	
Resident	Yes	1	
Resident	Yes	1	Only because I had to make a decision. I really do not think there would be a need for an additional pedestrian crossing if work was done to stop Bold Street being a throughfare and we use Lake Street and Lord Street for through traffic. Adjust the speed limit on Bold Street, it could be reduced to say 30kmh.
Resident	Yes	1	Cost and being centrally located, and convenient.
Resident	No	1	Community consultation a great idea, well executed.
Resident	Yes	1	Ingress and egress from Coles carpark is already congested.
Resident	No	1	The first option seems the most sensible to me.
Resident	Yes	1	Because the option 3 is the least desirable because the crossing would be too close to the safety refuge.
Resident	Yes	2	Is still close to Coles etc for older citizens. Suggest taxi rank could move to in front of Coles.
Resident	Yes	2	Safety issues.
Resident	Yes	2	It fixes two problems one shorter distance for older residents to go from Coles to pharmacy and gets rid of the taxi stand which is a hindrance to cars coming out of Coles car park because they block your view of cars coming up Bold st.

Resident	No	2	Moves taxi rank which impairs visioning of traffic when leaving Coles parking area. Makes it easy to cross to pharmacy from Coles.
Resident	Yes	2	The Taxi Rank is a blind spot for traffic exiting Cole car park, more children & elderly need to cross the road near Cole and the Pharmacy on the other side of the road.
Resident	Yes	2	I feel this is the best option, considering our town has an aging population. I have been here all my life and do spend time in the street. I realise the council preferred option may be more suitable for the businesses in the locality. However considering the plaza is the hub on this end of town, this is where the volume of people gather and move across the street. Also the footpath and access, offered in this option is much more suitable in the long term, especially the footpath proposal on the eastern side. Aged access and safety have been considered. Thank you.
Resident	Yes	2	I feel that as the chemist shop has been moved to its new location, people will automatically cross at a convenient place and placing between 2 driveways seems safer for both drivers and pedestrians
Resident	Yes	2	More central for all the shops . Option 3 is too dangerous & congested . My second choice is option 1.
Resident	Yes	2	If this was to start from the footpath I can't see where the 11 carpark loss is how wide is this crossing surely with the taxi rank moved to in front of I.J. Hooker that's a loss of 2 and straight opposite surely 3 spots should be wide enough, I feel that the aged and people with disabilities will find this option closer to the supermarket and the chemist which to most people this route would see more foot traffic aged people won't walk all the way around the plaza just to cross the road they will still cross near the supermarket
Resident	Yes	2	That is the highest pedestrian traffic option.
Resident	Yes	3	Selected wrong option in earlier vote, should have been option 3
Resident	Yes	3	It is nearest to where the main pedestrian flow is. Option 2 beggars belief. Who would place a pedestrian crossing between an existing bus stop and taxi rank??? Option 1 is too far away from the main pedestrian flow. People will not walk up from Coles or from the chemist shop to the crossing

			(approx 50 metres) and back again to go between the 2 main places they wish to access.
Resident	No	3	Needs to be as close to the chemist and coles as it can. The elderly in our community need this crossing the most and these two shops are the most used
Resident	Yes	3	When driving down into town lately. This is where most of the people seem to be crossing. So it makes sense to put it here. Option 2 is too inconvenient for many areas, ie buses, taxis, exit etc. I don't mind option 1 either, but I think people are lazy and will still cross out front of Coles.
Resident	Yes	3	Busy, high traffic area, can stand for ages waiting to cross the road safely, very dangerous at the moment.
Resident	Yes	3	For People shopping at Coles who then want or need Chemist, option 3 provides most direct access. We have experienced many times people crossing at this point, younger people with children and strollers plus older people crossing to Chemist or back again to Coles side of road. Parking outside Chemist is not essential with this option. All this SHOULD have taken place at the time the Chemist was relocated. For our part we drive and now use a different Chemist at North Haven as crossing Bold Street is too risky without a pedestrian crossing. An example of Poor Planning by all when a major business like the Chemist was moved.
Resident	Yes	3	It is closest to where most pedestrians are crossing. Option 2 - where is the taxi rank going? Option 1 is too far away from the main pedestrian flow and few pedestrians would walk up to it and then back to where they were going and then walk the same distance again if they were crossing Bold Street twice, which many pedestrians do.
Resident	Yes	3	It is safer than the other crossing locations as it allows the elderly to travel in a direct route from Coles to the pharmacy. Other businesses across the road can be accessed easily. I hope the crossing down from the school will remain but crossing near the pharmacy is the best option.
Resident	Yes	3	Access straight to chemist across the road. Easier for disabled and partly disabled senior citizens.
Resident	Yes	3	People's choice

Resident	Yes	3	I believe this is the safest option for all concerned - statistics indicate to me that this is the option that most people currently use - if funds are to be spent, this is this where it should be done - my understanding is that the majority of funds will be provided from external sources.
Resident	Yes	3	It answers the question "where are people crossing Bold Street at this location" This location will also be easily incorporated in the communities master plan for Laurieton's CBD, even though council staff has a plan which the community has NOT yet approved of.
Resident	Yes	3	My preferred location is further north to the corner so that there is not a duplication of crossings with 20m of each other. As there is a courtesy crossing at Tunis st why is that not turned into a zebra crossing. If the zebra crossing goes at option 3 then remove the courtesy crossing.
Resident	Yes	3	To safely cross road from Coles to the Chemist. Many people are going to Lakewood Pharmacy to avoid crossing Bold Street at the Coles location. This is safer at present but very inconvenient.
Resident	Yes	3	It is a commonsense solution. If the crossing is placed elsewhere people will ignore it & continue to cross at the most logical spot.
Resident	Yes	3	Crossing is not required outside the pub! I cannot understand the high cost of this project! As a retired engineer involved in construction I cannot see why this project cost estimate is so HIGH!
Resident	Yes	3	I was involved in the Petition that Harold Hunt had going, as I live in the Whiddon Retirement Village just off Tunis Street we have a lot of elderly residents who either use Walking Frames or Mobility Scooters, I witness it on a daily basis people crossing directly between the Chemist and Coles, these people have reduced mobility and will 'not' take a longer option. We have the Refuge Island on the corner of Tunis and Bold Streets, but is still not used for crossing to the Chemist. Hope common sense is used for the said crossing. ...on behalf of our residents
Resident	Yes	3	
Resident	Yes	3	
Resident	Yes	3	Cos it is logical.
Resident	No	3	Easy access for aged pedestrians to pharmacy.

Resident	No	3	
Resident	Yes	3	Better located.
Resident	No	3	
Resident	Yes	3	Safer and more direct access for pedestrians, especially elderly, as they will take the most direct route.
Resident	Yes	3	Most likely to be used by pedestrians.
Resident	No	3	The safest option.
Resident	Yes	3	Because it is the busiest and most likely to cause issues with the elderly.
Resident	Yes	3	Most people I observe cross here which is dangerous for the many elderly people who do this. A crossing would be much safer.
Resident	Yes	3	(1) It is the cheapest option (2) It provides safety for ageing population (3) Provides the shortest distance between Coles and chemist for the elderly on walkers and mobile carts. (4) We all should remember that the Laurieton area has one of the oldest demographics in NSW and they are still moving in from Sydney, Hunter Valley and Armidale in droves.
Resident	No	3	
Resident	No	3	
Resident	No	3	
Resident	Yes	3	My age and infirmity on occasions.
Resident	Yes	3	
Resident	Yes	3	More vision for cars leaving Coles, more demand to cross there.
Resident	No	3	No to option 2 - pedestrians walk across vehicles exit and entry. Taxi rank preference near L J Hooker 2 x spots Recommend left turn only out of Coles
Resident	Yes	3	We're customers of the chemist and Coles and would find this option 3 most convenient and safe.

Resident	Yes	3	Most people cross at this location.
Resident	No	3	Direct access to chemist and shops.
Resident	Yes	3	Highly used area, safety.
Resident	No	3	More elderly people cross to chemist from Coles. Footpath too rough on hops side of street from hotel.
Resident	No	3	Access to chemist.
Resident	No	3	The other side is not good as it is not very good.
Resident	No	3	
Resident	Yes	3	The HAZARD on incoming traffic, often very fast, from the north. The need to SLOW DOWN traffic - REDUCE speed limit. I have joined older age groups, and am concious of the large number of elderly people attempting to cross to the CHEMIST. Relocate taxi rank
Resident	Yes	3	Proximity to Masonic Retirement Village. Safe acces to pharmacy from Coles.
Resident	No	3	No. 3.
Resident	Yes	3	Most people want to go to chemist after they do grocery, especially elderly people.
Resident	No	3	Elderly to pharmacy safety.
Resident	No	3	Safer option.
Resident	Yes	3	For older people to cross to the chemist from their shopping at Coles,
Resident	No	3	Would benifit all residents. In particular residents that live east of Bold Street.
Resident	Yes	3	Closer for children walking to Laurieton park and sporting fields.
Resident	Yes	3	Slowing traffic coming into CBD. Many accidents at the 4 way corner. Closer ot chemist for pensioners who cannot walk far.

Resident	Yes	3	The cost. Just makes sense.
Resident	Yes	3	Because of cost. To many loss of parking spots. To much money.
Resident	Yes	3	Less cost, breakdown of costing required. Access to Coles and pharmacy needed for the aged. As before relocation. Please note - cost of 4 bedroom home for \$196,000 on your land (attached) this crossing is also on OUR land. Please explain.
Resident	No	3	There is a crossing near Coles but people seem to prefer the direct route to the pharmacy which is dangerous for both pedestrians and motorists. the crossing is near Tunis Street.
Resident	No	3	For 18 years I have shopped at present Coles and had scripts (doctor) process at pharmacy at old location and pharmacy as life allows. Two // wages for 6 years \$430,000. Please post full costings for option 3.
Resident	No	3	This is the one I would choose.

Regional
NSW

Mr Cameron Hawkins
Engineering Planning Manager
Port Macquarie-Hastings Council
PO Box 84
Port Macquarie NSW 2444

Ref: A3098685

Dear Mr Hawkins,

Stronger Country Communities Fund – Bold Street pedestrian crossing project.

The Department of Planning, Industry and Environment (DPIE), on behalf of the NSW Government, made available funding for Bold Street pedestrian crossing between Seymour and Tunis Streets Laurieton (SCCF1C - 0111) in Round One of the Stronger Country Communities Fund (SCCF).

Following on from a meeting between Council and the DPIE Grants Management Office on 6 August 2019, Council is reminded that as per the SCCF Program Guidelines and terms of the Funding Deed, projects are required to be completed within two years. In the case of this project, the date for completion is 31 March 2020.

As discussed in the meeting, Port Macquarie-Hastings Council recognises that the local community and the NSW Government have an expectation that the project will be delivered within the agreed term and in the intent the funding was awarded. Any failures to do so may result in funding being considered for withdrawal and a request for prior instalments made be repaid by Council.

We ask that you advise us as soon as practical if you are unable to meet the timeframes or deliverables of the project.

Kind regards

A handwritten signature in black ink, appearing to read 'MB [unclear]'.

Grants Management Office, Regional NSW
Department of Planning, Industry & Environment

From: Cr Peter Alley <cr.palley@pmhc.nsw.gov.au>
Sent: Wednesday, 4 September 2019 2:43 PM
To: Jeffery Sharp <Jeffery.Sharp@pmhc.nsw.gov.au>
Subject: Belated Bold Street Pedestrian Crossing Submission

Hi Jeffery,

I had intended putting in a submission on behalf of Lisa Intemann and myself and just realized that I have left it too late. I am hoping that you will be able to accept the following submission.

On the 3/07/19, Councillor Peter Alley observed people, from the vicinity of the bus stop, crossing Bold Street over a 15 minute period from noon until 12:15pm.
 On the 11/07/19, Councillors Peter Alley and Lisa Intemann, from the vicinity of the bus stop, crossing Bold Street over a 1 hour period period from noon until 1pm.
 On the 12/07/19, Councillors Peter Alley and Lisa Intemann, from the vicinity of the bus stop, crossing Bold Street over a 1 hour period period from noon until 1pm.

From this vantage point, we classified people crossing into whether they would have benefitted from a pedestrian crossing at location #1 – near the entrance to the plaza car park between the Real Estate Agents and the Chiropractor or at location #3 – between Coles and the Chemist shop.

The observations were broken down into 15 minute intervals:

Date	Time	Option #1 Count	Option #3 Count	
Wed 03/07/2019	12:00 PM	20	22	One person had a walking frame at option #1
Thu 11/07/2019	12:00 PM	23	19	
Thu 11/07/2019	12:15 PM	21	21	One person had a walking frame at option #1
Thu 11/07/2019	12:30 PM	15	20	
Thu 11/07/2019	12:45 PM	6	19	one person had a gopher at option #1
Fri 12/07/2019	10:00 AM	21	26	
Fri 12/07/2019	10:15 AM	14	29	one person had a gopher at option #1
Fri 12/07/2019	10:30 AM	13	28	
Fri 12/07/2019	10:45 AM	17	23	walking stick at option #3
Fri 12/07/2019	11:00 AM	17	22	walking stick at option #3 (same person as above walking back).
Fri 12/07/2019	11:15 AM	23	21	
Fri 12/07/2019	11:30 AM	15	26	
Fri 12/07/2019	11:45 AM	20	20	
TOTAL		225	296	
		43%	57%	

We made the following general observations:

1. The 3rd July was not during school holidays, while the 11th and 12th July were during school holidays.
2. The vast majority of people crossing the road between Coles and the Chemist seemed to be shopping at Coles only and using the parking spots on the East side of Bold Street because of their proximity to Coles.
3. We need to remember that the proposal for a pedestrian crossing between Coles and the Chemist will remove 11 parking spots. This will in turn reduce the number of people parking there and hence the number of pedestrians requiring the crossing.
4. In 3 hours and 15 minutes of observations, 43% crossed in the vicinity of Coles and the Chemist and 57% crossed in the vicinity of the entrance to the Plaza Carpark.
5. There is about 70 parking spaces at the rear of the Laurieton Plaza. Those who use these spaces to access Bold Street emerge near the Plaza Carpark entrance at option #1.
6. A pedestrian crossing near the Chemist will remove the six parking spaces immediately in front of the Chemist shop.
7. Sometimes taxis parked at the taxi rank obscure the visibility of vehicles coming from the Plaza carpark.

Consideration should be given to moving the taxi rank 2 metres south.

8. There are other risks to be considered such as vehicles emerging from the Plaza carpark, drivers looking to their right for oncoming traffic, but also having to consider pedestrians who would have right of way crossing on their left.

9. Of those who stopped and offered an opinion, many told us they would prefer a mid-block location based on it not being so popular for parking and safer because of fewer traffic turning movements.

Regards

Peter Alley & Lisa Intemann



BIODIVERSITY MANAGEMENT STRATEGY 2019–2030

A strategy to conserve the biodiversity
of the Port Macquarie-Hastings LGA



PORT MACQUARIE
HASTINGS
COUNCIL

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The information in this publication is primarily intended to direct strategic planning at the local government area scale and intended only as a broad guide for individual sites. Port Macquarie-Hastings Council takes no responsibility for decisions made by individuals based on the information contained in this report.

Acknowledgements

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Our thanks also go to the keen photographers who have kindly allowed us to use their photos. These people include, amongst others, Rex Moir, Matt Bell, Paul Koch, Thor Aaso, Estelle Gough and Friends of Queens Lake Landcare.

Port Macquarie-Hastings Council acknowledges the Birpai People as the traditional custodians of the lands within its local government boundaries. The watersheds of the Manning River in the south, the Maria River in the north and the Apsley River in the west create the natural boundaries of the Birpai Nation. Council also acknowledges the Dunghutti People as the traditional custodians of land within the northern part of the local government boundary. The richly diverse landscapes of the region provide spiritual and physical resources such as food, shelter and other necessities of daily life, which allowed the community to thrive in harmony with the environment for many thousands of years prior to the arrival of Europeans. Port Macquarie-Hastings Council pays respect to Birpai and Dunghutti Elders both past and present. Port Macquarie-Hastings Council extends that respect to all other Aboriginal and Torres Strait Islander people present.





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A MESSAGE FROM THE MAYOR

It gives me great pleasure to introduce the *Biodiversity Management Strategy 2019–2030* for the Port Macquarie-Hastings Local Government Area.

The Port Macquarie-Hastings is rich in biodiversity. The area's natural values are a major reason so many people enjoy living in and visiting the area. Council recognises that biodiversity is fundamental to the region. It contributes to the ecological balance necessary for successful functioning of our important agricultural and primary industries. The challenge is to protect these important natural biodiversity values for current and future generations while facilitating sustainable development and economic prosperity for the area.

This Biodiversity Management Strategy identifies the most important natural assets of the area, the threats to these assets and the actions that can be undertaken to manage these threats.

The Strategy builds on Council's strategic planning work, environmental modelling and natural resource projects undertaken. It uses the best possible current science to deliver its objectives. This Biodiversity Management Strategy is integral to delivering the goals of the *Towards 2030 Community Strategic Plan* and underpins the *Urban Growth Management Strategy* and the *Port Macquarie-Hastings Council Local Environment Plan*.

Council looks forward to engaging with the community in order to responsibly deliver the Biodiversity Management Strategy over the coming years.

Peta Pinson

Mayor





DEFINITIONS AND ACRONYMS

Ecological resilience	In ecology, resilience is the capacity of an ecosystem to respond to a disturbance (or perturbation) by resisting damage and recovering quickly.
Ecological maintenance	A state in which the majority of layers of vegetation (i.e. strata) and species are present in an ecosystem (with few weeds) such that the site becomes resilient to future disturbances such as weed invasion.
Environmental weeds	Environmental weeds are plants that invade native ecosystems and adversely affect the survival of native flora and fauna. Environmental weeds can be foreign plants accidentally or intentionally introduced into Australia, or they can be native plants that have become weedy because they are outside of their normal range. In the Port Macquarie-Hastings area, for example, many plants from northern Queensland become weedy.
Biodiversity	Biodiversity is defined as the variety of living organisms on the planet. It includes terrestrial, aquatic and other ecosystems and the ecological complexes of which they are a part. Biodiversity occurs at a variety of scales including genetic diversity, species diversity and ecosystem diversity. In this Strategy, biodiversity refers to plants and animals native to the Port Macquarie-Hastings Local Government Area.
Forestry Lands	For the purposes of this Strategy, 'Forestry Lands' are taken to be: <ul style="list-style-type: none"> • Areas with a private native forestry licence (as of October 2016) • Forestry Corporation NSW lands outside Protected Areas.
GAP CLoSR	General Approach to Planning Connectivity from Local Scales to Regional. A modelling tool which can be used to examine landscape connectivity and habitat fragmentation.
Habitat component	An area defined by GAP CLoSR wherein wildlife may move around within the component, but not out of the component, due to impermeable barriers or a lack of linking habitat. They are like 'islands' in the landscape that wildlife cannot move from.
Habitat linkage	An area defined by GAP CLoSR that effectively links two habitat patches together. These links may be narrow strips of vegetation or scattered paddock trees (which act like 'stepping stones' across the landscape). They are too small to be considered as a 'habitat patch' but play an important role in connectivity.
Habitat patch	A consolidated area of vegetation wherein wildlife has sufficient resources (food, shelter, mates) available for long-term survival.
LEP	Local Environment Plan
Mesic	In ecology, a mesic habitat is a type of habitat with a moderate or well-balanced supply of moisture, e.g. a mesic forest.



National parks	This includes all parks and reserves in National Parks and Wildlife Service estate, including national parks, nature reserves, state conservation areas and historic sites.
Precautionary principle	The precautionary principle states that when a human-induced activity raises a significant threat of harm to the environment or human health, then precautionary measures should be taken even if there is no scientific consensus regarding cause and effect. It is akin to 'better safe than sorry'. It is embedded in much national and international environmental legislation.
Protected Areas	For the purposes of this Strategy, 'Protected Areas' are taken to be: <ul style="list-style-type: none"> • National Parks and Wildlife Service estate (national parks, nature reserves, historic areas, state conservation areas) • Forestry Corporation lands dedicated under the Forest Management Zones 1 or 2 purely for biodiversity conservation • E2 Lands within Port Macquarie-Hastings Council's 'Managed Public Bushland' portfolio (as of June 2016).
Silviculture	Silviculture is the practice of controlling the establishment, growth, composition, health and quality of forests to meet diverse needs and values.
Threatened ecological community	An ecological community is a group of native plants, animals and other organisms that naturally occur together and interact in a unique habitat. A threatened ecological community is one that has limited geographic distribution and is therefore at risk of extinction. These communities may be protected under state and/or federal legislation.
Threatened species	Plant or animal species that are at risk of becoming extinct. These species may be protected under state and/or federal legislation.
Transforming weeds	Invasive plant species which have the capacity to undermine the ecological processes which maintain the health of native vegetation and hence the habitat of indigenous plants and animals. Many transforming weeds can change the ecosystem to benefit their species ahead of native species, such as through changing soil chemistry or fire regimes.
Zonation	Zonation is a modelling tool (developed by the University of Helsinki) which seeks to rank the landscape in terms of the relative importance of areas for supporting biodiversity values. 'High value' sites may support a high diversity or abundance of species, or may support just one species found nowhere else.
NC LLS	North Coast Local Land Services
PMHC	Port Macquarie-Hastings Council
OEH	Office of Environment and Heritage
NPWS	National Parks and Wildlife Service
ARI	Average recurrence interval
UGMS	Urban Growth Management Strategy





HOW TO USE THIS STRATEGY

This Biodiversity Management Strategy is divided into five chapters.

Chapter 1 provides some context for the importance of biodiversity to the Port Macquarie-Hastings Local Government Area (LGA) and why a Strategy is required. It outlines the aims and objectives of the Strategy and the legislative context. It also outlines the various datasets that were used to conduct the modelling and mapping associated with this Biodiversity Management Strategy.

Chapter 2 identifies and maps the biological values of the Port Macquarie-Hastings LGA, such as landscape units, vegetation communities, important wetlands and threatened species. It outlines the program 'Zonation' which was used to compile various datasets and identify the most important areas for biodiversity in the LGA.

Chapter 3 examines the concepts of landscape connectivity and habitat fragmentation. It outlines the program 'GAP CLoSR' which was used to examine how well the Port Macquarie-Hastings LGA is 'connected' for wildlife and which areas may require some additional assistance to reconnect them or consolidate tenuous links. It also examines issues such as broader-scale wildlife corridors and the connectedness of wetland systems.

Chapter 4 uses the knowledge derived from Chapters 2 and 3 to derive a 'Priority Investment Layer'. These are

the areas on private lands and land managed/owned by Council where strategic investment for biodiversity (such as through government funding streams or the biodiversity offset market) would be best spent. Helping to conserve these areas would be highly beneficial to protecting the biodiversity of the Port Macquarie-Hastings LGA.

Chapter 5 identifies threats to the biological assets of the LGA and considers the relative threats operating in different landscape units. It includes some quantitative analysis of the impacts of climate-induced sea-level rise on biological assets and the amount of land affected by private native forestry.

Chapter 6 outlines the four key themes that Council will use to identify actions in the annual operational plan(s) and future delivery program which assist in delivering biodiversity conservation.

All scientific names for species mentioned are in Appendix A.

All technical terms are defined in the Definitions and Acronyms (at the front of the Strategy).

We hope this Strategy helps develop a new or improved understanding of the valuable biological resources of the Port Macquarie-Hastings LGA, the threats that face these resources and the actions that are required to protect them for future generations.



SUMMARY

The Port Macquarie-Hastings Local Government Area (LGA) is a biodiverse area and these biological assets are highly valued by the Council and community. They contribute to the cultural, lifestyle, aesthetic and recreational identity of our LGA. The importance of biodiversity to the local economy (e.g. property values, tourism, agriculture, silviculture, and economic development generally) is also highly valued and recognised.

There are, however, untold challenges for the biodiversity of our LGA, including feral pest invasion, clearing for development and agriculture, and a rapidly changing climate.

The key messages from this Strategy are:

- We need to protect our most important biological assets to maximise biodiversity conservation.
- These important areas need to be ecologically connected so they can function properly.
- We need to manage the threats that undermine the resilience of these important areas.
- Everyone in the Port Macquarie-Hastings community and visitors to the region have a role to play in protecting biodiversity.

This Biodiversity Management Strategy:

- identifies the most important biological priority areas in our LGA (using Zonation and other software packages)
- identifies islands/patches of contiguous vegetation and where the key habitat linkages and connections are between these patches (using GAP CLoSR)
- identifies threats to biodiversity
- identifies four overarching themes, or programs, to generate annual biodiversity actions.

A major focus of the Biodiversity Management Strategy has been to use the best available information and science to identify the areas that are most valuable for biodiversity in the Port Macquarie-Hastings LGA. This work has allowed us to create a Priority Investment Layer that can be used to assist landholders to direct biodiversity offset schemes and apply for funding to protect key biological assets on private lands.

The Port Macquarie-Hastings LGA has an educated and inspired community, with some amazing examples of community-led initiatives that support biodiversity conservation. Port Macquarie-Hastings Council plays a key role in bringing together different stakeholders (government, education, private individuals, community groups etc.) to attract funding and deliver projects to make a difference.

This Biodiversity Management Strategy provides many spatially explicit outputs (using tools such as Zonation, GAP CLoSR, climate change modelling, species distribution models) that can inform future strategic planning and conservation initiatives. Possessing such models, and using these to justify projects, will greatly increase the chances of receiving funding for projects in the LGA. These spatially explicit models can also help guide biodiversity management and protection in the LGA, particularly in a time where environmental legislation is undergoing a radical overhaul.

Many of the challenges to biodiversity are not easy to solve, but they do present exciting opportunities along the way. The challenges are certainly worth the knowledge that we stand our children in better stead to inherit a world still rich in natural wonders and capable of supporting the full range of ecosystem services we all rely on.

1. INTRODUCTION

1.1 PORT MACQUARIE-HASTINGS LOCAL GOVERNMENT AREA

The Port Macquarie-Hastings Local Government Area (LGA) (Figure 1) is an area rich in biodiversity supporting a diverse and significant assemblage of both terrestrial and aquatic plants and animals. Situated in the Macleay-McPherson overlap, the area contains elements of both tropical and temperate biota. The LGA, with an area of 3680 km², also spans a wide range of altitudes — from the high plateaus of Werrikimbe National Park through to the coastal plains. For many species, the Port Macquarie-Hastings area is a stronghold for the population (such as the Koala or the White-flowered Wax Plant), while for others it is an area where the species is at the edge of either their southern or northern geographical distribution (such as the Lesser Swamp-orchid and Coastal Pandanus).

Conserving the altitudinal and latitudinal ranges of species is important given impending changes to climate. Some species, such as the North Brother Wattle and the Big Nellie Hakea, are found virtually nowhere else in the world.

The LGA also includes specific areas of biological importance. For example, Limeburners Creek Nature Reserve is one of only two coastal wilderness areas in NSW. Lake Innes Nature Reserve is considered the 'engine room' for Koala populations in the LGA and contains 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, and the Antarctic Beech forests of Werrikimbe National Park (with Gondwanan origins) are of great significance. The estuaries and foreshores of the Camden Haven area as well as those around Pelican Point,

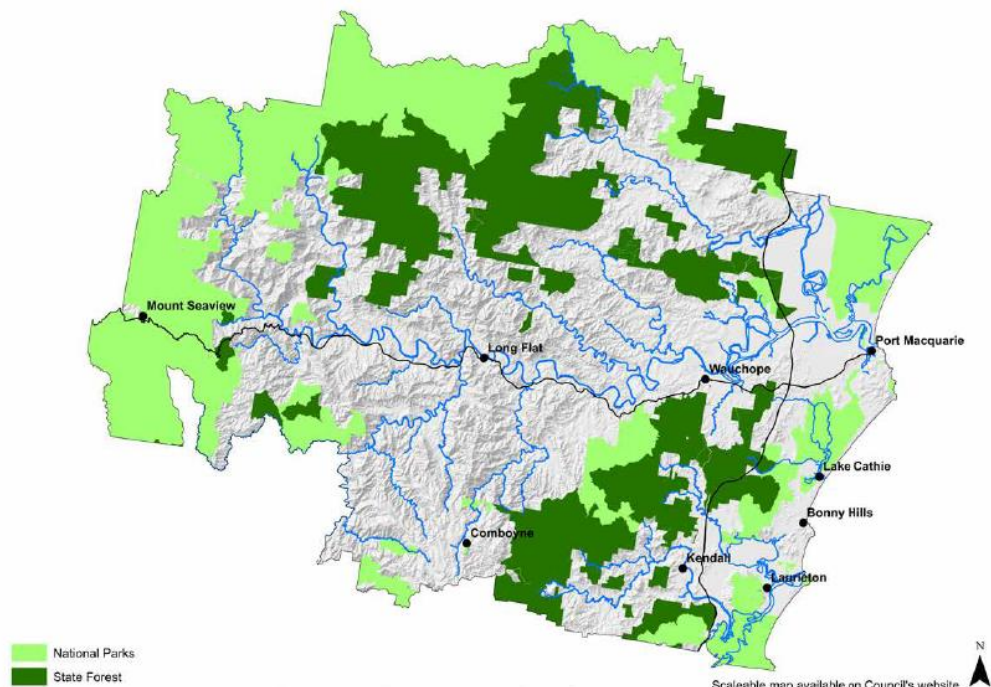


Figure 1. Port Macquarie-Hastings Local Government Area



including Woregore Nature Reserve, are of immense importance for migratory shorebirds listed under international conventions and agreements. Clearly we live in an area with nationally and internationally important biological values.

The identity and economy of the Port Macquarie-Hastings LGA is strongly tied to its rich biological values, with many people attracted to live, work or play in the area because of these values. A community research survey undertaken in 2008 identified that the natural environment/beauty of the area was the item that 21% of residents valued most about living in the LGA. Residents were also asked to rate the importance of specific criteria in regards to planning of the LGA in the next 10 years. The items considered to be of highest importance (across all criteria) were:

- 'That water is conserved' and
- 'That bushland, open spaces and natural habitats are protected'.

Furthermore, Environmental Monitoring and Protection was ranked of higher importance than Managing Commercial Development, or Managing Residential Development (importance scores of 4.43, 4.01 and 4.24 respectively). A similar study of Port Macquarie residents in 2015 showed that:

- 98% of residents surveyed 'believed that looking after the biodiversity value of Port Macquarie's green spaces is important'
- 95% of residents agreed that removing weeds from bushland reserves is important
- virtually all (99%) residents agreed that the bushland corridors are important for wildlife
- the vast majority (89%) of people believed that the bushland reserves are important for views
- 97% of residents stated that they liked living in a place near wildlife
- more than 93% of residents stated that they were attracted to live at their residence because of proximity to/views of the bush.

Numerous studies around the world have shown that proximity to/views of green spaces can increase the value of urban dwellings.

Port Macquarie-Hastings LGA prides itself in having the largest remaining coastal population of Koalas, and many people view this species as a 'cultural icon' for the area. Cultural or historical ties to forestry, fishing and farming across the LGA ensure that some people feel passionate about, for example, the long-term conservation of ecologically functional forest and marine ecosystems. The Birpai and Dughutti peoples of this area also have strong cultural ties to the biodiversity of the area and a strong interest in the protection of the area's biological values. Of particular importance are the seven Birpai animal dreaming totems, several of which have declined in extent in our LGA and elsewhere, including pademelons (species uncertain) and the Australian Bass.

While the Port Macquarie-Hastings LGA has numerous national parks and nature reserves with high biological importance, the majority of these reserves are located in areas historically not suitable for housing development, forestry or agriculture, such as swamps and steep ridges. Thus, while such reserved areas capture some of the biological values of the area, they are not fully comprehensive or representative of the LGA's biodiversity. Land outside the formally protected area network therefore has an important role to play in conserving the full range of biodiversity found within our local government area.

The Port Macquarie-Hastings LGA is undergoing rapid economic expansion and development. For example, from 2011 to 2016, the average number of development applications received each month has increased by 63% and the population of Port Macquarie is expected to increase by 30% to 103,000 in the next 20 years. Port Macquarie-Hastings Council faces the challenge of trying to preserve its biological values, while simultaneously accommodating such economic opportunities.

BOX 1. BIODIVERSITY IS PART OF US

The Port Macquarie-Hastings Local Government Area has magnificent natural values. Our spectacular sweeping beaches and fertile coastal plains are backed by the spectacular hinterland with the distinctive Three Brothers and the Bago Bluff mountains. Beyond this, the landscape rises to the heights of the escarpments of Mount Seaview and Werrikimbe National Park. Our landscape is diverse and as such it supports a diversity of plants and animals. Both tropical and temperate plants and animals abound in the Port Macquarie-Hastings, with many species occurring at the edge of their range.

The region's identity is strongly tied to its natural values and the way people connect with them. Our biodiversity is part of our existence, our lifestyle and collective memories. Our legendary Koala populations, the region's strong history with the forestry industry, childhood reminiscences of summertime Christmas Bells on the Christmas Bells Plains, the dawn bird chorus and evening frog call cacophony, the spectacular backdrop of littoral rainforest along Shelly Beach, enjoying our beautiful rainforests on a hot summer's day, or appreciating our coastal lakes and rivers.

Henry Kendall (*The Song of the Shingle-splitters*), writing during his time in the state forests of this area, captures this sense of our biodiversity being with us wherever we go.

*In dark wild woods, where the lone owl broods
And the dingoes nightly yell
Where the curlew's cry goes floating by,
We splitters of shingles dwell.
And all day through, from the time of the dew
To the hour when the mopoke calls,
Our mallets ring where the woodbirds sing
Sweet hymns by the waterfalls.*



1.2 THE IMPORTANCE OF BIODIVERSITY

Biodiversity is defined as the variety of life, or the variability of living organisms on the planet. It includes terrestrial, aquatic and other ecosystems and the ecological complexes of which they are a part. Biodiversity occurs at a variety of scales including genetic diversity, species diversity and ecosystem diversity. Biodiversity is recognised as an important feature of healthy natural assets and increases flexibility and resilience in the face of change (i.e. resilience from natural disasters including floods, droughts and fires). The more healthy and diverse a system is, the more able the system as a whole is able to absorb stresses and compensate for damage or loss that may occur in one part of the system.

Conserving biodiversity is an essential part of safeguarding the biological life support systems. All living creatures, including humans, depend on and contribute to these life support systems for the necessities of life. For example, we need oxygen to breathe, clean water to drink, fertile soil for food production, and physical materials for shelter and fuel. These necessities can be described collectively as 'ecosystem services'. Ecosystem services are provided by healthy ecosystems. These functions are supported by biodiversity and its attributes, including the number of different species in an area, the number of individuals of each species (i.e. their abundance), the composition or mix of species in any particular area, and the interactions between these species. Ecosystem services can be divided into four groups:

1. provisioning services (e.g. food, fibre, fuel, fresh water)
2. cultural services (e.g. spiritual values, recreation and aesthetic values, knowledge systems)
3. supporting services (e.g. primary production, habitat provision, nutrient cycling, atmospheric oxygen production, soil formation and retention)
4. regulating services (e.g. pollination, seed dispersal, climate regulation, pest and disease regulation, water purification).

The resilience of ecosystems in Australia and around the world is currently being reduced by a number of threats, including habitat loss and consequent loss of species, degradation and fragmentation, invasive species, unsustainable use and management of natural resources, changes to the aquatic environment and water flows, changing fire regimes and climate change. For ecosystems to be resilient to these and other threats, they need a healthy diversity of individuals, species and populations.

This Biodiversity Management Strategy provides a framework for actions to protect our local biodiversity in the Port Macquarie-Hastings LGA and preserve these values for the wellbeing of future generations. As *Australia's Biodiversity Conservation Strategy 2010–2030* states, 'business as usual is no longer an option' if ongoing damage to biodiversity is to be prevented.

Throughout this Strategy, the term **'biodiversity'** means the biodiversity that is native to the Port Macquarie-Hastings LGA.

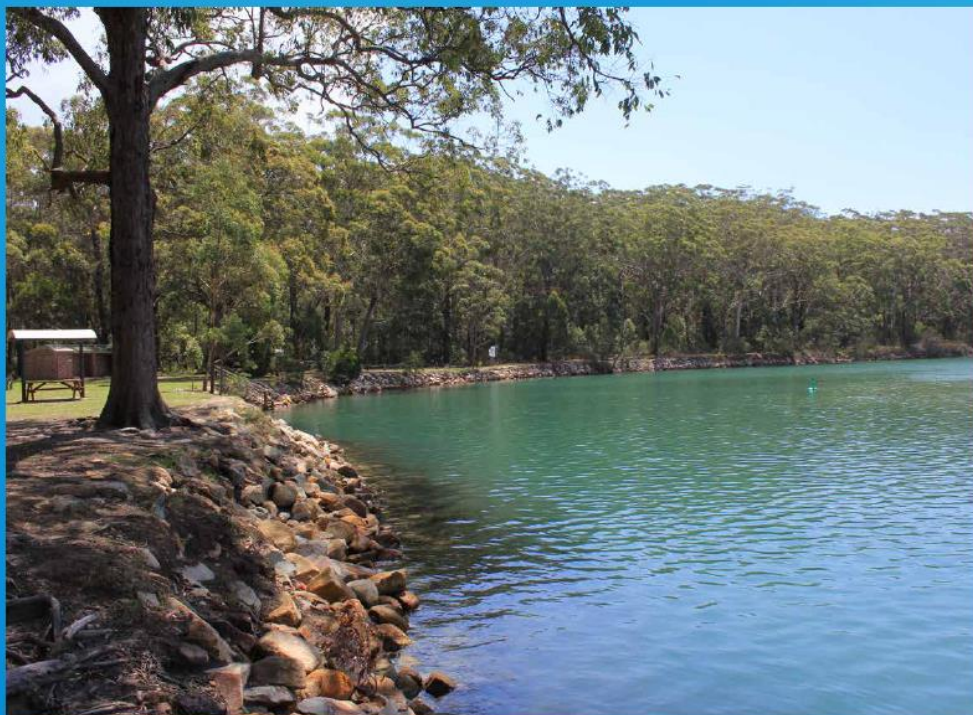
A major focus of the Strategy has been terrestrial biodiversity; an element over which local government has jurisdiction (compared with marine diversity for which Council has no jurisdiction). The Strategy uses the best available information and focuses on the species that have a good amount of information available. Therefore, animals such as invertebrates, although highly important, are largely not considered due to a lack of information on their occurrence and requirements.

BOX 2. BIODIVERSITY: AT THE HEART OF EVERYTHING WE DO

Who wouldn't want to live in a region with beautiful beaches, waterways, nature reserves and over 40,000 hectares of national park and state forest? Talk to any local and they will tell you that life in the Port Macquarie-Hastings region is enriched by our natural environment. It's our biodiversity which sets us apart, allowing our unique waterways, flora and fauna to thrive. But it's more than just lifestyle. Our local economy is supported by agriculture, aquaculture, forestry and fishing sectors which sell more than \$100 million worth of goods out of our region each year. All of these industries are reliant on our natural resources and biodiversity conservation.

Our tourism sector is also heavily dependent on our biodiversity assets. Some of the most popular tourist activities in the Port Macquarie area are nature-based. Visitors flock to our region to enjoy our beaches, coastal walks, national parks and wildlife – Koalas being the clear favourite with our international visitors. Locals and visitors alike are increasingly taking an interest in where their food comes from (choosing food sources which have a 'clean and green' image or other sustainable credentials) and emerging farm-gate experiences are adding to the range of ways which we can enjoy our natural environments. Tourism Research Australia recently confirmed that the 'unprecedented numbers of domestic travellers pursuing outdoor nature-based and cultural activities' has underpinned the strong growth in holiday-based travel.

Our region's biological resources are precious. As a community, we are all stewards of our local environment and we need to take responsibility for using and sharing it in a responsible and sustainable way.



1.3 PRINCIPLES AND OBJECTIVES OF THE BIODIVERSITY MANAGEMENT STRATEGY

Principles

Australia's Biodiversity Conservation Strategy 2010–2030 (Natural Resource Management Ministerial Council, Commonwealth of Australia, 2010) outlines a number of principles, including:

- We share the Earth with many other life forms that have intrinsic value and warrant our respect.
- All Australians benefit from biodiversity; all Australians can and should contribute to its wellbeing.
- Biodiversity is best conserved by protecting existing natural habitats.
- Effective conservation of biodiversity operates at the landscape scale across public and private tenures.
- Natural ecosystems are dynamic but have a finite capacity to recover from external impacts.
- Building resilience (see Box 3) recognises the critical links between ecological and social systems.
- Knowing that our knowledge is limited, we should apply the 'precautionary principle' while employing adaptive management approaches using new science and practical experience. The precautionary principle is that the lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there is a risk of serious environmental damage.

The principles have been taken into account in the development of this Strategy. These principles are commensurate with the objectives also outlined in the Port Macquarie-Hastings Council's *Towards 2030 Community Strategic Plan* (discussed in further detail below).

Objectives

This Strategy is a local response to *Australia's Biodiversity Conservation Strategy*, the *Draft New South Wales Biodiversity Strategy 2010–2015*, the *Northern Rivers Regional Biodiversity Management Plan* (the Port Macquarie-Hastings LGA is part of the Northern Rivers region) and the *Draft Mid North Coast Regional Conservation Plan*.

The Objectives of this Strategy are in accordance with these broader guiding documents and are to:

1. Maintain and improve biodiversity and ecological processes by protecting, rehabilitating and managing native vegetation across all land tenures, particularly those areas with high biological values.
2. Promote landscape connectivity to help biodiversity conservation and reduce climate change impacts (such as rising sea levels, increased drought, fire, flood events).
3. Contribute to identifying and mitigating threats acting on biodiversity values.
4. Provide targeted actions to protect and assist the recovery of biodiversity across all ecosystems.
5. Improve awareness of the importance of biodiversity conservation and ways this can be achieved.
6. Work cooperatively with regional, state and federal stakeholders on biodiversity conservation initiatives.

While Council will work towards these Objectives, it is important to remember that many of the impacts on biodiversity in the region are beyond the control of Council, either because of the scale at which they operate, or because the power of jurisdiction rests at the state or federal level or with private individuals, or because Council simply does not have the financial resources to address the issue. There are also 'lag' effects from historical disturbances which are not readily reversible. For example, the full loss of biodiversity from clearing and/or habitat fragmentation is often only observed years after the clearing event. However, the knowledge gained from this Strategy will greatly aid the community and Council in its ability to lobby other sectors and stakeholders as well as to empower and educate the community, even for issues over which Council has no direct control.

This Biodiversity Management Strategy also seeks to guide delivery of key goals outlined in the *Towards 2030 Community Strategic Plan*, including:

- Goal 4.6 Restore and protect natural areas
- Goal 4.3 Facilitate development that is compatible with the natural and built environment
- Goal 4.8 Increase awareness of issues affecting our environment including preservation of flora and fauna.

BOX 3. BUILDING ECOSYSTEM RESILIENCE: THE IMPORTANCE OF BUSHLAND RESTORATION

Objective 1 of this Strategy is to 'Maintain and improve biodiversity and ecological processes by protecting, rehabilitating and managing native vegetation across all land tenures, particularly those areas with high biological values'.

Since 2006, Port Macquarie-Hastings Council has taken a pro-active approach in the management of 5000 hectares of native bushland under its jurisdiction through its *Strategic Bushland Reform Program*. Much of this vegetation is one of a number of listed threatened ecological communities and supports a wide range of threatened plant and animal species.

A six-person Bushland Management Team, alongside community volunteers such as Landcare, works hard to remove weeds and rubbish from urban community bushland and restore the biological values and ecological functioning of these important areas. The aim is to bring these sites to 'ecological maintenance' — that is, a state in which the majority of the strata (or layers of vegetation) and species are present in the ecosystem, such that the site becomes resilient to future disturbances such as weed invasion.

Weed invasion has a major impact on the resilience of vegetation. Weedy areas do not support the full range of potential species that should occur there, are visually unappealing and often have a higher fire risk due to exotic annual grasses and vine weeds. Conversely, when the full complement of native species is present in the ground layer there are no available spaces for weed species to germinate and colonise the site. These sites are more resilient and are closer to the ideal 'ecological maintenance' state.

Monitoring of sites in the LGA has demonstrated the success of our collective bushland management program.



Port Macquarie Landcare members in a rehabilitated area.

1.4 THE ROLE OF LOCAL GOVERNMENT IN BIODIVERSITY CONSERVATION

Local government is a key player in the conservation and management of terrestrial biodiversity and threatened species in an area. As land-use planners, local government has legislative responsibilities for planning and regulating many activities which may impact biodiversity and threatened species. Councils must therefore consider such activities against numerous pieces of state and federal legislation governing biodiversity conservation. Councils also manage large areas of public land, much of which contain important biodiversity values.

Local government regularly considers biodiversity in its day-to-day operations including:

- strategic land use
- assessing development applications
- managing public operational land (e.g. sewage plants, water tower reserves, drainage areas)
- managing public bushland
- supporting landholders
- planning and constructing infrastructure
- ensuring that Council operations do not adversely impact the environment
- acting as the local control authority for biosecurity issues.

Port Macquarie-Hastings Council has recognised the importance of the preservation of the biological values of the LGA in a number of policy and planning documents. The *Towards 2030 Community Strategic Plan* states that:

We understand and manage the impact that the community has on the natural environment. We protect the environment now and in the future (Focus Area 4).

The *Port Macquarie-Hastings Urban Growth Management Strategy* states that we will work:

To maintain and improve existing environmental values in the Port Macquarie-Hastings LGA (Key Natural Environment Strategy).

The *Port Macquarie-Hastings Council Operational Plan* (2016–2017) states that we will:

Prepare a draft Biodiversity Management Strategy to determine environmental priorities for conservation and restoration (Action 4.7.1.2). (This Strategy ultimately fulfils that aim).

Many existing Council programs are outlined in Appendix B.

1.5 KNOWLEDGE IS KEY

The knowledge delivered by this Strategy will help Council to meet planning obligations under the *North Coast Regional Plan 2036: Implementation Plan 2017–2019*, Action 2.1 which states:

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.

Information is fundamental to local government when making decisions which protect biodiversity and when providing high quality advice. This includes knowledge on where the most important areas for biodiversity are, the regional patterns and drivers in the distribution of biodiversity, knowledge on which species are threatened, and key threats to species. These areas of knowledge form the basis for this Biodiversity Management Strategy, which seeks to:

1. identify areas of high biological importance in the LGA (see Section 2 and Section 4)
2. identify patterns in landscape connectivity (see Section 3)
3. identify threats to key biological values in the LGA (see Section 5)
4. provide a framework to develop annual action plans to help mitigate these threats (see Section 6).

This Biodiversity Management Strategy aims to deliver this information in a spatially explicit (i.e. mapped) manner wherever possible. Most importantly, this knowledge has been delivered at a scale appropriate to the Port Macquarie-Hastings LGA. While the *Northern Rivers Regional Biodiversity Management Plan* (DECCW 2010) similarly identified areas of biological importance and threats to biodiversity, it is of too coarse a scale to be of practical assistance for many areas considered by Council. The knowledge delivered by this Strategy will greatly aid strategic planning. It will assist Council, private landholders and other parties to gain grant funding to protect important biological areas. It will help inform the biodiversity offset market (see Box 4). For offset works to be appropriate, Council must understand areas that represent 'like-for-like'. The relative biological values of an area must also be understood spatially and temporally across all species to uphold the 'maintain or improve' concept of offsetting.

BOX 4. BIODIVERSITY OFFSETTING: AN EXAMPLE

A development company, Prosperity Enterprises, buys a property for a housing development. They draw up full plans (a substantial investment) and then engage an ecological consultant to assess the impact. The consultant finds that there are Squirrel Gliders on site. Squirrel Gliders are a threatened species under NSW legislation. Some Squirrel Glider habitat will be lost if the housing development proceeds.

The ecological consultant concludes that there is no point trying to plant trees for Squirrel Gliders on the site as it is not large enough (so would not support a sustainable population) and the housing development will allow dogs and cats (which are key threats to the gliders). Furthermore, the land surrounding the site is also scheduled for future developments and any plantings on the site would therefore effectively become an 'island' in a sea of suburbia within the next 5 years. The Bushfire Consultant concludes that the proposed development is in a bushfire prone zone and any tree planting would contravene asset protection zone requirements. The development cannot, however, proceed without mitigating the impacts to Squirrel Gliders.

Port Macquarie Hastings Council agrees that the development can proceed **if** the developer can 'offset' the impacts by improving Squirrel Glider habitat elsewhere in the LGA. Modelling associated with this Biodiversity Management Strategy has shown that Farmer Smith's property nearby has good potential for Squirrel Gliders. An ecological consultant surveys the site and determines that, while a small colony of Squirrel Gliders is present, the population is not at its full potential due to the presence of foxes and a depauperate (i.e. not diverse) mid-storey vegetation layer. If foxes were controlled and wattles planted, the population would increase. Farmer Smith is very happy to get some money to do fox control on his farm and plant some wattles. Prosperity Enterprises pays Farmer Smith to manage his farm for Squirrel Gliders for a number of years and a biodiversity offset has occurred. The development proceeds.



1.6 DATASETS USED IN THIS BIODIVERSITY MANAGEMENT STRATEGY

Port Macquarie-Hastings Council has been active in preparing and compiling datasets for informing the Strategy. In addition, a range of freely available datasets have been utilised. The datasets used are outlined in Table 1 (see Appendix C for a detailed description of these datasets).

This Biodiversity Management Strategy has been prepared using the best available datasets and methodology available at the time of preparation. Nonetheless, no mapping or modelling process is ever 100% accurate due to issues with scale, on-ground disturbances and input data (see Box 5). Therefore, due to limitations with both the available datasets and the modelling processes

used, on-ground verification will always be required to determine the accuracy of the mapping. The information is primarily intended to direct strategic planning at the local government area scale and intended only as a broad guide for individual sites. Individual landholders should seek professional advice to verify the data at the site level prior to any decision-making processes.

The Biodiversity Management Strategy should also be viewed as constantly evolving. For example, priority species identified in this Strategy may be downgraded in the future should a new, larger threat emerge. Conversely, the relative value of an area may be upgraded if other similar areas were to be progressively cleared over time.

Due to such limitations and the ever-changing world in which we live, it is proposed that the Biodiversity Management Strategy be reviewed every 5 years.

Table 1. Datasets used to inform the Biodiversity Management Strategy

Dataset	Brief description
Port Macquarie-Hastings Council vegetation community mapping	Maps patches of vegetation existing in 2009 outside of national parks and state forests. Maps developed using aerial photographs and field surveys.
CRAFTI vegetation mapping	Comprehensive Regional Assessment Forestry Type Inventory mapping of national parks and state forests across New South Wales. Created in the mid-1990s. Less accurate than PMHC vegetation mapping.
Koala habitat mapping	Maps different classes of Koala habitat across the LGA. Maps developed in 2013.
Threatened ecological community (TEC) mapping	Maps created using PMHC vegetation community mapping plus other datasets of geomorphic features (e.g. elevation and soil type).
BioNet	Publicly available NSW Government database of plant and animal records in the State. Formerly the Atlas of NSW Wildlife.
Atlas of Living Australia	Publicly available information on Australia's biodiversity (including records, calls, images).
BirdLife Australia Birddata	Comprehensive database administered by Birdlife Australia. Data was purchased for use in species distribution modelling.
Climate change scenarios	Estuarine and coastal inundation maps of Hastings, Lake Cathie/Lake Innes and Camden Haven developed as part of PMHC Sea Level Rise Mapping Project (data and report available from Council upon request).
ANUCLIM	Bioclimatic data (e.g. rainfall, altitude, aspect) from ANUCLIM was used by the University of Melbourne for species distribution modelling.

BOX 5. A WORD OR TWO ON MODELLING

The American statistician, George Box, once stated that 'All models are wrong but some are useful'. Similarly, the statisticians, Burnham and Anderson, noted 'A model is a simplification or approximation of reality and hence will not reflect all of reality'.

A good model can be compared to a good map — it will never replicate each and every intricacy of reality, but it will give good direction (and is certainly better than no map at all when navigating unclear terrain!). Similarly, the models and mapping produced by this report provide an approximation of reality. They will always require ground validation and checking.



2. BIOLOGICAL VALUES OF THE LGA

2.1 FLORA AND FAUNA IN THE LGA

The Port Macquarie-Hastings LGA is a biodiverse area supporting a varied and important assemblage of terrestrial and aquatic plants and animals across approximately 368,000 hectares. Situated in the Macleay-McPherson overlap (i.e. the overlap between tropical and temperate bioregions), the area contains a mix of both tropical and temperate species. The LGA also spans a wide range of altitudes — from the high altitude plateaus of Werrikimbe National Park (1266 metres above sea level) through to the low coastal plains and beaches.

The Port Macquarie-Hastings LGA can be broadly divided into four **landscapes**: Coastal Plains, Midland Hills, Escarpment Ranges and Tablelands (see Figure 2). 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. Each of these landscape units also experiences different levels of environmental protection. For instance, while close to 100% of the Tablelands Landscape is protected in national parks, only 10% of the Midland Hills Landscape is similarly protected. This means that species typical of the Midland Hills are currently poorly represented in the formal reserve network in the Port Macquarie-Hastings LGA. Each landscape unit also experiences different levels of development, grazing and tree cover.

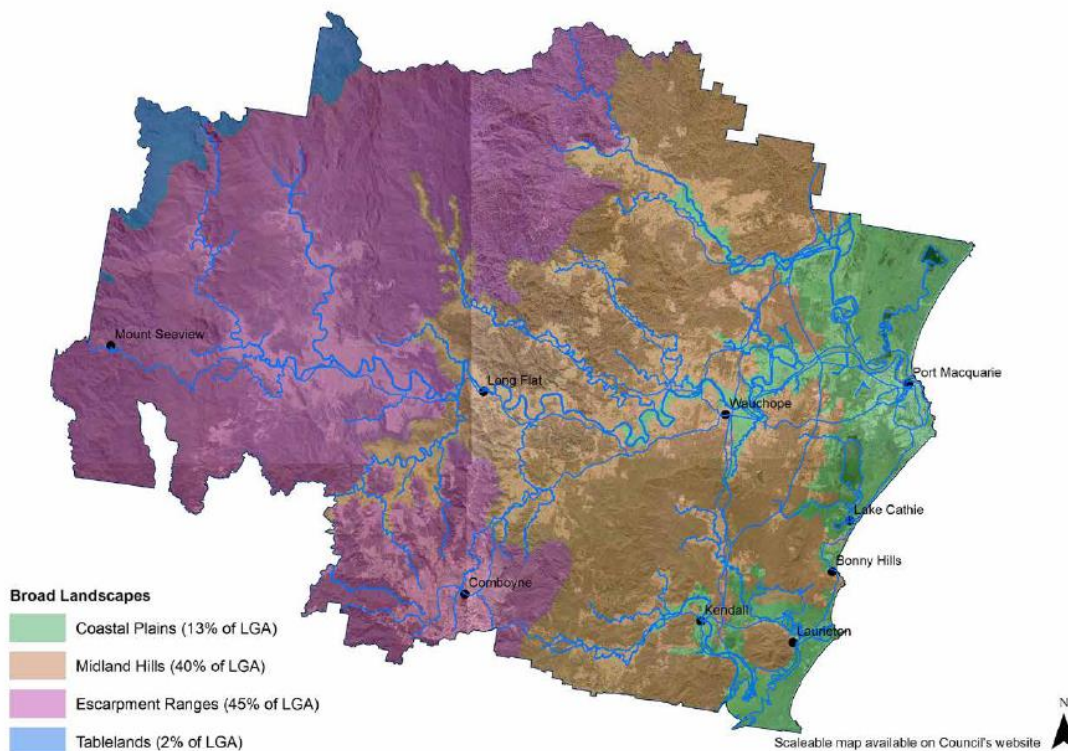


Figure 2. Landscape units in the Port Macquarie-Hastings LGA

Each landscape unit has different biological values and supports different assemblages of plants and animals.



Compared to many other local government areas, the Port Macquarie-Hastings LGA still has a good coverage of **remaining native vegetation** at the LGA-wide scale, with around 283,000 hectares (76%) remaining (including for the purposes of this Biodiversity Management Strategy, native grasslands and wetland vegetation). Nonetheless, the amount of remnant vegetation does not occur equally between the four landscape units. The very small area of Tablelands Landscape in the LGA is entirely vegetated (being national park and state forest) and the Escarpment Ranges retain 86% of their vegetation. At the other end of the scale, and not surprisingly with its many current and historical developments, the Coastal Plains Landscape has undergone the heaviest clearing and has 56% remaining vegetation. The Midland Hills, with its predominantly agricultural land uses, is still 72% vegetated. However, much forested land has been, or is, subject to timber harvesting. Much of the vegetation is therefore 'regrowth' of varying ages and does not support trees of large diameter, stately formation and hollow-bearing characteristics as in old-growth forest. Old-growth forest is highly important to a wide range of animals, particularly hollow-dependent species (such as gliders and large forest owls). Such forests only now occur in limited extent in the Port Macquarie-Hastings LGA and elsewhere.

A wide range of **broad vegetation formations** are represented in the LGA (Table 2). Of these broad types, Wet Sclerophyll Forests are the predominant forest type and occur on all landscapes and account for over half of the vegetation types of the Port Macquarie-Hastings LGA (~187,500 hectares or 66%). Rainforests are another dominant vegetation type and account for 58,744 hectares or 20% of the total native woody vegetation in the LGA. Grassy Woodlands are rare across the LGA, occupying only 1,340 hectares (0.5%). Figure 3 shows the broad vegetation formations in the LGA.

Table 2. Native vegetation formations by area and percentage of total

Formation	Area (ha)	% of total
Wet Sclerophyll Forests (Grassy)	99,408	33.9
Wet Sclerophyll Forests (Shrubby)	88,143	30.9
Rainforests	58,744	20.6
Dry Sclerophyll Forests (Shrubby)	11,100	3.9
Dry Sclerophyll Forests (Grassy)	7,141	2.5
Forested Wetlands	7,132	2.5
Heathlands	5,958	2.1
Freshwater Wetlands	2,250	0.8
Saline Wetlands	1,954	0.7
Grassy Woodlands	1,340	0.5
TOTAL	283,169	

Separate to the broad vegetation formation maps, Port Macquarie-Hastings Council has completed very detailed **vegetation community** mapping of all remnants outside state forests and national parks across the LGA (see Box 6). In the LGA, 83 vegetation communities are described in detail and mapped at a very fine scale. The communities are too detailed to illustrate in this Strategy, however, an example of an area is included in Box 7, and the maps are available from Council upon request. The mapping has identified that while some vegetation communities are widespread (e.g. Grey Gum - Tallowood - White Mahogany Grassy Forest), others are very limited in their extent (such as Themeda Headland Grassland). Council's mapping work also revealed an entirely new vegetation community, Lighthouse Gully Subtropical Rainforest, which is currently only known to occur in the Port Macquarie LGA.

The Port Macquarie-Hastings LGA supports an amazing array of species with some 1890 native plant species and 621 native animal species recorded for the LGA. Among these, there are around 140 threatened animals,

50 threatened plants and 9 threatened ecological communities as listed under New South Wales and/or federal legislation. These numbers are given as estimates only as the official list of threatened species changes frequently and knowledge on which species occur in the LGA is imperfect. Most of the ecological communities listed as threatened occur in the flattest, most fertile parts of the landscape where clearing has affected the largest area. For individual species, mammals, birds and plants together make up the bulk of the threatened species. Each of these animals and plants has different habitat requirements and life cycles. Some of the animals move widely around the landscape to satisfy feeding and breeding requirements (and thus require a 'whole of landscape' approach to conservation), while others are quite sedentary and may be highly reliant on one small area for their survival. Some of our threatened species are found nowhere else in the world, such as the North Brother Wattle (see Box 8). The habitat of some animals is principally found on private land (for instance 80% of primary Koala habitat in the LGA is on private land), and

for other species, national parks and state forests provide important habitat. It is therefore clear that all stakeholders within the Port Macquarie-Hastings LGA (government agencies like Forestry Corporation of NSW and National Parks and Wildlife Service, private landholders, the community and Council) have a role to play in protecting threatened species and other plants and animals that are native to the LGA.

Having a large number of threatened species can be considered both a blessing and a curse. While it is a good thing that these species are still present and utilising habitat in the LGA, it is still unfortunate that their long-term persistence in the wild across the full extent of their range is not secure. A large number of threatened species in the LGA therefore represents an opportunity to help reverse their decline while there is still time and in a place where there is still hope. The new NSW *Biodiversity Conservation Act 2016* fully recognises that such opportunities be followed through with funding under Biodiversity Stewardship arrangements for private landholders.

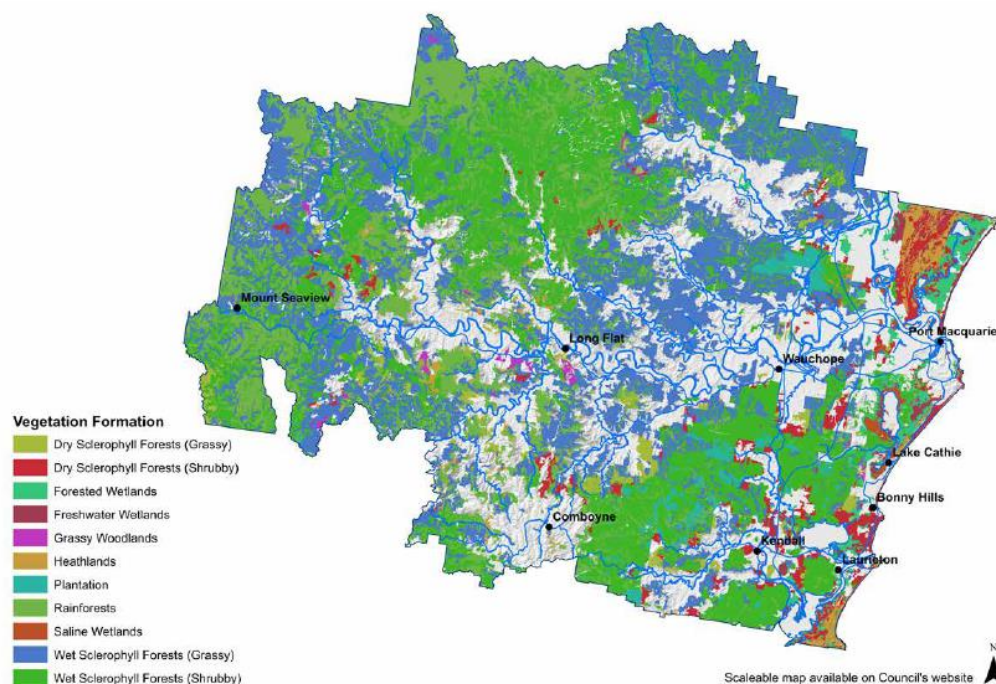


Figure 3. Broad Vegetation Formations across the LGA

It should be noted that while some vegetation formations are widespread, others are limited in spatial extent and/or are restricted to one landscape unit.



BOX 6. VEGETATION CLASSIFICATION

A classification is any ordered grouping of objects. Vegetation in Australia is 'classified' using a range of features such as vegetation structure, physiognomy (i.e. physical appearance or features), and species composition (i.e. the mix of different plants). Classifying vegetation helps us to simplify and distil the complex patterns of vegetation that occur across the landscape. These classifications are also used to create maps and systems which are valuable tools for communicating fundamental information about the environment.

In New South Wales, the adopted standards follow the hierarchical classification system which is outlined in the book ***Ocean Shores to Desert Dunes*** by David Keith (2004). At the highest level, vegetation is assigned to a **vegetation formation**. These broad groups tend to be based on structural features, for example Rainforest, Grasslands or Heathlands, but may also be based on locations where they are found, for example Saline Wetlands or Alpine Complexes.

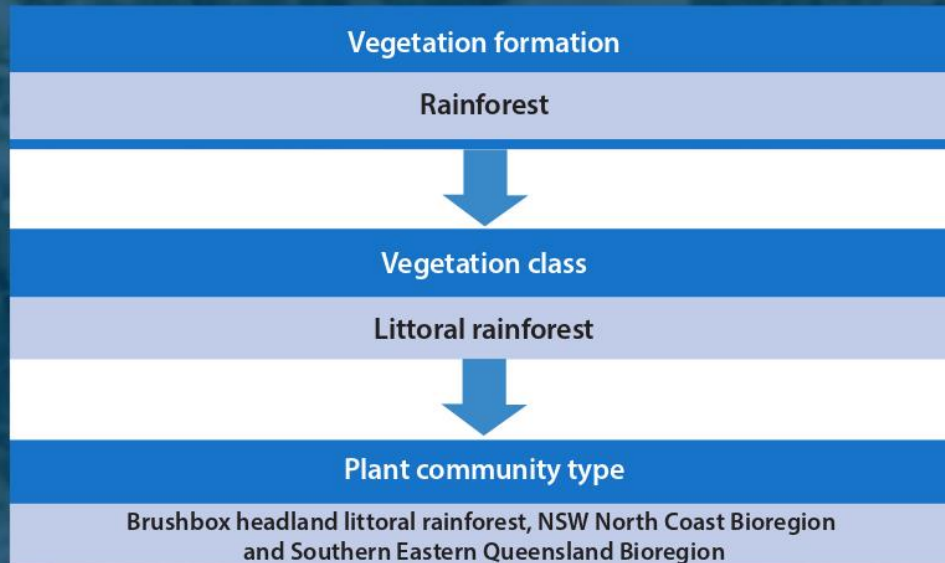
At the next level, the vegetation is assigned to a **vegetation class**. These groups are defined mainly by overall floristic (species) similarities, although they may also share structural and habitat characteristics. So for instance, nested within the Rainforest vegetation formation are Subtropical Rainforests and Cool Temperate Rainforests vegetation classes. A Subtropical Rainforest would be readily identifiable from a Cool Temperate Rainforest by the species present, with the former likely to support Rosewoods, Moreton Bay Figs, Red Cedars, and Booyongs and the latter readily identifiable by species such as Antarctic Beech and Mountain Laurel. Unfortunately, species patterns are highly complex due to geographic variation and other factors such as disturbance history.

Vegetation is then assigned to a **plant community**. These are assemblages of plant species that live together, generally at the same time. They are usually the features found in vegetation maps. They also frequently share structural similarities, although these vary based on the condition of the vegetation.

Changes in vegetation species are frequently representative of changes in other biodiversity as well, with some species, for instance, only occurring in one vegetation class. Some species may be so specific they only occur in one plant community type.

Box 6 continued

Within the Port Macquarie-Hastings LGA, vegetation mapping revealed 83 different plant communities, including 'derived' or 'novel' vegetation communities (e.g. Camphor Laurel Forest). These are referred to as Port Macquarie-Hastings Vegetation Communities.

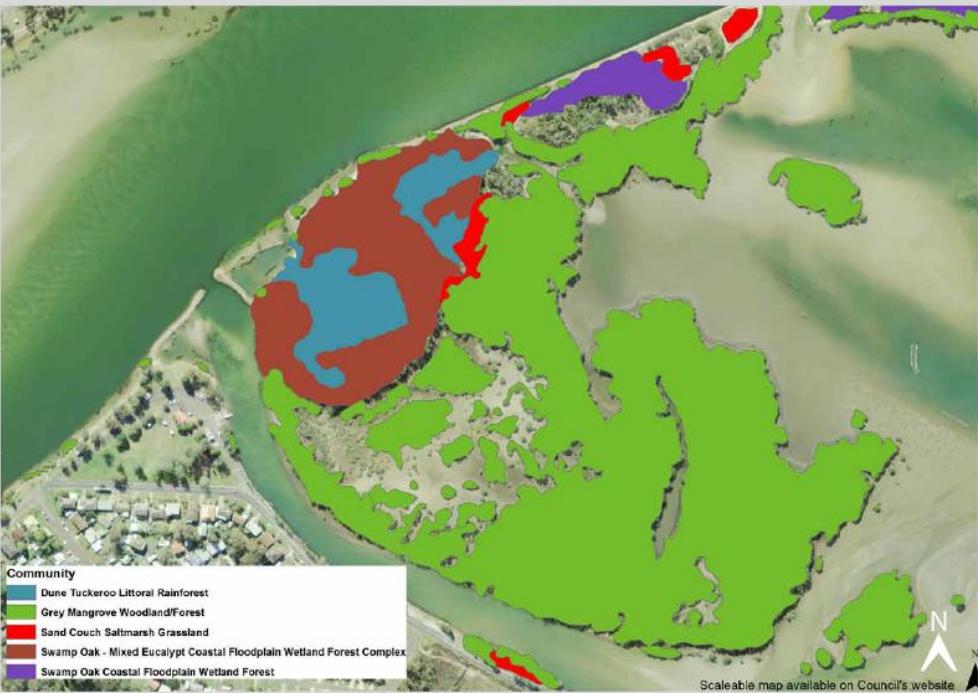


Within New South Wales, a great deal of work is currently being undertaken to conduct comprehensive analysis of **plant community types** and associated mapping. Port Macquarie-Hastings Council is currently working with the Office of Environment and Heritage to align the Port Macquarie Vegetation Communities with the plant community types used under the Biodiversity Conservation Act.

The Biodiversity Conservation Act dictates that environmental impacts be calculated relative to these plant community types. At the local level, councils may wish to conduct their own vegetation community mapping, which further splits NSW plant community types into locally recognised discrete communities. Mapping plant community types is not easy because areas frequently include components of two community types — this is particularly true where the communities occur adjacent to each other (in what are called ecotones).

BOX 7. VEGETATION COMMUNITIES

As described above, vegetation communities are much more finely detailed than vegetation classes or formations, and at the local level, even more detailed than plant community types. An example of the diversity of plant community types that can be found in a small local area is shown in the figure for Googleys Island below. The area (or spatial extent) of some communities also varies over time. For instance, work by the Port Macquarie-Hastings Council's Bushland Management Team has shown the recovery and increase in the spatial extent of the Littoral Rainforest on this island over time.

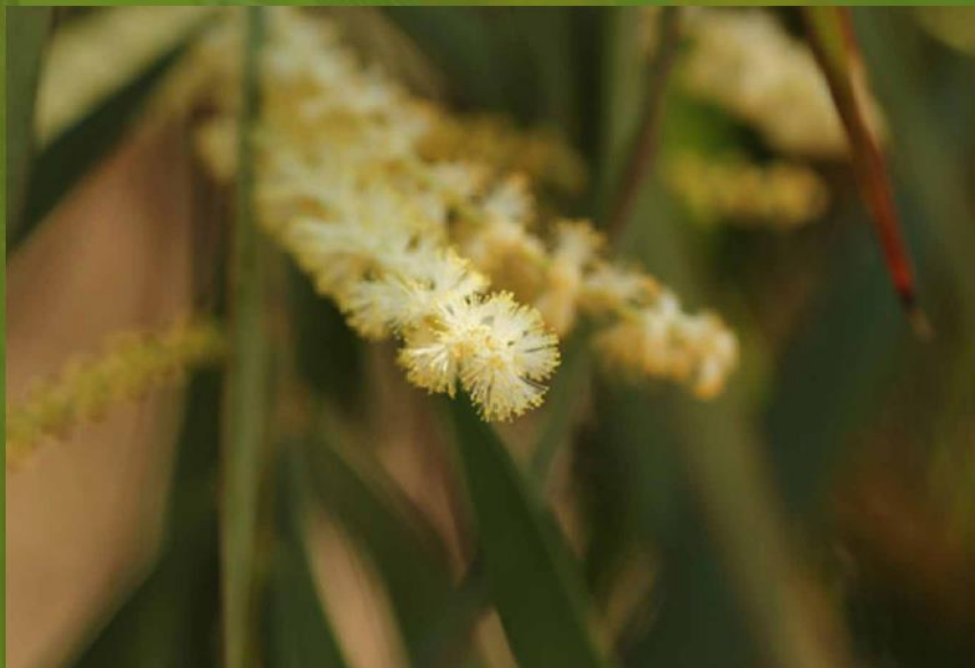


BOX 8. NORTH BROTHER WATTLES

The North Brother Wattle is found only in the Laurieton district, occurring on North Brother, Middle Brother and South Brother mountains. It is not known from anywhere else in the world. North Brother Wattle usually grows on steep, dry, rocky slopes and in mixed dry forest on shallow soils, often under a canopy of White Mahogany and Grey Gum.

It is a tall shrub or weeping tree 7–20 metres high. The bark is smooth and grey when young and later becomes black and furrowed. Small branches are a maroon-brown colour. The leaves are dull green and narrow, up to 18 centimetres long, and have a small gland on the leaf edge just above the stem. From late spring to mid-summer, spikes of pale yellow globular flowers are produced followed by straight or curved, narrow woody pods up to 18 centimetres long.

It is at risk of extinction due to the low numbers of individuals known to exist, and it is threatened by inappropriate disturbance regimes, particularly fire but also road construction and Lantana encroaching habitat and preventing germination. The conservation of this species within its natural range in the Port Macquarie-Hastings LGA is therefore of high significance.



North Brother Wattle in flower. Photo © Louisa Billeter - https://www.flickr.com/photos/louisa_catlover/8165797045/

2.2 BIOLOGICALLY SIGNIFICANT AREAS IN THE LGA

2.2.1 OVERVIEW

While the Port Macquarie-Hastings LGA is important for biodiversity, not all areas have equal importance. For strategic planning purposes at the LGA scale, it is very important to understand the *relative* biological significance of a particular parcel of land or location compared with other locations. This is because examining locations in isolation reveals very little about their importance for the long-term conservation of biodiversity (or of a particular species) in the LGA as a whole. For instance, if a site supported only one species it may be concluded that this site was of low biological diversity and therefore of low importance. It might be concluded that this site had few ecological constraints for development and that the site was of low value for environmental funding opportunities. If the species was, for example, an Australian Raven which is widely distributed and very common, this would be an accurate conclusion ... But what if the one species on the site occurred nowhere else in the LGA? Clearly the goalposts have shifted entirely.

The Port Macquarie-Hastings LGA supports more than 2500 native plant and animal species. Therefore, the 'one species' example above is simplistic and the reality of conservation planning across the LGA is extremely complex. The large number of species in the LGA coupled with the fact that most species are not just limited to one easily identified site make strategic planning very complex. This is compounded by the lack of information on where species are distributed across the LGA, as not all areas have been surveyed.

A basic principle of biodiversity conservation is to ensure that species that are native to an area do not become extinct. Ultimately, the goal of biodiversity conservation is to conserve as much habitat as possible for as many locally native species as possible. In practice, this goal must be balanced against many competing land uses. For the Port Macquarie-Hastings LGA we used **Zonation**, a spatial prioritisation modelling software package, to identify which areas of land will work together to best conserve the habitats of *all* species that are native to the LGA. Zonation uses species distribution models as a fundamental input to the modelling process. These models show the location of the species' **predicted habitat** in the LGA.

Protection of habitat for species of limited spatial extent (i.e. species that only occur in a small area) is prioritised first and foremost to ensure their conservation. The modelling identifies the minimal area of land that will make the biggest contribution to biodiversity conservation. So, for instance, the best 20% of lands might represent habitat for 70% of species, whereas the best 80% of lands might still only represent habitat for 80% of species. The process of 'prioritising' land identified as having high biological importance does not, however, automatically ensure species conservation because:

- the mapping only identifies priority areas — it does not change planning rules or dictate what activities may or may not be appropriate
- no model is ever perfect and field verification is always required
- the model does not examine threats to species (such as predation from foxes or disease) in reserved lands
- the model does not examine minimum patch sizes or connectivity, both of which are fundamental to long-term species persistence (and hence the use of the GAP CLoSR analysis).

Nonetheless, spatial prioritisation models are of great value for strategic planning, particularly in examining landscape patterns and allowing all stakeholders to know the likely value of a parcel of land for biodiversity conservation.

Port Macquarie-Hastings Council engaged experts from the University of Melbourne in 2015 to undertake spatial prioritisation modelling to prioritise areas within the Port Macquarie-Hastings LGA based on their importance for representing the LGA's biodiversity. The assessment aimed to ensure that the best data and science is used to inform strategic planning and biodiversity investment in the LGA. The full report prepared by the university is available from Council on request. The work was done in conjunction with an analysis undertaken for the Upper Hunter group of Councils.

2.2.2 SPECIES DISTRIBUTION MODELS

For the Biodiversity Management Strategy, Zonation used the species distribution models that were developed for the broader Upper Hunter assessment, restricted to the Port Macquarie-Hastings LGA. This increased the statistical power of the analysis for the Port Macquarie-Hastings LGA and allowed for consideration of the full

range of natural environments that various species are found in.

Two different types of models were used as inputs to Zonation:

- species distribution models which are based on available records (i.e. locations where the species is known to occur) and other environmental datasets (e.g. vegetation and soil)
- species presence-absence models which are based on available records only.

Information on where each species was known to occur was obtained from online public databases, such as BioNet, and from records held by Council. MaxEnt, a freely available software package, was used to construct the species distribution models.

Species distribution models were developed for 404 species for which there was sufficient data (i.e. at least 20 records). This included a range of native fauna and threatened plants (not all plants could be included and the available datasets were quite biased, e.g. there were a very large number of orchid records).

Species distribution models show the likelihood of finding a species in each 'pixel' (i.e. each 100x100 metre grid cell in the LGA) given the environmental conditions that exist in that pixel relative to the environmental conditions in pixels where that species is known to occur. See Figure 4. The environmental conditions were assessed using (one or more of) 18 ecologically relevant environmental variables to predict the distribution of species. These included variables describing the climate, vegetation, topography and soils (the full list of variables is shown in Appendix D). So for instance, if a species is known to occur in an area with vegetation type X, topography A, soil type B and climatic conditions C, D, E, other areas with these characteristics (X, A, B, C, D, E) would be predicted to have a high likelihood of supporting that species as well.

The vegetation variables included both CRAFT1 mapping and the Port Macquarie Vegetation Communities mapping (see Table 1). The models considered the vegetation occurring in the 100x100 metre grid cell as well as the vegetation context of the area (e.g. how much rainforest, wet sclerophyll or dry sclerophyll forest a grid cell had around it). Where more than one of these environmental variables was significantly correlated (or strongly linked) to the known locations for a species, only the one with the highest explanatory power was retained in the model

outputs. For example, the records for a species may all occur in a vegetation community that is restricted to only one soil type, but soil type is the more strongly linked variable so the final model only used soil type, not vegetation.

An important step was to account for observer bias. Publicly held species records such as BioNet are incredibly useful, however, they are strongly biased towards the areas that people visit regularly or areas that have been surveyed. In our LGA, this includes national parks and state forests, locations along the coast and the more populated areas of the LGA. Failure to correct for such geographic biases can produce models that reflect the levels of visitation or survey effort rather than true species distribution. Sampling bias grids were introduced into the modelling process to remove observer biases and ensure all areas were treated more equally. Average model performance was around 80% which indicates a robust model.

The species distribution model for one species, the Burton's Snake-lizard, was identified as being poorly modelled by MaxEnt. The species had only 63 records so it was converted to a presence-absence model. This resulted in 403 species distribution models being available for the analysis.

Species presence-absence models were developed for 32 species with less than 20 records in the LGA. To do this, the point locations were overlain with a 100x100 metre grid cell to indicate their known locations.

In total, 435 models were developed: 403 species distribution models and 32 presence-absence models. See Table 3 for a taxonomic breakdown and Appendix E for the list of species.

Table 3. Taxonomic breakdown of the 435 species models

Taxonomic group	Number of species
Frogs	37
Reptiles	50
Birds	265
Mammals	63
Threatened Plants	20
TOTAL	435

While species distribution models give an excellent oversight into potential habitat for a species, there may

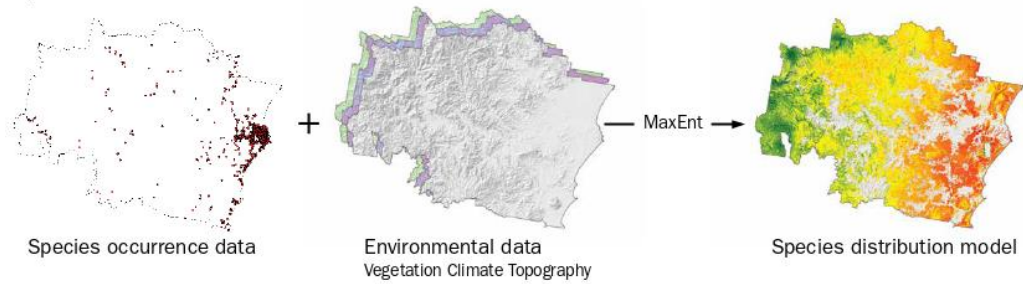
be a mismatch between the species' actual, current distribution and their predicted distribution. For example, a species may be absent from a site that is predicted to be suitable habitat. There are various reasons why this may occur, for example:

- other species may be competitively excluding the species
- the species may have a low dispersal ability that prevents it from colonising the site

- there may be historic factors that have excluded the species from a previously occupied site (e.g. land-use practices may have changed the habitat).

However, while these areas may not currently be occupied, they are likely to represent potentially suitable habitat for the species concerned and may still be important for conservation purposes. The models may also predict a species absence, when in fact it is present or visa versa. Field surveys are therefore always required to validate the models.

A) SPECIES DISTRIBUTION MODELLING



B) SPATIAL PRIORITISATION

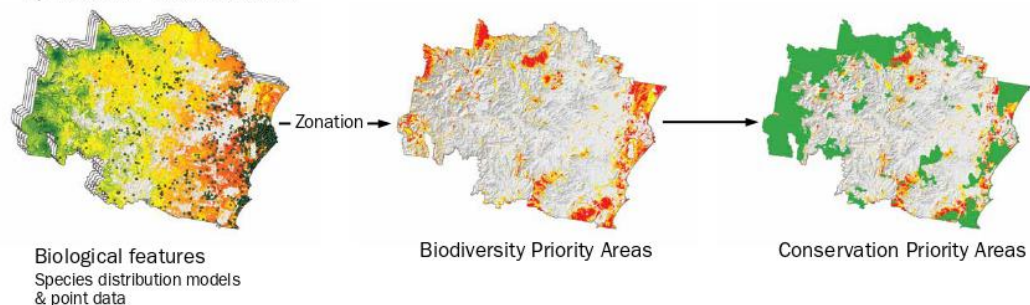


Figure 4. Schematic diagram representing the two-step modelling process used to generate the biodiversity prioritisation

- a) Species records (occurrence data) were combined with environmental data to produce species distribution models.
- b) These models were clipped to the PMHC area and combined with additional biodiversity features (i.e. point data for species for which there was too little data to complete formal modelling) in the spatial conservation prioritisation software, Zonation, to identify priority areas for biodiversity. We identified the top 30% of the landscape as conservation priorities ('Biodiversity Priority Areas'). By accounting for how well species are already conserved in currently 'Protected Areas' in the LGA (dark green areas on map), we can then identify priorities outside current Protected Areas for potential biodiversity investment ('Conservation Priority Areas').

2.2.3 ZONATION

Zonation conservation planning software: what it is and what it can do

'Zonation' was used to identify areas of high biodiversity value in the Port Macquarie-Hastings LGA. Zonation is a publicly available conservation planning software program, and a framework for conservation prioritisation and large-scale spatial conservation planning. It identifies areas, or landscapes, that are important for retaining habitat quality and connectivity simultaneously for multiple species (or any other biodiversity features). As such it provides a quantitative method for enhancing persistence of biodiversity in the long term. Zonation uses information about biodiversity features — such as species, their relative occurrences and biological needs — to create a hierarchical ranking of sites across any given landscape. See Figure 4.

The hierarchical ranking of sites is created through a 'removal' process where the software starts by assuming that all sites (i.e. 100x100 metre grid cells) in the landscape are to be protected. It then proceeds by removing the grid cells that cause the smallest marginal loss in conservation value (in terms of species abundance and diversity). This is repeated until all cells have been removed. The least valuable cells are removed first and the most valuable cells are retained until the very end. The order in which cells are removed produces a ranking, or priority value, for each cell. These can be grouped into classes (e.g. to identify the highest ranking areas). In this way, landscapes can be mapped according to their *potential* for biodiversity conservation.

The purpose is not to produce a detailed conservation plan for a large region, but to identify priority areas of the landscape that could be subjected to more detailed analysis and planning that accounts for other land-use pressures. It helps to identify the least important parts of the landscape, that is, those areas where human activity would cause the least harm to biodiversity value, as well as those areas that have high biological values and should be targeted for biodiversity protection and investment. The output of Zonation should be seen as an analysis of conservation value which feeds into a broader land-use planning framework where planning and political decisions are made and where other constraints and opportunities are considered.

Analysis for the Biodiversity Management Strategy

In this Strategy, priority areas are the 30% of sites which together best captured the biodiversity of the Port Macquarie-Hastings LGA. Thirty percent was chosen as the target for priority areas for several reasons, notably:

- Many studies (e.g. Walpole 1999; Doerr et al. 2013) have shown that landscapes where native vegetation cover falls below 30% experience rapid declines in biodiversity conservation and ecological services (a 'threshold' effect).
- Examination of the Zonation outputs for Port Macquarie-Hastings LGA showed that the amount of predicted habitat captured under various percentages increased most markedly up to 30% (and indeed, probably beyond). The top 30% of priorities encompassed, on average, 40% of species' predicted habitat.
- It is unlikely that even 30% of lands outside existing conservation reserve networks can all be subject to biodiversity investment works, either because of a lack of landholder desire/willingness, or a lack of available funds. A target of 30% is therefore likely to pick up sufficient lands to enable choice among species, locations and landholder wishes while still clearly identifying the 'most important' areas.

For each of the 435 species that were modelled (see Section 2.2.2 and Appendix E), an individual map showing the species' predicted distribution within the LGA (as produced by the species modelling) was used as input data for spatial prioritisation. Each model was 'clipped' to the Port Macquarie-Hastings LGA. All input layers were also restricted to areas of remnant native vegetation within the LGA. All species were assigned equal importance (i.e. not weighted). While there may be some merit to assigning threatened species a higher conservation weighting, if they are naturally rare in the landscape they will automatically be assigned a higher ranking by virtue of the way that Zonation operates.

Zonation was used in three stages. The first stage was to run a 'tenure-blind analysis'. This tenure-blind analysis identified the relative value of all areas for biodiversity across the entire LGA. Cells which were identified as '**Biodiversity Priority Areas**' in this analysis (i.e. the top ranked 30%) are of paramount importance for biodiversity conservation. They are likely to have values which are irreplaceable and should be protected wherever possible.



The second stage was to assume that lands within 'Protected Areas' were secure. The ranking process was then re-run to show the highest priority areas outside Protected Areas. These areas are referred to as 'Conservation Priority Areas'.

Protected Areas include:

- National Parks and Wildlife Service estate (national parks, nature reserves, historic areas, state conservation areas)
- Forestry Corporation lands dedicated under the Forest Management Zones 1 or 2 purely for biodiversity conservation
- lands zoned E2 (environmental conservation in the PMHC LEP) within Port Macquarie-Hastings Council's 'Managed Public Bushland' portfolio.

This analysis identified which lands outside formal conservation reserves could best complement the Protected Areas to ensure that the maximum amount of species habitat is protected.

The third stage was to remove Forestry Lands (i.e. areas with a private native forestry licence as of October 2016 and Forestry Corporation lands outside Protected Areas) from the Conservation Priority Areas layer to create 'Priority Action Areas'. These areas comprised community land (i.e. Crown land managed by Council and Council-owned land) and private lands. These Priority Action Areas fed into the Priority Investment Layer and form priorities for funding (see Section 4).

These three analyses are explained in further detail below.

Analysis 1: Tenure-blind results – Biodiversity Priority Areas

In the first step, Zonation was run 'tenure-blind' to examine the relative biodiversity value of ALL lands across the LGA irrespective of their tenure. The results are shown in Figure 5 (in 10% priority classes). The highest ranked 30% of lands are referred to as 'Biodiversity Priority Areas'. These Biodiversity Priority Areas are likely to represent lands with values which cannot easily be replaced. For instance, they may support rare species that only occur in a single location or only a few locations in the LGA, or they may support a high diversity and abundance of native species.

The results showed that many of the Biodiversity Priority Areas were within existing Protected Areas (see Table 4). Werrikimbe National Park; the cross-section of Kippara and Mount Boss State Forest and Willi National Park; Limeburners Creek and Lake Innes nature reserves; the combined area of Dooragan, Crowdy Bay and Middle Brother national parks and Middle Brother State Forest; and along Comboyne, Upsalls Creek and Kerewong state forests were areas of high biological importance.

Concentrations of Biodiversity Priority Areas outside Protected Areas were found mostly along the coastal region near Camden Haven River in Kew and Rossglen; along Maria River at Torrens Island and Blackmans Point; and in several other locations such as Fernbank Creek, Riverside, North Shore and Thrumster East. More isolated areas of high priority were also present in Birdwood, around Koorebang Nature Reserve and along the Hastings and Forbes rivers.



The area of predicted habitat for each species encompassed by the Biodiversity Priority Areas varied greatly – from 22% to 100% – and averaged 47% for all species modelled. The amount of predicted habitat encompassed within these priority areas also varied between species guilds. For instance, shorebirds were the best represented guild with about 81.2% of species distributions within Biodiversity Priority Areas. On the other hand, frugivorous birds, cave-roosting bats and the group ‘phalangers, phascogales and their predators’ had the lowest relative representation, with only on average 36%, 37% and 34% of predicted habitat encompassed respectively. This is approaching the minimum 30% threshold below which significant declines are likely. These results are not surprising as shorebirds are found only at a few sites, which are quickly captured by the iterative process, whereas frugivorous birds are widely distributed across many sites in the LGA (and indeed require many dispersed areas to satisfy their requirements).

The amount of different land tenures that was encompassed within the Biodiversity Priority Areas is shown in Table 4.

Table 4. Biodiversity Priority Areas in different land tenures

Tenure	% of total Biodiversity Priority Areas
Protected Areas	50%
Forestry Lands	24%
Community/Private lands	26%

The analysis shows that only half (50%) of Biodiversity Priority Areas are protected (see Protected Areas definition), the rest of these vitally important areas are not formally protected.

While some species have relatively large areas of predicted habitat occurring within Protected Areas, others do not, such that on average across all species Protected Areas only encompassed 36% of predicted habitat. Eight species occurred completely **outside** Protected Areas, namely: White-eared Monarch, Speckled Warbler, Brown Treecreeper, Brown Tree Frog, Black-chinned Honeyeater, Central-eastern Broad-nosed Bat, Rough-scaled Snake and Tyler’s Toadlet. It should, however, be noted that many of these species were rare and/or under-surveyed in the study area indicating further work is required. Four of these species are listed as vulnerable under NSW legislation. Of specific ‘guilds’ of conservation interest (with the exception of shorebirds the habitat of which were well-represented in Protected Areas), most averaged just over 30% of predicted habitat occurring within Protected Areas (again representing a minimum threshold). The above analysis shows that the most preferred habitat for numerous species does not align with existing Protected Areas. The best conservation opportunities for these species must therefore be sought outside these Protected Areas, necessitating additional prioritisation analysis.

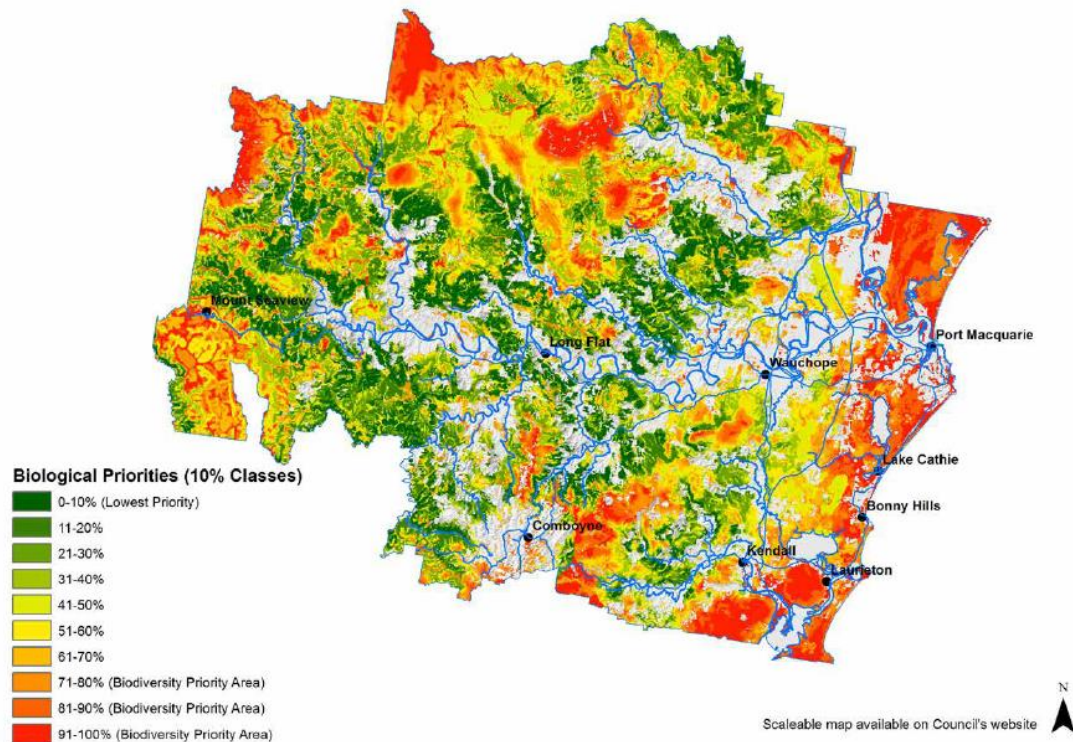


Figure 5. Biological priorities in the Port Macquarie-Hastings LGA, including Biodiversity Priority Areas

The figure shows areas of least biological importance (green) through to areas of highest biological importance (red). The top 30% are the 'Biodiversity Priority Areas'.

Analysis 2: Priorities outside of Protected Areas – Conservation Priority Areas

In the second step, Zonation was used to rank priorities on lands outside of Protected Areas (as described above). Zonation includes these Protected Areas in the top biodiversity priorities regardless of their actual predicted biodiversity value. This analysis allowed identification of areas that would best complement existing Protected Areas and therefore most effectively increase their representativeness in terms of local biodiversity in the Port Macquarie-Hastings LGA.

The highest ranked 30% are called 'Conservation Priority Areas' and are shown in Figure 6. Conservation Priority Areas were evenly divided between Forestry Corporation lands (50%, see Figure 7) and Community/Private lands (50%).

Conservation Priority Areas were found across the LGA with particular concentrations in the Kippara/Bril Bril, Kerewong/Swans Crossing, Batar Creek/Ross Glen, Bonny Hills-Lake Cathie, Dunbogan, Lake Innes, Upper Pappinbarra, Thrumster/Sancro and Comboyne localities.

Analysis revealed that protection of all the Conservation Priority Areas (i.e. the top 30%) could increase the average coverage of species distributions from the 36% currently protected, to 73%. Even just securing the top 5% would increase the average coverage to 47% of species distributions. More importantly, securing this top 5% would ensure that no species would be left without protection and that all species would have a least 25% of their distribution protected within the Port Macquarie-Hastings LGA.

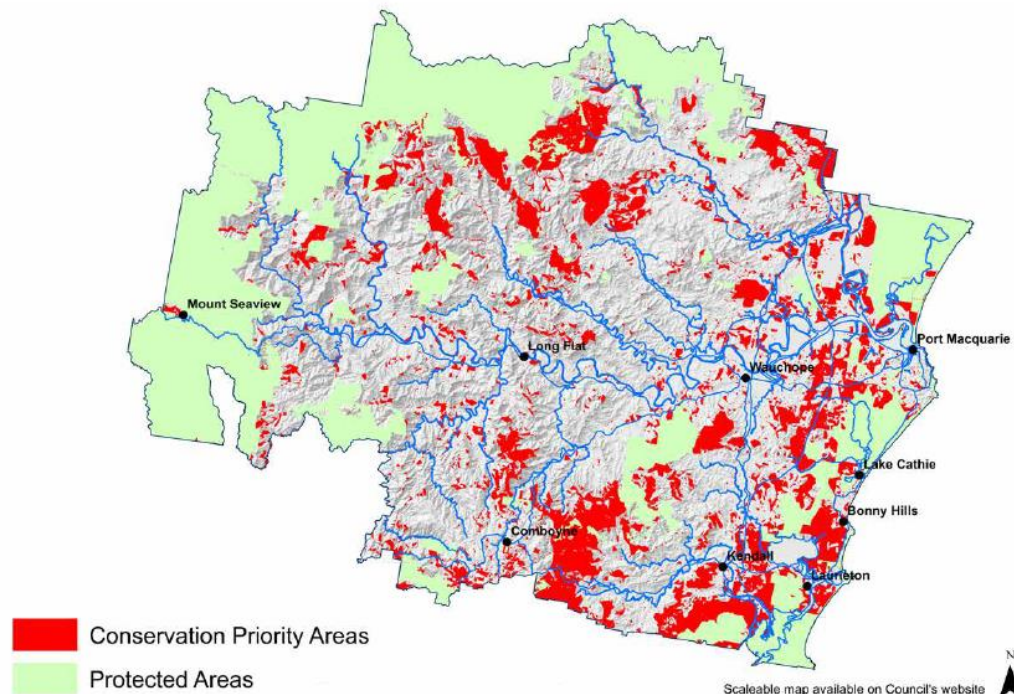


Figure 6. Conservation Priority Areas in the Port Macquarie-Hastings LGA

These areas, if protected, provide the maximum benefit to help ensure the conservation of all species distributions across the LGA (it is assumed that species habitats within Protected Areas are secure). It should be noted that other sites may be suitable for incentive funding or works for an individual species (the species distribution models can help to identify such sites).

Analysis 3: Priority Action Areas

The final analysis was to identify 'Priority Action Areas' in the LGA.

For this analysis, Forestry Corporation lands were simply deleted from the Conservation Priority Areas layer. Forestry Corporation lands are areas with a private native forestry licence as of October 2016 and Forestry Corporation lands outside Protected Areas. As such, the Priority Action Areas are either community lands (i.e. Crown land managed by Council and Council-owned land) or private lands. They do not include 'protected' Council Lands which are part of Council's Bushland Management Program and already managed for conservation outcomes.

To ensure maximum interpretation of the Zonation model outputs and to ensure that the model was contemporary,

additional mapping work was then performed. This included the following:

1. Removing all areas which have been cleared since publication of the aerial imagery which underpinned the Zonation model (i.e. the 2010–2012 imagery). This was performed using the latest Near Map imagery for any area as shown in Appendix F.
2. Working to identify which natural feature(s) the Zonation raster (gridded cell) 'polygons' indicated. This was done by examining all natural features in an area (aspect, slope, vegetation communities, riparian features, the underlying species distribution models and a knowledge of such species' biology) and then mapping those local features which best matched the Zonation model output.



3. Removing isolated individual grid cells, unless they were part of a 'chain' of natural features (as commonly occurred along ridge tops or drainage lines for example). A buffering tool was used to help inform whether cells were isolated or part of a chain.

The final Priority Action Areas Layer contained slightly more areas than captured by the Conservation Priority Layer. This is because either:

- no natural features differentiated the area identified by the raster polygon from surrounding features, or
- at a fine scale, there were a multitude of single raster polygons scattered through a locality and thus that whole locality was picked up using natural features.

These Priority Action Areas are a major component of the Priority Investment Layer (see Section 4). Port Macquarie-Hastings Council can direct biodiversity investment funds towards priority areas on Council land and similarly can work with interested private landholders, Crown Lands and other stakeholders to help them prioritise and direct biodiversity actions in areas where the most benefit can be gained. Council can also work with such individuals to help secure conservation funding opportunities.

Two percent (837 hectares) of Priority Action Areas are on land owned or managed by Council. The remaining 98% are on private lands. A total of 47,418 hectares of land are identified as Priority Action Areas, providing ample opportunities for works through the life of this Biodiversity Management Strategy.

On Council lands, three particularly large and consolidated areas of importance were identified by Zonation:

1. The area of bushland around the MotoCross Track. This land contains the unique Narrow-leaved Red Gum – Orange Gum Swamp Woodland and important Koala habitat.
2. The area of bushland around the Port Macquarie Airport (currently part of a Biocertification process which will protect key areas of the Airport lands in perpetuity). This area contains unique wetland vegetation communities and numerous threatened flora and fauna species, including important populations of the Wallum Froglet.
3. Areas around Kew, including lands associated with the new Kew Waste Transfer Station and associated environmental offset lands, and the Kew sewerage treatment works.

The latter example illustrates the importance of having models such as Zonation for strategic planning purposes. Zonation was not available at the time of this development, although the biological importance of the land was recognised and offset works conducted. Another relatively large area of biological importance on Council land was also found at the western end of Rosendahl Reservoir. This area is managed for weeds and vertebrate pests, and Koala stiles have been installed to allow Koalas and other arboreal marsupials to access this area. Having such areas highlighted as Priority Action Areas can help inform future planning decisions.

Examining Priority Action Areas on lands owned or managed by Council can help inform Council's bushland management priorities and indeed, since the Zonation

analysis was completed, some such areas have been added to the Bushland Management Portfolio using specific grant funding (e.g. the links running from Dooragan National Park to the estuaries using the Estuarine Lakeside Linkages project funding). The importance of these links was previously recognised by Council staff anecdotally and Zonation gave quantitative evidence to further support works programs.

On private lands, Priority Action Areas are quite widely distributed across the LGA. Localities with higher concentrations of Priority Action Areas included Thrumster/Sancroix, Lake Innes, North Shore, Lake Cathie, Bonny Hills, Grants Beach, Dunbogan, Kew, Comboyne, Byabarra, Ellenborough, Lakewood and Kippara. Consolidated areas of importance were also found on the North Shore and around the Maria

River. One of these properties has subsequently been incorporated into Limeburners Creek Nature Reserve while another was purchased by the Koala Hospital for conservation opportunities.

Figure 8 shows the location of Priority Action Areas on Council owned/managed land across the LGA and Figure 9 shows the location of Priority Action Areas on private lands. It is important to note that, in recognition of their high biological values, many Priority Action Areas mapped using Zonation have already been incorporated into NSW regulatory mapping layers, such as the Biodiversity Values layer under the Biodiversity Conservation Act, the Coastal Wetlands layer under the Coastal Management Act and the Sensitive and Vulnerable lands layers under the Local Land Services Act.

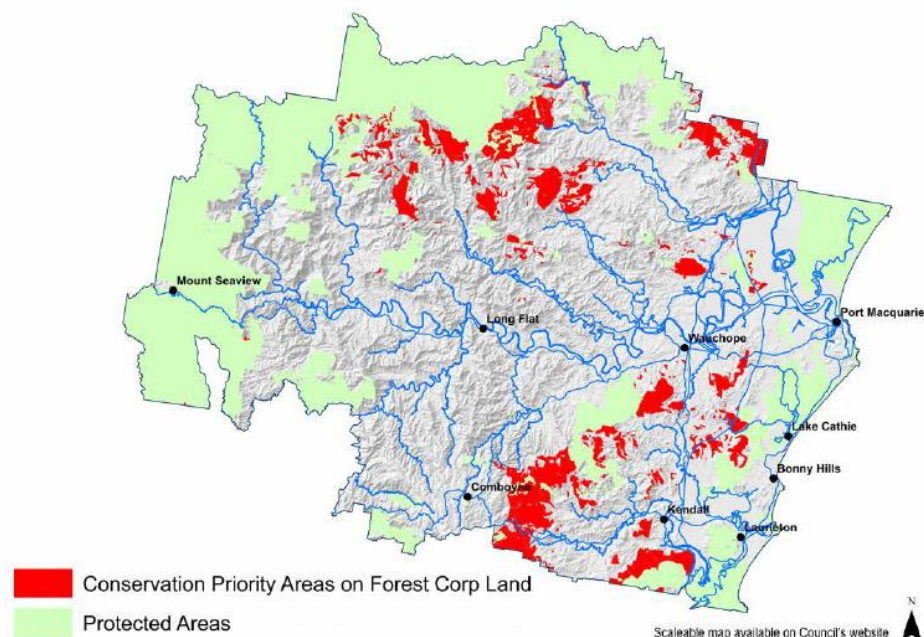


Figure 7. Conservation Priority Areas (as identified by Zonation) on Forestry Corporation lands in the Port Macquarie-Hastings LGA

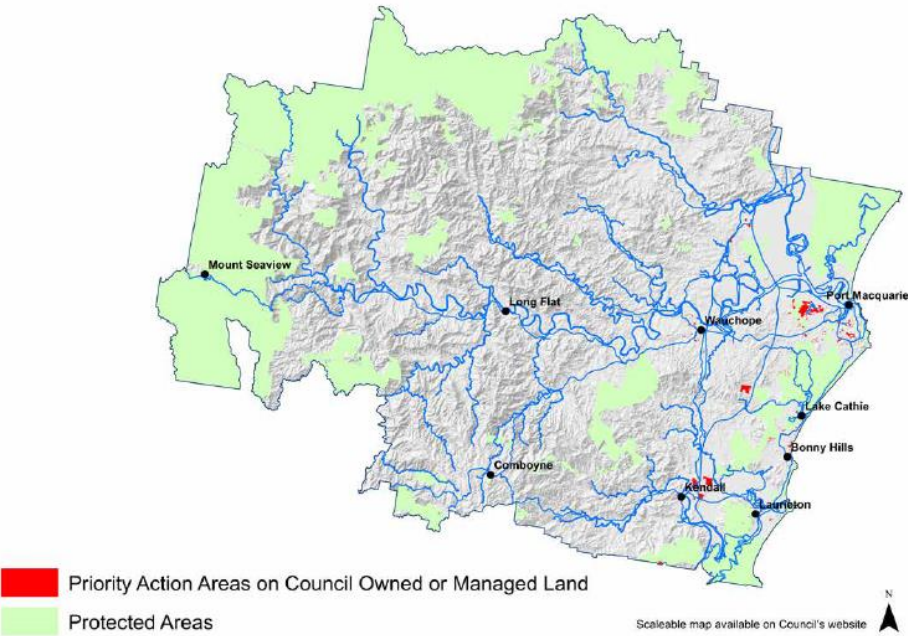


Figure 8. Priority Action Areas on Council-owned or -managed land in the Port Macquarie-Hastings LGA

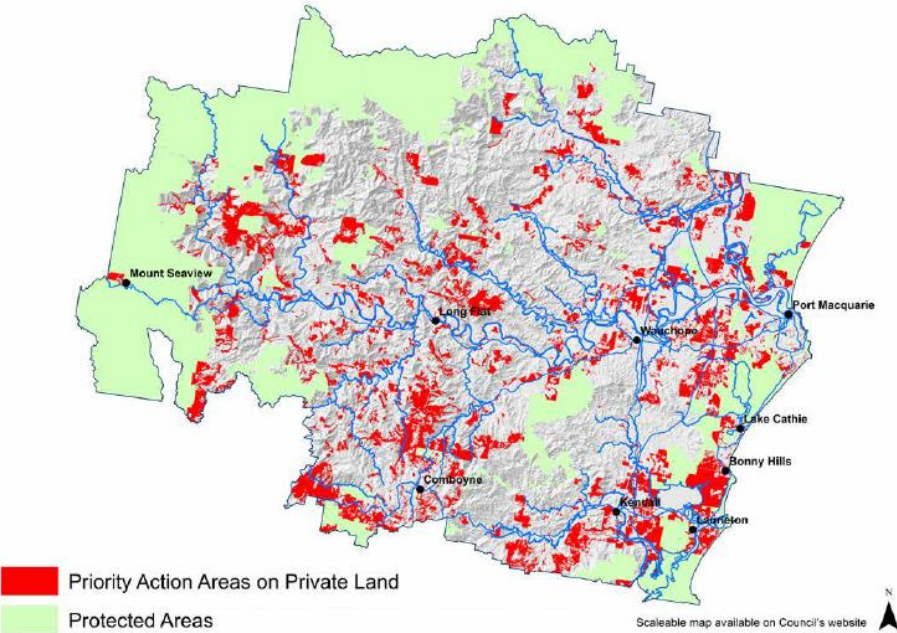


Figure 9. Priority Action Areas on private land in the Port Macquarie-Hastings LGA

The sites indicated show those areas where Council can work with interested landholders to better conserve biodiversity, such as through targeted investment schemes.

2.2.4 SUMMARY OF BIODIVERSITY PRIORITISATION ANALYSIS

The results of the analysis revealed three major findings.

The first was that the current Protected Areas within the Port Macquarie-Hastings LGA encompass or represent the distribution of species relatively well. Across all species and nominated guilds of conservation interest, the average proportion of predicted habitat within Protected Areas was 36%. However, there is notable variation among species: some species have their entire distribution within Protected Areas but others have none of their distribution within Protected Areas. Therefore, clear opportunities exist to improve biodiversity conservation within currently unprotected areas of the Port Macquarie-Hastings LGA.

The second point is that if additional relatively small, but well prioritised, areas were to be managed for conservation, all species could be adequately protected in the LGA (i.e. could have more than 30% of their predicted distribution being managed for conservation). Even just managing the top 5% of the identified Conservation Priority Areas for conservation would increase the average percent of predicted habitat to 47% and, most importantly, would ensure that all species have at least 25% of their predicted habitat being managed for conservation.

The third point is that community and, in particular, private lands can play a big role in biodiversity conservation with 25% of the Biodiversity Priority Areas occurring on these lands. When Protected Areas are excluded from the analysis, Zonation showed that 49% of the most important Conservation Priority Areas (or just over 28,000 hectares) are on private land.

It should be noted that this work is not 'static'. It represents a snapshot in time. If some areas of habitat/vegetation, particularly within high priority areas, are lost through clearing or other land use changes as a result of natural impacts such as fire or climate change this rapidly results in other areas automatically assuming a higher importance. For this reason, some areas that are not currently Priority Action Areas may emerge as being important priority areas in the future because they possess values being lost elsewhere in the landscape. Some areas may be so unique (again, particularly high priority areas) that they simply cannot be replicated or protected/represented elsewhere in the landscape (such as through biodiversity offset schemes).

Finally, it should be mentioned that like all data modelling exercises this work has unavoidable uncertainties.

Nonetheless, the final models were statistically robust and therefore provide a significant improvement to our understanding of biodiversity patterns within the Port Macquarie-Hastings LGA and the relative value that any one area of land plays in the protection of species' habitat at the LGA scale (see Box 9). The work will have many applications, including:

- informing landholders about the value of their land for biodiversity
- informing prospective developers about the likely ecological constraints they may face on a parcel of land prior to purchase
- informing those interested in entering the rapidly burgeoning biodiversity offset market about where the best opportunities exist
- providing much-needed knowledge for those community members interested in applying for land management or biodiversity conservation grants (allowing them for the first time to express the importance of their grant in a broader context — a necessity in this increasingly competitive grant funding environment).

2.3 IMPORTANT WETLANDS AND COASTAL LAKES

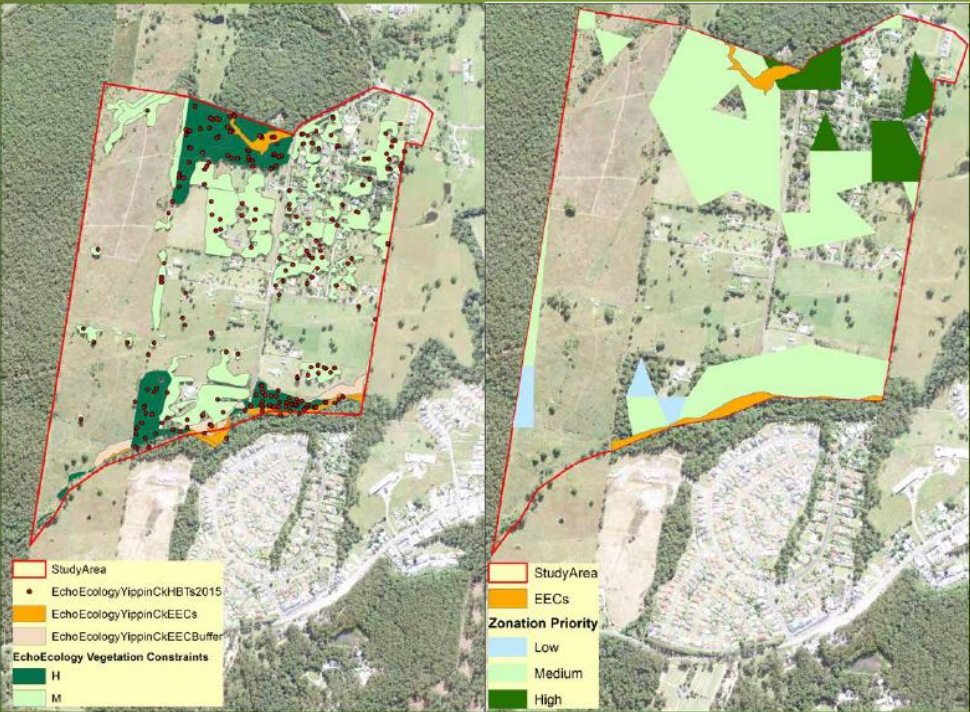
Estuarine wetlands, coastal floodplain wetlands and coastal lakes are ecologically, socially and economically important. They provide many ecosystem functions, ecosystem services (see Section 1.2) and habitats for a wide range of animals (e.g. waterbirds, fish, frogs and invertebrates) and water-dependent 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 Port Macquarie-Hastings 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*),

BOX 9. HOW DOES ZONATION COMPARE AGAINST ON-GROUND ECOLOGICAL ASSESSMENTS?

In 2015, Port Macquarie-Hastings Council contracted Echo Ecology to do a comprehensive on-ground ecological assessment of the biological values on an area of land near Wauchope (Yippin Creek) to determine areas of low, medium and high ecological constraints which could influence a proposed housing development on the site. The study examined a broad range of taxa, including mammals, plants, birds, amphibians and micro-chiropteran bats. The study also identified areas of threatened ecological communities. The results are shown in the figures below.

The results of this survey were compared against the tenure-blind outputs of Zonation because they provide an idea of the importance of a site relative to the whole LGA. Zonation has correctly identified that the majority of the land is of moderate biological value. It also identified that there is an area of higher biological value in the northern section of the site, but under-predicted the spatial extent of this. Zonation also ranked an area in the southern section of the site as 'moderate' that was identified by Echo Ecology as 'high' value. It ranked a few areas in the eastern section of the site 'high' which were identified by Echo Ecology as 'moderate' but which also supported numerous large hollow-bearing trees. Overall the results of Zonation should be considered as a good overall guide to the likely biological constraints operating in the area. The Zonation output also relates to a tenure-blind analysis of the LGA. Areas may have been ranked higher if using the priorities focusing on areas outside reserve networks.



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). The location of these important biological assets (as identified and classified by the *Northern Rivers Biodiversity Management Plan*) is shown in Figure 10.

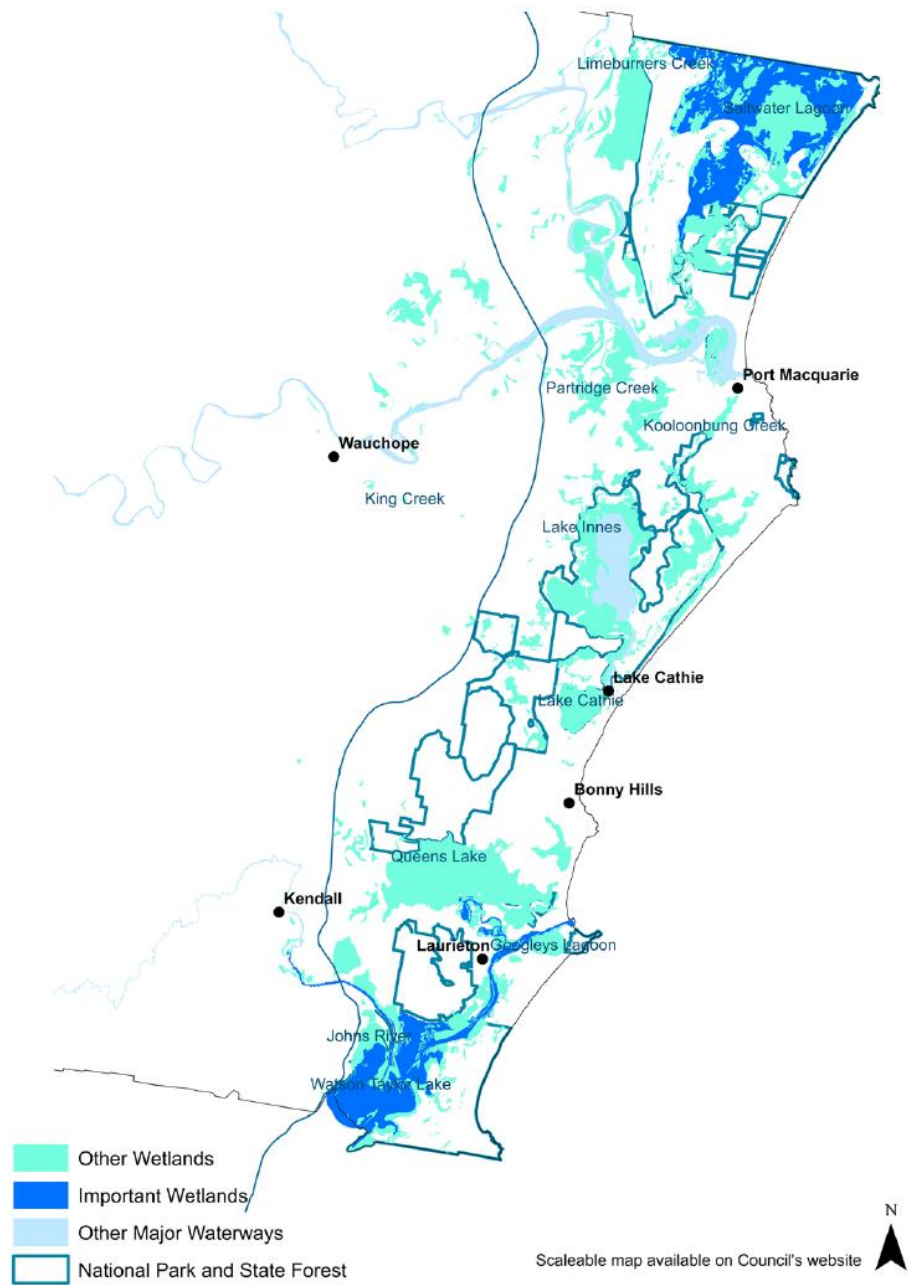


Figure 10. Location of coastal and estuarine wetlands and lakes

BOX 10. AN UNLIKELY PLACE TO START A FAMILY?

Magpie Geese are listed as a threatened species in New South Wales as they disappeared from south-east Australia by 1920 due to draining and overgrazing of their breeding habitat. Since the 1980s there have been an increasing number of records from central and north New South Wales. The only record of a breeding pair in southern Australia (until 2015!) was of introduced birds at the Shortland Wetlands near Newcastle.

Imagine the surprise when, in 2015, staff of Port Macquarie-Hastings Council not only saw three of these birds (one male and two females) inhabiting overflow ponds associated with the Port Macquarie sewage treatment plant, but then saw them building a nest! They quickly contacted Council's ecologist, who recommended that scheduled cleaning works of the ponds be delayed until the chicks could be fledged. The example shows that humans and biodiversity can at times happily co-exist, even somewhere as unlikely as a sewage treatment plant!

Magpie Geese are medium-sized waterbirds standing about 90 centimetres high and with a wingspan of up to 1.8 metres. With a black head, a distinctive knob on the crown (larger in males) which increases in size with age, and a hooked bill, they are quite unmistakable. Unlike other waterfowl, the Magpie Goose has half-webbed feet. The call is a resonant honk. Magpie Geese are mainly found in shallow water such as large wetlands and dams, especially with dense growth of rushes or sedges and with permanent lagoons and grasslands nearby. The Magpie Goose is a specialised feeder with wild rice, *Oryza*, some grasses and spike-rush forming the bulk of its diet.

During the breeding season Magpie Geese build nests in secluded places, usually close to wetlands (and sometimes in sewage treatment plants!). The nest is almost single-handedly constructed by the male. It usually consists of a simple unlined cup placed either in a floating platform of trampled reeds or built in tree-tops. Pairs of geese mate for life, but a male may have two females. Two females may occasionally use the same nest to lay the large, oval, off-white coloured eggs. All adults share incubation and care for the young.



Magpie Geese and young at the STP. Photo by Lark Whittingham.

The coastal lakes and wetlands of the Port Macquarie-Hastings area support numerous threatened species. In particular, some areas such as Partridge Creek and Lake Innes support notable populations of Black Bittern and Wallum Froglet. Black-necked Stork intermittently utilise many of the wetlands across the Port Macquarie-Hastings landscape, which is encouraging as the species has declined across the southern part of its range. The threatened Giant Dragonfly, one of the largest dragonflies in the world, is also known from wetlands within the Port Macquarie-Hastings LGA. Areas of Queens Lake are important roosting grounds for wading birds and shorebirds (many threatened) and indeed the Port Macquarie-Hastings area is included among the Key Biodiversity Areas of Australia (as recognised by BirdLife International), in part for its shorebirds, particularly the Sharp-tailed Sandpiper as well as wading birds such as the Australasian Bittern.

Even relatively small wetlands on private property, such as around King Creek, can be important. For instance, properties in this area are known to support Comb-crested Jacanas, which is unusual as the species is usually found only north of Grafton. Magpie Geese, now threatened in New South Wales and largely absent from southern Australia since the 1920s, have also been sighted in wetlands of the Port Macquarie area. Some even bred in the 'wetlands' of the Port Macquarie sewage treatments works! (See Box 10.)

2.4 THREATENED ECOLOGICAL COMMUNITIES

Ecological communities are groups of plants and animals that occur together in a particular area. This area is characterised by a set of environmental conditions which define suitable habitats, for example, soil types, landforms and climatic conditions. As a result, an ecological community may be distinguished from others by its characteristic species and the area in which it occurs (for example, a wetland on the coastal floodplain on alluvial soils). Ecological communities are complex, so correct identification often requires specialist advice.

Some ecological communities are threatened with extinction, either because their distribution has been significantly reduced by clearing (this is particularly true for those communities that occur on fertile land favoured for housing or agriculture), or because their distribution

is naturally restricted which means that the whole community is susceptible to significant threats. Ecological communities may also be threatened if the ecological function of that community is undergoing a significant decline. For instance, a community may be particularly prone to invasion of a feral species resulting in a change in the structure and composition of the community and resulting in its fragmentation and degradation. Some communities are also threatened because they only occur under a narrow set of climatic conditions (e.g. alpine bogs). Ecological communities can be listed under state or federal legislation as critically endangered, endangered or vulnerable, depending on their risk of extinction.

With its coastal location and long history of agriculture and housing development on the rich coastal floodplains, the Port Macquarie-Hastings LGA supports numerous threatened ecological communities. The LGA is an important stronghold for many types, such as Littoral Rainforest, Lowland Rainforest, coastal floodplain forest communities and various wetland communities. Figure 11 shows the location of these important biological assets. The report outlining the methodology for mapping these threatened ecological communities is listed in Table 1 and available from Council upon request.

In addition to communities listed under state or federal legislation, an area may support 'novel' communities that have not yet been fully described or subject to the formal listing process. This is certainly the case in the Port Macquarie-Hastings LGA, where Council's vegetation community mapping has identified the presence of three ecological communities which are of particular interest because they:

1. have a narrow spatial distribution
2. largely occur outside formal conservation reserve networks
3. are experiencing significant declines in ecological function due to a range of external threatening processes.

These three communities are the Orange Gum – Swamp Gum Woodland (see Box 11), Serpentine Grass-trees Woodland and the Lighthouse Gully Subtropical Lowland Rainforest. These areas require additional work to help secure their protection and to gain additional funding for works to reverse declines in their condition. Port Macquarie-Hastings Council are working closely with the NSW Office of Environment and Heritage to better determine other locally significant plant communities.

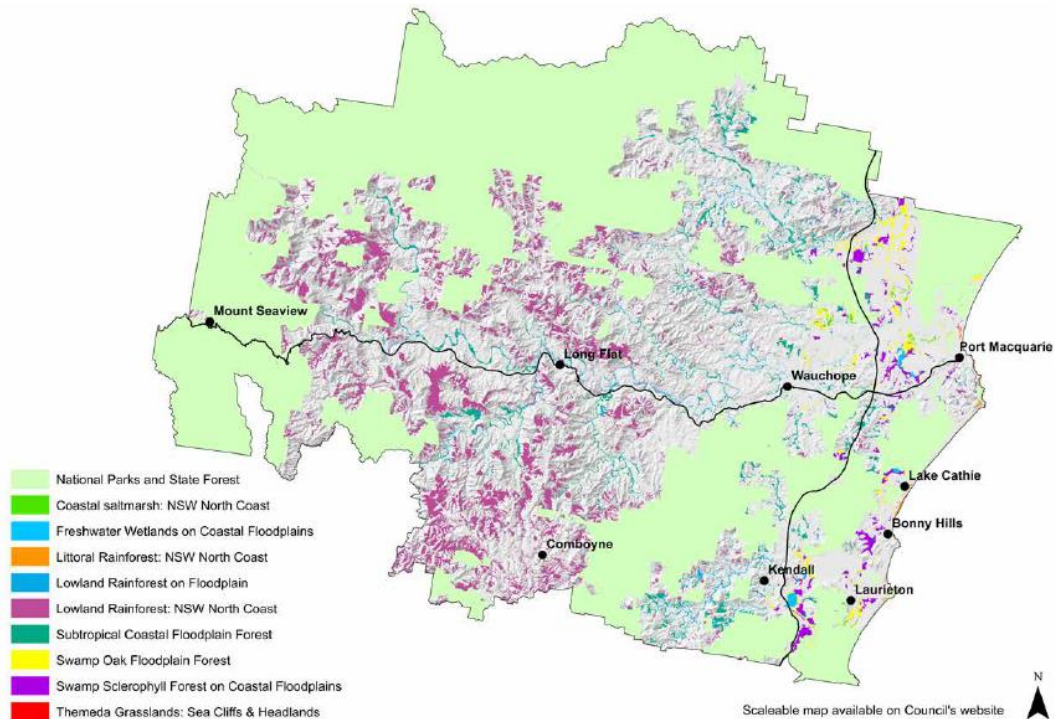


Figure 11. Location of threatened ecological communities within the LGA outside Forestry Lands or Protected Lands

Some additional threatened ecological communities are likely to occur in the LGA, particularly in Protected Areas, such as Werrikimbe National Park, high in the Escarpment (e.g. Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions). Knowledge of their spatial extent is poor.

2.5 HIGH VALUE FOREST AREAS

The Port Macquarie-Hastings LGA has always been an important area for the timber harvesting industry. Cedar cutters moved into the area in the 1830s following establishment of the penal settlement in Port Macquarie in 1823.

Logging did not take place evenly across the landscape. Certain species with superior timber qualities and occurring in particular vegetation communities were selected and felled first and in higher quantities than other less desirable species.

The rush for 'red gold' saw the near extermination of Red Cedar from many rainforests in the region. Tallowood,

Blackbutt and various ironbarks were also heavily targeted for bridge timbers, railway sleepers, power poles and building timber. Large trees were also preferentially felled. Trees of large dimensions are known to offer superior habitat opportunities for many animals (see Box 12). Trees in flatter, more accessible areas were also preferentially logged for logistical and operational reasons. However, these trees on flat, more fertile country are also superior habitat for a range of animals, including Koalas and Swift Parrots, compared to trees on steeper, rocky country.

Learning from the loss of the valuable Red Cedar industry, from 1871 the NSW Government declared some areas to be 'forest reserves' (now called state forests). While some of these forests are still within Forestry Corporation of NSW estate, others have been reserved as national parks in recognition of their natural values and are

**BOX 11. ORANGE GUM WOODLAND ON SERPENTINITE: A
UNIQUE VEGETATION COMMUNITY WORTHY OF PROTECTION**

Vegetation mapping by the Northern Rivers Catchment Management Authority revealed a spatially restricted vegetation community found only in the Port Macquarie-Hastings LGA. The community has no known equivalents in New South Wales or the Northern Rivers region. The community was classified as 'NR 222 Orange Gum woodland on serpentinite in the Burrawan – Cowarra area, NSW North Coast Bioregion'. More recent vegetation mapping by Biolink (2012) for Port Macquarie-Hastings Council confirmed the presence and floristic composition of this community and found that only 212 hectares of this community existed outside state forests or national parks (areas which were not mapped by Biolink).

This vegetation community is found only on serpentinite soils, which are known to give rise to unique assemblages of plants. The majority of serpentinite communities occur on dry rocky outcrops and are made up of native grasses and a diversity of forbs (herbaceous plants) and grasstrees. They tend to be treeless. The Orange Gum Woodland on Serpentinite community is unique for serpentinite in the area because it is dominated by a tree, the Orange Gum, which reaches around 10 metres high in this community. The area where the community occurs is also much moister than other areas supporting serpentinite vegetation communities.

The mid-high to tall woodland is dominated by Orange Gum and also includes Red Mahogany, Narrow-leaved Red Gum, Turpentine, Tallowwood and White Stringybark. Orange Gum, Narrow-leaved Red Gum and Tallowwood are important Koala food trees and therefore the Orange Gum Woodland on Serpentinite community is important Koala habitat. The mid-storey and understorey reflect the moist ground layer and include a variety of paperbarks, Swamp Oaks, tea-tree and Willow Bottlebrush. The groundcover is a mid-high sedgeland; again typical of wetter environments and not typical of serpentinite communities.

The term 'serpentine' refers to magnesium- and iron-rich rocks, principally serpentinite and peridotite, and the soils derived from them. Serpentine is a harsh environment for plants because of its low nutrient levels, high levels of metal (causing metal toxicity) and, in some cases, poor water-holding capacity. Throughout the world, vegetation on serpentine is more sparse, stunted and drier (xeromorphic) than the vegetation of most other soils. Distinctive vegetation communities and plants occur on serpentine, both because it excludes many plant species from the surrounding communities, and because it often supports specialist species ('serpentine endemics'). Many ecologists have noted that serpentine endemic flora provides excellent examples of the linkage between adaptation and speciation.

Vegetation communities on serpentinite often support a high abundance of wildflowers. Many plants have even developed specialised adaptations to exist on serpentine soils and such plants have been used to treat environmental problems by taking up certain heavy metals from polluted soil.

The NSW Threatened Species Scientific Committee Guidelines considers the geographic extent of vegetation communities and the number of locations in its consideration to list an ecological community as 'threatened' or 'endangered'. The narrow geographic extent of this community, as well as the threats to it from potential mining and inappropriate recreational uses as well as weed incursion, certainly would make this unique and restricted vegetation community a candidate. Port Macquarie-Hastings Council will continue to work with the NSW Office of Environment and Heritage to protect this community.



now managed by NSW National Parks and Wildlife Service (NPWS).

We are fortunate in our LGA to have outstanding examples of old-growth forests in national parks and state forests, such as Willi Willi National Park (formerly the Wilson River Primitive Reserve) and Middle Brother National Park. Other precious pockets of old-growth forest remain on private properties, scattered across the LGA, even in coastal areas, however the extent of these is quite limited and generally little understood. In the Coffs Harbour LGA, a study revealed that old-growth forests comprise less than 1% of all forests on private land (therefore a very small percentage of all freehold land in total). It is likely that a similar pattern occurs in the Port Macquarie-Hastings LGA due to similar land-use histories and landscapes. It is important that private landholders understand the supreme importance of such areas for biodiversity and receive appropriate advice and assistance to aid their long-term protection.

2.6 LOCAL PRIORITY AREAS, COMMUNITIES AND SPECIES

This Biodiversity Management Strategy was formulated with the assistance of an **Expert Panel** (comprised of members of NSW Government agencies from the North Coast and local practicing ecologists), and a **Community Panel** (comprised of a diversity of various stakeholders in the community, including those with a good deal of knowledge about biodiversity in the local area). Members of both the Expert Panel and the Community Panel were asked to identify local priority areas, communities and/or species.

The Expert Panel identified areas they believed were important for different species (see Figure 12). These areas were largely within Biodiversity Priority Areas identified by Zonation in the tenure-blind analysis (see Section 2.2.3). In a few instances, the areas depicted by the Expert Panel gave a bit more emphasis to an area than did Zonation. The values of the areas are listed in Table 5. In addition, the Expert Panel identified a number of vegetation communities they believed were of importance (see Figure 12).

BOX 12. OLD TREES: THERE'S NOTHING QUITE LIKE 'EM

Large eucalypts have undergone serious declines as a result of selective logging practices. The mighty eucalypts once seen regularly by timber-getters are now scarce to non-existent. Many of the largest 'giants' felled in the days of cross-saws and bullocks would have been 500 years or older when felled, and it takes many eucalypts more than 100 years to attain stately proportions and basic hollows.

The loss of large eucalypts has had serious consequences for wildlife. This is because large eucalypts offer superior habitat opportunities.

Old trees support **more hollows** as well as **different types of hollows** (e.g. hollows of different sizes, shapes, volumes and positions in the tree). Animals require this diversity of hollows in the landscape because each species has different hollow requirements. An abundance of hollows is also required, not only to support a good abundance of animals, but because many animals require more than one hollow to call home. Swapping hollows prevents the build-up of parasites, keeps would-be predators guessing and assists with moving in response to seasonal requirements.

Old trees also support the highest volumes of **loose and shedding bark** (also called 'decorticated' bark). This bark is home to a vast variety of invertebrates (e.g. spiders, bugs and insects) which are important prey items for many vertebrate animals. Some animals also like to roost under the flaking bark layers, notably geckoes and micro-chiropteran bats such as the Eastern Freetail-bat.

Large, old trees also support the highest amounts of **eucalypt blossom and nectar** flow. A study by the NSW Department of Primary Industries found that mature forest produces almost 10 times more sugar per hectare than recently logged forest. This resource is extremely important for birds such as honeyeaters, as well as mammals such as possums and gliders.

Large, old trees also have **better perching sites** for animals due to the size and diversity of branches. They also often support **epiphytes** (e.g. orchids, ferns, mosses and lichens) and **mistletoes** which are an important food resource.

Clearly, old trees are vastly important resources in the landscape and every remaining one in the LGA is precious. Unfortunately nest boxes are a poor substitute for the real thing, require maintenance and tend only to attract common species. The loss of any remaining large eucalypts cannot be 'offset' in our lifetime, or our children's lifetime, or their children's lifetime, or their grandchildren's lifetime....



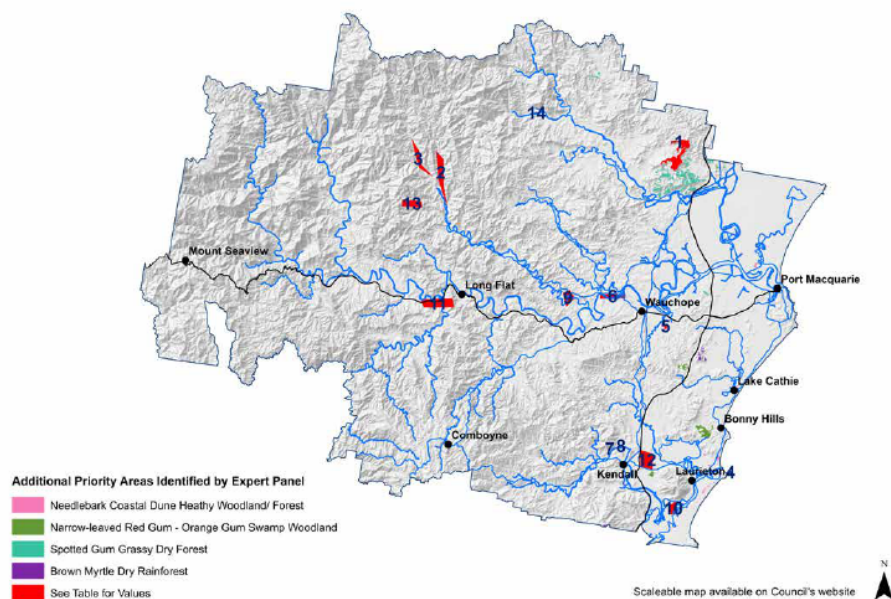
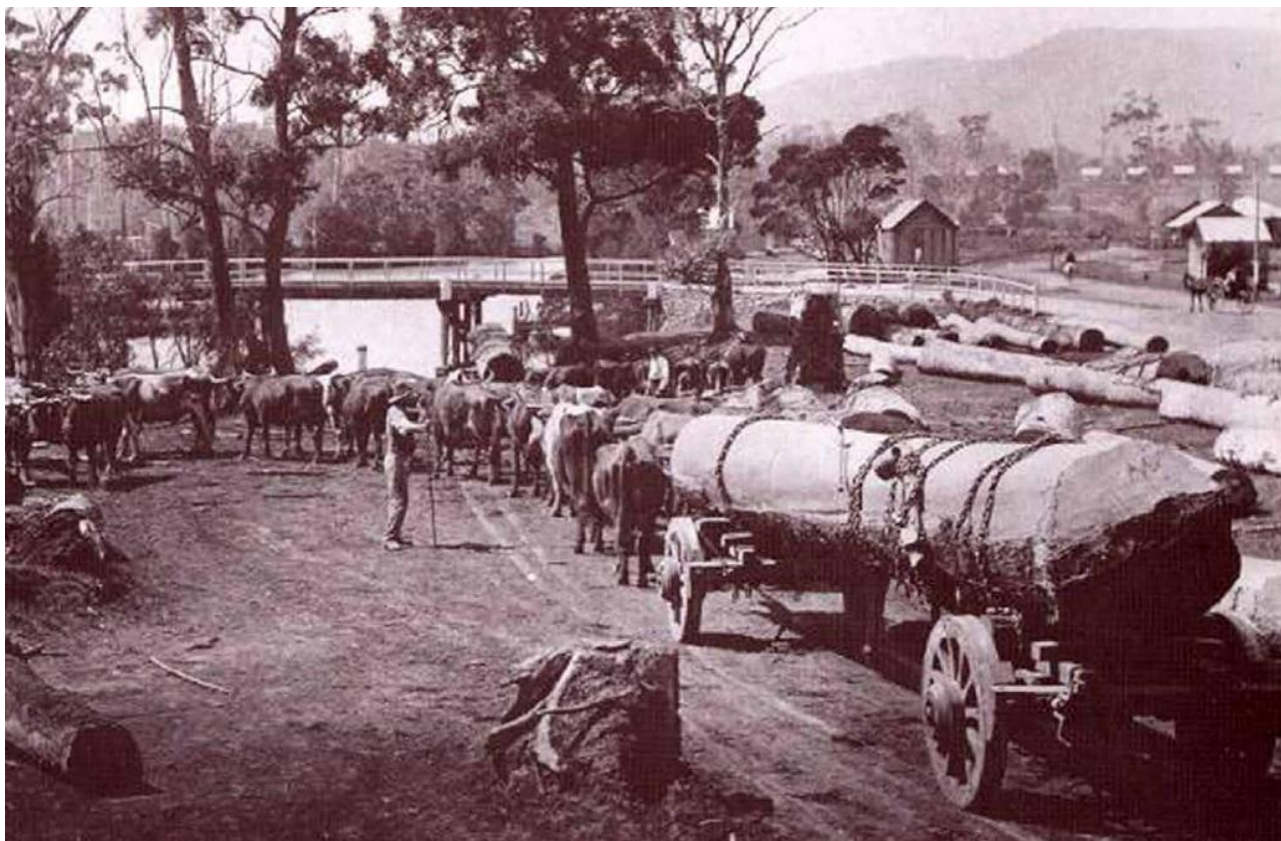


Figure 12. Priority areas identified by the Biodiversity Strategy Expert Panel

These areas are known by the Panel to support important biological assets, including healthy populations of threatened species (see key in Table 5), and rare vegetation communities (see map legend).

Table 5. Key to Expert Panel priority areas

Number	Broad location	Biological assets identified by Expert Panel
1	Red Hill	Red Hill Basalt. Complex vegetation assemblages, important populations of frugivorous birds and Pacific Baza.
2	Pappinbarra Right Arm	Diverse and abundant fauna populations including many threatened species (e.g. Giant Barred Frog, Red-legged Pademelon).
3	Pappinbarra Left Arm	Diverse and abundant fauna populations including many threatened species (e.g. Giant Barred Frog, Red-legged Pademelon).
4	Diamond Head	Southern Limit of Coastal Pandanus.
5	King Creek	King Creek wetlands. Good populations of waterbirds including Comb-Crested Jacanas.
6	Hastings River	Important Rainbow Bee-eater nesting habitat on banks of Hastings River near Beechwood.
7	Logans Crossing	Flying-fox camp (first area), mostly Grey-headed Flying-foxes.
8	Logans Crossing	Flying-fox camp (second area), mostly Grey-headed Flying-foxes.
9	Brombin	Range extension of <i>Eucalyptus nobilis</i> .
10	Crowdy Bay	Substantial area of Needlebark Stringybark in Crowdy Bay National Park.
11	Long Flat to Ellenborough	Range extension of Drooping Ironbark.
12	East Kew	Important populations of arboreal marsupials (Yellow-bellied Glider, Squirrel Glider, Brush-tailed Phascogale) and Wallum Froglets.
13	Cooks Trail	Sphagnum Frog at low elevations (and buried sphagnum).
14	Upper Rollands Plains	Maternal colony of Southern Myotis.



In contrast, the Community Panel predominantly identified species and ecological communities they felt were 'iconic' to the Port Macquarie-Hastings LGA. Those species/communities that fell within the scope of this report (i.e. terrestrial biota) are listed below. In addition, both groups identified the limestone caves in the Toms Creek area and old mining shafts in the Kippara area to be critical habitat for cave-roosting bats. These have not been spatially depicted.

Important biological areas and species of interest:

Mammals

- Platypus
- Koala
- Brush-tailed Phascogale
- Red-legged Pademelon
- Red-necked Pademelon
- Long-nosed Potoroo
- Grey-headed Flying-fox
- Black Flying-fox
- Little Red Flying-fox
- Spotted-tailed Quoll
- Dingoes
- Hastings River Mouse (identified by Expert Panel)

Frogs

- Green-thighed Frog (Expert Panel)
- Green and Golden Bell-frog
- Giant-barred Frog

Birds

- shorebirds
- Eastern Curlew
- Glossy Black-cockatoo
- Rose-crowned Fruit-dove
- forest owls (Expert Panel)
- Brolgas and Black-necked Storks (Hastings River Drive)

Plants

- Antarctic Beech
- *Melaleuca biconvexa*
- Christmas Bells
- Orange Gum
- plants at northern and southern end of their range (e.g. Coastal Pandanus, Lesser Swamp-orchid, Silver Bush)

Invertebrates

- Spiny Crayfish (*Eustacus* spp.)
- native bees
- Fritillary Butterfly (Expert Panel)

**Communities**

- Serpentine Grass Tree Woodland
- littoral rainforest
- wetlands
- alluvial terraces
- mangroves and sea grass
- hardwood forests
- Swamp Mahogany/ Forest Red Gum Associations for Swift Parrots

3. CONNECTING THE DOTS: LANDSCAPE CONNECTIVITY IN THE LGA

3.1 INTRODUCTION

A significant consequence of increased human activity and development is the loss of habitat, most generally caused by habitat clearing and destruction. When habitat is lost, the original contiguous natural landscapes become subdivided (fragmented) into a mosaic of remnant habitats surrounded by the 'landscape matrix'. This process is known as **habitat fragmentation**, and habitat fragmentation reduces **habitat connectivity**.

The **landscape matrix** which surrounds remnant habitat will exist in different configurations and be comprised of different elements depending on the land-use history of an area. For example, the landscape matrix may be predominantly built elements such as buildings and urban areas, industrial areas, and highways and roads. Or it may be comprised of unbuilt elements such as rural landscapes with native grasses, paddocks and scattered trees. In the case of Port Macquarie-Hastings LGA, the landscape matrix surrounding remnant vegetation is a mix of built and unbuilt elements.

Some parts of the landscape matrix will be more 'permeable' (i.e. able to be crossed by species) and therefore provide greater connectivity. Rural landscapes with native grasslands and scattered paddock trees are a good example of what a '**permeable matrix**' is for many species. On the other hand, an industrial estate with a busy four-lane highway would be a relatively '**impermeable matrix**' for many species.

3.1.1 HABITAT FRAGMENTATION

Habitat fragmentation is a serious threat to wildlife because many of the habitat patches that remain are too small to support viable populations of biota in the longer term. Also, habitat fragmentation directly influences the ability of wildlife to move about the landscape to breed and feed. Specific issues are discussed here.

Reduced genetic exchange

Habitat fragmentation reduces genetic flow between populations and therefore reduces genetic vigour and the resilience of the population to disturbances, such as

disease and climatic variability. Isolated habitat patches may be restricted from any genetic exchanges, resulting in in-breeding depression.

Reduced patch size

The net effect of sustained habitat fragmentation is a reduction in the average size of remaining habitat patches, such that they no longer provide the resources necessary for an animal's long-term survival. Some animals have very large home ranges (for instance a Spotted-tailed Quoll requires several hundred hectares) and small patches cannot cater to their long-term existence. Exceptions occur when animals may satisfy some or all of their life-history requirements by, for example:

- using different elements of the landscape matrix (e.g. mobile species using scattered paddock trees for shelter or feeding, or honeyeaters using urban gardens)
- by occupying multiple *connected* habitat patches (e.g. several small habitat patches that occur in close proximity separated by a 'permeable' matrix).

Increased edge effects

Smaller habitat patches tend to have an increased edge:area ratio. Larger, more blocky shaped patches have a lower edge:area ratio than long, narrow patches of vegetation. Edges of habitat patches offer less intact habitat for flora and fauna, and often have higher weed loads, and suffer from wind effects and sunlight.

Increased susceptibility to disturbance events

Habitat fragmentation often results in a steady reduction in populations of species across the landscape because individual populations in isolated patches are easily lost as a result of random (i.e. stochastic) disturbance events, such as wildfire and drought. This is because animals are unable to leave the 'habitat island' or if they do, they are quickly lost in an inhospitable matrix. Such patches cannot then be recolonised as they are isolated from any other populations.

Inability to perform seasonal movements

Many animals move in response to the seasons. Such animals include 'latitudinal migrants' (for example, the Swift Parrot moves from Tasmania as far as south-eastern Queensland each year) and 'altitudinal migrants' (for example, the Noisy Pitta moves from rainforests high in the hinterland to the coastal floodplain each winter). Many other species are 'locally nomadic', moving about widely between habitat patches to find sufficient resources (fruit-doves and honeyeaters are classic examples). During the breeding season, some animals such as the male Koala will move widely to find mates. Many animals will also move to drought refuges in response to drier periods. All of these animals require their multiple habitat patches to be connected at various scales, or at least be within a permeable matrix, for them to perform these important seasonal movements.

3.1.2 HABITAT CONNECTIVITY

Connectivity can be defined as the extent to which a landscape facilitates the movements of organisms and their genes. Connectivity operates at multiple scales relative to individual species' movement abilities. What is therefore connected habitat for a small, mouse-sized Brown Antechinus is very different to what is connected for a highly mobile Black-necked Stork. Different species are also able to move through different types of 'landscape matrix' with various levels of success. Some landscape matrixes will be more permeable to some species than others. For example, a Noisy Miner readily moves through and occupies a range of highly modified habitats, whereas a Paradise Riflebird is highly restricted to high quality consolidated habitat. These different abilities and tolerances for modified landscapes mean that each species views the relative habitat connectivity of the same landscape differently.

Connectivity is built around core habitats (also known as refugia) including areas protected in formal reserves and areas of private land. These core habitats are linked across different land uses by patches of remnant vegetation, corridors and 'stepping stones'. So connectivity is not just about corridors — it includes core habitats, small and large patches of vegetation, stepping stones, areas managed for conservation, and remnant vegetation such as scattered trees and narrow corridors along roadsides or riparian areas (see Figure 13).

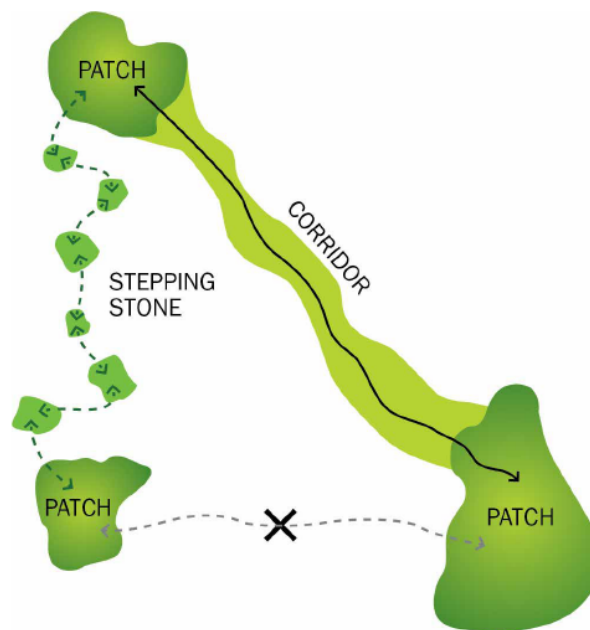


Figure 13. Examples of habitat patches and various kinds of connectivity within the landscape matrix

In this example, some animals are able to cross from patch to patch using the corridor or the 'stepping stones', but are unable to cross the open ground to move directly between the two lower patches.

Wildlife corridors are typically thought of as vegetated (i.e. woody, treed) areas stretching across the landscape and linking up areas of more consolidated **patches** of habitat. In fact, **corridors** come in all shapes, sizes and types. For example, some species disperse across suitable grasslands, while others move from rocky outcrop to rocky outcrop.

Corridors also exist at different scales, from continental to local. For instance, The Great Eastern Ranges Corridor extends 3600 kilometres from the Victorian Alps to the Atherton Tablelands in Far North Queensland. The Great Eastern Ranges Corridor contains Australia's longest and most unfragmented north-south mountainous landscapes and habitats.

Within the North Coast Bioregion, wildlife corridors have also been identified at the regional and subregional scale (see Figure 14 and refer to Scotts, D (2003), *Key Habitats and Corridors for Forest Fauna. Occasional Paper 32*.



NSW NPWS for more information on how these were derived). These broad-scale corridors help to identify major woody-vegetated areas forming natural corridors (e.g. along river systems) and in so doing identify important pathways for altitudinal and latitudinal migrants and areas that link key populations. Nonetheless, they are restricted to identifying broad patterns and are limited in number. Such broad-scale corridors alone do not provide the full range of connectivity required for effective conservation.

Every day, all around us, there is a flow of biota and associated genetic material between parcels of habitat. Such flow does not always occur along lines of woody vegetation or mapped corridors, and in many cases the distances travelled between habitat is small. For short distances, animals are able to cross open space, or use stepping stones such as isolated paddock trees. Seeds may even wash across open ground from one habitat patch to another. Increasingly, empirical studies are revealing that the dispersal movements of animals in fragmented landscapes depend on very fine-resolution elements of structural (woody) connectivity, such as roadside corridors, scattered paddock trees or small patches. These short distance **connections** are numerous, and represent the reality of how the landscape is actually working every day. Some such links are more important than others, representing the 'vital link' in the chain of habitat.

Empirical studies also highlight the importance of **habitat patches** along linkages (e.g. vegetated corridors or stepping stones, such as scattered trees). Just as we

need regular pit-stops for food and rest while driving along the highway, so too dispersing biota need regular access to patches of habitat to survive. Studies of dispersing woodland birds have shown that they will only move from a habitat patch along a linkage for about 1.1 kilometres. If no habitat patch is encountered at this distance, they will return to the original habitat patch. The spatial distribution of habitat patches is therefore fundamental to species' survival and ability to move through the landscape. Traditional corridor models fail to highlight their importance.

New modelling approaches such as 'GAP CLoSR' (The General Approach to Planning Connectivity from Local Scales to Regional – see below) are seeking to model these finer-scale connectivity features at the landscape or regional scale. These new approaches consider a number of these factors, such as:

- biota will cross 'gaps' in the landscape only for finite distances
- different elements of the 'landscape matrix' have different crossing costs, with some simply being impassable
- biota can only move along links for finite distances unless patches are encountered
- fine-scale elements, such as scattered trees, are an essential part of landscape connectivity.

The underlying data is empirical based on expert opinion.

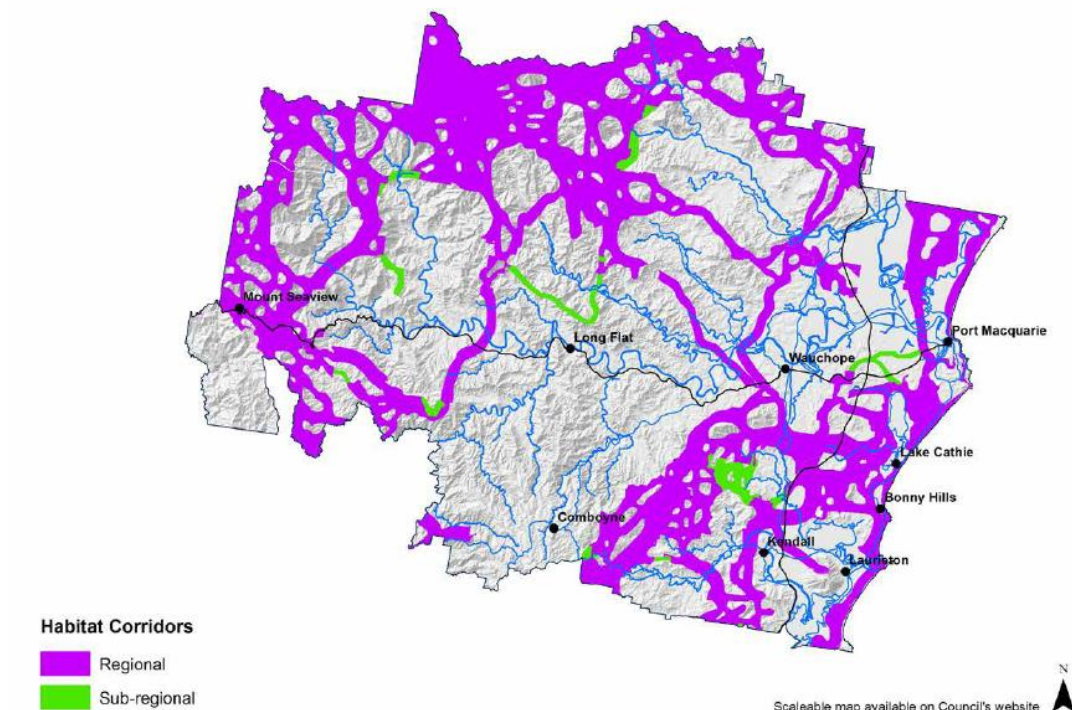


Figure 14. Regional and subregional corridors in the Port Macquarie-Hastings LGA (as identified in the Northern Rivers Biodiversity Management Plan)

Source: Scotts, D (2003), *Key Habitats and Corridors for Forest Fauna. Occasional Paper 32.* NSW NPWS

3.2 MAPPING CONNECTIVITY IN THE LGA

3.2.1 AN INTRODUCTION TO GAP CLoSR

As habitats become increasingly fragmented, smaller landscape features such as paddock trees and narrow strips of roadside vegetation become more important. These features can act as stepping stones to connect larger patches of vegetation.

GAP CLoSR (The General Approach to Planning Connectivity from Local Scales to Regional) is a software package that is able to pick up these small-scale features at a regional level.

GAP CLoSR identifies the most important patches and appropriate locations for wildlife connectivity based on the habitat and dispersal requirements of target species.

(Lechner & Lefroy 2014)

The software uses high resolution spatial data (aerial imagery) to examine the environments encountered by species in the landscape and considers these against the actual movement patterns of species, groups of species, or 'biodiversity' as a whole. For instance, will a species cross open ground and, if so, for what distance? How big does a habitat patch need to be to sustain a population

of that species? If moving through stepping stones, such as isolated paddock trees, how far would it use these stepping stones before giving up?

GAP CLoSR is a free software modelling program developed by the University of Tasmania (Lechner & Lefroy 2013), and has previously been used to aid strategic planning by local councils, such as through the Upper Hunter.

3.2.2 INPUTS TO GAP CLoSR

GAP CLoSR uses a number of inputs to map the important patches and locations for wildlife connectivity — referred to as the **connectivity map** in this strategy. The fundamental layer that drives the analysis is a map of woody vegetation. Other inputs represent the habitat and dispersal requirements of target species (the target species may be a single species, or in the case of this Biodiversity Management Strategy, multiple species which are all encapsulated under the habitat and dispersal parameters set). The model also uses a land surface crossing costs layer. These inputs are discussed here.

Woody vegetation layer

A 'Woody vegetation/No woody vegetation' layer was derived as an input to GAP CLoSR. This was based on the latest aerial imagery available for any given area of the LGA (ranging from 2018 for the Camden Haven area to 2010 for the western hinterland areas). The aerial imagery was converted to a grid (raster) layer using 5 metre pixels (i.e. 5x5 metre grid cells) in ArcGIS software. Reflectivity (colour-matching) software was used to accurately pick woody vegetation from non-woody vegetation across the LGA. Given that most trees within the LGA easily have canopies equal to, or larger than, the pixel size used, any grid cell accurately predicted whether it was occupied by a tree or not.

The resultant layers were then visually checked by Council staff to find and remove any errors across the LGA (for instance, the verdant green of sewage treatment ponds often reflected as vegetation). Areas known to have been cleared since the aerial imagery was taken were also manually removed, as were areas where clearing will take place in the near future (for instance because of approved developments). Some vegetation was also added into the vegetation layer, for instance, areas which are known to have been (or will be) planted since the aerial imagery was captured.

GAP CLoSR software considers connectivity for species reliant on woody vegetation only, that is, **trees and shrubs**. As such, some vegetation communities were excluded from the Woody vegetation/No woody vegetation layer, either because they did not support large trees or shrubs, or because they did have trees or shrubs but had a very wet understorey impermeable to many terrestrial animals. This was done by overlaying the Woody vegetation/No woody vegetation layer with CRAFTI vegetation mapping and Port Macquarie Vegetation Communities and cutting some vegetation communities out. The list of vegetation communities removed from the vegetation layer is provided in Appendix G. Species whose dispersal is reliant on different habitat, for instance, hill-tops (e.g. butterflies), wetlands (e.g. frogs) or grasslands are therefore not appropriately considered by this model as their key habitat has not been modelled.

Biodiversity habitat and dispersal requirements

Before running GAP CLoSR, the Expert Panel met to discuss the input parameters to represent the habitat and dispersal requirements of biodiversity in the LGA. The Expert Panel included people with diverse areas of interest (plants, mammals, birds, reptiles), and individuals provided advice/input based on their areas of expertise while also considering published literature.

As mentioned previously, connectivity works at multiple scales and, unlike other regional corridors models, the GAP CLoSR model is able to pick up very fine-scale habitat elements such as scattered paddock trees. The challenge for the Expert Panel was to determine the best parameters to use to derive a connectivity map suitable for 'biodiversity' at the scale of the Port Macquarie-Hastings LGA. The model parameters had to represent the requirements of as many species as possible. Following discussion, it was felt that many species in our LGA would be captured by a model which incorporated the following parameters:

- **A 'gap-crossing distance' of 60 metres.** Most species could cross open ground (i.e. no trees or shrubs) for 60 metres. As examples, many small birds can easily disperse from tree to tree over this distance, while a Squirrel Glider can glide 50 metres on average (but up to 100 metres depending on the terrain).

- **A patch size of 10 hectares.** Populations of many species in the LGA would survive in patches that were 10 hectares or larger.
- **An 'inter-patch distance' of 550 metres.** Most species would continue to use stepping stones for 550 metres before 'giving up' and returning to their original patch, or before encountering an unfortunate end, such as predation.

The Expert Panel considered that these biodiversity requirements represented a range of species across taxonomic groups (mammals, reptiles, birds) native to the LGA. The Common Ringtail Possum (see picture) is just one example of a species for which the GAP CLoSR model is likely to be appropriate.

As a result of this rule set, the model may fail to identify or explain the appropriate connectivity for small or sedentary species (such as the Eastern Pygmy Possum or Yellow-throated Scrubwren) that are unable or unwilling to cross open ground for 60 metres. Neither would it provide for species which require consolidated habitat patches much larger than 10 hectares for their survival (for instance, the Spotted-tailed Quoll).

For some highly mobile species, such as larger birds like the Powerful Owl and Black-necked Stork, the model may be overly constrained, showing a fragmented landscape when in fact these species could easily cross the landscape. Similarly, the model may be overly pessimistic for species that have small home ranges and can have large, sustainable populations existing in a 10 hectare patch (for instance Delicate Skinks). A future application of GAP CLoSR is running models for key species such as the Koala.

A list of species likely, and not likely, to be represented by this model is contained at Appendix H.

GAP CLoSR trials were also undertaken using different metrics to consider the performance of the model and the results discussed with the Expert Panel. For instance, while it may be intuitive to make patch sizes bigger (to ensure that they are large enough to cater for the long-term persistence of a broader range of species), the trials revealed that locally known important patches in the landscape were not detected (because they were smaller than the patch size used in the trial). Similarly, reducing the gap-crossing distance to 40 metres frequently caused 'breaks' in connectivity when the Expert Panel believed that the area probably was connected for most species.



The Common Ringtail Possum is an example of an animal covered by the GAP CLoSR parameters. Photo © David Cook



The Eastern Pygmy Possum is an example of a species which requires finer-scale connectivity than provided by the GAP CLoSR modelling. It has a predicted inter-patch crossing distance of only 200 metres.

Often this was a result of the 'pixel shading' in the underlying maps, something which seemed to be largely overcome when the gap-crossing distance was increased to 60 metres.

Land surface crossing costs

The other input required for the GAP CLoSR model was a layer showing land surface crossing costs. This provides a mapped representation of the matrix referred to above (and how permeable or impermeable) it is in the LGA. This input considers the different 'land surfaces' through which biodiversity of the LGA would have to cross. A land surface layer was derived for the LGA using maps including the Local Environmental Plan, land information mapping (e.g. for roads and streams), forestry maps and private native forestry maps.

Each of the different land surfaces was assigned a nominal/relative 'crossing cost' as shown in Table 6.

The costs are based on the principle that it is harder for an animal (or it is less likely that the animal will be successful) to move through an industrial estate than it is for them to move through a grassy paddock. Some land surfaces are so difficult for an animal to cross that the crossing cost must be considered as 'infinite'. An infinite cost was defined by the Expert Panel as presenting a barrier to an animal wherein it would be unable to either cross this surface at all, or cross this surface repeatedly and still live out its natural lifespan. For instance, the Pacific Highway was defined as a barrier with infinite crossing cost due to the paucity of crossing places suitable for a wide range of biodiversity, the associated fencing and the large volume of traffic. These crossing costs are consistent with those used for similar surfaces in previous GAP CLoSR models.

Table 6. Crossing costs for biodiversity through various land surfaces (least cost to infinite cost)

Category	Crossing cost
Environment (land managed for this purpose)	10
Native vegetation on rural land (not PNF)	10
Streams of order 1–3 (highest in catchment)	10
Environmental management areas (E3 and E4 lands)	20
Parks and fields	20
Forestry – Operational Forestry Corporation lands	20
Forestry – private native forestry (PNF)	20
Sub-arterial roads	20
Streams of order 4–6 (e.g. mid-lower Pappinbarra River)	20
Hardwood plantation	20
Rural land (paddocks etc.)	20
Other arterial roads	30
Developed areas	40
Streams of order 7 and above (e.g. Hastings River)	40
Pacific Highway	Infinite
Oxley Highway (to Huntingdon)	Infinite
Hastings River Drive	Infinite
Ocean Drive	Infinite
Lake Road	Infinite
John Oxley Drive	Infinite
North Coast Railway	Infinite

3.2.3 OUTPUTS OF GAP CLoSR

The GAP CLoSR software applies the parameters for biodiversity requirements and the crossing costs layer rule sets to the woody vegetation layer to map 'components' and 'habitat linkages'.

Components

Components represent **islands** in the landscape. Components encompass areas of woody and non-woody vegetation. The woody vegetation in a component may be present as consolidated habitat patches (shown by the coloured patches) or as unconsolidated habitat patches (i.e. those that are too small or fragmented to meet the 10 hectare minimum patch size – see Section 3.2.2).

Biodiversity can survive and move around within components, but is unable to move beyond them because the component is not connected by woody vegetation to the adjacent component, or there is a hard barrier (such as a river or a highway) which animals cannot cross.

If habitat is scant within a component, it may be insufficient to sustain a local population of a particular species in the longer term. In these areas, intervention is needed to link adjoining components through plantings or other works (such as fauna road crossings) to create a bigger component with sufficient habitat. If large consolidated areas of habitat are present and connected within a component, its isolation from other areas will not be an issue for the long-term survival of many wildlife populations.

Habitat linkages

Habitat linkages are areas where biodiversity moves through existing vegetation, that is not part of a patch, to get from habitat patch to habitat patch. These areas may be corridors of vegetation or scattered trees which act as 'stepping stones'.



This vegetation may be roadside vegetation, a narrow planting in an otherwise cleared paddock, small clumps of isolated paddock trees or native trees in people's backyards. While such vegetation may not look to be important upon field inspection, the results of GAP CLoSR can reveal its true importance in helping to link potentially highly important habitat patches.

The presence of habitat linkages within a component is significant because the GAP CLoSR model does not 'split'

a larger component into smaller components where there are sufficient linkages to enable adequate connectivity within the component.

As such, the habitat linkages mapped by GAP CLoSR are vitally important connectivity links. Such links need to be strengthened where possible, such as through widening the corridor and undertaking strategic planting programs to slowly replace weedy species with native species.

3.2.4 GAP CLOSURE MODEL RESULTS: THE PORT MACQUARIE-HASTINGS CONNECTIVITY MAP

Woody vegetation model

The GAP CLOSURE connectivity map for Port Macquarie-Hastings LGA is shown in Figure 15.

Components (shown outlined in red) are those 'islands' in the landscape where target species can move around *within* the area, but not *out of* the area, given the parameters (60 metre gap-crossing distance, 550 metre inter-patch crossing distance, 10 hectare minimum patch size) and land costs adopted. Habitat linkages (shown as purple dots) represent the vital links within the components. Areas with many small components represent parts of the landscape that are less connected than areas with larger components.

Overall, the results showed that with current levels of woody vegetation the Port Macquarie-Hastings LGA has generally **good levels of connectivity**. The largest 'component' encompasses the area west of the Pacific Highway (heading north from Johns River) to Herons Creek, then to Wauchope, Telegraph Point then following the Pacific Highway north. This represents the most connected part of the LGA. The most fragmented areas (small components) of the LGA occur along the Hastings River floodplain and north of the Hastings River in areas near the Pacific Highway. The immediate environs of Port Macquarie are also, not surprisingly quite fragmented, but closer inspection also reveals that the habitat linkages in Port Macquarie's urban areas (Sea Acres, Wrights and Yarranabee creeks and Kooloonbung Creek) are fundamental to the ecological connectivity and health of the coast and urban areas.

The results strongly showed that within the Port Macquarie-Hastings LGA, the **coastal corridor** is an amazingly connected resource, particularly for north-south migrants. This can be seen in the large components to the north and south of Port Macquarie. Collaborative work with Kempsey Shire Council showed that this corridor extends north beyond the Port Macquarie-Hastings LGA, revealing its true magnitude and significance.

Unfortunately, the results also showed that the **Pacific Highway** and **North Coast Railway line** represent

serious barriers to species movement and therefore ecological connectivity in the LGA. The Oxley Highway also represents a barrier to movements which will no doubt increase over time as the road becomes busier. The results also showed that some areas along the Hastings River floodplain, particularly where they occur near the highway, are quite fragmented and do not currently support sufficient habitat for the long-term survival of many species.

The results showed that **some areas are at risk of becoming seriously fragmented**, such as the Comboyne Plateau. The reason why GAP CLOSURE did not map Comboyne Plateau as a separate component is the presence of many stepping stones. Unfortunately, many of these are narrow, tenuous links comprised of thickets of Privet along fencelines. Work to control these Privet thickets in otherwise open landscapes may have both positive and negative ecological outcomes.

A similar example, which highlights the important of stepping stones is the area around Hyndmans Creek. A snapshot is discussed in Box 13.

Figure 15 also shows the different habitat patches within the LGA that are greater than 10 hectares (as set in the species movement ruleset). The largest is 164,000 hectares and includes adjoining large areas of national parks and state forests, as well as private lands. The smaller patches are approaching the lower end of what is sufficient habitat for many species. Examining the smaller patches in this way reveals places where any further clearing, or habitat fragmentation, would effectively render an existing patch 'ecologically redundant' for many species. Examples are found on the Hastings River floodplain.

If habitat is scant within a component, it may be insufficient to sustain a local population of a particular species in the longer term. There are several areas along the Hastings River floodplain dissected by the Pacific Highway which illustrate this concept.

Importantly, members of the Expert Panel and Community Panel all felt that the results of the GAP CLOSURE modelling were an appropriate reflection of important links and habitat patches in the LGA and supported previous decision-making by Port Macquarie-Hastings Council regarding areas important for connectivity (see Box 14).

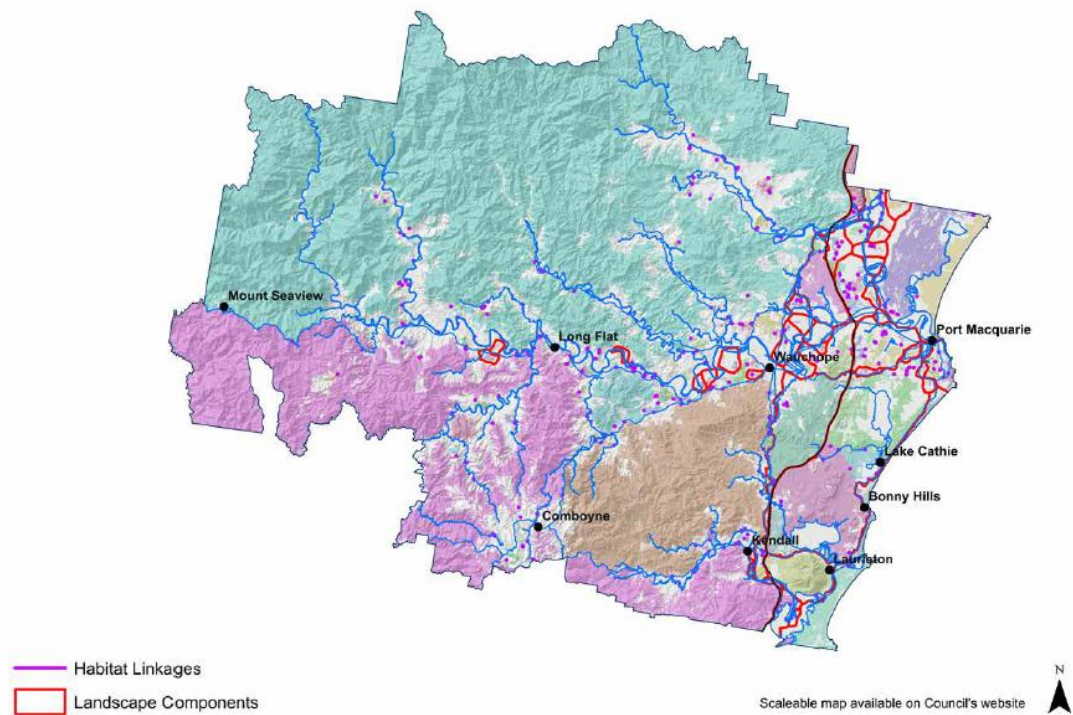


Figure 15. Habitat components and linkages in the Port Macquarie-Hastings LGA



BOX 13. THE IMPORTANCE OF HABITAT LINKAGES

The Hastings River floodplain supports rich alluvial soil, much prized for agriculture. As a result, it has been largely cleared. This cleared swathe on both sides of the river, together with the river itself, therefore presents a barrier for many species as they attempt to make north-south movements across otherwise quite consolidated areas of bushland. The figure below shows how seemingly small and insignificant strips of vegetation (purple lines) that run from ridges down to and across the Hastings River floodplain can play a key role as habitat linkages preventing landscape fragmentation.



BOX 14. CONNECTIVITY IN PORT MACQUARIE-HASTINGS LGA

The GAP CLoSR modelling showed that the LGA has generally good levels of connectivity.

Green ribbons of Port Macquarie's urban areas (Sea Acres, Wrights and Yarrabee creeks and Kooloonbung Creek) are fundamental to the ecological connectivity and health of the coast and urban areas.

Within the Port Macquarie-Hastings LGA and stretching north into Kempsey Shire, the coastal corridor is an amazingly connected resource, particularly for north-south migrants.

The Pacific Highway and North Coast Rail lines represent serious barriers to species movement and therefore ecological connectivity in the LGA. The Oxley Highway and Ocean Drive also represent barriers to movements which will no doubt increase over time as the roads become busier.

Some areas along the Hastings River floodplain, particularly where they occur near the highway are quite fragmented and do not support sufficient habitat for the long-term survival of many species.

Some areas, such as the Comboyne Plateau, are at the edge of becoming seriously compartmentalised, only still working in a connected fashion courtesy of many narrow, tenuous 'links'. Unfortunately, many of these links are actually thickets of Privet along fencelines, indicating that work to control such Privet thickets in otherwise open landscapes may have both positive and negative ecological outcomes.

The GAP CLoSR results matched with local Expert Panel knowledge about important areas for connectivity.

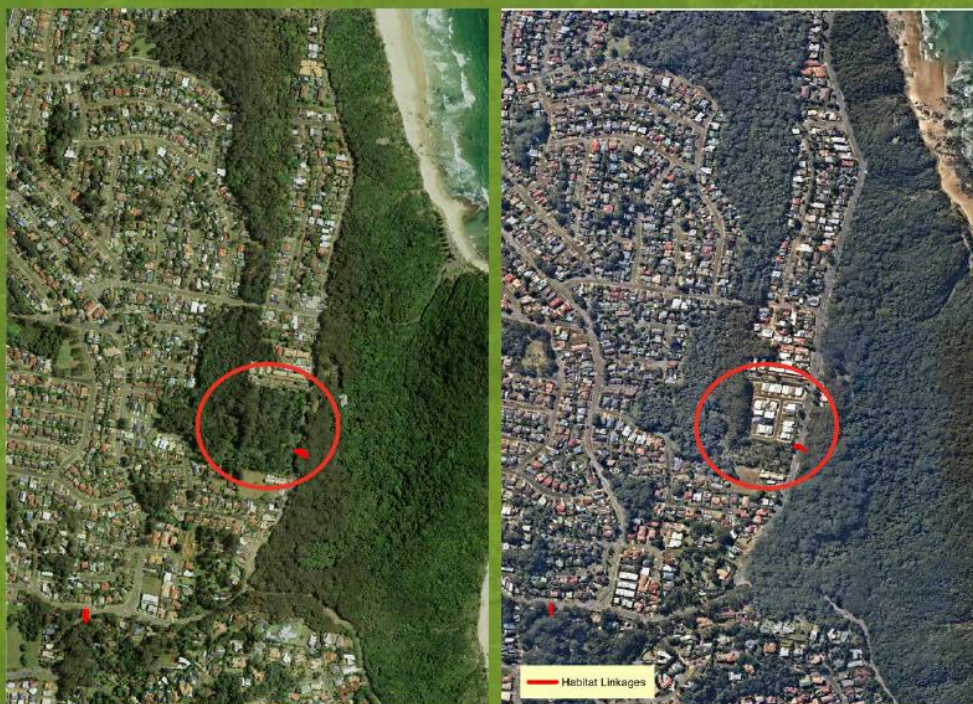


A tranquil area within Kooloonbung Creek Nature Reserve: an important area for ecological connectivity.

BOX 15. A REAL-WORLD TEST CASE FOR GAP CLOSURE

During the development of the Waverley Glade Estate at Shelly Beach, Port Macquarie, it was argued that the vegetation on the site was part of an important wildlife corridor, linking the World Heritage-listed Sea Acres National Park with the Wrights Creek system and beyond. The development was allowed to proceed and, with support of the developer, the southernmost portion of the site was retained to facilitate at least some remaining connectivity (see picture on the right). This area was placed under a vegetation management plan to protect this important area and increase the biological functioning of this narrow strip of vegetation.

The aerial imagery used in the GAP CLoSR connectivity pre-dated the Waverley Glade development and the whole site was identified by GAP CLoSR as being a significant link in the landscape that facilitated connectivity (see picture on the left). The modelling outputs validates the planning process and will help to identify other areas in the LGA where protective measures may be needed to maintain connectivity and improve biodiversity values.



Wet sclerophyll and rainforest only model

The Port Macquarie-Hastings LGA has numerous significant stands of rainforest and wet sclerophyll forest. Many species are restricted to these habitats and yet must move around widely between these habitat patches to satisfy life-history requirements. Particular examples are frugivorous birds, such as the Rose-crowned Fruit-dove and Wompoo Fruit-dove (both of which are threatened species in New South Wales). To illustrate the different ways that species view the environment, habitat patches and connectivity, a GAP CLoSR model was constructed to consider only rainforest and wet sclerophyll forest.

The Expert Panel agreed that the inter-patch crossing distance and patch size should remain the same as in

the general model (i.e. at 550 metres and 10 hectares respectively). However, the 'gap-crossing' distance was reduced from 60 metres to 40 metres, given that the species of interest inhabit finely textured, dense habitat, rather than the more open woodlands and dry sclerophyll forest environments. The results (see Figure 16) show that for species reliant on more mesic forests, the landscape is much more fragmented. Of note are fragmented areas that are of known importance for rainforest-dwelling species, such as the Comboyne Plateau and littoral rainforests along the coastal strip. The results also show a different set of strategic links between habitat patches. Careful attention is required to ensure these habitats are not further fragmented.

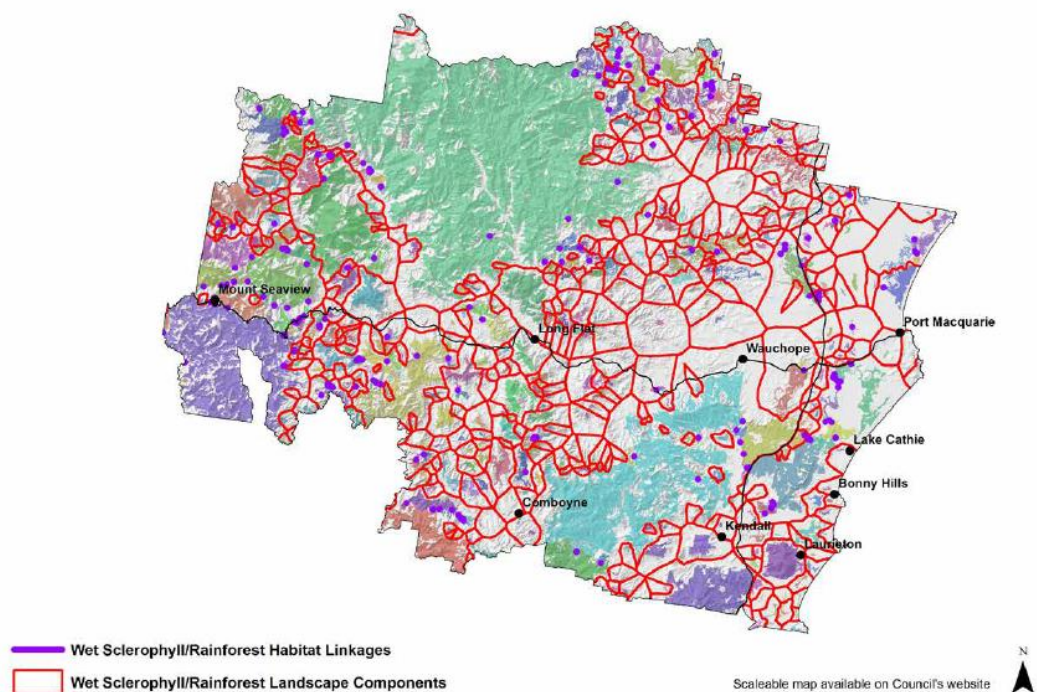


Figure 16. Wet sclerophyll and rainforest model for the Port Macquarie-Hastings LGA

Protected Areas only model

It is often argued that there is sufficient habitat available within national parks and other protected areas for the adequate protection of species. As a purely informative exercise, a GAP CLoSR model was run which assumed that the only available habitat in the LGA existed in 'Protected Areas' (see definition in Zonation discussion above, Section 2.2.3). The results (see Figure 17) show a landscape much more fragmented (i.e. with many more island 'components') than the general woody vegetation model. This shows the incredibly important role that private lands play in ensuring that the landscape is connected to an appropriate level for effective ecological functioning, particularly in the highly fertile landscapes so valued by many species.

3.2.5 THE FUTURE WITH GAP CLoSR

The importance of any given link, component or patch can be further interrogated using GraphAb software which accompanies the GAP CLoSR software. Another program, CircuitScape, is also available to help best plan the location of replanting efforts which seek to reconnect isolated components or identify connectivity bottlenecks that require embellishing. This information can be later used to assist with strategic planning and biodiversity incentive delivery schemes.

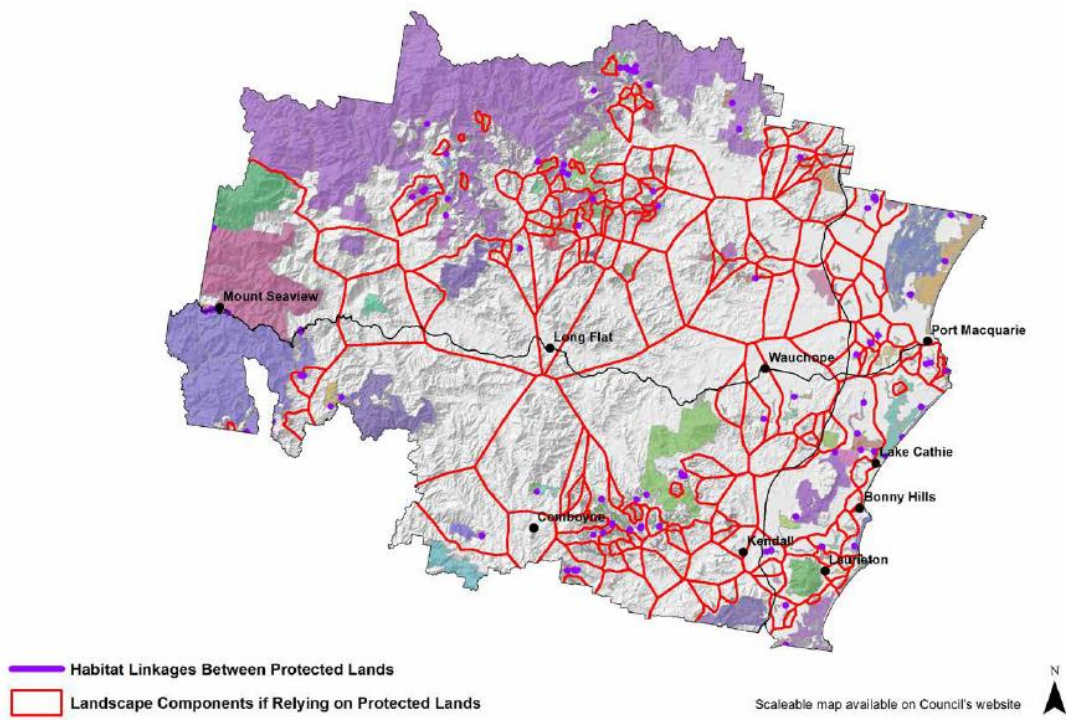


Figure 17. 'Protected Areas only' scenario
The results show extreme fragmentation in many areas.



3.3 WETLAND CONNECTIVITY

As outlined in Section 2.3, Port Macquarie-Hastings Council has numerous important coastal wetlands, notably Lake Innes, Queens Lake, Watson-Taylor Lake (Googleys Lagoon), Partridge Creek, and significant areas of coastal wetland on the North Shore adjoining Limeburners Creek Nature Reserve. Traditionally, these locations have been shown on maps as open bodies of water, with little reference/acknowledgement of the fringing vegetation which is habitat to so many wetland-dependent species, in particular amphibians, wading and waterbirds and even insects such as the threatened Giant Dragonfly.

In recognition of the importance of this fringing vegetation, maps were constructed which showed the vegetation formations (see Section 2.1 for more information on vegetation formations) that are associated with these open water wetlands. Formations included were Forested Wetlands, Freshwater Wetlands and Saline Wetlands (see Figure 3). Maps were produced showing vegetation classes encompassed by these broad vegetation formations. Two vegetation mapping sets were used (CRAFTI and Port Macquarie Vegetation Communities mapping – see Table 1 and Section 2.1).

Adjoining (continuous) patches of the different vegetation communities were then mapped to examine the connectivity of wetland vegetation in the LGA. See Figure 18. Some of these wetland ‘patches’ are quite large (e.g. the Lake Innes/Lake Cathie complex), and individual wetlands (e.g. Queens Lake and Watson-Taylor Lake) appear to be operating ecologically as one entity. Other systems such as ‘Partridge Creek’ are genuinely a unique wetland system and indeed, Council’s vegetation mapping revealed unique vegetation communities in this area which are now under further investigation by OEH.

The mapping also shows that Kooloonbung Creek is connected to much larger areas of wetland, such as Lake Innes. The strategic importance, particularly of Kooloonbung Creek Nature Reserve but also of Partridge Creek, in facilitating connectivity for wetland-dependent species north and south of the Hastings River is apparent.

The wetland patch map provides a reference point should works become required to better link wetland habitat into the future, and shows where wetlands might naturally expand as a result of climate change-induced sea-level rise. It also shows where narrow links of wetland associated vegetation (riparian strips) can link to much larger areas of wetland habitat. The importance of such small areas may not be fully appreciated when otherwise examining them in isolation.

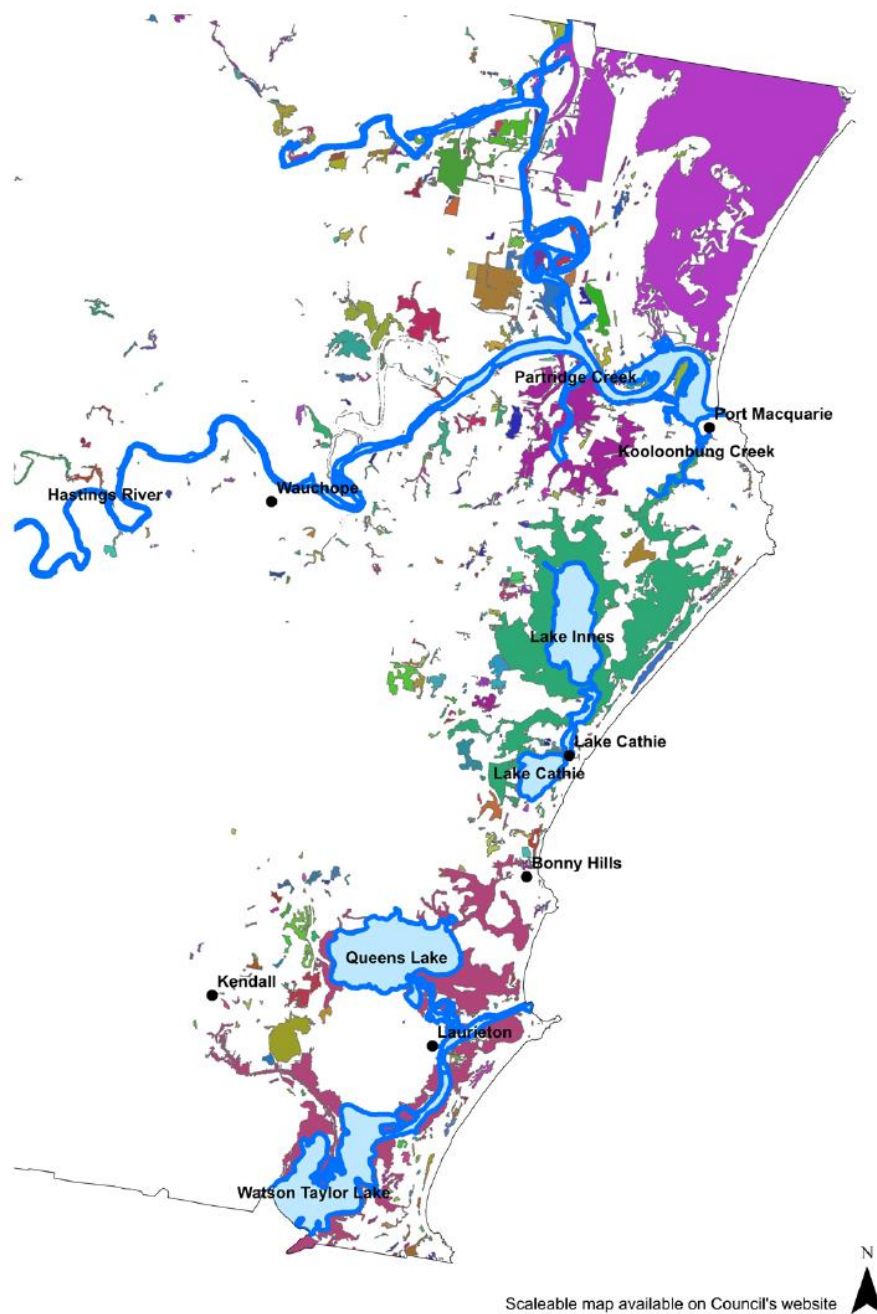


Figure 18. Important wetlands and areas of wetland vegetation

The different colours show different wetland patches (i.e. contiguous areas of wetland vegetation).



3.4 SOME FINAL WORDS ON CONNECTIVITY

Connectivity is vital to the effective functioning of ecosystems and ensuring species long-term persistence in the landscape. The work here has shown that landscape connectivity is *everyone's business*. Traditional corridor mapping approaches run over relatively few parcels of land, leaving people in those areas wondering how this will affect their rights and responsibilities. While these larger-scale corridors are undoubtedly important, the reality is that day-to-day connectivity occurs all around us at much finer scales and it is only when the patches are dissected and eroded, and the links between the patches lost, that fragmentation occurs.

Whether an urban landholder, or a rural farmer on large acreage, we can all play a role in helping the landscape to be more 'permeable' to wildlife so animals can move through the landscape easily with relatively little crossing cost and ensuring that all areas offer some habitat. These initiatives include planting endemic trees in our gardens and streetscapes, reducing roadkill, controlling weeds and reducing the incident of predation of native animals, including predation/harm by companion animals in the urban landscape.

The work here has shown some strategic areas for investment to improve landscape connectivity. Examples are:

- widening and strengthening habitat linkages (links need to be at least 50 metres wide to be truly effective and ideally comprised of native species)
- decreasing landscape fragmentation (i.e. the number of components) by adding new strategic links through native vegetation plantings
- ensuring that remaining patches are of a suitable size for the long-term persistence of species (or creating patches of suitable size in key locations)
- installing infrastructure (i.e. technical solutions such as road underpasses, overpasses, glider poles and crossings and stiles, which enable animals to cross otherwise impermeable fences) (see Box 16).

In some cases, these strategic areas of investment can even have a win-win approach for farmers and conservation (see Box 17).

Unfortunately connectivity also brings with it threats, for instance, connected land may be more susceptible to feral animals (who can also now travel to the habitat patch), weeds and bushfire. Connected lands therefore need to be appropriately managed to reduce such threats (also see Section 4).

BOX 16. A TECHNOLOGICAL FIX: INCREASING CONNECTIVITY WITH WILDLIFE STILES

In 2016, Port Macquarie Landcare received funding under the federal government's Work for the Dole scheme to work with the young participants and install Koala stiles in key locations around the urban areas of Port Macquarie. Working with the Bushland Management Team of Port Macquarie-Hastings Council, these stiles were placed over barbwire-topped chain-mesh fences to better facilitate crossing of these otherwise impassable barriers around areas of key habitat. The stiles were principally installed for Koalas, but will be used by a number of arboreal marsupials, such as possums and gliders, as well as other species. This 'infrastructure solution' has greatly helped to increase landscape connectivity in an otherwise fragmented area.



Landcarers installing koala stiles.

BOX 17. WIN-WIN: GOOD FOR THE FARMER AND GOOD FOR ECOLOGICAL CONNECTIVITY

The Comboyne Plateau is an amazingly fertile agricultural area in the Port Macquarie-Hastings LGA and of great economic importance. The climate is subtropical, though at an elevation of 705 metres, it is cooler than nearby coastal areas. The Comboyne Plateau has always been famous for its rich dairy industry, but these days the deep red basalt loams, high rainfall and variety of terrains ensures that avocados are a booming industry along with kiwifruits, blueberries, macadamias and potatoes.

Previously, the area was covered extensively in subtropical rainforest which was almost all cleared by the early 20th century. The early explorers originally sought the valuable timber of the Australian Red Cedar. Pockets of cool temperate rainforest also exist on the Comboyne Plateau. Today, remaining pockets of vegetation are truly hidden 'gems' and support important populations of threatened species, many of which are found nowhere else in the LGA. Factoring ecological connectivity into this highly cleared agricultural landscape is therefore important and many landholders are keen to participate, having previously been involved in conservation projects on the plateau.

The GAP CLoSR analysis revealed that connectivity in the Comboyne Plateau largely continues courtesy of narrow strips of vegetation along fencelines. These strips are often comprised of Privet. Nonetheless, many species, such as the Wompoo Fruit-Dove have been seen moving through and using these resources.

In this elevated, exposed plateau, wind chill and wind throw is a real threat for farmers and numerous quick-growing (and often short-lived) windrows have been planted. Traditionally exotic bamboo has been used. A prime opportunity exists for government funding to be made available to farmers to plant appropriate locally endemic quick-growing species behind, or in conjunction with, existing windrows. This will ensure that the windrows will be longer lasting, pose less weed threat to remaining pockets of bush,



be of greater ecological value to the species in the local area, and will improve the overall connectivity of the Comboyne area.



4. PRIORITY INVESTMENT LAYER

4.1 WHAT IS A PRIORITY INVESTMENT LAYER?

The Priority Investment Layer uses the maps and models on individual biodiversity assets described above.

This layer effectively identifies the **priority areas for biodiversity investment in the LGA**, or in other words, those areas which if protected would best help to conserve the area's native flora and fauna. It does not include those important biological areas within Protected Areas (it is assumed that they are already managed appropriately) or on operational Forestry Lands.

The vast majority of lands within this layer are on private properties, however, a smaller amount are on Council-owned or managed land. Council is not considering back-zoning areas of private land for environmental protection. Rather, we will work positively and pro-actively with landholders to seek funding opportunities to enable them to protect biodiversity priorities in the LGA, such as through funding bids and the burgeoning biodiversity offset market. Similarly, Council will work proactively to ensure that its own operations do not impact these important biological areas and will seek funding to better aid their protection, such as through bushland management works to reduce weeds and rubbish and increase ecological functioning.

The areas in the Priority Investment Layer are those that represent the best 'bang for your buck' in relation to conservation incentive programs. Formally identifying these priority areas puts Council and landowners in a strong position to bid for government funding. The likelihood of receiving government funding will further increase when there is strong support from landholders working together in a local landscape.

The Priority Investment Layer is a 'snapshot in time'. Other priorities may emerge over time, and lands within this layer may also be subject to private native forestry arrangements. Following forestry operations, the intrinsic values of these areas (i.e. older-growth forest and associated flora and fauna habitats) are likely to be

reduced, which in turn may greatly reduce the likelihood of receiving funding or offset opportunities.

All areas identified in the Priority Investment Layer require on-ground assessment to validate the presence of modelled/mapped values prior to the delivery of investment schemes, particularly the offset market. Nonetheless, the layer forms a valuable starting point for negotiations with landholders having lands with particular biodiversity values and for identifying strategic landscape-scale patterns and associated projects.

The Priority Investment Layer greatly enables identification of potential local offsets thereby helping to ensure offsets stay in the LGA and that there is not a net loss of local biodiversity. For individual species requiring offsetting, the underlying species distribution models can be re-examined to determine all offset locations. However, wherever these species occur in lands identified in the Priority Investment Layer, these areas would be preferred as offset sites. This is because conservation of these areas is more likely to protect numerous species (the 'offset' species effectively acting as an 'umbrella species' to protect many others).

The Priority Investment Layer is also likely to stimulate a market for people wishing to purchase lands of a high biodiversity value. Such people may be attracted to these lands for altruistic reasons, for the enjoyment of living with abundant flora and fauna or for financial reasons (i.e. rural land that comes with an income stream in perpetuity when a biodiversity offset is achieved). There has been a growing interest in property marketed for its biodiversity values as evidenced by businesses such as the Nature Conservation Trust. Private conservancy groups, such as the Australian Wildlife Conservancy, Bush Heritage Australia and other charitable trusts, also purchase lands of high conservation values.

The Priority Investment Layer is not a legal document and does not affect existing property owner's existing legislative rights or requirements. Participating in any biodiversity incentive schemes is voluntary and the decision of the land owner.

4.2 WHAT LANDS DOES THE PRIORITY INVESTMENT LAYER INCLUDE?

The Priority Investment Layer is shown in two parts in Figure 19 and Figure 20.

Figure 19 focuses on **protecting and restoring existing bushland** areas of high biodiversity values outside Protected Areas and Forestry Lands. Example works in these areas could include supplementary plantings, vertebrate pest control, nest box installation, control of invasive weeds, riparian works, ecological monitoring and cessation of clearing. It includes:

- The Priority Action Areas identified using Zonation (from Figure 7 – priority areas on Council owned/manage lands and Figure 8 – private land priority areas).
- Threatened ecological communities (from Figure 11).
- Coastal and estuarine wetlands and lakes and associated areas of wetland vegetation (from Figure 10). However, all of these areas were either already captured by the Priority Action Areas or, in the case of a small area immediately to the north-east edge of Queens Lake, already captured by the threatened ecological community layer.
- Additional priority areas identified by the Expert Panel (from Figure 12).

It does not include core Koala habitat as an explicit overlay as this is the focus of a Coastal Koala Plan of Management, however, Koalas were one of the modelled species determining priority areas and therefore received equal consideration with a number of other fauna species.

Figure 20 focuses on **enhancing landscape connectivity**. It shows those areas that require additional native vegetation plantings, and associated invasive weed control to increase connectivity. It includes:

- Habitat linkages identified using GAP CLoSR (from Figure 15) – these are areas that currently comprise only narrow strips of trees or isolated trees.
- Key planting connections (digitised by hand), including:
 - ◊ areas that would reconnect small components identified by the woody vegetation model of GAP CLoSR (see Figure 15).

◊ areas where Northern Rivers habitat corridors (regional and subregional as shown in Figure 14) currently cross open, predominantly cleared land.

- Areas requiring 'technical solutions' for connectivity. Such solutions typically include road underpasses, overpasses, glider poles, Koala stiles or other initiatives to reduce the incidence of roadkill. These areas were identified through discussion with the Expert Panel (who know where the 'road-kill' black-spots occur) and through examination of the woody vegetation model of GAP CLoSR which showed where either small components occurred because of major roads or where two larger components were separated only by virtue of a road.
- The 'Comboyne Corridors for Conservation' area. The plateau is more than 80% cleared (see EcoLogical Australia 2007), has unique and diverse biological values found nowhere else in the LGA, and currently has connectivity only by virtue of small linear strips mostly comprising introduced species. This area requires substantial investment, such as the creation of a *Comboyne Corridors for Conservation* project. If done in close consultation with landholders, this could result in wins for the farming industry and wins for biodiversity.

4.3 WORKING WITH THE PRIORITY INVESTMENT LAYER

The Priority Investment Layer should be considered a 'guide' only to the biological values of the LGA. It does not guarantee funding. Other sites outside these areas are likely to be worthy of biodiversity investment. All of the areas identified require on-ground verification of potential values. In some instances, for example projects seeking to improve landscape connectivity, the willing participation of multiple landholders may be required for a project to be of benefit and worthy of funding. The Priority Investment Layer will require updating every 5 years to ensure it reflects current knowledge.

Port Macquarie-Hastings Council is happy to work with landholders to discuss the potential biological values of their land. The Priority Investment Layer and maps of various biological values will be made freely available to the public.

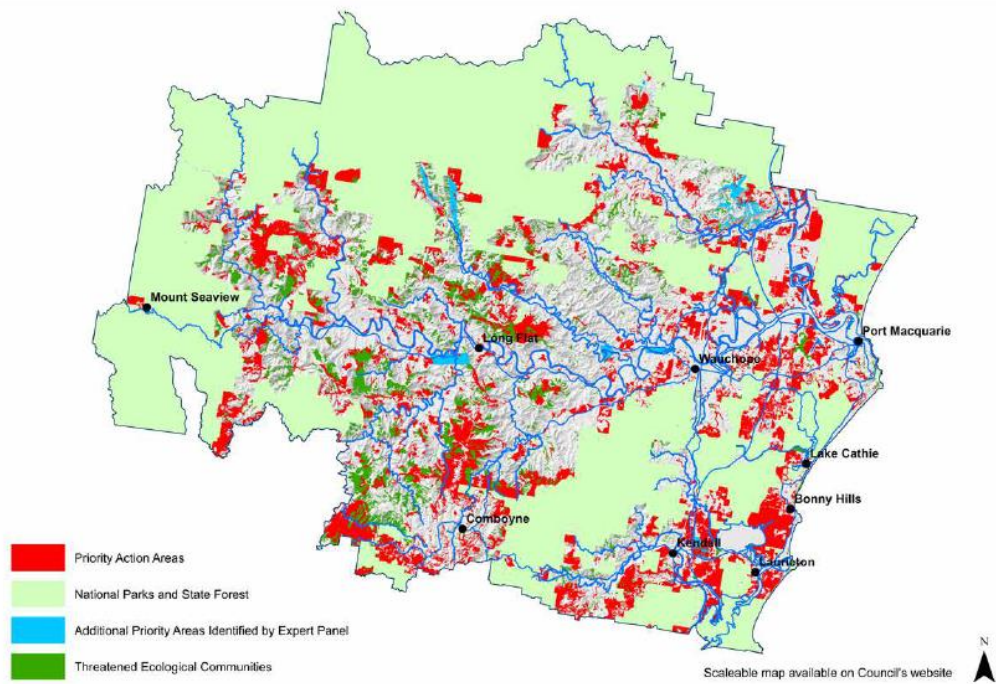


Figure 19. Priority Investment Layer for works aiming to protect and restore existing bushland

There are a large number of opportunities and avenues for landholders interested in biodiversity to participate, and often receive funds for, work to protect and restore the biological values of their lands.

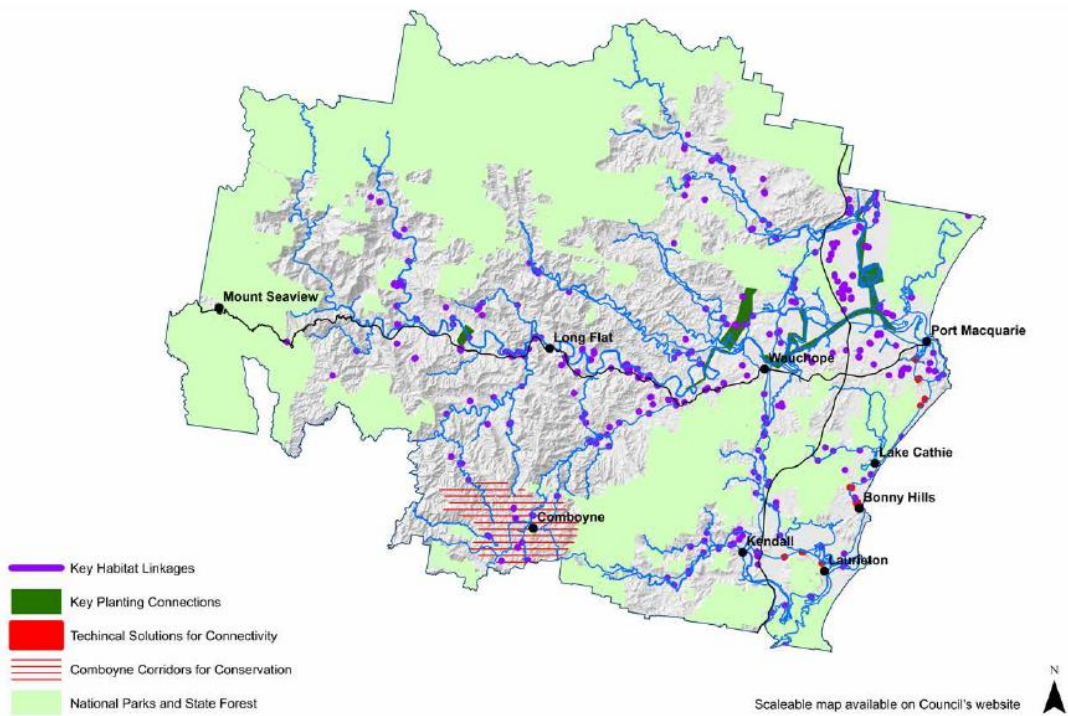
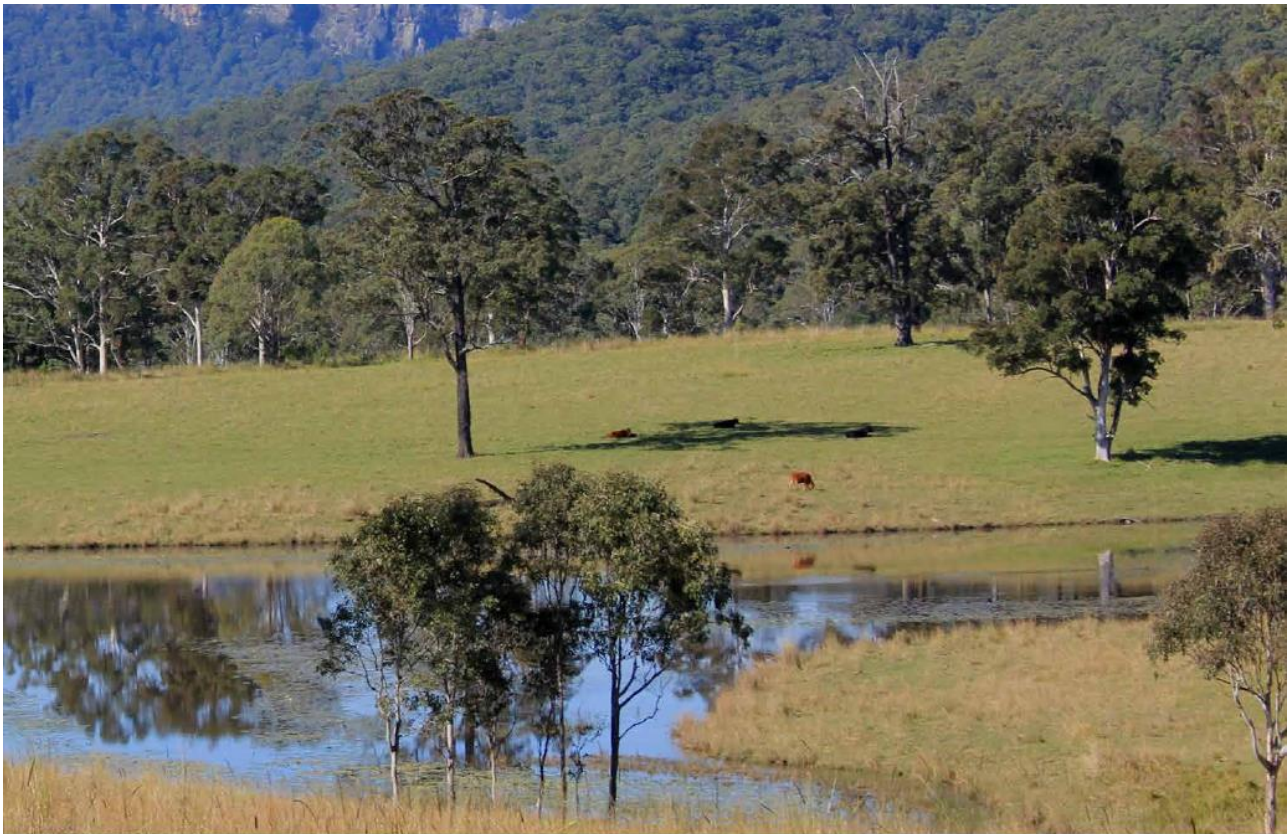


Figure 20. Priority Investment Layer for works aiming to enhance landscape connectivity

5. THREATS TO BIOLOGICAL VALUES IN THE LGA

5.1 INTRODUCTION

Around the world, biodiversity is being lost every day. Many species are lost before they have even been scientifically described. It is estimated that over 40% of the world's species are at risk of extinction.

Australia is one of the most biologically diverse countries in the world. We have 10% of the world's species, most of which occur nowhere else, in under 6% of the earth's land surface. And while we pride ourselves on our unique wildlife, by virtually every measure our record of biodiversity loss is the worst in modern times. More than 14% of our vertebrate animals and 12% of our plants are threatened; a substantially higher percentage than the next two worst performing countries, USA and Mexico. Of nearly 80 mammal extinctions recorded globally since the 1600s and the Age of Exploration, about 20 were lost from Australia during the last 220 years. Today, many hundreds of species are listed as threatened within Australia at the federal and/or state levels.

While the Port Macquarie-Hastings LGA has fared better than many other parts of Australia in protecting diversity, the loss to biodiversity is still apparent, with many old-timers having stories to tell of the 'old days' and 'how you just don't see them like to used to'. Central in many people's minds is the Koala and how abundant they used to be relative to today. Today, there are approximately 190 species and 10 ecological communities listed as threatened at either the state and/or federal level that occur within the Port Macquarie-Hastings LGA, and this list grows every day. For instance, recent evidence has shown that populations of the White-bellied Sea-Eagle are declining, with many individuals failing to rear chicks. The NSW Threatened Species Committee has recently added the eagle to the list of threatened species.

So why is biodiversity declining? The answer is really quite simple: at the heart of biodiversity decline and species extinction is the **loss of habitat**. Habitat can be lost through clearing, fragmentation, degradation (e.g. incursion of feral plant and animal species) and modification (e.g. through inappropriate fire regimes, rising

sea-levels causing increased inundation). The impacts can occur immediately after the change, or can be delayed.

This is referred to as an extinction 'debt', wherein the species' fate is already sealed following previous impacts but the effects take time to become apparent.

The impacts of habitat loss can act directly on species, for example, vegetation clearing can lead to a lack of food resources or hollows. Or the impacts can act indirectly on a species. For instance, increasing urbanisation may allow Common Mynahs to inhabit an area which was previously unsuitable. The Mynahs then displace native hollow-dwelling species. Another indirect impact of habitat loss is that it may cause animals to become stressed which leaves them vulnerable to disease.

Seemingly small changes and actions can result in 'ecosystem unravelling' when species that provide fundamental services in the ecosystem are lost. This in turn affects other species in that ecosystem. For example, a parcel of bush may be 'underscrubbed' in a rural-residential development removing shrubs and understorey species. This is important habitat for small bush birds (e.g. wrens and scrub birds). Noisy Miners, preferring more open understoreys, invade the site and drive away other birds. A reduction in insectivorous birds allows insect populations to become locally abundant. An increase in some foliage-eating insects then drives dieback in the eucalypt canopy, which in turn further renders the habitat unsuitable for insectivorous birds and other species dependent on canopy attributes, and a downward spiral begins.

5.2 THREATS ACROSS THE PORT MACQUARIE-HASTINGS LGA

The NSW Office of Environment and Heritage prepared a report listing the major threats, and their impact level, for the different landscape units (see Figure 2) present in the Port Macquarie-Hastings LGA. A short summary for each of the different landscape units is presented below.

Coastal plains

The coastal plains, covering 13% of the LGA, provide an attractive 'sea change' lifestyle for many people seeking to move out of capital cities. This shift in demographics is placing a vastly increased pressure on the natural environment, leading to further clearing and fragmentation of existing vegetation and habitats to satisfy an increased demand for urban and rural-residential land, infrastructure and services. As well, there are increased risks of fires, weed invasion, pollution and predation on wildlife by domestic cats and dogs. As a result, the coastal plains, in comparison to the three other landscapes, has the highest overall number of threat activities and the most number of threats unique to a landscape.

Threats include:

- clearing and disturbance of vegetation for urban, rural-residential and industrial development (including setbacks for fire protection)
- invasion by introduced plant species
- the establishment and spread of Bitou Bush and Lantana
- competition and predation by the European Red Fox
- inappropriate fire regimes in some locations.

Competition, predation and disease by feral cats is also of high concern within this landscape. While Cane Toads are presently not established in the LGA, they are a potential threat. Feral deer are having large impacts throughout the coastal floodplains. Their browsing is causing a lack of regeneration in some vegetation communities, including littoral rainforest, and evidence of their trampling and rubbing is also widely evident. The role that they play in disease transmission is yet unknown, but is of major concern.

Additionally, there are a number of significant future threats unique to the coastal plains landscape, such as sea-level rise, storm surge and possible increased storm events due to the impacts associated with climate change. Inundation of low-lying areas may fundamentally change the character of the coastline and estuaries, displacing important habitats for shorebirds, estuarine species and littoral rainforest. The ecology of freshwater wetlands is also likely to change dramatically as saltwater incursions increase. Increasing stochastic events such as cyclones, storms and floods may alter or destroy important coastal habitats.

Due to their location in the landscape, riparian areas within the coastal plains are constantly reinvaded by weeds carried downstream during floods. Floods also increase erosion of degraded stream banks and, following heavy rain, low-lying swampy areas that have been drained can discharge acidic waters that result in fish kills.

Waterways in the coastal plains are also impacted by stormwater run-off and pollution from the urban and industrial developments near estuaries and rivers. The expanding population and urban areas also increase pressures on the natural environment from recreational activities such as boating and fishing.

Many habitats in the coastal plains are highly disturbed and fragmented and major roads such as the Pacific Highway cause significant barriers to the movement of species. This causes genetic isolation of populations and an inability for species to recolonise areas after local extinctions. Flying-fox camps on the coastal plains are often within or adjoining urban areas, making them vulnerable to disturbances and habitat loss.

The coastal Koala population is under significant levels of threats from cars, dogs, fragmented habitat and potential wildfire. Disease is also an ongoing problem. The potential for wildfire in the coastal national parks which support key Koala populations is a significant risk.

Midland hills

The midland hills landscape covers 40% of the LGA and, in comparison to the coastal plains, has less overall threat activities reflecting the relatively lower population density. The diversity of land uses is less and they are mainly associated with agricultural activities, primarily cattle grazing. Forestry is also widespread on both private land and Forestry Corporation of NSW lands. The main threats include:

- clearing and disturbance of vegetation for agriculture, invasion from introduced plant species
- the establishment and spread Lantana
- competition and predation by the European Red Fox, feral deer and feral pigs
- inappropriate fire regimes in some locations.

Competition, predation and disease by feral cats is also of high concern within this landscape. While Cane Toads are presently not established in the LGA, they are a potential threat. Some areas are also subject to urban, rural-

residential and industrial development (including clearing setbacks for fire protection).

The impacts associated with climate change are likely to be less in the midland hills than in the coastal plains landscape. There may however be impacts from increased wildfire potential and the invasion of new weeds and pests such as the Cane Toad may occur. Some plant species and the floristics of some vegetation communities may also change as a result of changes in the current range and distribution of temperature and rainfall. Increasing stochastic events such as cyclones, storms and floods may also alter or impact on important habitats.

Some habitats in the midland hills are highly disturbed and fragmented and/or have roads or cleared lands that cause significant barriers to the movement of species. This can cause genetic isolation of populations and an inability for species to recolonise areas after local extinctions.

Escarpment ranges

The escarpment ranges (45% of the LGA) is a dramatically different landscape to the other landscapes in the region due largely to the steep, rugged landforms. These have precluded, in many areas, the extensive development of land uses that are major threats to biodiversity in the other landscapes. There are low levels of human settlement, less agriculture than the coastal plains and midland hills due to the difficulty of the steep terrain, and a relatively large areas of national park and state forest.

Threats to this landscape, although much reduced compared to other land uses, are still present and include inappropriate fire regimes as a result of wildfires. These can result in the burning of large inaccessible areas, including rainforest, under extreme conditions. Inappropriate fire regimes encompass those that are too frequent, or not frequent enough, dependent on the ecosystem. Predation from foxes, and feral cats and dogs can also occur throughout these areas, predominantly in disturbed forest areas, along forest edges and in the rural agricultural lands. Feral goats and deer may be an emerging issue. Forestry is a major industry in the escarpment ranges. It occurs on both state forests and private land, with potential threats including loss of hollow-bearing trees, increased erosion, inappropriate fire regimes, Bell Miner associated dieback, firewood collection, increased predation and human interference.

Overall the escarpment ranges landscape is likely to be more resilient to the potential impacts of climate change

because of the highly variable topography and the mosaic of generally well-connected vegetation communities. Nevertheless, restricted vegetation communities such as upland wetlands, rocky outcrops, dry rainforest and cool temperate rainforest are vulnerable to the catastrophic consequences of climate change as a result of extended dry periods, increased fire and/or storm intensities. Bell Miner associated dieback may be an emerging threat to the escarpment ranges. Chytrid fungus is a serious threat to the many frogs that inhabit the streams and moist forests and may be an emerging threat in the escarpment ranges. Weed invasion in disturbed areas may be a problem.

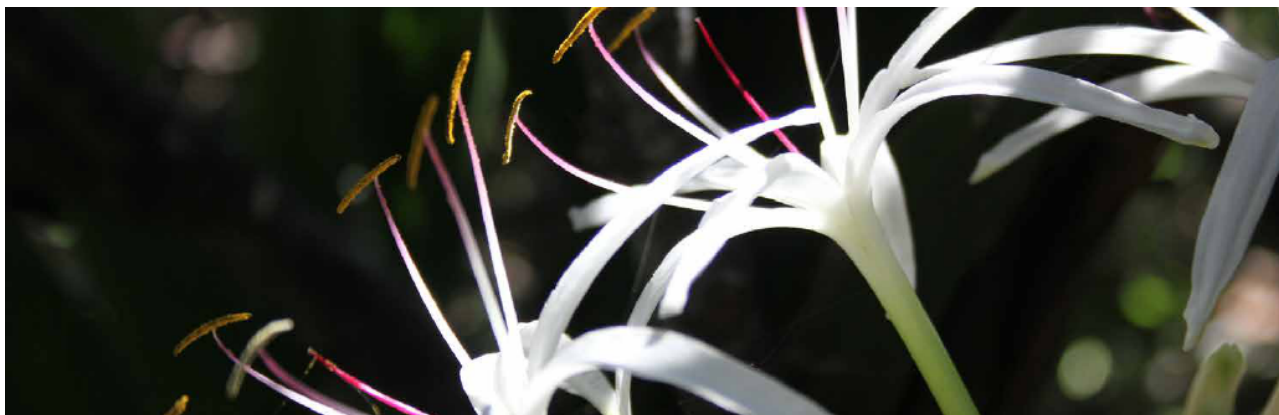
Tablelands

The small area of tablelands landscape (2% of the LGA) comprises all public land (national parks). Threats are generally much lower than in the other landscapes and relate mainly to wildfire, weed invasion and feral animals.

5.3 SPECIFIC THREATS TO THE LGA: DISCUSSIONS WITH THE EXPERT AND COMMUNITY PANELS

The Biodiversity Strategy Expert and Community Panels read the OEH Report as described above and met to discuss specific threats they felt had high levels of impact on the biodiversity of the Port Macquarie-Hastings LGA. These threats included:

- impacts from feral pest animals, most notably foxes, cats, rabbits, Common Mynahs and deer, with specific concern expressed over the impact of deer browsing on littoral rainforests (and also the impact of domestic pets, notably cats and dogs, on wildlife)
- development and associated clearing and habitat fragmentation
- agricultural enterprises which result in further clearing, particularly in sensitive and already over-cleared landscapes, such as the Comboyne Plateau
- weed invasion (with a particular emphasis on riparian community weeds)
- forestry (including private native forestry)
- road kills
- inappropriate fire regimes
- shorebird declines as a result of recreational activities (including jet skis, boats and sea planes)



causing wash into important roosting and nesting areas, most notably Pelican Island, Queens Lake and Watson-Taylor Lake and recreational four-wheel driving impacting shorebird habitat and nesting environments (and generally the North Shore's environment)

- alteration to the natural flow regimes of rivers, streams and wetlands from habitat modification and degradation.
- overly-intensive domestic livestock grazing, trampling and competition
- mining in headwaters
- climate change.

5.4 SIGNIFICANT THREATS IN THE LGA

The Panels felt that it was important for this Biodiversity Management Strategy to explicitly consider habitat losses which may occur as a result of development, climate change and private native forestry. The following sections, developed by Council, discuss these significant threats.

5.4.1 LOSS TO DEVELOPMENT

The coastal floodplain, with its temperate climate, coastal lifestyle and proximity to the beach and major urban centres such as Port Macquarie, is a highly desirable place for urban development. Unfortunately, this area also has some of the most fertile soils, best fauna habitat, largest hollow-bearing trees and remaining patches of many threatened ecological communities, such as Littoral Rainforest. The coastal floodplain also has the most important Koala habitat, and indeed Port Macquarie's Koala population is of national significance. It is fundamentally important to understand that these biological assets are not distributed evenly throughout the LGA, and impacts on the coastal floodplain are likely to further result in key habitat loss and fragmentation in this already fragmented and over-cleared landscape unit.

While all developments must undergo ecological assessments, the challenge is that any individual

development may not cause a 'significant impact on a local population or community', and therefore is allowed to proceed. However, it is the cumulative impacts of many such individual developments that cause significant losses to biodiversity and the ancillary impacts that follow developments (such as increasing weed encroachment from urban landscapes, road strikes and influence of predation from companion animals), that cause the long-term damage and such impacts are much harder to regulate and control. Thus, both the immediate threats to biodiversity from development and the ongoing threats require consideration. This has been an increasing focus of Port Macquarie-Hastings Council to:

1. separate critical biodiversity conservation issues from urban areas so as to avoid conflicts which will result in further biodiversity losses. For instance, using consolidated off-site offsets rather than trying to retain small parcels of habitat on the development site which will only be a 'population sink' due to factors such as road strike, predation and weed incursion. Experience has also shown that retaining trees in the urban landscape is fraught with difficulties as such trees or habitat parcels are often lost in time to vandalism or removed for safety considerations.
2. find ways that biodiversity losses can be, in the first place avoided, but failing that, minimised and offset elsewhere
3. improve strategic planning by considering all available biological data (particularly that now provided by this Biodiversity Management Strategy) and the cumulative impacts.

The population of Port Macquarie is expected to increase by 30% to 103,000 in the next 20 years. The Urban Growth Management Strategy outlines where this development may take place. That Strategy has been developed with consideration of work from the Biodiversity Management Strategy, particularly Zonation and GAP CLoSR. The key outcomes of the Urban Growth Management Strategy as they relate to biodiversity are summarised in Box 18.

BOX 18. THE URBAN GROWTH MANAGEMENT STRATEGY AND ITS RELATIONSHIP TO BIODIVERSITY

The purpose of the Urban Growth Management Strategy is to provide a sound strategic planning framework for residential, rural-residential, retail, industrial and tourism development in the Port Macquarie-Hastings Local Government Area to 2036.

The Urban Growth Management Strategy achieves Council's vision of 'A sustainable high quality of life for all' by identifying land-use management strategies to maintain and enhance the quality of life for everyone 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 none being more important than the others.

Our population is anticipated to grow, on average, by more than 1000 people per year over the next 20 years. This equates to more than 500 new dwellings a year on average, or nearly 50 hectares of cleared land needed every year if all of this development is accommodated in new housing estates. Allowing urban development while simultaneously protecting our natural environment presents significant challenges for the Urban Growth Management Strategy.

Council's ecological data, including outputs from Zonation and GAP CLoSR, has helped to create a map of high environmental values for the LGA. This mapping is the fundamental basis for selection of areas for potential urban development. Land free of environmental values is rare, particularly in our highly desirable coastal area east of the Pacific Highway. Our policy to facilitate a compact urban form by encouraging growth around our centres and encouraging more efficient use of land for development is reinforced by our environmental values mapping.



5.4.2 LOSSES TO SEA-LEVEL RISE

Climate change and sea-level rise have the potential to impact private and public land and assets, including biodiversity, within the Port Macquarie-Hastings LGA as well as other coastal areas around New South Wales and Australia. BMT WBM was commissioned by Council 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 was to determine the estuarine and coastal inundation extent for a range of 'design events' as outlined in Table 7.

Table 7. Design events for climate changes

Design event	Comment
Spring tide	This represents a typical tidal case as would be observed many times each month.
King tide	This represents a less typical tidal case as would only be observed several times each year.
1 year ARI	This peak tidal level is expected on average to be exceeded once each year and would occur due to a minor storm event.
50 year ARI	This peak tidal level is expected on average to be exceeded once every 50 years and would occur due to a major storm event. Alternatively, this peak water level event only has a 2% chance of occurring in a given year.
100 year ARI	This peak tidal level is expected on average to be exceeded once every 100 years and would occur due to a major storm event. Alternatively, this peak water level event only has a 1% chance of occurring in a given year.

ARI = average recurrence interval

The three timeframes and associated mean sea levels included in the study were:

- Current; mean sea level = 0.0 metre AHD (Australian height datum)
- 2050; mean sea level = 0.4 metre AHD
- 2100; mean sea level = 0.9 metre 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). 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). 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. The report is available from Council.

While temporary inundation, as may be experienced with a 1:100 year flood event or even a king tide, may have little ecological impact on the biodiversity of an area, repeated inundation over a month (as occurs in the spring tide scenario) would almost certainly impact the biota on a site. Many plants would not only be unable to cope with the waterlogged conditions, but more importantly would not be able to survive in the increasingly saline conditions. Such saline conditions greatly reduce the ability of a plant to uptake nutrients, thus affecting their flowering, fruiting and survival. Leaf chemistry would also be altered, which is of great concern for folivores, such as the Koala (which are notoriously fussy eaters). In the case of saltmarshes, the repeated inundation and *reduced* hyper-saline conditions (through regular tidal flushing) is likely to transform these communities into Grey Mangrove woodlands/forests.

For the purposes of this Biodiversity Management Strategy, the sea-level rise scenarios for the three mean sea levels were compared against spatial data for threatened ecological communities (outside state forests and NPWS estate) and Swamp Sclerophyll Forests (Keith Formation, tenure-blind analysis). This community occupies low-lying parts of the landscape and is therefore at risk from inundation. Wallum Froglet and Black Bittern also occupy low-lying areas on the coastal floodplain and thus inundation of their prime habitat (the top 30% of predicted habitat from their individual MaxEnt models used in Zonation) was also examined. The scenarios examined the amount of these lands which experience inundation under spring tides currently, and compared this against likely inundation scenarios for a spring tide in 50 and 100 years' time.

The results show that while many vegetation communities will not be affected, several already threatened ecological communities will experience substantially increased inundation within 50 and 100 years, most likely resulting in major modification (see Figure 21 and Figure 22). Of



particular note are the following wetland and floodplain threatened ecological communities: Coastal Saltmarsh, Freshwater Wetlands on Coastal Floodplains, Swamp Oak Floodplain Forest, and Swamp Sclerophyll Forest on Coastal Floodplains.

Indeed, there will be a 20-fold increase in the area of wetland and floodplain threatened ecological communities experiencing spring tide inundation in 100 years. The modelling indicates that **all** Coastal Saltmarsh is likely to be inundated by 2103.

The results showed that Swamp Sclerophyll Forests (both the recognised threatened ecological community on coastal floodplain soils and the broader ecological formation, see Figure 23) will experience high levels of spring tide inundation. These communities represent some of the most Preferred Koala Habitat in the region, for their combination of primary food trees, such as Swamp Mahogany and Broad-leaved Paperbark (a tree offering food and shelter). They are also important habitat for other threatened animals such as the Swift Parrot and Wallum Froglet and threatened plants such as *Maundia triglochinoides* and the Lesser Swamp-orchid.

As a quantitative example, specific modelling of the best Wallum Froglet habitat showed that 16% of this will experience regular spring tide inundation within 100 years (see Figure 24). Wallum Froglets are highly

sensitive to changes in water quality, pH and water levels. Modelling of additional species will be completed in line with this Biodiversity Management Strategy to examine potential climate change refuge areas that will have a disproportionate importance in time.

The results show the importance of considering the impacts of climate-mediated sea-level rise on vegetation in strategic planning. For example, 'offset' sites should remain free of such impacts (see Box 19). The results also show that 'marginal areas' of species habitat, particularly for wetland-associated species, may become fundamentally more important over time when other areas are inundated. For example, the Black Bittern, a threatened species, inhabits coastal wetlands and is well known from the Partridge Creek area, which will experience much greater inundation within 50 years (see Box 20).

It is often argued that the impacts of climate-induced sea-level rise will be marginal because species will simply 'migrate' up topographic gradients. While the idea has merit, this is unlikely to occur in many areas of the LGA due to urban development immediately adjoining existing vegetation and also the time scales at which these changes may operate (particularly given storm surges and so forth). There is a growing recognition that future strategic planning must allow for buffers around areas

BOX 19. CONSIDERING CLIMATE CHANGE WHEN PREPARING BIODIVERSITY OFFSET SITES

Establishing sites that seek to 'offset' the environmental impacts of development is increasingly becoming common place. Many such sites involve planting replacement habitat trees, such as Koala food trees, in larger ratios than they were removed. Such offsets take time to function ecologically. For instance, a Koala food tree typically takes a minimum of 5 years to be used, with many species not reaching full functionality until about 20 years. Trees planted for hollow-dependent species may take 100 or more years to begin offering the full suite of habitat requirements.

Planning for offsets therefore needs to consider many long-term issues, such as:

- Will the area become geographically isolated in time due to surrounding clearing?
- Will the area have major roads nearby that could result in road-strike?
- Will the area experience more frequent inundation (sea-level or overland flow) in the future?
- Will the area experience more severe fires in the future?

Within the Port Macquarie-Hastings Council area, a development was required to find an 'offset' site on which to plant Koala food trees. A parcel of land, supporting fringing Primary Koala Habitat (Swamp Sclerophyll Forest on the Coastal Floodplain) was located by the developer and submitted to Council for approval. While all looked appropriate by today's standards, modelling associated with this Biodiversity Management Strategy revealed that Koala habitat in this area is predicted to regularly experience tidal inundation within 50 years. This is highly likely to have an impact on eucalypt survival and browse palatability and nutritional content. The developer was required to find a more suitable offset site.

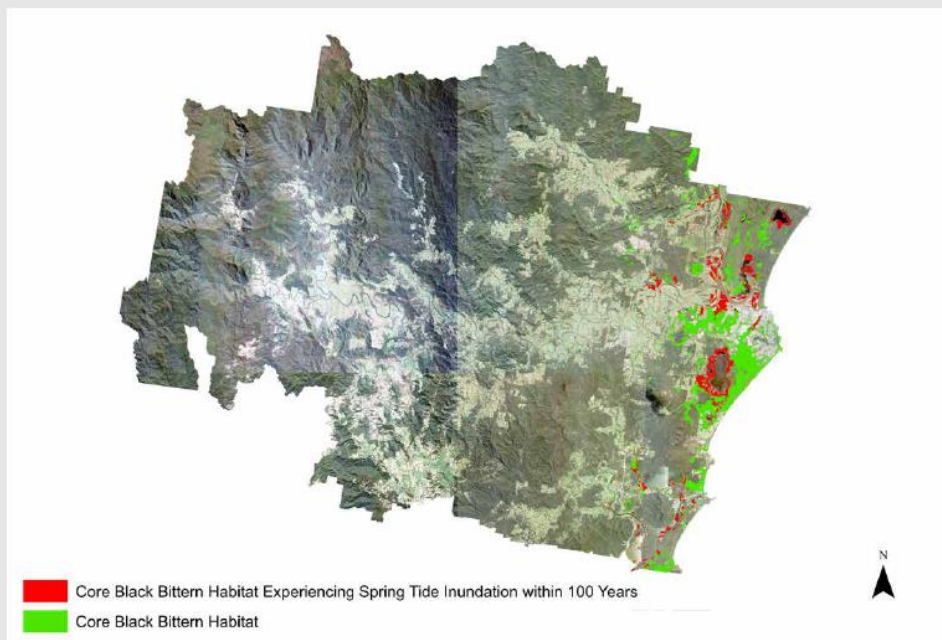
When planting offset sites, it is important to consider what that site may be like in the fullness of time, and particularly the impacts of climate change, to ensure that such areas will not be seasonally or permanently inundated.



BOX 20. CONSIDERING CLIMATE CHANGE WHEN PREPARING BIODIVERSITY OFFSET SITES

The Black Bittern (see image opposite) is a sooty black or dark brown wading bird with a yellow patch on the sides of the neck, extending from the throat to the wing. The feathers on the crown and lower neck are almost plumes. Black Bitterns live in tree-lined wetlands and mangroves. There they forage among the shallow water by slowly stalking prey, such as fish and frogs, or by standing and waiting for prey to emerge. Sometimes they may plunge at prey from a perch, stabbing it with their sharp bills. They forage in both daylight and darkness but by day they are usually quite secretive, skulking among areas of short marshy vegetation. Unlike many other wading birds, Black Bitterns are mainly sedentary throughout the year, therefore being strongly tied to a particular wetland. They nest on platforms built in trees overhanging water. Damage to wetlands, upon which this species is so reliant, has resulted in the Black Bittern being declared a threatened species in New South Wales.

Climate change will result in large changes to water levels and water quality of key Black Bittern habitat. Such changes will have flow-on effects for the availability and composition of their prey items as well as areas of suitable habitat for daytime refuges, perching and nesting opportunities, as many such areas will be 'drowned' by rising water levels. An examination of current core Black Bittern habitat against spring tide inundation in 100 years, showed that 25% of core Black Bittern habitat is likely to experience regular spring tide inundation (area shows in red below), which is 8.75 times higher than the levels of habitat currently affected. Areas outside the zones of inundation (areas shown in green below) are therefore of key importance.



Areas of core Black Bittern habitat that are likely to be inundated during spring tides within 100 years.



which may experience more inundation as a result of climate-induced sea-level rise.

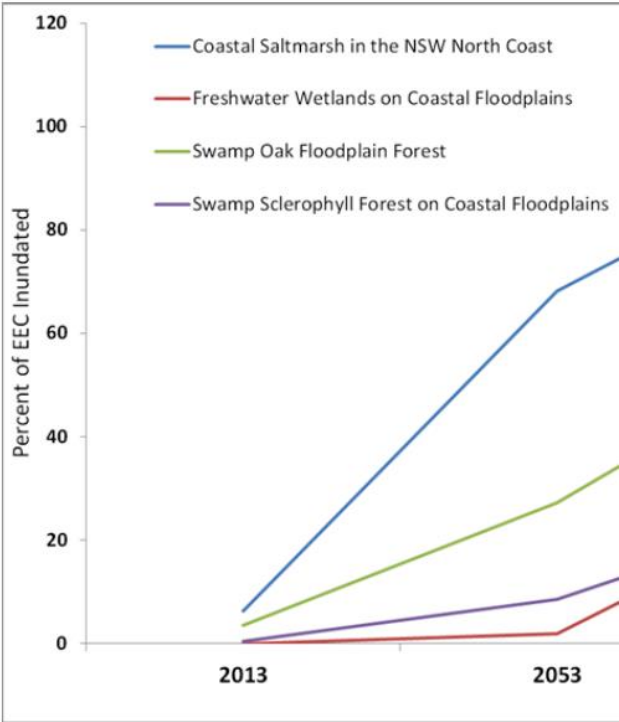


Figure 21. Percentages of most affected threatened ecological communities which will experience significantly more inundation (even under spring tide scenarios) with increasing sea-level rise

Note: this analysis does not include areas within state forests or national parks as this data was not available. It is the percentage that exists on private, Council or Crown land that will be affected.

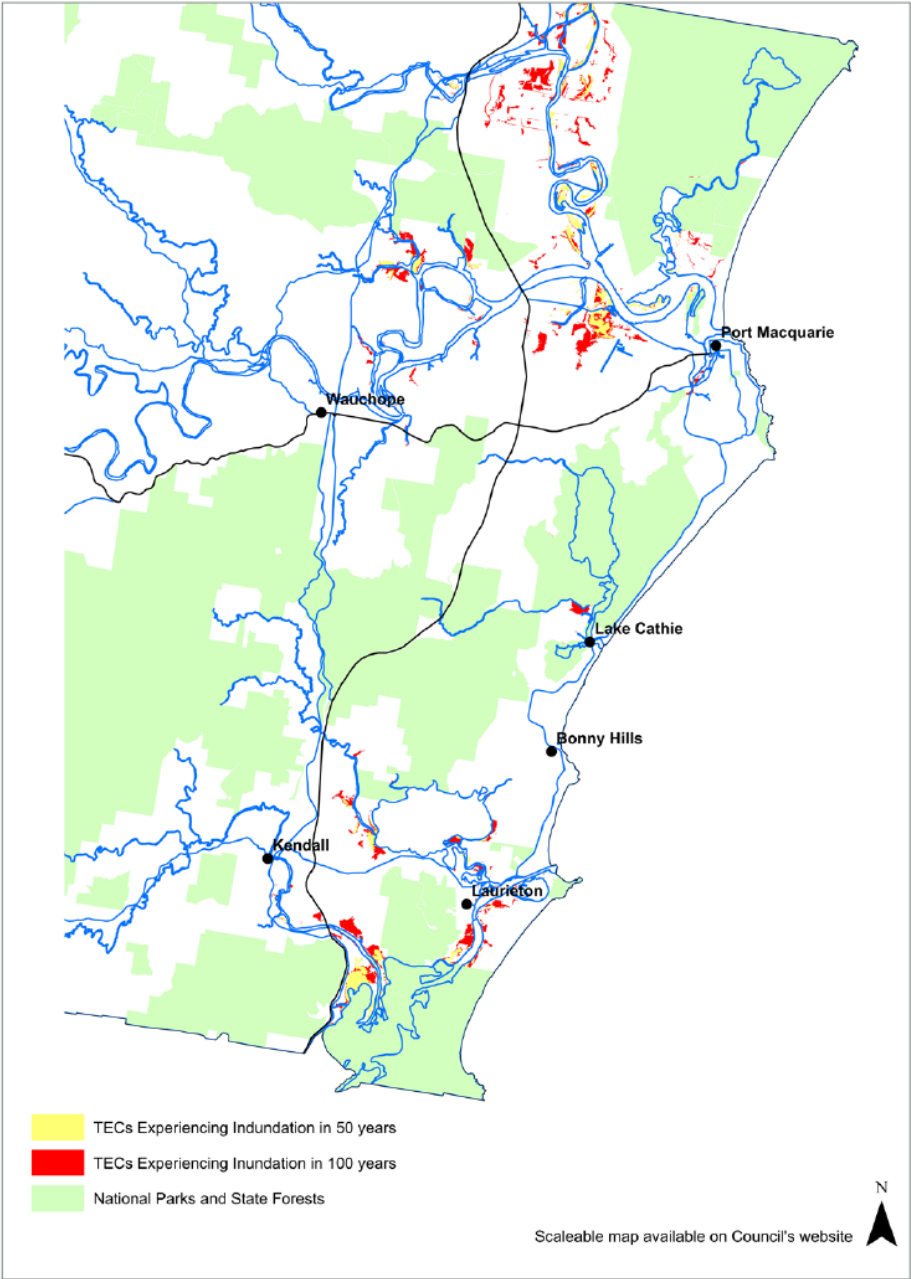


Figure 22. Threatened ecological communities (TECs)(outside Protected Areas and Forestry Lands) which will undergo significant modification through tidal inundation within 50 and 100 years with spring tides

There will be a 20-fold increase in areas inundated. While the area of affected TECs within national parks and state forests is not shown, a similar quantity of TECs is likely to be impacted in these areas, particularly in low-lying areas such as Lake Innes.

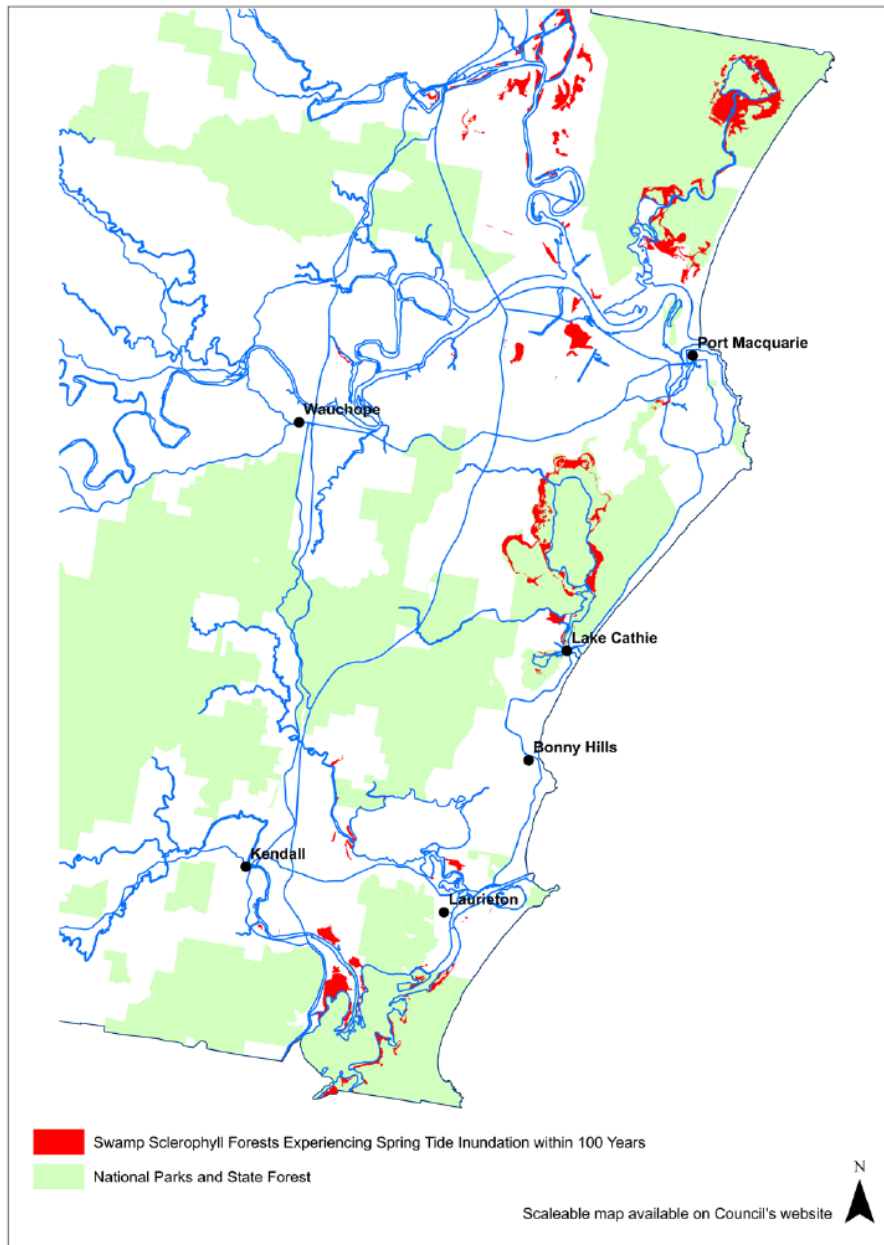


Figure 23. Areas of swamp sclerophyll forest (Keith Formation) which will experience increased inundation under spring tide scenarios with climate-induced sea-level rise

Approximately 30% of swamp sclerophyll forest will experience regular inundation with spring tides. Increased inundation is likely to affect the ability of plants to uptake nutrients, which affect their survival and palatability for folivores, such as the Koala, for which this ecological community is among its most preferred habitat on the coastal floodplain.

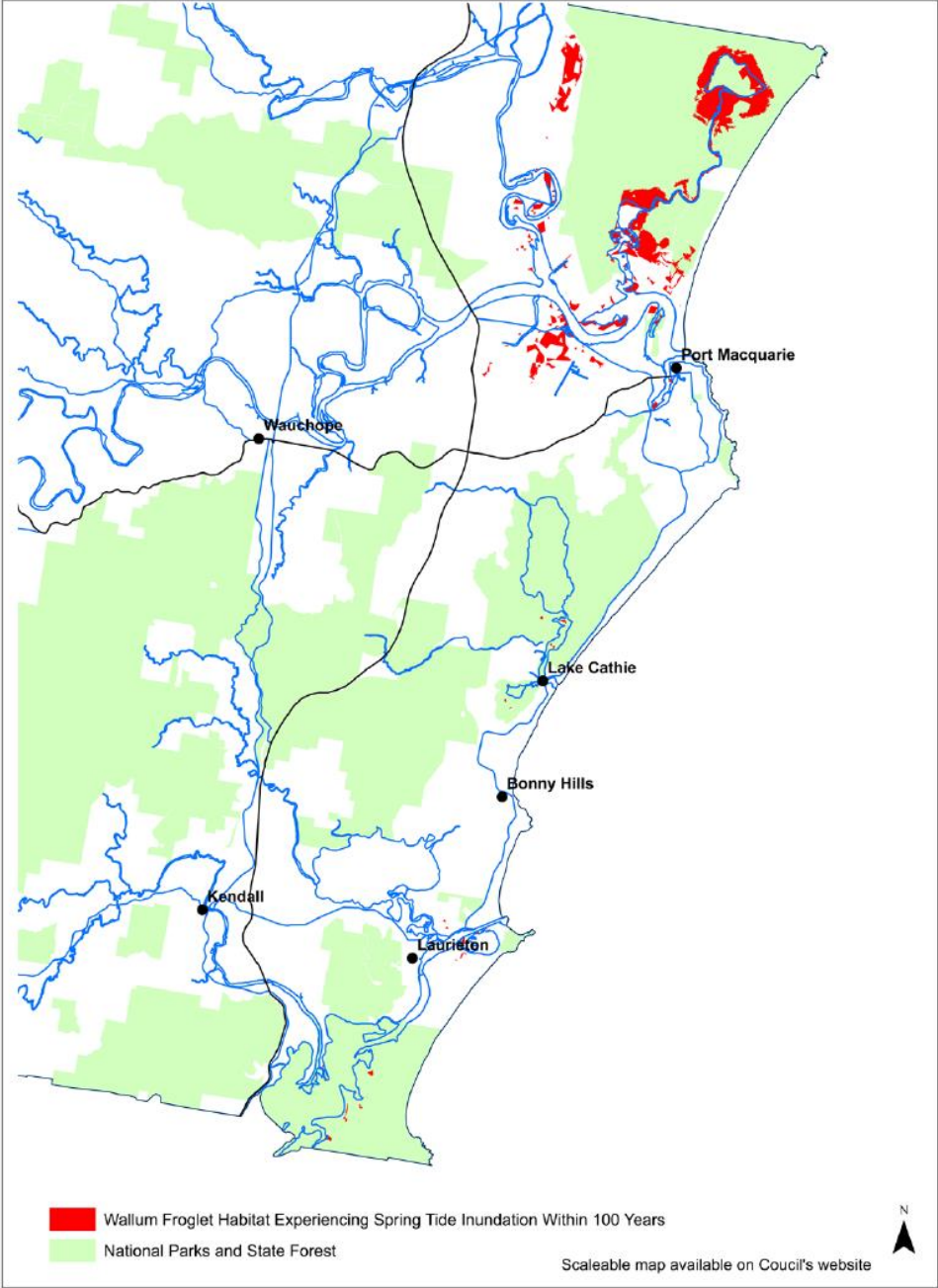


Figure 24. Areas of Wallum Froglet habitat which will experience increased inundation under spring tide scenarios with climate-induced sea-level rise

Approximately 16% of predicted habitat will experience regular inundation with spring tides which is likely to have consequences for species survival.

5.4.3 PRIVATE NATIVE FORESTRY

While Port Macquarie-Hastings Council is not the regulatory authority on private native forestry, the industry is a large one within the LGA. Because of this, the Expert and Community Panels requested that this industry be further examined here. An examination of available data revealed:

- As of October 2016, there was 17,799 hectares of land subject to private native forestry agreements within the Port Macquarie-Hastings LGA.
- From 2015–2016 an average of two private native forestry licences were granted each month in the LGA.
- 15,330 hectares of the private native forestry licences issued were located on Preferred Koala Habitat. Indeed, 16% of Primary Koala Habitat (outside of national parks and state forests) was covered by a private native forestry licence. Any

significant loss of Primary Koala Habitat is likely to have an impact on Koala ecology and survival.

- Some ecological communities are likely to be more affected than others (see Table 8). For instance, 100% of Coachwood – Black Booyong Warm Temperate Rainforest, 77.8% of Narrow-leaved Red Gum – Orange Gum Swamp Woodland and 77.6% of Spotted Gum Grassy Dry Forest (outside national parks and state forests) has a private native forestry licence over it as of October 2016. The two latter vegetation communities were specifically identified as being of biological significance by the Expert Panel. Another significant vegetation community identified by the Expert Panel was the Brown Myrtle Dry Rainforest on the western shores of Lake Innes. Parts of this community also have a private native forestry licence over them as of October 2016. It should be noted that while licences have

Table 8. Percentage of vegetation communities (outside State Forests or NPWS Estate) with a private native forestry licence as of October 2016 as revealed by the PMHC Vegetation Mapping Dataset.

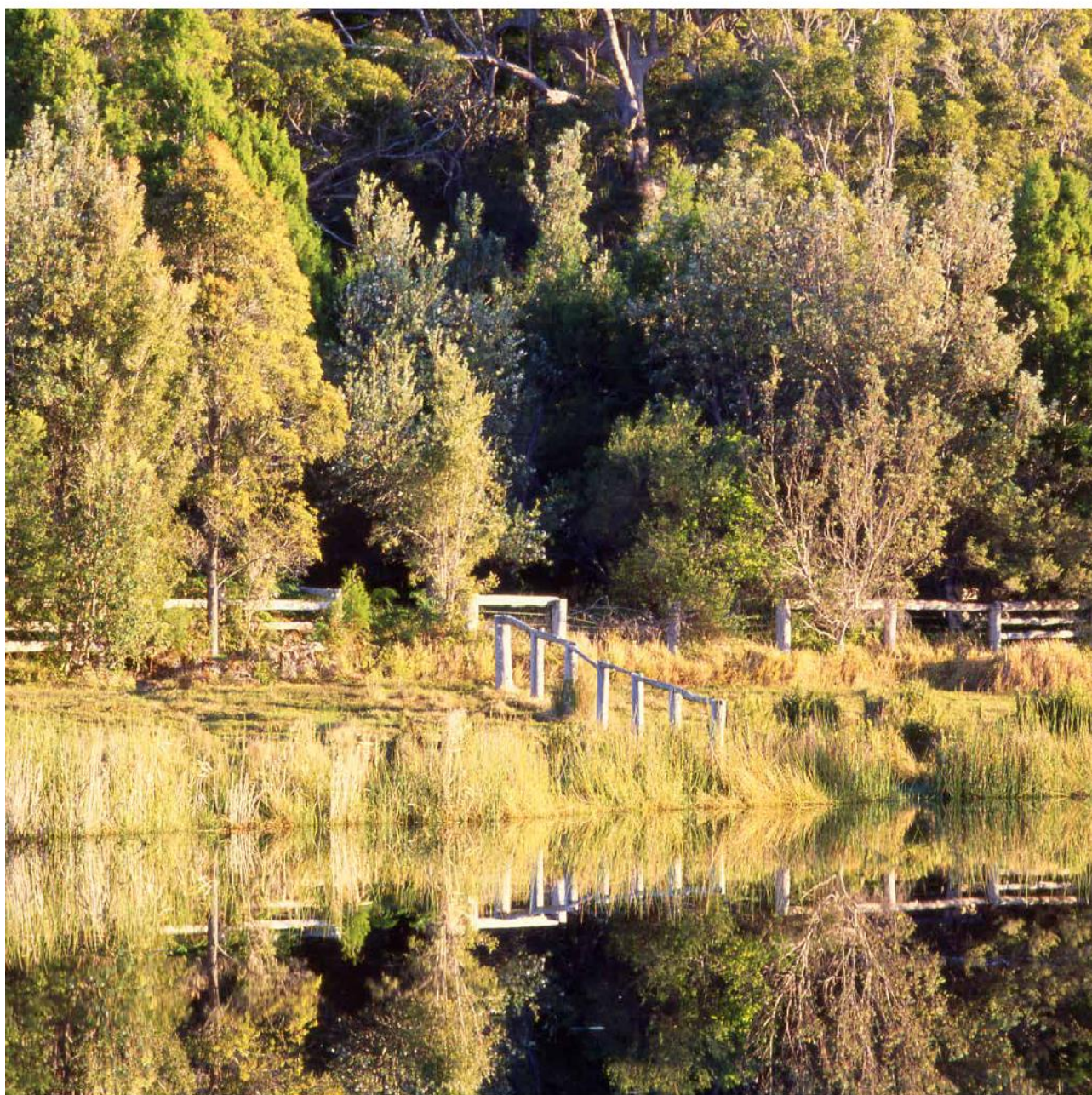
It should be noted that the Code precludes logging within rainforest and other threatened ecological communities.

Port Macquarie Vegetation Community	% of community (outside national parks and state forests) under a PNF Licence*
Coachwood - Black Booyong Warm Temperate Rainforest	100
Narrow-leaved Red Gum - Orange Gum Swamp Woodland	77.82
Spotted Gum Grassy Dry Forest	76.63
Blackbutt Shrubby Moist Forest	64.68
Blackbutt Grassy Forest	58.23
Grey Gum - Grey Ironbark Moist Forest	57.17
Grey Ironbark Grassy Forests	56.68
Brushbox - Blue Gum Moist Riparian Forest	49.24
Grey Gum - Tallowwood - White Mahogany Grassy Forest	48.57
Mountain Grey Gum - Broad-leaved Mahogany Grassy Dry Forest	41.99
Swamp Mahogany Forest	41.37
Sydney Blue Gum - Tallowwood +/- Brush Box White Mahogany Moist Forest	38.30
Flooded Gum Moist Riparian and Gully Forest	37.36
Black Booyong Subtropical Rainforest	35.76
Native Tamarind - Brush Box - Bangalow Palm Gully Subtropical Rainforest	35.57
Blackbutt Coastal Dune Satinwood Forest	29.58
Brown Myrtle Dry Rainforest	27.56
White Stringybark - Tallowwood - Grey Gum Dry Forest	27.10
Shatterwood Dry Rainforest	26.71
Wattle Scrub (Dist)	26.10

* It is important to note that some communities are not likely to be found in large quantities in national parks or state forests.

seemingly been issued over some such areas due to discrepancies in vegetation mapping datasets, the Code explicitly excludes logging operations within all areas of mapped rainforest, old-growth forest and

threatened ecological communities identified on the ground, and sets prescriptions regarding logging operations within proximity of these areas and other key habitat areas.



5.5 INAPPROPRIATE BURNING REGIMES

Bushfire is part of the Australian landscape. While some species require fire on a semi-regular basis — for instance the Eastern Chestnut Mouse requires a fire interval of approximately 4 years to ensure appropriate habitat — other species or communities, such as Littoral Rainforest, are extremely fire intolerant. Conducting planned hazard reduction burns at appropriate fire intervals across the landscape to minimise the risk of unplanned wildfires in areas supporting species or communities intolerant of fires, and as a means of minimising the risk of 'catastrophic fires', is highly important. Planned 'ecological burns' are also important to retain some ecological communities in the landscape, such as Themeda Headland Grassland (see Box 21).

The threat of unplanned, inappropriate burns to biodiversity can be greatly improved by increased spatial

knowledge depicting key biological assets such as where fire should be avoided, and areas where fire would be beneficial (and at what intervals). Such information can then be shared with key stakeholders, such as the Rural Fire Service, the NPWS and landholders. The threat of inappropriate fire regimes can also be reduced by having appropriate personnel to assist in hazard reduction burns and fire control activities.

Some areas of the Port Macquarie-Hastings LGA currently are at risk from bushfires. For instance, the Christmas Bells Plains area supports key Koala habitat, and patches of Littoral Rainforest (not mapped in SEPP 26 legislation). These assets both occur amid an area of heath which is highly prone to intense fire and indeed requires fire for proper ecological functioning.

Rainforest environments do not respond well to fire, with most rainforest species suffering when burnt. Figure 25 shows that many rainforest patches have likely burned in the last 15 years.

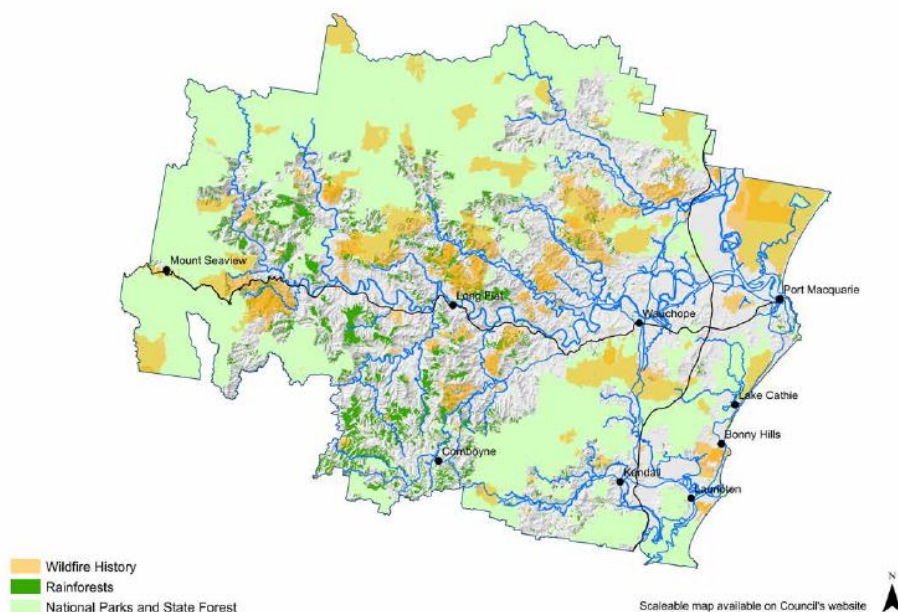


Figure 25. Wildfire history (2000–2015)

While the fire mapping extent is 'broad-brush' and may not have affected every patch of rainforest, the data still reveals the need for better understanding of biological assets that may be at risk from wildfire and actions to protect them.

BOX 21. THEMEDA HEADLAND GRASSLAND AND THE NEED FOR ECOLOGICAL BURNS

Themeda Grassland on Seacliffs and Coastal Headlands in NSW is a threatened ecological community. It occurs in several areas in the Port Macquarie-Hastings LGA, with perhaps the most accessible examples at Gaol and Tacking points. The community contains a rich diversity of small forbs, grasses and shrubs as well as unique micro-organisms, fungi and cryptogamic plants, such as lichens, mosses and ferns. The exact composition of species varies from one site to another, illustrating their spatial isolation, independent evolution, and the importance of protecting all sites in order to conserve the full range of biodiversity found in this community. Individual stands of the community are often very small, a few square metres, but some sites may be several hectares in size.

Many of the plants in this community have developed unique growth habits and forms to deal with the highly exposed conditions. For instance, the *Themeda* grass (also called Kangaroo Grass) in this community is prostrate (i.e. lying flat on the ground) with glaucous leaves (covered with a whitish bloom which reflects the harsh sunlight). These features are retained when the plant is cultivated/propagated and this particular form of the grass is believed to be genetically distinct from *Themeda* grass in other situations.

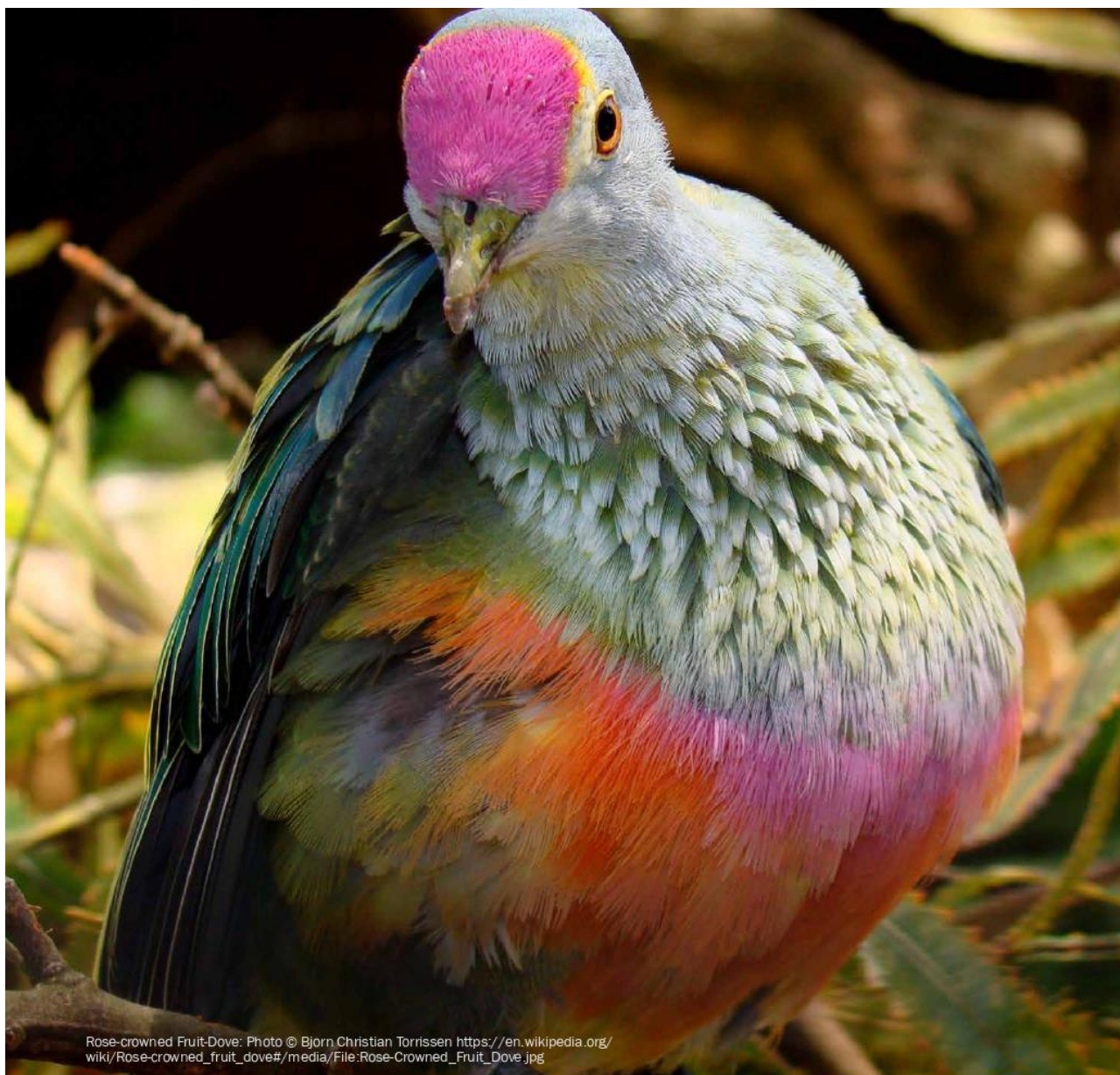
Many shrubs in the community also have a prostrate, matted form, which provides important habitat for many animals, such as skinks, which live under the layered branches. Themeda Headland Grasslands are important for other fauna species as well. For example, raptors such as Nankeen Kestrels hunt over the open ground, nectarivorous birds feed on the shrubs and invertebrates associated with the grasses and groundcovers. Kangaroo Grass is a food source for the caterpillars of the moth species *Pterolocera amplicornis*. The genetic diversity and uniqueness of these sites and their importance for a wide range of species is therefore high.





Themeda Headland Grassland is believed to be a 'derived ecological community'. That is, the community arose as a result of traditional Aboriginal burning regimes. It is believed these areas were burnt regularly for communication between people positioned on different headlands and to help with fishing (burning improved ocean views) and hunting (kangaroos were attracted to the fresh green pick and the headland formation enabled 'herding'). They were also important sites for rituals and gatherings. There has been some evidence that cessation of strategic burning in these areas has led to invasion of both native and exotic shrubs, such as wattles and banksias. While this is a 'natural process', it may deplete genetic diversity over time as species strictly associated with these communities are lost.

Unfortunately, the high pedestrian and car traffic in areas dominated by Themeda Headland Grassland also leaves them prone to weed invasion. Being 'grassland', it is more difficult to control invasive grasses without 'off-target' damage to the native grasses, which are often intergrown. Many studies have shown that strategic use of fire (i.e. ecological burns) can stimulate the native grasses and forbs while decreasing the weed load. Strategic use of fire may also 'open up' the grassland thereby allowing better spot-spraying of weeds with less off-target damage. Studies have shown that in contrast, unburnt headlands continue to deteriorate, with ongoing senescence of Kangaroo Grass and continued invasion of exotic plants. Nonetheless, moderation is key because too frequent burning can reduce the abundance of prostrate shrubs, which are functionally important.



5.6 SO WHAT DO WE DO?

Considering all of the above threats can seem somewhat overwhelming, particularly when many are beyond the control of an individual, or even a regulatory authority such as local government.

The simple answer is that we can all make local ecosystems as resilient as possible and thereby assist biodiversity conservation. Ecosystem resilience refers to the capacity of an ecosystem to recover from disturbance or withstand ongoing pressures. It can be achieved by ensuring that ecosystems have:

- good levels of habitat (and particularly conserving the 'best bits' first)

- habitats that are well connected
- have the appropriate species composition for that ecological community
- have the appropriate 'ecosystem services' species and processes present
- are weed and pest animal free (thus enabling the persistence of the appropriate species).

Within the Port Macquarie-Hastings LGA we can all play a role in this by undertaking specific actions. Each year Council will identify actions we can take to fulfill the essence of this document. This information will be contained in the annual Operational Plan..



6. ACTIONS REQUIRED TO REVERSE THREATS AND PROTECT BIODIVERSITY

The Biodiversity Management Strategy will be implemented through four key themes (identified by the Community and Expert Panels) to assist in delivering biodiversity conservation. These themes effectively overarch the specific threats listed by the Office of Environment and Heritage's analysis of the Port Macquarie-Hastings LGA. Each year a series of actions generated from the Biodiversity Management Strategy will be implemented. Factors such as external funding opportunities, internal resourcing requirements, Council's priorities and biological priorities will be considered when determining which actions are undertaken each year. A full list of actions will be included in Council's annual Operational Plan.

The four key themes/programs are:

Community Engagement/Education Program

Actions in this theme will centre around increasing the community's awareness and knowledge of biodiversity in the LGA. At the same time, Council will work towards improving and building the capacity of individuals and community groups by reducing impacts and increasing environmental works.

Operational Programs

This theme will focus on ensuring the ongoing on-ground work including:

- a) biosecurity works through the control of invasive weeds and vertebrate pest control
- b) biodiversity and fire management
- c) delivery of actions within the Koala Recovery Strategy
- d) Biodiversity and Indigenous Lands Program
- e) Riparian Biodiversity Program.

Biodiversity Offsetting and Investment Opportunities Program

It is recognised that Council has a role in helping to find appropriate offset sites within the LGA. This role is seen as an opportunity to assist in both management and procurement of offset sites for Council requirements but also to assist local residents to navigate this topic.

Biodiversity Guidance/Standards

Opportunities for improving guidance, processes and standards will always be an ongoing management action. Changes in biodiversity conservation legislation, new research and innovations will continuously create pressure for Council to operate effectively and remain in line with best practice management and the latest developments in this sector. Therefore, actions in this theme will focus on creating continuous improvements.



7. REVIEW

A major focus of the Biodiversity Management Strategy has been to use the best available information and science to identify the areas that are most valuable for biodiversity in the Port Macquarie-Hastings LGA. This work has allowed us to create a Priority Investment Layer that can be used to assist landholders to direct biodiversity offset schemes and apply for funding to protect biological assets on private lands.

The Strategy provides spatially explicit outputs that can inform future strategic planning and conservation initiatives. Possessing such models and using these to justify projects greatly increases the accountability in decision-making and helps guide biodiversity management in the LGA.

To ensure maps and models provide accurate data, Port Macquarie-Hastings Council commits to reviewing the document every 5 years including an assessment of key performance measures.

7.1 KEY PERFORMANCE MEASURES

- Number and description of a targeted actions delivered on ground that protected and assisted in the recovery of biodiversity across all ecosystems.
- Relationships with external stakeholders including regional, state, federal and community are established and demonstrated by programs delivered.
- Programs are in place that improve the awareness of the importance of biodiversity conservation and ways this can be achieved.
- Reduction in overall weed load and improvement in bushland reserves ecosystem health from 2019 baseline levels is achieved by maintaining, protecting, rehabilitating, and managing native vegetation across Council-owned land, particularly in areas with high biodiversity values.
- An increase in landscape connectivity across the LGA, from the 2019 baseline levels, achieved through compensatory planting, weed removal and bushland rehabilitation.

Reminiscence

I was born into a coloured country;
spider-webs in dew on feathered grass,
mountains blue as wrens,
valleys cupping sky in like a cradle,
christmas-beetles winged with buzzing opal;
finches, robins, gang-gangs, pardalotes
tossed the blossom in its red-streaked trees.

My father had a tale of an old neighbour,
the kind of reminiscence one inherits.
Asked for difficult detail in stories
at those bygone ample crowded teas,
(cup and saucer balanced on his knees):
'Madam, you might as well
ask me to enumerate the parrots.'

Hundreds, thousands, birds uncountable
babbling, shrieking, swirling all around –
skiesful, treesful: lorikeets, rosellas,
lorilets and cockatiels and lowries,

Red-backed, Ring-necked, Orange-breasted,
Turquoise,
Purple-crowned, Red-collared, Rainbow, Varied,
Scarlet-chested, Blue-browed, Scalybreasted,
Swift and Night and Paradise and Crimson,
Twenty-eight and Red-capped, Musk and
Elegant-

I give up. But see him
sitting stiffly in a basket-chair
circled by their millions, formally
stirring three of sugar in his tea
in an afternoon I never knew
making conversation with the ladies.

Not a flock of parrots left to number.
Just a picture, fifty years behind,
left embroidered on my childish mind.
Parrots! They were something to remember.

Judith Wright

Appendix A. Scientific names for species mentioned in this Strategy

Common name	Scientific name
PLANTS	
No common name	<i>Melaleuca biconvexa</i>
Antarctic Beech	<i>Nothofagus moorei</i>
Big Nellie Hakea	<i>Hakea archaeoides</i>
Blackbutt	<i>Eucalyptus pilularis</i>
Christmas Bells	<i>Blandfordia grandiflora</i>
Coastal Pandanus	<i>Pandanus tectorius</i>
Drooping Ironbark	<i>Eucalyptus caleyi</i>
Forest Red Gum	<i>Eucalyptus tereticornis</i>
Small-fruited Grey Gum	<i>Eucalyptus propinqua</i>
Kangaroo Grass	<i>Themeda triandra</i>
Lesser Swamp-orchid	<i>Phaius australis</i>
Narrow-leaved Red Gum	<i>Eucalyptus seeana</i>
Needlebark Stringybark	<i>Eucalyptus planchoniana</i>
North Brother Wattle	<i>Acacia courtii</i>
Orange Gum	<i>Eucalyptus bancroftii</i>
Privet	<i>Ligustrum</i> spp.
Red Cedar	<i>Toona ciliata</i>
Red Mahogany	<i>Eucalyptus resinifera</i>
Screw Pine	<i>Pandanus tectorius</i>
Silver Bush	<i>Sophora tomentosa</i>
Spike-rush	<i>Eleocharis</i> spp.
Swamp Mahogany	<i>Eucalyptus robusta</i>
Swamp Oak	<i>Casuarina glauca</i>
Tallowood	<i>Eucalyptus microcorys</i>
Turpentine	<i>Syncarpia glomulifera</i>
White Mahogany	<i>Eucalyptus acmenoides</i>
White Stringybark	<i>Eucalyptus globoidea</i>
White-flowered Wax Plant	<i>Cynanchum elegans</i>
Wild Rice	<i>Oryza</i> spp.
Willow Bottlebrush	<i>Callistemon salignus</i>
INVERTEBRATES	
Fritillary Butterfly	<i>Argyreus hyperbius inconstans</i>
Giant Dragonfly	<i>Petalura gigantea</i>
Spiny Crayfish	<i>Eustacus</i> spp.
FISH	
Australian Bass	<i>Macquaria novemaculeata</i>
FROGS	
Giant-barred Frog	<i>Mixophyes iteratus</i>
Green and Golden Bell-frog	<i>Litoria aurea</i>
Green-thighed Frog	<i>Litoria brevipalmata</i>

Common name	Scientific name
Wallum Froglet	<i>Crinia tinnula</i>
REPTILES	
Delicate Skink	<i>Lampropholis delicata</i>
BIRDS	
Australasian Bittern	<i>Botaurus poiciloptilus</i>
Australian Raven	<i>Corvus coronoides</i>
Black Bittern	<i>Ixobrychus flavicollis</i>
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>
Brolga	<i>Grus rubicunda</i>
Eastern Yellow Robin	<i>Eopsaltria australis</i>
Eastern Curlew	<i>Numenius madagascariensis</i>
Glossy Black-cockatoo	<i>Calyptorhynchus lathami</i>
Ground Parrot	<i>Pezoporus wallicus</i>
Magpie Goose	<i>Anseranas semipalmata</i>
Nankeen Kestrel	<i>Falco cenchroides</i>
Noisy Miner	<i>Manorina melanocephala</i>
Noisy Pitta	<i>Pitta versicolor</i>
Paradise Riflebird	<i>Ptiloris paradiseus</i>
Pied Oystercatcher	<i>Haematopus longirostris</i>
Rose-crowned Fruit-dove	<i>Ptilinopus regina</i>
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>
Swift Parrot	<i>Lathamus discolor</i>
Yellow-throated Scrubwren	<i>Sericornis citreogularis</i>
MAMMALS	
Black Flying-fox	<i>Pteropus alecto</i>
Brown Antechinus	<i>Antechinus stuartii</i>
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>
Dingo	<i>Canis dingo</i>
Eastern Freetail-bat	<i>Mormopterus norfolkensis</i>
Eastern Pygmy Possum	<i>Cercartetus nanus</i>
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>
Hastings River Mouse	<i>Pseudomys oralis</i>
Koala	<i>Phascolarctos cinereus</i>
Little Red Flying-fox	<i>Pteropus scapulatus</i>
Long-nosed Potoroo	<i>Potorous tridactylus</i>
Red-legged Pademelon	<i>Thylogale stigmatica</i>
Red-necked Pademelon	<i>Thylogale thetis</i>
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>
Squirrel Glider	<i>Petaurus norfolcensis</i>

Appendix B. Existing and continuing initiatives in the Port Macquarie-Hastings LGA to protect biodiversity

Initiative	Partners
Increase ecological resilience of public bushland	
Active community involvement in public bushland management	PMHC, Port Macquarie Landcare, Friends of Kooloonbung, Friends of Mrs Yorks Garden, Camden Haven Landcare, Lake Cathie Landcare, Bonny Hills Landcare, Pappinbarra Landholders Conservation Management Network
Bushland Management Team working on 90 publicly owned bushland reserves using best practice methods	PMHC
Formalised Bushland Management Monitoring Program	PMHC
State of the art 'ArcCollector' reporting system for weed mapping (public lands, roadsides and rural lands)	PMHC
Tree planting and restoration initiatives (e.g. National Tree Day)	PMHC, Port Macquarie Landcare
PMHC successful recipient of numerous grants to implement the Bushland Management Program	PMHC, North Coast Local Land Services, Office of Environment and Heritage
Significant roadside vegetation and hollow-bearing trees mapped	PMHC
Active weed management	
Bushland Management Program (as described above)	PMHC
Annual urban weed tree removal works (street trees and trees in public bushland)	PMHC
Invasive Weeds Team reducing weeds in known incursion pathways, such as roadsides and waterways.	PMHC
Annual weed inspections and extension/education on rural properties	PMHC
Extension/education work on weed control and identification at field days etc.	PMHC, North Coast Local Land Services, Hastings Landcare
Supporting community groups such as the Pappinbarra Landholders Conservation Management Network	PMHC, Hastings Landcare
Protecting biodiversity on rural land	
Increasing soil fertility and productivity through natural processes (e.g. soil biota)	Hastings Landcare and North Coast Local Land Services
Extension/education work on weed control and identification at field days etc.	PMHC, North Coast Local Land Services, Hastings Landcare
Funding programs for riparian restoration and protection works	Hastings Landcare and North Coast Local Land Services
Comboyne Corridor Conservation and Remnant Rescue Program	Bolwarra Environmental Services, Hastings Landcare
Land for Wildlife Program	Community Environment Network (CEN) in partnership with the Office of Environment and Heritage (OEH) and locally run in conjunction with Hastings Landcare.

Initiative	Partners
Strategic planning and development controls	
Plan of Management for Kooloonbung Creek Nature Reserve Flying-fox colony (and monitoring of this colony four times per annum through the National Flying-fox Census)	PMHC
Koala Plan of Management (and close working relationship with Port Macquarie Koala Hospital)	PMHC
Vegetation community mapping for Port Macquarie-Hastings LGA	PMHC
Close liaison with Development Assessment Team and NRM staff	PMHC
Preparation of vegetation management plans to help ensure 'Avoid, Minimise, Offset' philosophy	PMHC and development industry
Use of endemic native species for planting on public lands, including urban street trees and roadside plantings	PMHC and development industry
Biodiversity controls articulated in DCP, including: <ul style="list-style-type: none"> • hollow-bearing tree protocol • buffers for threatened ecological communities, riparian areas etc. • Koala habitat trees offsets • an Indigenous street and open space planting list 	PMHC
Bushfire management	
Consideration of how asset protection zone (APZ) works can benefit bushland reserves and minimise harm	PMHC
Involving stakeholders in inspecting areas before and after hazard reduction burns	PMHC, Koala Hospital, For Australian Wildlife Needing Aid (FAWNA)
Ensuring that APZs and fire trails/tracks are contained within the development proposal area	PMHC
Fire and Biodiversity Consortium for the Port Macquarie-Hastings LGA	PMHC, National Parks and Wildlife Service (NPWS), RFS, Forestry Corporation of NSW
Protecting waterways	
Active aquatic weed monitoring and control works (e.g. Salvinia)	PMHC
Ecohealth Monitoring Program	PMHC and UNSW
Riparian Vine Weeds Program	PMHC, Hastings Landcare
River restoration works	PMHC, Hastings Landcare
Riparian protection works to prevent stock trampling and reduce weed incursion	Hastings Landcare
Feral animal control	
Deer control in key areas (e.g. Port Dam, Thrumster)	Recreational Game Hunters, North Coast Local Land Services, NPWS, PMHC
Fox, cat and rabbit control in some coastal areas	PMHC (BioFund, Estuarine Lakeside Linkages Project with NCLLS and OEH), NPWS
Increasing landscape connectivity	
Installing Koala stiles to assist Koalas moving about the landscape	PMHC with Port Macquarie Landcare and Work for the Dole
Ensuring offsets and vegetation management plans increase landscape connectivity	PMHC

Initiative	Partners
Community extension/education	
Working with, and supporting, community stakeholders as requested	Koala Hospital, Schools, Landcare, Living Futures Hub, FAWNA, PMHC
Signage programs (and compliance as required) for illegal clearing for coastal view enhancement	PMHC
Work with community groups to facilitate improved data collection	PMHC with Hastings Birdwatchers, Koala Hospital and Landcare

Appendix C. Datasets used in the Biodiversity Management Strategy

Dataset and description	Reference
<p>PMHC Vegetation Community Mapping</p> <p>Maps all extant vegetation remaining as of 2009 in patches greater than 0.25 ha (0.1 ha for Littoral Rainforest) outside National Parks and State Forest lands and assigns the patch to one of c. 90 vegetation communities defined for our LGA. Patches were assigned based on a combination of aerial imagery analysis and field assessment. The methods adhered to the NSW Government's Native Vegetation Type Standard.</p>	Vegetation of the Port Macquarie-Hastings Local Government Area, BioLink Ecological Consultants April 2013. Available from PMHC upon request.
<p>CRAFTI Vegetation Mapping</p> <p>Comprehensive Regional Assessment Forestry Type Inventory (CRAFTI) vegetation mapping was used to identify vegetation on State Forest and National Parks land and for tenure-blind analyses undertaken. It is coarser and less-accurate than the PMHC Vegetation Community Mapping but is commonly used across NSW.</p>	Resource and Conservation Division (1997). CRAFTI Aerial Photographic Interpretation Manual. Unpublished report. Department of Urban Affairs and Planning.
<p>Koala Habitat Mapping</p> <p>Maps 'Primary', 'Secondary (A)', 'Secondary (B)', 'Secondary (C)' koala habitat across the LGA. Each of these habitat classes contains quantities of trees known to be browsed by koalas in the LGA (Koala Food Trees). 'Primary Koala Habitat' is the most important of these. The mapping also identifies 'Other Koala Habitat'. This habitat is not known to support significant numbers of koala food trees, but may still be important for connecting key areas of habitat etc.</p>	Port Macquarie-Hastings Koala Habitat & Population Assessment. Final Report to Port Macquarie-Hastings Council, June 2013. BioLink Ecological Consultants. Available from PMHC upon request.
<p>Threatened ecological community (TEC) mapping</p> <p>The Scientific Committee Final Determinations and NSW Land and Environment Court case precedents illustrate that TECs are defined by more than the vegetation composition. This is particularly true for the coastal floodplain TECs in the bioregion which must occur on alluvial topographic formations to qualify. This mapping revises BioLink's vegetation mapping to identify those vegetation communities which satisfy both the floristic and geomorphic criteria of coastal floodplain TECs specified in the Final Determinations.</p>	PMHC Vegetation Community Mapping: Coastal Floodplain EEC Mapping Review. DarkHeart Eco-Consultancy, February 2014. Available from PMHC upon request.
<p>BioNet</p> <p>BioNet is a portal for accessing government-held information about plants and animals in NSW. Records in the Atlas come from a variety of sources, including from members of the public and scientific surveys. An Atlas search will retrieve species records from across the entire Atlas database. Anyone can use the BioNet database to search for records, but registered users (as per PMHC) can access more spatially-explicit information for some species.</p>	See: http://www.bionet.nsw.gov.au/

Dataset and description	Reference
<p>The Atlas of Living Australia (ALA)</p> <p>The Atlas is a free online resource, which provides access to a wealth of information about Australia's biodiversity. The type of information available includes species occurrence records (based on field observations, specimens from biological collections, and surveys), photographs, sound recordings, maps, molecular data, and links to additional literature. Powerful mapping tools allow users to explore and analyse this information in a myriad of ways. The ALA is used for research, environmental monitoring, conservation planning and management, education, Citizen Science, and biosecurity activities.</p>	<p>See: http://www.ala.org.au/</p>
<p>BirdLife Australia BirdData</p> <p>This comprehensive database is administered by BirdLife Australia. Records are from BirdLife Australia members, many of whom regularly contribute using standardised surveys. Data was purchased by PMHC for use in Species Distribution Modelling to ensure the maximum number of records and increase model robustness.</p>	<p>See: http://birdata.com.au/homecontent.do</p>
<p>Climate Change Scenarios</p> <p>BMT WBM was commissioned by Port Macquarie-Hastings Council (PHMC) 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 study uses three numerical models of the major estuaries in the LGA including: the 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.</p>	<p>Port Macquarie - Hastings Council Sea level Rise Mapping Project. BMT WBM Consulting. Final Report to PMHC, June 2013.</p>
<p>ANUCLIM</p> <p>Bio-climatic data were sourced from ANUCLIM for the PMHC LGA by the University of Melbourne for use in species distribution modelling. A range of climatic and geographic variables were included (e.g. rainfall, altitude, aspect, soil type).</p>	<p>See: http://fennerschool.anu.edu.au/research/products/anuclim-vrsn-61</p>

Appendix D. Abbreviated names and definitions of mapped environmental data used as candidate predictor variables for inclusion in species distribution models

All environmental data were available in raster format with a resolution of 100m.

Candidate variable	Definition
mean_temp	Mean annual temperature (ANUCLIM)
cold_temp	Mean temperature of the coldest period (ANUCLIM)
hot_temp	Mean temperature of the hottest period (ANUCLIM)
mean_rain	Mean annual rainfall (ANUCLIM)
seasonal_rain	Mean annual temperature (ANUCLIM)
mean_solar	Mean annual solar radiation (ANUCLIM)
Altitude	The altitude of a cell (in metres) above sea level (25m DEM of Hunter Valley)
Slope	The slope of a cell (in degrees) (derived from Altitude)
Eastness	The degree to which the aspect of a cell is east (east = 1, west = -1) (derived from Altitude)
Northness	The degree to which the aspect of a cell is north (north = 1, south = -1) (derived from Altitude)
rugg1000	Topographic ruggedness (standard deviation in elevation) in a 1000m radius (derived from Altitude)
terr1000	Relative terrain position in a 1000m radius (derived from Altitude)
Wetness	Compound topographic index (derived from Altitude)
final_vegetation	Keith formation vegetation categories derived from PMH (Phillips et al. 2013), CRAFTI, the Parsons Brinkerhoff (Cockerill et al. 2013) and Greater Hunter (Sivertsen et al. 2011) vegetation mappings
Dry_sclerophyll_forests2000	The percentage of cells within a 2000m radius dominated by dry sclerophyll forest (derived from final_vegetation)
rainforests2000	The percentage of cells within a 2000m radius containing rainforest (derived from final_vegetation)
Wet_sclerophyll_forests2000	The percentage of cells within a 2000m radius dominated by wet sclerophyll forest (derived from final_vegetation)
Soils	Digital Atlas of Australian Soils (CSIRO 2014)

ANUCLIM: Fenner School of Environment and Society, Australian National University <http://fennerschool.anu.edu.au/research/products/anuclim-vrsn-61>

CRAFTI: Comprehensive Regional Assessment Aerial Photograph Interpretation – A vegetation mapping process undertaken as part of the north-east Regional Forestry Agreement

Appendix E. List of species modelled in Zonation

Note: Colour code indicates guilds to which species were assigned

Shore Birds	Water Birds	Nectarivorous Birds	Phalangers, Phascogales and their predators	Cave-Roosting Microbats	Amphibians	Frugivorous Birds
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Red = Edge of range and limited records

Species	Common Name	Family	Data type
<i>Adelotus brevis</i>	Tusked Frog	Myobatrachidae	SDM
<i>Crinia signifera</i>	Common Eastern Froglet	Myobatrachidae	SDM
<i>Crinia tinnula</i>	Wallum Froglet	Myobatrachidae	SDM
<i>Lechriodus fletcheri</i>	Fletcher's Frog	Myobatrachidae	SDM
<i>Limnodynastes dumerilii</i>	Eastern Banjo Frog	Myobatrachidae	SDM
<i>Limnodynastes peronii</i>	Brown-striped Frog	Myobatrachidae	SDM
<i>Limnodynastes tasmaniensis</i>	Spotted Grass Frog	Myobatrachidae	SDM
<i>Litoria aurea</i>	Green and Golden Bell Frog	Hylidae	SDM
<i>Litoria booroolongensis</i>	Booroolong Frog	Hylidae	points
<i>Litoria brevipalmata</i>	Green-thighed Frog	Hylidae	SDM
<i>Litoria caerulea</i>	Green Tree Frog	Hylidae	SDM
<i>Litoria chloris</i>	Red-eyed Tree Frog	Hylidae	SDM
<i>Litoria daviesae</i>	Davies' Tree Frog	Hylidae	SDM
<i>Litoria dentata</i>	Bleating Tree Frog	Hylidae	SDM
<i>Litoria ewingii</i>	Brown Tree Frog	Hylidae	points
<i>Litoria fallax</i>	Eastern Dwarf Tree Frog	Hylidae	SDM
<i>Litoria freycineti</i>	Freycinet's Frog	Hylidae	SDM
<i>Litoria gracilentia</i>	Dainty Green Tree Frog	Hylidae	SDM
<i>Litoria jervisiensis</i>	Jervis Bay Tree Frog	Hylidae	SDM
<i>Litoria latopalmata</i>	Broad-palmed Frog	Hylidae	SDM
<i>Litoria lesueuri</i>	Lesueur's Frog	Hylidae	SDM
<i>Litoria nasuta</i>	Rocket Frog	Hylidae	SDM
<i>Litoria pearsoniana</i>	Pearson's Green Tree Frog	Hylidae	SDM
<i>Litoria peronii</i>	Peron's Tree Frog	Hylidae	SDM
<i>Litoria phyllochroa</i>	Leaf-green Tree Frog	Hylidae	SDM
<i>Litoria revelata</i>	Revealed Frog	Hylidae	SDM
<i>Litoria subglandulosa</i>	Glandular Frog	Hylidae	SDM
<i>Litoria tyleri</i>	Tyler's Tree Frog	Hylidae	SDM
<i>Litoria verreauxii</i>	Verreaux's Frog	Hylidae	SDM
<i>Mixophyes fasciolatus</i>	Great Barred Frog	Myobatrachidae	SDM
<i>Paracrinia haswelli</i>	Haswell's Froglet	Myobatrachidae	SDM
<i>Phyllorhina sphagnicola</i>	Sphagnum Frog	Myobatrachidae	SDM
<i>Pseudophryne bibronii</i>	Bibron's Toadlet	Myobatrachidae	SDM
<i>Pseudophryne coriacea</i>	Red-backed Toadlet	Myobatrachidae	SDM
<i>Uperoleia fusca</i>	Dusky Toadlet	Myobatrachidae	SDM
<i>Uperoleia laevisgata</i>	Smooth Toadlet	Myobatrachidae	SDM
<i>Uperoleia tyleri</i>	Tyler's Toadlet	Myobatrachidae	points

Species	Common Name	Family	Data type
<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	Acanthizidae	SDM
<i>Acanthiza lineata</i>	Striated Thornbill	Acanthizidae	SDM
<i>Acanthiza nana</i>	Yellow Thornbill	Acanthizidae	SDM
<i>Acanthiza reguloides</i>	Buff-rumped Thornbill	Acanthizidae	SDM
<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill	Meliphagidae	SDM
<i>Accipiter cirrocephalus</i>	Collared Sparrowhawk	Accipitridae	SDM
<i>Accipiter fasciatus</i>	Brown Goshawk	Accipitridae	SDM
<i>Accipiter novaehollandiae</i>	Grey Goshawk	Accipitridae	SDM
<i>Acrocephalus australis</i>	Australian Reed-Warbler	Acrocephalidae	SDM
<i>Actitis hypoleucos</i>	Common Sandpiper	Scolopacidae	SDM
<i>Aegotheles cristatus</i>	Australian Owlet-nightjar	Aegothelidae	SDM
<i>Ailuroedus crassirostris</i>	Green Catbird	Ptilonorhynchidae	SDM
<i>Alectura lathami</i>	Australian Brush-turkey	Megapodiidae	SDM
<i>Anas castanea</i>	Chestnut Teal	Anatidae	SDM
<i>Anas gracilis</i>	Grey Teal	Anatidae	SDM
<i>Anas rhynchotis</i>	Australasian Shoveler	Anatidae	SDM
<i>Anas superciliosa</i>	Pacific Black Duck	Anatidae	SDM
<i>Anhinga novaehollandiae</i>	Australasian Darter	Anhingidae	SDM
<i>Anseranas semipalmata</i>	Magpie Goose	Anseranatidae	SDM
<i>Anthochaera carunculata</i>	Red Wattlebird	Meliphagidae	SDM
<i>Anthochaera chrysoptera</i>	Little Wattlebird	Meliphagidae	SDM
<i>Anthochaera phrygia</i>	Regent Honeyeater	Meliphagidae	SDM
<i>Anthus novaeseelandiae</i>	Australian Pipit	Motacillidae	SDM
<i>Apus pacificus</i>	Fork-tailed Swift	Apodidae	SDM
<i>Ardea ibis</i>	Cattle Egret	Ardeidae	SDM
<i>Ardea intermedia</i>	Intermediate Egret	Ardeidae	SDM
<i>Ardea modesta</i>	Eastern Great Egret	Ardeidae	SDM
<i>Ardea pacifica</i>	White-necked Heron	Ardeidae	SDM
<i>Arenaria interpres</i>	Ruddy Turnstone	Scolopacidae	SDM
<i>Artamus cyanopterus</i>	Dusky Woodswallow	Artamidae	SDM
<i>Artamus leucorhynchus</i>	White-breasted Woodswallow	Artamidae	SDM
<i>Artamus personatus</i>	Masked Woodswallow	Artamidae	SDM
<i>Artamus superciliosus</i>	White-browed Woodswallow	Artamidae	SDM
<i>Atrichornis rufescens</i>	Rufous Scrub-bird	Atrichornithidae	SDM
<i>Aviceda subcristata</i>	Pacific Baza	Accipitridae	SDM
<i>Aythya australis</i>	Hardhead	Anatidae	SDM
<i>Biziura lobata</i>	Musk Duck	Anatidae	SDM
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Ardeidae	SDM
<i>Burhinus grallarius</i>	Bush Stone-curlew	Burhinidae	SDM
<i>Butorides striatus</i>	Striated Heron	Ardeidae	SDM
<i>Cacatua sanguinea</i>	Little Corella	Cacatuidae	SDM
<i>Cacatua tenuirostris</i>	Long-billed Corella	Cacatuidae	SDM
<i>Cacomantis flabelliformis</i>	Fan-tailed Cuckoo	Cuculidae	SDM
<i>Cacomantis pallidus</i>	Pallid Cuckoo	Cuculidae	SDM
<i>Cacomantis variolosus</i>	Brush Cuckoo	Cuculidae	SDM

Species	Common Name	Family	Data type
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Scolopacidae	SDM
<i>Calidris canutus</i>	Red Knot	Scolopacidae	SDM
<i>Calidris ferruginea</i>	Curlew Sandpiper	Scolopacidae	SDM
<i>Calidris ruficollis</i>	Red-necked Stint	Scolopacidae	SDM
<i>Calidris tenuirostris</i>	Great Knot	Scolopacidae	SDM
<i>Calyptorhynchus funereus</i>	Yellow-tailed Black-Cockatoo	Cacatuidae	SDM
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	Cacatuidae	SDM
<i>Carterornis leucotis</i>	White-eared Monarch	Monarchidae	points
<i>Centropus phasianinus</i>	Pheasant Coucal	Centropodidae	SDM
<i>Ceyx azureus</i>	Azure Kingfisher	Alcedinidae	SDM
<i>Chalcites basalis</i>	Horsfield's Bronze-Cuckoo	Cuculidae	SDM
<i>Chalcites lucidus</i>	Shining Bronze-Cuckoo	Cuculidae	SDM
<i>Chalcophaps indica</i>	Emerald Dove	Columbidae	SDM
<i>Charadrius bicinctus</i>	Double-banded Plover	Charadriidae	SDM
<i>Charadrius mongolus</i>	Lesser Sand-plover	Charadriidae	SDM
<i>Charadrius ruficapillus</i>	Red-capped Plover	Charadriidae	SDM
<i>Chenonetta jubata</i>	Australian Wood Duck	Anatidae	SDM
<i>Cheramoeca leucosterna</i>	White-backed Swallow	Hirundinidae	SDM
<i>Chlidonias hybrida</i>	Whiskered Tern	Laridae	SDM
<i>Chroicocephalus novaehollandiae</i>	Silver Gull	Laridae	SDM
<i>Chthonicola sagittata</i>	Speckled Warbler	Acanthizidae	points
<i>Cincloramphus cruralis</i>	Brown Songlark	Megaluridae	SDM
<i>Cincloramphus mathewsi</i>	Rufous Songlark	Megaluridae	SDM
<i>Cinclosoma punctatum</i>	Spotted Quail-thrush	Psophodidae	SDM
<i>Circus approximans</i>	Swamp Harrier	Accipitridae	SDM
<i>Circus assimilis</i>	Spotted Harrier	Accipitridae	SDM
<i>Cisticola exilis</i>	Golden-headed Cisticola	Cisticolidae	SDM
<i>Climacteris erythrops</i>	Red-browed Treecreeper	Climacteridae	SDM
<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	Climacteridae	points
<i>Columba leucomela</i>	White-headed Pigeon	Columbidae	SDM
<i>Coracina lineata</i>	Barred Cuckoo-shrike	Campephagidae	points
<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	Campephagidae	SDM
<i>Coracina papuensis</i>	White-bellied Cuckoo-shrike	Campephagidae	SDM
<i>Coracina tenuirostris</i>	Cicadabird	Campephagidae	SDM
<i>Corcorax melanorhamphos</i>	White-winged Chough	Corcoracidae	SDM
<i>Corvus orru</i>	Torresian Crow	Corvidae	SDM
<i>Corvus tasmanicus</i>	Forest Raven	Corvidae	SDM
<i>Coturnix pectoralis</i>	Stubble Quail	Phasianidae	SDM
<i>Coturnix ypsilophora</i>	Brown Quail	Phasianidae	SDM
<i>Cracticus nigrogularis</i>	Pied Butcherbird	Artamidae	SDM
<i>Cracticus torquatus</i>	Grey Butcherbird	Artamidae	SDM
<i>Cygnus atratus</i>	Black Swan	Anatidae	SDM
<i>Daphoenositta chrysoptera</i>	Varied Sittella	Neosittidae	SDM
<i>Dendrocygna arcuata</i>	Wandering Whistling-Duck	Anatidae	SDM

Species	Common Name	Family	Data type
<i>Dendrocygna eytoni</i>	Plumed Whistling-Duck	Anatidae	SDM
<i>Dicaeum hirundinaceum</i>	Mistletoebird	Nectariniidae	SDM
<i>Dicrurus bracteatus</i>	Spangled Drongo	Dicruridae	SDM
<i>Egretta garzetta</i>	Little Egret	Ardeidae	SDM
<i>Egretta novaehollandiae</i>	White-faced Heron	Ardeidae	SDM
<i>Egretta sacra</i>	Eastern Reef Egret	Ardeidae	SDM
<i>Elanus axillaris</i>	Black-shouldered Kite	Accipitridae	SDM
<i>Elseornis melanops</i>	Black-fronted Dotterel	Charadriidae	SDM
<i>Entomyzon cyanotis</i>	Blue-faced Honeyeater	Meliphagidae	SDM
<i>Eolophus roseicapillus</i>	Galah	Cacatuidae	SDM
<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	Ciconiidae	SDM
<i>Epthianura albifrons</i>	White-fronted Chat	Meliphagidae	SDM
<i>Erythronyx cinctus</i>	Red-kneed Dotterel	Charadriidae	SDM
<i>Esacus magnirostris</i>	Beach Stone-curlew	Burhinidae	SDM
<i>Eudynamis orientalis</i>	Eastern Koel	Cuculidae	SDM
<i>Eurostopodus mystacalis</i>	White-throated Nightjar	Caprimulgidae	SDM
<i>Eurystomus orientalis</i>	Dollarbird	Coraciidae	SDM
<i>Excalfactoria chinensis</i>	King Quail	Phasianidae	SDM
<i>Falco berigora</i>	Brown Falcon	Falconidae	SDM
<i>Falco cenchroides</i>	Nankeen Kestrel	Falconidae	SDM
<i>Falco longipennis</i>	Australian Hobby	Falconidae	SDM
<i>Falco peregrinus</i>	Peregrine Falcon	Falconidae	SDM
<i>Falcunculus frontatus frontatus</i>	Eastern Shrike-tit	Pachycephalidae	SDM
<i>Fulica atra</i>	Eurasian Coot	Rallidae	SDM
<i>Gallinago hardwickii</i>	Latham's Snipe	Scolopacidae	SDM
<i>Gallinula tenebrosa</i>	Dusky Moorhen	Rallidae	SDM
<i>Gallirallus philippensis</i>	Buff-banded Rail	Rallidae	SDM
<i>Gelochelidon nilotica</i>	Gull-billed Tern	Laridae	SDM
<i>Geopelia humeralis</i>	Bar-shouldered Dove	Columbidae	SDM
<i>Geopelia striata</i>	Peaceful Dove	Columbidae	SDM
<i>Gerygone albogularis</i>	White-throated Gerygone	Acanthizidae	SDM
<i>Gerygone levigaster</i>	Mangrove Gerygone	Acanthizidae	SDM
<i>Gerygone mouki</i>	Brown Gerygone	Acanthizidae	SDM
<i>Gliciphila melanops</i>	Tawny-crowned Honeyeater	Meliphagidae	SDM
<i>Glossopsitta concinna</i>	Musk Lorikeet	Psittacidae	SDM
<i>Glossopsitta pusilla</i>	Little Lorikeet	Psittacidae	SDM
<i>Grallina cyanoleuca</i>	Magpie-lark	Monarchidae	SDM
<i>Grus rubicunda</i>	Brolga	Gruidae	points
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	Haematopodidae	SDM
<i>Haematopus longirostris</i>	Pied Oystercatcher	Haematopodidae	SDM
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	Accipitridae	SDM
<i>Haliastur indus</i>	Brahminy Kite	Accipitridae	SDM
<i>Haliastur sphenurus</i>	Whistling Kite	Accipitridae	SDM
<i>Hieraaetus morphnoides</i>	Little Eagle	Accipitridae	SDM
<i>Himantopus himantopus</i>	Black-winged Stilt	Recurvirostridae	SDM

Species	Common Name	Family	Data type
<i>Hirundapus caudacutus</i>	White-throated Needletail	Apodidae	SDM
<i>Hirundo neoxena</i>	Welcome Swallow	Hirundinidae	SDM
<i>Hydroprogne caspia</i>	Caspian Tern	Laridae	SDM
<i>Irediparra gallinacea</i>	Comb-crested Jacana	Jacanidae	SDM
<i>Ixobrychus dubius</i>	Australian Little Bittern	Ardeidae	points
<i>Ixobrychus flavicollis</i>	Black Bittern	Ardeidae	SDM
<i>Lalage leucomela</i>	Varied Triller	Campephagidae	SDM
<i>Lalage sueurii</i>	White-winged Triller	Campephagidae	SDM
<i>Lathamus discolor</i>	Swift Parrot	Psittacidae	SDM
<i>Leucosarcia picata</i>	Wonga Pigeon	Columbidae	SDM
<i>Lewinia pectoralis</i>	Lewin's Rail	Rallidae	SDM
<i>Lichenostomus fuscus</i>	Fuscous Honeyeater	Meliphagidae	SDM
<i>Lichenostomus leucotis</i>	White-eared Honeyeater	Meliphagidae	SDM
<i>Lichenostomus melanops</i>	Yellow-tufted Honeyeater	Meliphagidae	SDM
<i>Lichenostomus penicillatus</i>	White-plumed Honeyeater	Meliphagidae	SDM
<i>Lichmera indistincta</i>	Brown Honeyeater	Meliphagidae	SDM
<i>Limosa lapponica</i>	Bar-tailed Godwit	Scolopacidae	SDM
<i>Limosa limosa</i>	Black-tailed Godwit	Scolopacidae	SDM
<i>Lonchura castaneothorax</i>	Chestnut-breasted Mannikin	Estrildidae	SDM
<i>Lophoictinia isura</i>	Square-tailed Kite	Accipitridae	SDM
<i>Lopholaimus antarcticus</i>	Topknot Pigeon	Columbidae	SDM
<i>Macropygia amboinensis</i>	Brown Cuckoo-Dove	Columbidae	SDM
<i>Malacorhynchus membranaceus</i>	Pink-eared Duck	Anatidae	SDM
<i>Malurus lamberti</i>	Variegated Fairy-wren	Maluridae	SDM
<i>Malurus melanocephalus</i>	Red-backed Fairy-wren	Maluridae	SDM
<i>Manorina melanocephala</i>	Noisy Miner	Meliphagidae	SDM
<i>Manorina melanophrys</i>	Bell Miner	Meliphagidae	SDM
<i>Megalurus gramineus</i>	Little Grassbird	Megaluridae	SDM
<i>Megalurus timoriensis</i>	Tawny Grassbird	Megaluridae	SDM
<i>Meliphaga lewinii</i>	Lewin's Honeyeater	Meliphagidae	SDM
<i>Melithreptus brevirostris</i>	Brown-headed Honeyeater	Meliphagidae	SDM
<i>Melithreptus gularis gularis</i>	Black-chinned Honeyeater (eastern subspecies)	Meliphagidae	points
<i>Melithreptus lunatus</i>	White-naped Honeyeater	Meliphagidae	SDM
<i>Menura novaehollandiae</i>	Superb Lyrebird	Menuridae	SDM
<i>Merops ornatus</i>	Rainbow Bee-eater	Meropidae	SDM
<i>Microcarbo melanoleucos</i>	Little Pied Cormorant	Phalacrocoracidae	SDM
<i>Microeca fascians</i>	Jacky Winter	Petroicidae	SDM
<i>Milvus migrans</i>	Black Kite	Accipitridae	SDM
<i>Monarcha melanopsis</i>	Black-faced Monarch	Monarchidae	SDM
<i>Myiagra cyanoleuca</i>	Satin Flycatcher	Monarchidae	SDM
<i>Myiagra inquieta</i>	Restless Flycatcher	Monarchidae	SDM
<i>Myiagra rubecula</i>	Leaden Flycatcher	Monarchidae	SDM
<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater	Meliphagidae	SDM
<i>Neochmia temporalis</i>	Red-browed Finch	Estrildidae	SDM

Species	Common Name	Family	Data type
<i>Ninox connivens</i>	Barking Owl	Strigidae	SDM
<i>Ninox novaeseelandiae</i>	Southern Boobook	Strigidae	SDM
<i>Ninox strenua</i>	Powerful Owl	Strigidae	SDM
<i>Numenius madagascariensis</i>	Eastern Curlew	Scolopacidae	SDM
<i>Numenius minutus</i>	Little Curlew	Scolopacidae	points
<i>Numenius phaeopus</i>	Whimbrel	Scolopacidae	SDM
<i>Nycticorax caledonicus</i>	Nankeen Night Heron	Ardeidae	SDM
<i>Ocyphaps lophotes</i>	Crested Pigeon	Columbidae	SDM
<i>Oriolus sagittatus</i>	Olive-backed Oriole	Oriolidae	SDM
<i>Orthonyx temminckii</i>	Logrunner	Orthonychidae	SDM
<i>Oxyura australis</i>	Blue-billed Duck	Anatidae	SDM
<i>Pachycephala olivacea</i>	Olive Whistler	Pachycephalidae	SDM
<i>Pandion cristatus</i>	Eastern Osprey	Accipitridae	SDM
<i>Pardalotus striatus</i>	Striated Pardalote	Pardalotidae	SDM
<i>Pelecanus conspicillatus</i>	Australian Pelican	Pelecanidae	SDM
<i>Petrochelidon ariel</i>	Fairy Martin	Hirundinidae	SDM
<i>Petrochelidon nigricans</i>	Tree Martin	Hirundinidae	SDM
<i>Petroica boodang</i>	Scarlet Robin	Petroicidae	SDM
<i>Petroica phoenicea</i>	Flame Robin	Petroicidae	SDM
<i>Petroica rosea</i>	Rose Robin	Petroicidae	SDM
<i>Phalacrocorax carbo</i>	Great Cormorant	Phalacrocoracidae	SDM
<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant	Phalacrocoracidae	SDM
<i>Phalacrocorax varius</i>	Pied Cormorant	Phalacrocoracidae	SDM
<i>Phaps chalcoptera</i>	Common Bronzewing	Columbidae	SDM
<i>Phaps elegans</i>	Brush Bronzewing	Columbidae	SDM
<i>Philemon citreogularis</i>	Little Friarbird	Meliphagidae	SDM
<i>Phylidonyris niger</i>	White-cheeked Honeyeater	Meliphagidae	SDM
<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater	Meliphagidae	SDM
<i>Pitta versicolor</i>	Noisy Pitta	Pittidae	SDM
<i>Platalea flavipes</i>	Yellow-billed Spoonbill	Threskiornithidae	SDM
<i>Platalea regia</i>	Royal Spoonbill	Threskiornithidae	SDM
<i>Platycercus elegans</i>	Crimson Rosella	Psittacidae	SDM
<i>Platycercus eximius</i>	Eastern Rosella	Psittacidae	SDM
<i>Plectorhyncha lanceolata</i>	Striped Honeyeater	Meliphagidae	SDM
<i>Pluvialis fulva</i>	Pacific Golden Plover	Charadriidae	SDM
<i>Pluvialis squatarola</i>	Grey Plover	Charadriidae	SDM
<i>Podargus strigoides</i>	Tawny Frogmouth	Podargidae	SDM
<i>Podiceps cristatus</i>	Great Crested Grebe	Podicipedidae	SDM
<i>Porphyrio porphyrio</i>	Purple Swamphen	Rallidae	SDM
<i>Porzana fluminea</i>	Australian Spotted Crane	Rallidae	SDM
<i>Porzana pusilla</i>	Baillon's Crane	Rallidae	SDM
<i>Porzana tabuensis</i>	Spotless Crane	Rallidae	SDM
<i>Psophodes olivaceus</i>	Eastern Whipbird	Psophodidae	SDM
<i>Ptilinopus magnificus</i>	Wompoo Fruit-Dove	Columbidae	SDM
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	Columbidae	SDM

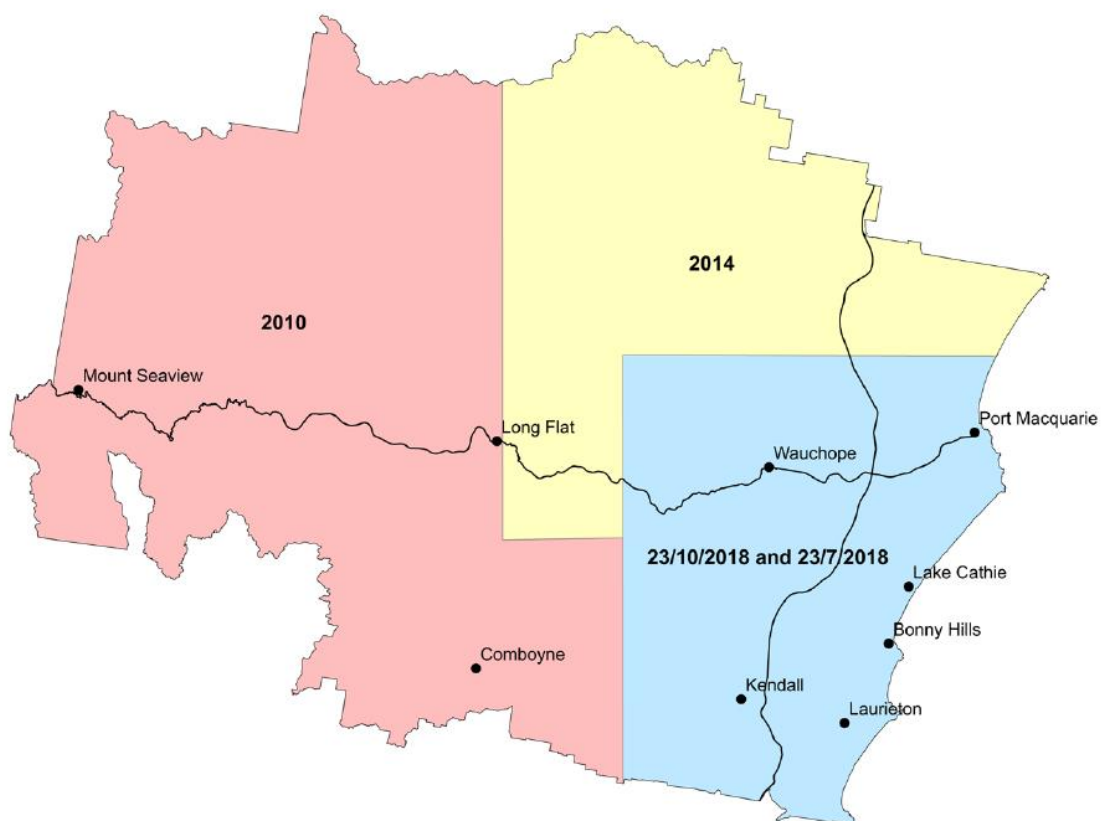
Species	Common Name	Family	Data type
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	Columbidae	SDM
<i>Ptilonorhynchus violaceus</i>	Satin Bowerbird	Ptilonorhynchidae	SDM
<i>Ptiloris paradiseus</i>	Paradise Riflebird	Paradisaeidae	SDM
<i>Rhipidura leucophrys</i>	Willie Wagtail	Rhipiduridae	SDM
<i>Rhipidura rufifrons</i>	Rufous Fantail	Rhipiduridae	SDM
<i>Scythrops novaehollandiae</i>	Channel-billed Cuckoo	Cuculidae	SDM
<i>Sericornis citreogularis</i>	Yellow-throated Scrubwren	Acanthizidae	SDM
<i>Sericornis frontalis</i>	White-browed Scrubwren	Acanthizidae	SDM
<i>Sericornis magnirostra</i>	Large-billed Scrubwren	Acanthizidae	SDM
<i>Sericulus chrysocephalus</i>	Regent Bowerbird	Ptilonorhynchidae	SDM
<i>Smicronis brevirostris</i>	Weebill	Acanthizidae	SDM
<i>Sphecotheres vieillotii</i>	Australasian Figbird	Oriolidae	SDM
<i>Sterna hirundo</i>	Common Tern	Laridae	SDM
<i>Sterna striata</i>	White-fronted Tern	Laridae	SDM
<i>Sternula albifrons</i>	Little Tern	Laridae	SDM
<i>Stipiturus malachurus</i>	Southern Emu-wren	Maluridae	SDM
<i>Symphysichrus trivirgatus</i>	Spectacled Monarch	Monarchidae	SDM
<i>Tachybaptus novaehollandiae</i>	Australasian Grebe	Podicipedidae	SDM
<i>Tadorna tadornoides</i>	Australian Shelduck	Anatidae	SDM
<i>Taeniopygia bichenovii</i>	Double-barred Finch	Estrildidae	SDM
<i>Thalasseus bergii</i>	Crested Tern	Laridae	SDM
<i>Threskiornis molucca</i>	Australian White Ibis	Threskiornithidae	SDM
<i>Threskiornis spinicollis</i>	Straw-necked Ibis	Threskiornithidae	SDM
<i>Todiramphus macleayii</i>	Forest Kingfisher	Alcedinidae	SDM
<i>Todiramphus sanctus</i>	Sacred Kingfisher	Alcedinidae	SDM
<i>Tregellasia capito</i>	Pale-yellow Robin	Petroicidae	SDM
<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet	Psittacidae	SDM
<i>Trichoglossus haematodus</i>	Rainbow Lorikeet	Psittacidae	SDM
<i>Tringa brevipes</i>	Grey-tailed Tattler	Scolopacidae	SDM
<i>Tringa incana</i>	Wandering Tattler	Scolopacidae	points
<i>Tringa nebularia</i>	Common Greenshank	Scolopacidae	SDM
<i>Tringa stagnatilis</i>	Marsh Sandpiper	Scolopacidae	SDM
<i>Turnix varius</i>	Painted Button-quail	Turnicidae	SDM
<i>Tyto javanica</i>	Eastern Barn Owl	Tytonidae	SDM
<i>Tyto longimembris</i>	Eastern Grass Owl	Tytonidae	SDM
<i>Tyto novaehollandiae</i>	Masked Owl	Tytonidae	SDM
<i>Tyto tenebricosa</i>	Sooty Owl	Tytonidae	SDM
<i>Vanellus miles</i>	Masked Lapwing	Charadriidae	SDM
<i>Vanellus tricolor</i>	Banded Lapwing	Charadriidae	SDM
<i>Xenus cinereus</i>	Terek Sandpiper	Scolopacidae	SDM
<i>Zoothera heinei</i>	Russet-tailed Thrush	Turdidae	SDM
<i>Zoothera lunulata</i>	Bassian Thrush	Turdidae	SDM
<i>Acrobates pygmaeus</i>	Feathertail Glider	Acrobatidae	SDM
<i>Aepyprymnus rufescens</i>	Rufous Bettong	Potoroidae	SDM
<i>Antechinus flavipes</i>	Yellow-footed Antechinus	Dasyuridae	SDM

Species	Common Name	Family	Data type
<i>Antechinus stuartii</i>	Brown Antechinus	Dasyuridae	SDM
<i>Antechinus swainsonii</i>	Dusky Antechinus	Dasyuridae	SDM
<i>Cercartetus nanus</i>	Eastern Pygmy-possum	Burramyidae	SDM
<i>Chalinolobus gouldii</i>	Gould's Wattled Bat	Vespertilionidae	SDM
<i>Chalinolobus morio</i>	Chocolate Wattled Bat	Vespertilionidae	SDM
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	Dasyuridae	SDM
<i>Falsistrellus tasmaniensis</i>	Eastern No Pipistrelle	Vespertilionidae	SDM
<i>Hydromys chrysogaster</i>	Water-rat	Muridae	SDM
<i>Isodon macrourus</i>	Northern Brown Bandicoot	Peramelidae	SDM
<i>Kerivoula papuensis</i>	Golden-tipped Bat	Vespertilionidae	SDM
<i>Macropus giganteus</i>	Eastern Grey Kangaroo	Macropodidae	SDM
<i>Macropus parma</i>	Parma Wallaby	Macropodidae	SDM
<i>Macropus robustus</i>	Common Wallaroo	Macropodidae	SDM
<i>Macropus rufogriseus</i>	Red-necked Wallaby	Macropodidae	SDM
<i>Melomys burtoni</i>	Grassland Melomys	Muridae	points
<i>Melomys cervinipes</i>	Fawn-footed Melomys	Muridae	SDM
<i>Miniopterus australis</i>	Little Bentwing-bat	Vespertilionidae	SDM
<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	Vespertilionidae	SDM
<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	Molossidae	SDM
<i>Mormopterus planiceps</i>	Little Mastiff-bat	Molossidae	SDM
<i>Myotis macropus</i>	Southern Myotis	Vespertilionidae	SDM
<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat	Vespertilionidae	SDM
<i>Nyctophilus gouldi</i>	Gould's Long-eared Bat	Vespertilionidae	SDM
<i>Ornithorhynchus anatinus</i>	Platypus	Ornithorhynchidae	SDM
<i>Perameles nasuta</i>	Long-nosed Bandicoot	Peramelidae	SDM
<i>Petauroides volans</i>	Greater Glider	Pseudocheiridae	SDM
<i>Petaurus australis</i>	Yellow-bellied Glider	Petauridae	SDM
<i>Petaurus breviceps</i>	Sugar Glider	Petauridae	SDM
<i>Petaurus norfolcensis</i>	Squirrel Glider	Petauridae	SDM
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	Dasyuridae	SDM
<i>Phascolarctos cinereus</i>	Koala	Phascolarctidae	SDM
<i>Planigale maculata</i>	Common Planigale	Dasyuridae	points
<i>Potorous tridactylus</i>	Long-nosed Potoroo	Potoroidae	SDM
<i>Pseudocheirus peregrinus</i>	Common Ringtail Possum	Pseudocheiridae	SDM
<i>Pseudomys gracilicaudatus</i>	Eastern Chestnut Mouse	Muridae	SDM
<i>Pseudomys oralis</i>	Hastings River Mouse	Muridae	SDM
<i>Pteropus alecto</i>	Black Flying-fox	Pteropodidae	points
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Pteropodidae	SDM
<i>Pteropus scapulatus</i>	Little Red Flying-fox	Pteropodidae	SDM
<i>Rattus fuscipes</i>	Bush Rat	Muridae	SDM
<i>Rattus lutreolus</i>	Swamp Rat	Muridae	SDM
<i>Rhinolophus megaphyllus</i>	Eastern Horseshoe-bat	Rhinolophidae	SDM
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	Emballonuridae	SDM
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	Vespertilionidae	SDM
<i>Scotorepens orion</i>	Eastern Broad-nosed Bat	Vespertilionidae	SDM

Species	Common Name	Family	Data type
<i>Scotorepens sp 1</i>	Central-eastern Broad-nosed Bat	Vespertilionidae	points
<i>Sminthopsis murina</i>	Common Dunnart	Dasyuridae	SDM
<i>Syconycteris australis</i>	Common Blossom-bat	Pteropodidae	SDM
<i>Tadarida australis</i>	White-striped Freetail-bat	Molossidae	SDM
<i>Thylogale stigmatica</i>	Red-legged Pademelon	Macropodidae	SDM
<i>Thylogale thetis</i>	Red-necked Pademelon	Macropodidae	SDM
<i>Trichosurus caninus</i>	Short-eared Possum	Phalangeridae	SDM
<i>Trichosurus vulpecula</i>	Common Brushtail Possum	Phalangeridae	SDM
<i>Vespadelus darlingtoni</i>	Large Forest Bat	Vespertilionidae	SDM
<i>Vespadelus pumilus</i>	Eastern Forest Bat	Vespertilionidae	SDM
<i>Vespadelus regulus</i>	Southern Forest Bat	Vespertilionidae	SDM
<i>Vespadelus troungtoni</i>	Eastern Cave Bat	Vespertilionidae	SDM
<i>Vespadelus vulturinus</i>	Little Forest Bat	Vespertilionidae	SDM
<i>Vombatus ursinus</i>	Common Wombat	Vombatidae	SDM
<i>Wallabia bicolor</i>	Swamp Wallaby	Macropodidae	SDM
<i>Acacia courtii</i>	North Brother Wattle	Fabaceae (Mimosoideae)	SDM
<i>Acronychia littoralis</i>	Scented Acronychia	Rutaceae	points
<i>Allocasuarina defungens</i>	Dwarf Heath Casuarina	Casuarinaceae	SDM
<i>Asperula asthenes</i>	Trailing Woodruff	Rubiaceae	SDM
<i>Chamaesyce psammogeton</i>	Sand Spurge	Euphorbiaceae	points
<i>Cynanchum elegans</i>	White-flowered Wax Plant	Apocynaceae	SDM
<i>Dracophyllum macranthum</i>		Ericaceae	SDM
<i>Hakea archaeoides</i>	Big Nellie Hakea	Proteaceae	SDM
<i>Haloragis exalata subsp. velutina</i>	Tall Velvet Sea-berry	Haloragaceae	points
<i>Hibbertia hexandra</i>	Tree Guinea Flower	Dilleniaceae	points
<i>Hibbertia superans</i>		Dilleniaceae	points
<i>Marsdenia longiloba</i>	Slender Marsdenia	Apocynaceae	points
<i>Maundia triglochinoides</i>		Juncaginaceae	SDM
<i>Melaleuca biconvexa</i>	Biconvex Paperbark	Myrtaceae	SDM
<i>Melaleuca groveana</i>	Grove's Paperbark	Myrtaceae	SDM
<i>Parsonsia dorrigoensis</i>	Milky Silkpod	Apocynaceae	points
<i>Senna acclinis</i>	Rainforest Cassia	Fabaceae (Caesalpinoideae)	SDM
<i>Sophora tomentosa</i>	Silverbush	Fabaceae (Faboideae)	points
<i>Thesium australe</i>	Austral Toadflax	Santalaceae	points
<i>Zieria lasiocaulis</i>	Willi Willi Zieria	Rutaceae	points
<i>Acanthopis antarcticus</i>	Common Death Adder	Elapidae	SDM
<i>Amphibolurus muricatus</i>	Jacky Lizard	Agamidae	SDM
<i>Bellatorias major</i>	Land Mullet	Scincidae	SDM
<i>Boiga irregularis</i>	Brown Tree Snake	Colubridae	points
<i>Cacophis krefftii</i>	Southern Dwarf Crowned Snake	Elapidae	SDM
<i>Cacophis squamulosus</i>	Golden-crowned Snake	Elapidae	SDM
<i>Calyptotis ruficauda</i>	Red-tailed Calyptotis	Scincidae	SDM
<i>Chelodina longicollis</i>	Eastern Snake-necked Turtle	Chelidae	SDM
<i>Cryptophis nigrescens</i>	Eastern Small-eyed Snake	Elapidae	SDM

Species	Common Name	Family	Data type
<i>Ctenotus robustus</i>	Robust Ctenotus	Scincidae	SDM
<i>Ctenotus taeniolatus</i>	Copper-tailed Skink	Scincidae	SDM
<i>Cyclodomorphus gerrardii</i>	Pink-tongued Lizard	Scincidae	SDM
<i>Demansia psammophis</i>	Yellow-faced Whip Snake	Elapidae	SDM
<i>Dendrelaphis punctulatus</i>	Common Tree Snake	Colubridae	SDM
<i>Drysdalia coronoides</i>	White-lipped Snake	Elapidae	points
<i>Egernia cunninghami</i>	Cunningham's Skink	Scincidae	SDM
<i>Egernia mcpheeii</i>	Eastern Crevice Skink	Scincidae	SDM
<i>Egernia striolata</i>	Tree Skink	Scincidae	SDM
<i>Egernia whitii</i>	White's Skink	Scincidae	SDM
<i>Emydura macquarii</i>	Macquarie Turtle	Chelidae	points
<i>Eulamprus heatwolei</i>	Yellow-bellied Water-skink	Scincidae	SDM
<i>Eulamprus kosciuskoi</i>	Alpine Water Skink	Scincidae	SDM
<i>Eulamprus murrayi</i>	Murray's Skink	Scincidae	SDM
<i>Eulamprus quoyii</i>	Eastern Water-skink	Scincidae	SDM
<i>Eulamprus tenuis</i>	Barred-sided Skink	Scincidae	SDM
<i>Hemiaspis signata</i>	Black-bellied Swamp Snake	Elapidae	SDM
<i>Hoplocephalus stephensii</i>	Stephens' Banded Snake	Elapidae	SDM
<i>Hypsilurus spinipes</i>	Southern Angle-headed Dragon	Agamidae	SDM
<i>Lampropholis amicala</i>	Friendly Sunskink	Scincidae	SDM
<i>Lampropholis delicata</i>	Dark-flecked Garden Sunskink	Scincidae	SDM
<i>Lampropholis guichenoti</i>	Pale-flecked Garden Sunskink	Scincidae	SDM
<i>Lialis burtonis</i>	Burton's Snake-lizard	Pygopodidae	points
<i>Morelia spilota</i>	Carpet & Diamond Pythons	Boidae	SDM
<i>Notechis scutatus</i>	Tiger Snake	Elapidae	SDM
<i>Physignathus lesueurii</i>	Eastern Water Dragon	Agamidae	SDM
<i>Pogona barbata</i>	Bearded Dragon	Agamidae	SDM
<i>Pseudechis porphyriacus</i>	Red-bellied Black Snake	Elapidae	SDM
<i>Pseudonaja textilis</i>	Eastern Brown Snake	Elapidae	SDM
<i>Pygopus lepidopus</i>	Common Scaly-foot	Pygopodidae	SDM
<i>Ramphotyphlops nigrescens</i>	Blackish Blind Snake	Typhlopidae	SDM
<i>Rankinia diemensis</i>	Mountain Dragon	Agamidae	SDM
<i>Saiphos equalis</i>	Three-toed Skink	Scincidae	SDM
<i>Saltuarius swaini</i>	Southern Leaf-tailed Gecko	Gekkonidae	SDM
<i>Saproscincus challengeri</i>	Orange-tailed Shadenskink	Scincidae	SDM
<i>Saproscincus mustelinus</i>	Weasel Skink	Scincidae	SDM
<i>Saproscincus rosei</i>	Orange-tailed Shadenskink	Scincidae	SDM
<i>Tiliqua scincoides</i>	Eastern Blue-tongue	Scincidae	SDM
<i>Tropidechis carinatus</i>	Rough-scaled Snake	Elapidae	points
<i>Varanus varius</i>	Lace Monitor	Varanidae	SDM
<i>Vermicella annulata</i>	Bandy-bandy	Elapidae	points

Appendix F. Near Map extents



Appendix G. Vegetation types removed from GAP CLoSR woody vegetation model

GAP CLoSR software considers connectivity for species reliant on woody vegetation only, that is, **trees and shrubs**. As such, some vegetation communities were excluded from the Woody vegetation/No woody vegetation layer, either because they did not support large trees or shrubs, or because they did have trees or shrubs but had a very wet understorey impermeable to many terrestrial animals. This was done by overlaying the Woody vegetation/No woody vegetation layer with CRAFTI vegetation mapping and Port Macquarie Vegetation Communities and cutting some vegetation communities out.

The table below shows vegetation removed from the GAP CLoSR woody vegetation model. CRAFTI Vegetation Mapping was overlaid with the Woody vegetation/No woody vegetation layer and the following vegetation classes were removed.

Wetlands	'Baumea arthropphylla', 'Baumea articulata', 'Baumea articulata Typha ientalis', 'Baumea juncea', 'Baumea juncea Juncus kraussii ssp australiensis', 'Baumea juncea Phragmites australis', 'Baumea juncea Saltmarsh complex' 'Baumea rubiginosa'
	'Baumea rubiginosa Typha ientalis'
	'Blechnum indicum' 'Cladium procerum Baumea juncea' 'Eleocharis equisetina' 'Estuarine complex' 'FT231 Bog and Fen' 'Juncus kraussii ssp australiensis' 'Juncus kraussii ssp australiensis Phragmites australis' 'Lepironia articulata', 'Lepironia articulata Typha ientalis' 'Phragmites australis'
	'Sedgeland' 'Sedgeland ~ Natural Fest Stands'
Cleared land	'Beach sand, mobile sand'
Grasslands	'FT230 Natural Grassland', 'Headland complex', 'Foredune complex', 'Improved Pasture and Cropland' 'Natural Grassland' 'P Pasture non native species' 'Themeda australis'
Seagrass	'Halophila sp', 'Zostera sp'
Water	'Open water'
Saltmarsh	'Saltbush' 'Saltmarsh Communities' 'Saltmarsh complex' 'Sarcocnia quinquefla ssp quinquefla-Spobolus virginicus' 'Sarcocnia quinquefla ssp quinquefla-Spobolus virginicus Juncus kraussii ssp australiensis' 'Sm Saltmarsh'

Appendix H. Examples of species and GAP CLoSR parameters

Species for which the model parameters generally work	
Common Death Adder	<i>Acanthophis antarcticus</i>
Southern Angle-headed Dragon	<i>Hypsilurus spinipes</i>
Varied Sittella	<i>Daphoenositta chrysoptera</i>
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>
Dusky Antechinus	<i>Antechinus swainsonii</i>
Grassland Melomys	<i>Melomys burtoni</i>
Long-nosed Potoroo	<i>Potorous tridactylus</i>
Squirrel Glider	<i>Petaurus norfolcensis</i>

Species for which the modelled patch size is too small (unless a compartment has multiple patches operating together to provide the species with sufficient home range area)	
Masked Owl	<i>Tyto novaehollandiae</i>
Powerful Owl	<i>Ninox strenua</i>
Sooty Owl	<i>Tyto tenebricosa</i>
Southern Boobook	<i>Ninox novaeseelandiae</i>
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>
Koala	<i>Phascolarctos cinereus</i>
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>
Yellow-bellied Glider	<i>Petaurus australis</i>

Species for which the gap crossing distance is too large	
Orange-tailed Shadeskink	<i>Saproscincus rosei</i>
Three-toed Skink	<i>Saiphos equalis</i>
Southern Leaf-tailed Gecko	<i>Saltuarius swaini</i>
Pale-yellow Robin	<i>Tregellasia capito</i>
Logrunner	<i>Orthonyx temminckii</i>
Eastern Pygmy Possum	<i>Cercartetus nanus</i>
Feathertail Glider	<i>Acrobates pygmaeus</i>
Swamp Rat	<i>Rattus lutreolus</i>

Species for which the model is too restrictive (the landscape is more connected than indicated)	
Australian Hobby	<i>Falco longipennis</i>
Musk Lorikeet	<i>Glossopsitta concinna</i>
Spotted Harrier	<i>Circus assimilis</i>
Spangled Drongo	<i>Dicrurus bracteatus</i>
Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>
Wompoo Fruit-Dove	<i>Ptilinopus magnificus</i>
Chocolate Wattled Bat	<i>Chalinolobus morio</i>
Large Forest Bat	<i>Vespadelus darlingtoni</i>

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The Expert Panel included people with a diversity and wealth of experience, including knowledge of specific taxa.

- Bill Peel (Ecologist and Botanist)
- Peter West (Ornithologist)
- Steve Phillips (Ecologist)
- Jason Berrigan (Ecologist)
- Cheyne Flannagan (Ecologist and Supervisor of the Port Macquarie Koala Hospital)
- Mark Drury (Ecologist, North Coast Forestry Corporation)
- Mathew Bailey (Restoration Ecologist, Bolwarra Environmental Services)
- Michael Eddie (Soil Scientist, ex-NSW Soil Conservation Service)
- Mike Dodkin (Soil Scientist, ex-Office of Environment and Heritage).
- Andrew Marshall (Ranger, National Parks and Wildlife Service)
- John Turbill (Ecosystems and Threatened Species Officer, Office of Environment and Heritage)

Community Panel:

The Community Panel included people with a diversity of backgrounds and interests.

- Bev Sibthorpe / Ken Aplin / Patrick McEntee (rotating members representing Pappinbarra Valley Landholders Conservation Group)
- Bill Peel (representing Port Macquarie Landcare and Friends of Kooloonbung Nature Reserve)
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- John Edward Jeayes (North Coast Environment Council)
- Alex Statzenko / Lindy Brown (North Coast Local Land Services)
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- Michelle Love (Love Project Management representing the development industry)
- Roger Barlow (President, Bonny Hills Progress Association)
- Sally Stutsel (Environmental Scientist, Camden Haven).

BIODIVERSITY MANAGEMENT STRATEGY

2019–2030

A strategy to conserve the biodiversity
of the Port Macquarie-Hastings LGA





Kooloonbung Creek
Flying-fox Camp Management Plan
Final
Adopted by Council June 2019

PORT MACQUARIE-HASTINGS COUNCIL



ecology / vegetation / wildlife / aquatic ecology / GIS



Acknowledgements

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Acronyms and abbreviations

ABLV	Australian bat lyssavirus
BAM	Biodiversity Assessment Method
BC Act	<i>Biodiversity Conservation Act 2016</i> (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	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
FKCNP	Friends of Kooloonbung Creek Nature Park
GHFF	Grey-headed flying-fox (<i>Pteropus poliocephalus</i>)
the Guideline	Referral guideline for management actions in grey-headed and spectacled flying-fox camps 2015 (Commonwealth)
HeV	Hendra virus
KCPoM	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 (<i>Pteropus scapulatus</i>)
MNES	Matters of national environmental significance
NFFMP	National flying-fox monitoring program



NPW Act	<i>National Parks and Wildlife Act 1974 (NSW)</i>
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	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
the Policy	Flying-fox Camp Management Policy 2015 (NSW)
SEPPs	State Environmental Planning Policies
SIS	Species impact statement
TEC	Threatened ecological community
V	Vulnerable



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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



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



- 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.



Figure 1: Camp locations in Port Macquarie-Hastings Council

Port Macquarie-Hastings Council
Kooloonbung Creek CMP

- ▲ Nationally important
- ▲ Active
- ▲ Inactive
- Local Government Area



Job number: PR3995
Revision: 0
Author: KF
Date: 23/11/2018



0 1 2 4
Kilometers

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Meter

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

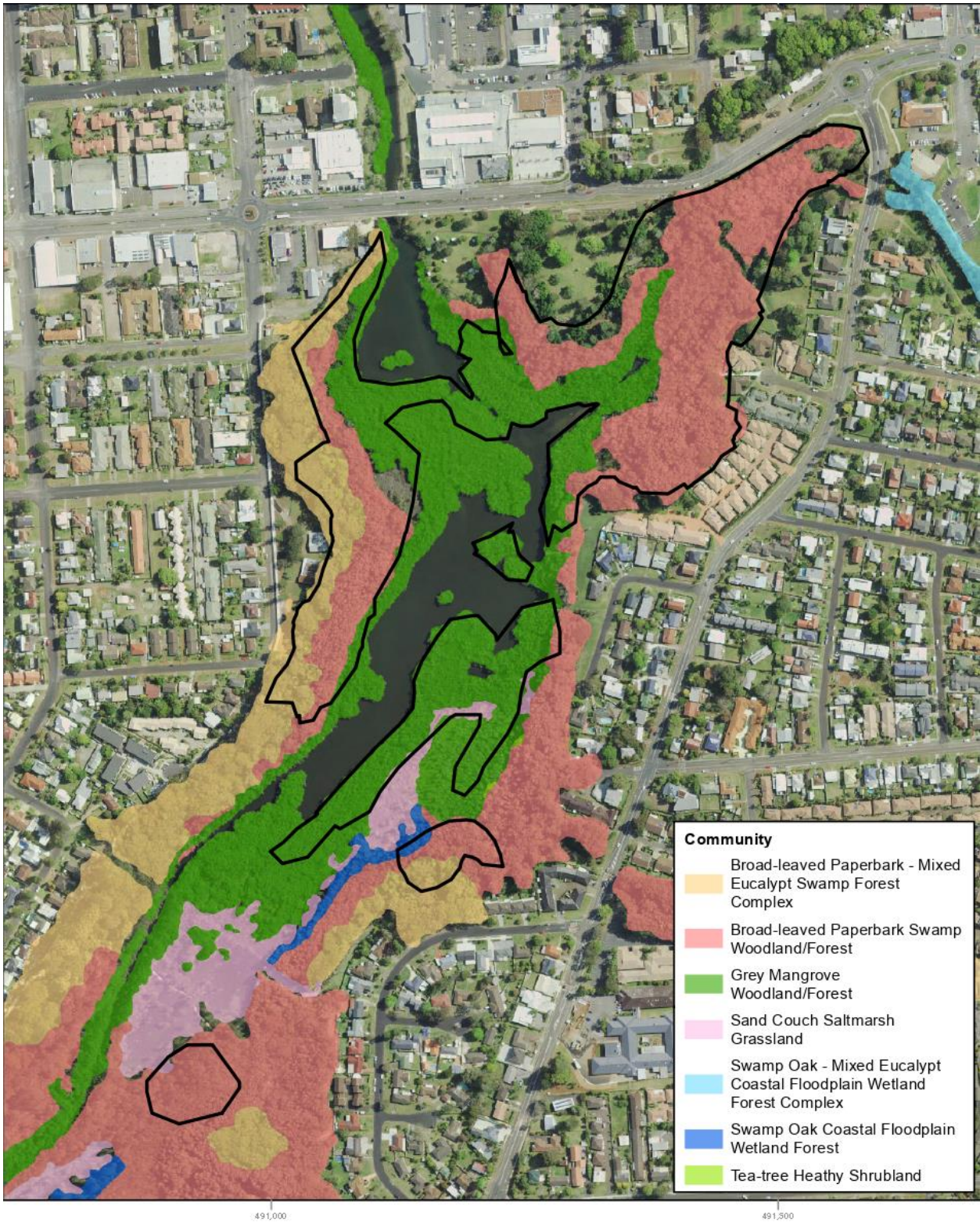


Figure 5: Vegetation communities

Maximum camp extent

Port Macquarie-Hastings Council
Kooloonbung Creek CMP



Job number: PR3995
Revision: 0
Author: KF
Date: 26/11/2018



0 25 50 100
Metres

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Meter



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

A large number of pups on mothers was observed during the November site assessment by



Figure 8 GHFF resting in camp

Ecosure (Figure 8). The area occupied by flying-foxes 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.



Figure 9 Vegetation overhanging property boundaries

Figure 10 Hollingworth street acts as a buffer from roosting flying-foxes in the Park.



Figure 11: Kooloonbung maximum camp extent
2018)

Port Macquarie-Hastings Council

Kooloonbung Creek CMP



- Camp extent (November 2018)
- Maximum camp extent
- Property boundary

Job number: PR3995
Revision: 0
Author: KF
Date: 26/11/2018



0 25 50 100
Metres

GCS GDA 1994
Datum: GDA 1994
Units: Degree

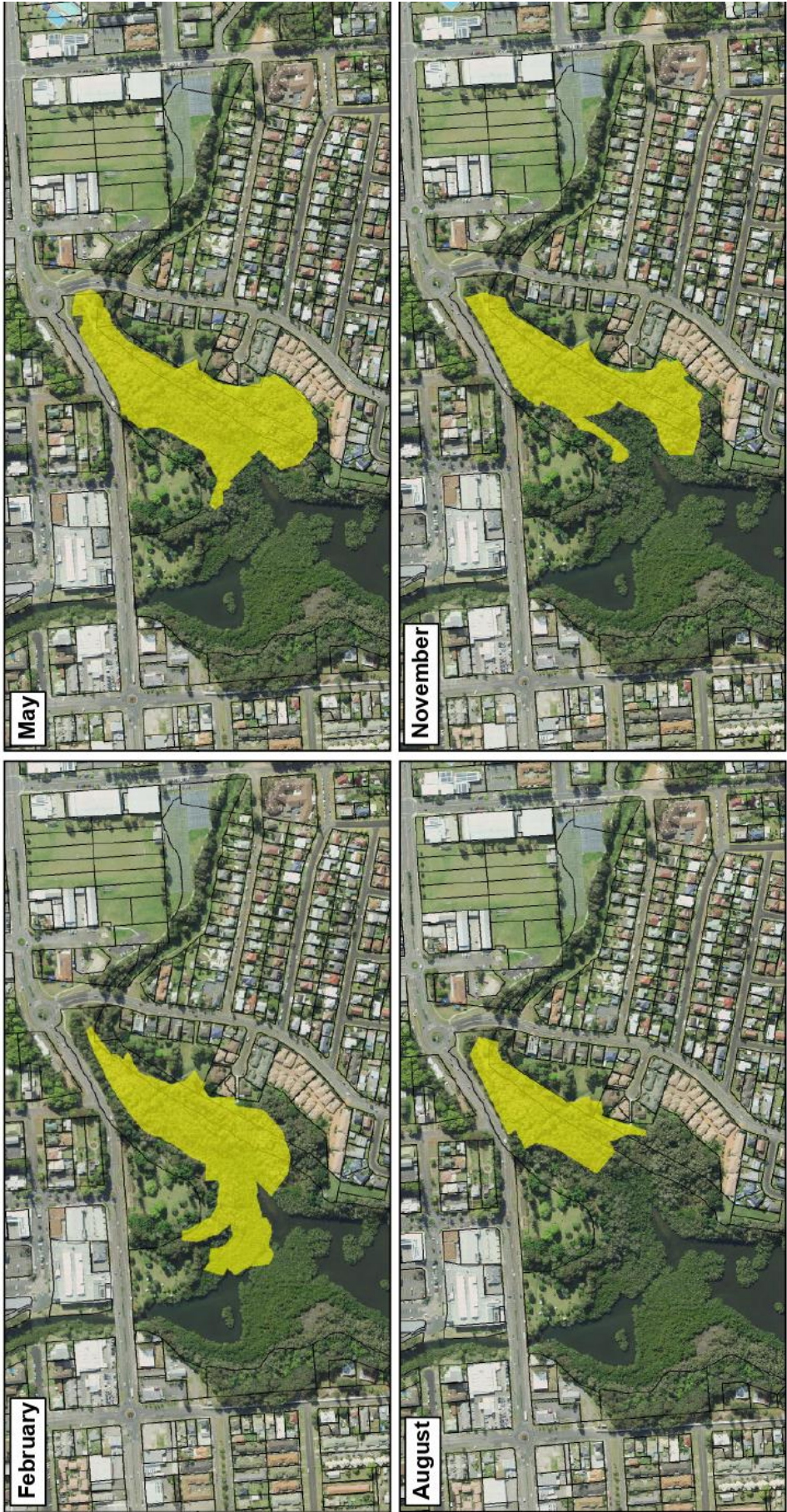


Figure 12: Seasonal camp extents 2015-2018

Port Macquarie-Hastings Council
Kooloonbung Creek CMP



Job number: PR3995
Revision: 0
Author: J. Smith
Date: 29/11/2018



0 100 200 300
metres

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: MGA
Units: Metre

Printed: 29/11/2018 14:00:00. Plot: 1 of 1. P:\GIS\Projects\Kooloonbung Creek CMP\Map 12 - Seasonal Camp Extents 2015-2018.mxd



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 extent. Lot and plans are mapped in Section 2.1.

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

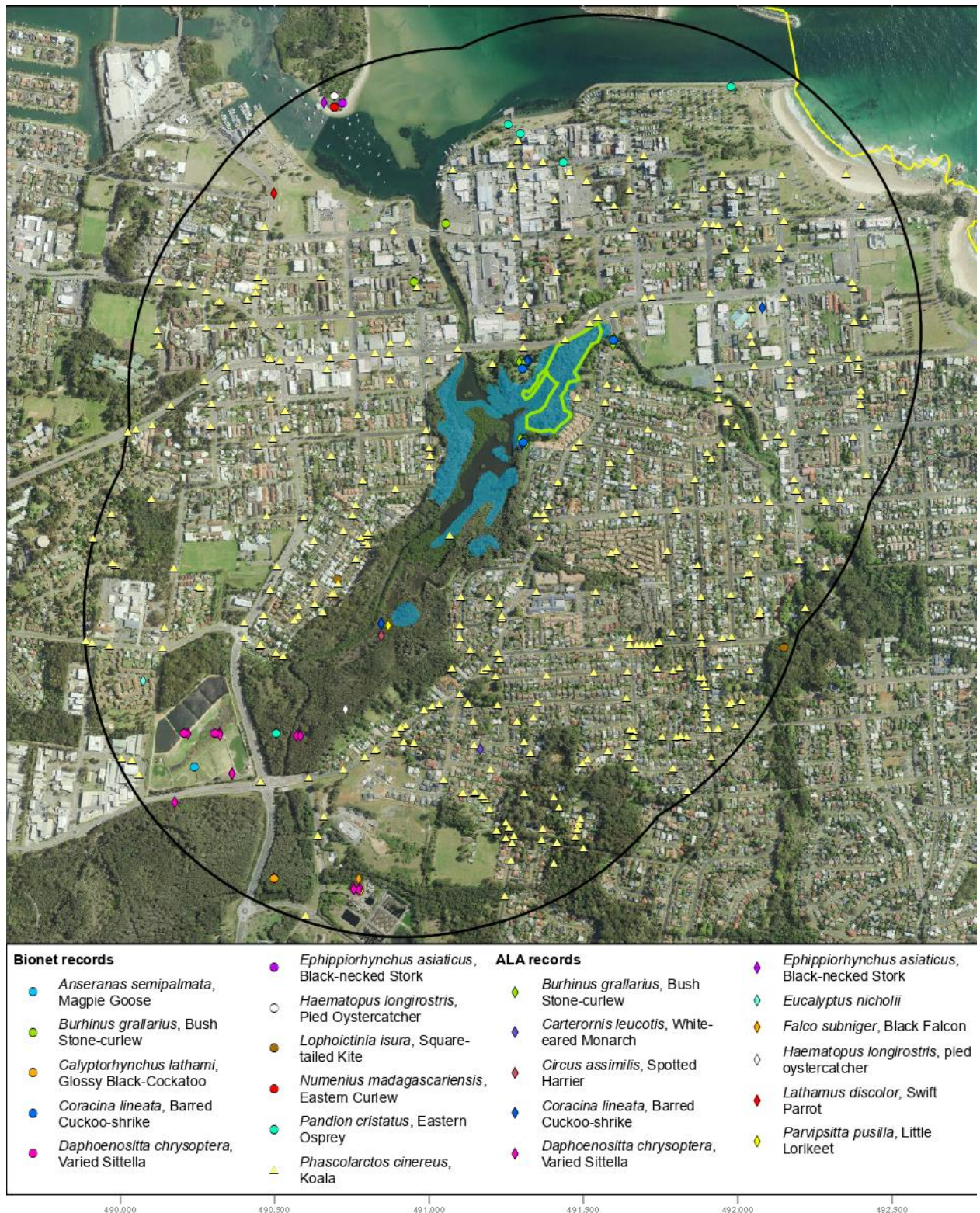
Thirty-three threatened species are known to occur or have been recorded within 1 km of Kooloonbung Creek camp (Table 2) (Figure 13). Migratory and marine species found within the area have been excluded from this list but are provided in Appendix 3. The Park also contains five threatened plant communities; 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).



Table 2 Other ecological values known to occur or recorded within 1km of the camp

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 thalassoscopia</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 (<i>Anseranas semipalmata</i>) (V) Bush Stone-Curlew (<i>Burhinus grallarius</i>) (E) Glossy Black Cockatoo (<i>Calyptorhynchus lathami</i>) (V) White-eared Monarch (<i>Carterornis leucotis</i>) (V) Spotted Harrier (<i>Circus assimilis</i>) (V) Barred Cuckoo-shrike (<i>Coracina lineata</i>) (V) Varied Sittella (<i>Daphoenositta chrysoptera</i>) (V) Black-necked Stork (<i>Ephippiorhynchus asiaticus</i>) (E) Black Falcon (<i>Falco subniger</i>) (V) Pied Oystercatcher (<i>Haematopus longirostris</i>) (V) Swift Parrot (<i>Lathamus discolor</i>) (E) Square-tailed Kite (<i>Lophoictinia isura</i>) (V) Eastern Curlew (<i>Numenius madagascariensis</i>) (CE) Eastern Osprey (<i>Pandion cristatus</i>) (V) Little Lorikeet (<i>Parvipsitta pusilla</i>) (V) Koala (<i>Phascolarctos cinereus</i>) (V) Eucalyptus nicholii (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 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>Melaleuca biconvexa</i>) (V)	10 species identified in the park (not recorded in database searches)

[^] listing status: CE – Critically Endangered, EN – Endangered, VU – Vulnerable

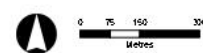
**Figure 13: Bionet threatened species records**

Port Macquarie-Hastings Council
Kooloonbung Creek CMP

- 1 km buffer
- Camp extent (November 2018)
- Maximum camp extent



Job number: PR3995
Revision: 1
Author: KF
Date: 30/1/2019



GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Metre

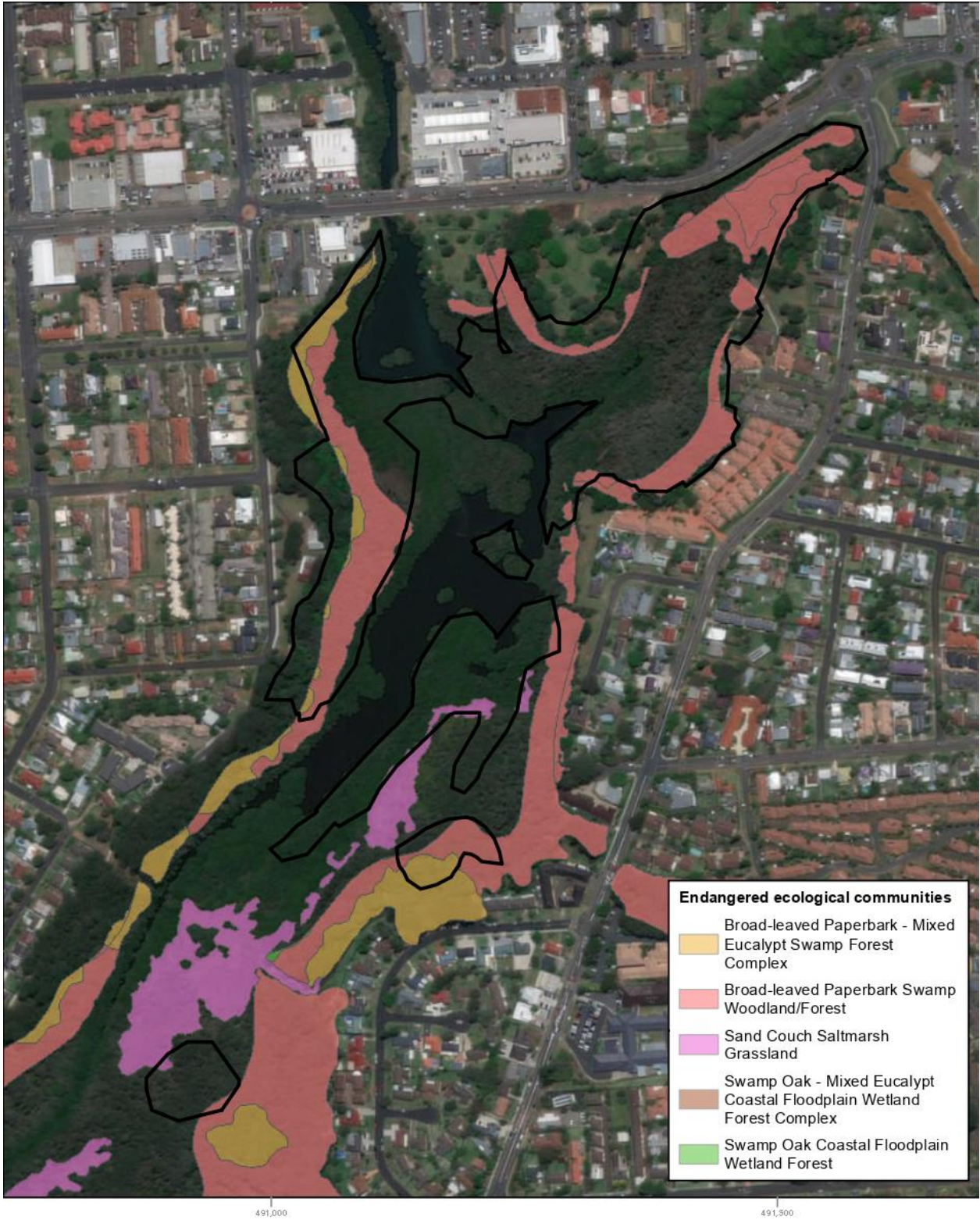


Figure 14: Endangered ecological communities

Maximum camp extent

Port Macquarie-Hastings Council
Kooloonbung Creek CMP



Job number: PR.3995
Revision: 0
Author: SR
Date: 26/11/2018



0 25 50 100
Metres

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Metre



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.

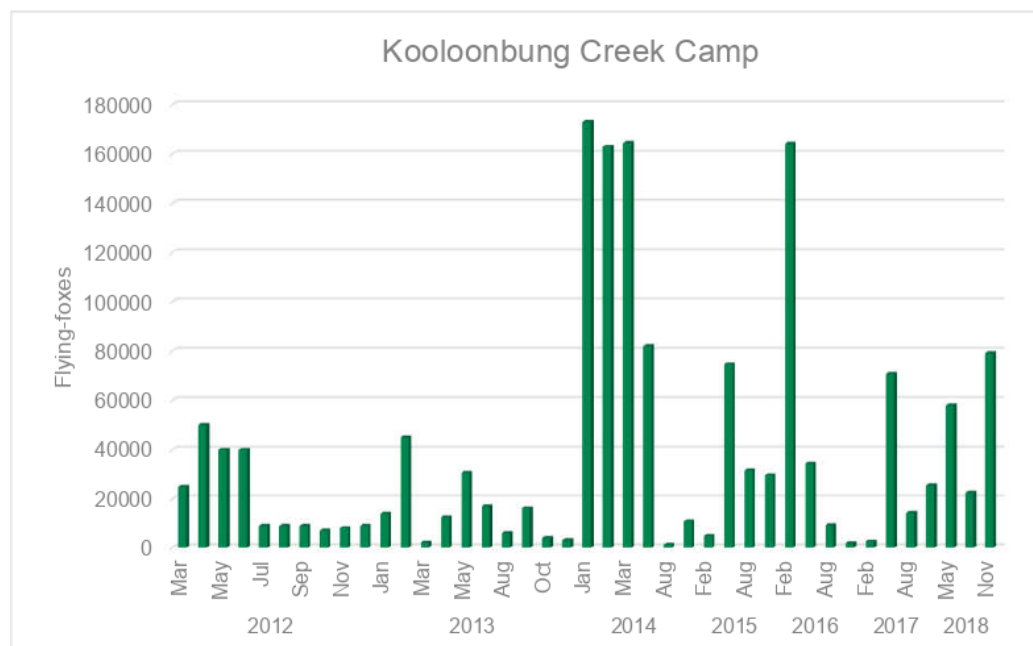


Figure 15 Numbers of flying-foxes at Kooloonbung Creek camp (Source: OEH 2017; PMHC 2018). Count methods are consistent with those described in Westcott et al. 2011.



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.

Table 3 Sensitive receptors surrounding the camp

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

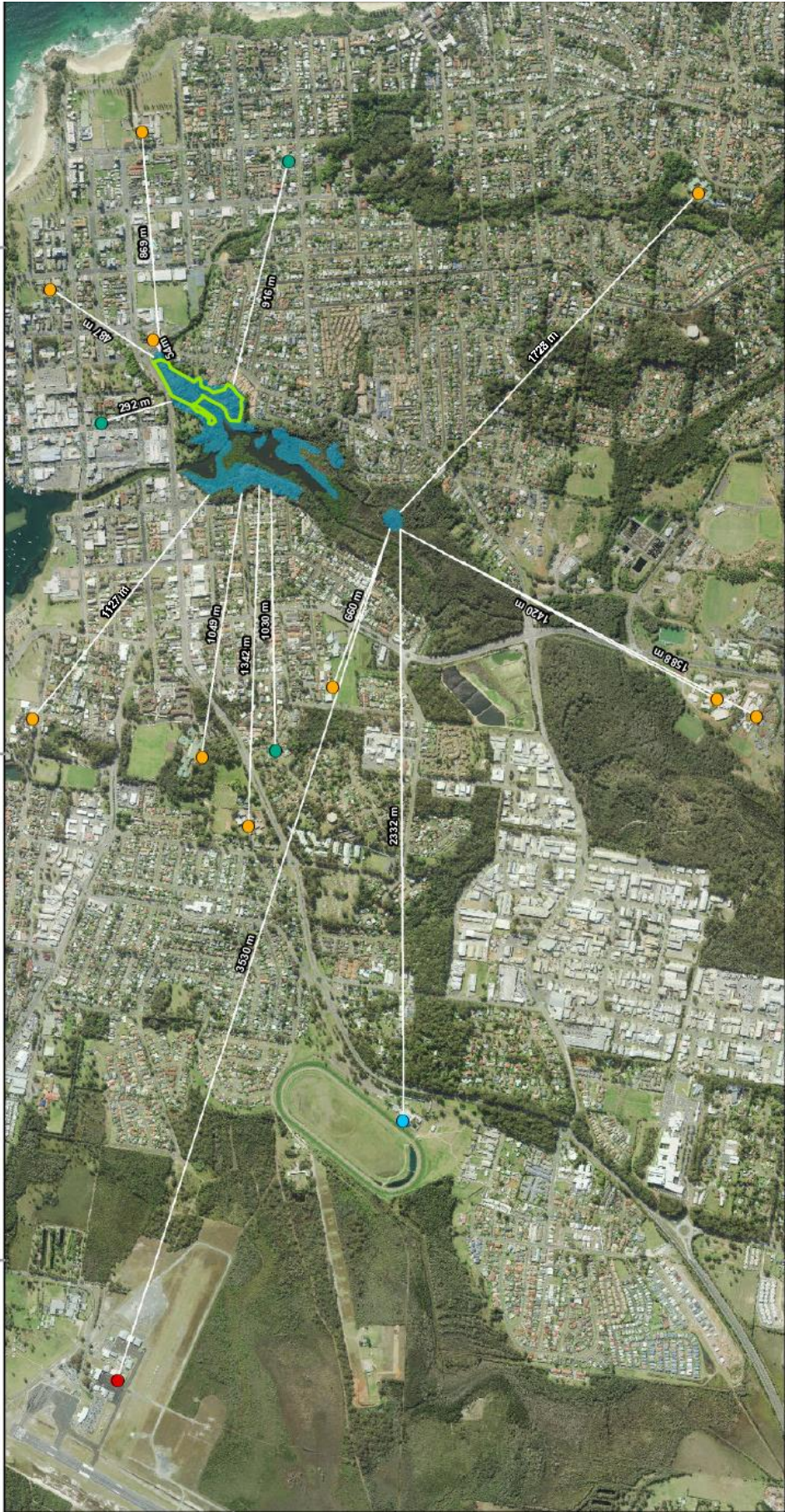


Figure 16: Sensitive receptors

Port Macquarie-Hastings Council
Kooloonbung Creek CMP



Job number: PR3995
Revision: 0
Author: J. Smith
Date: 26/11/2018



Scale: 1:1000
0 250 500 1000
Metres

GDA 1994 MGA Zone 56
Projection: Transverse
Mercator
Units: Metre



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.jst	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.



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?



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



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.

Table 5 Stakeholders of Kooloonbung Creek camp

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: <ul style="list-style-type: none"> · 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 medicinal 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 legislation relating to matters of national environmental significance, such as the grey-headed flying-fox which roosts at 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 an 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.



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).

Table 6 Community engagement methods

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	TBA

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.



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 Prioritise', '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.



Figure 20: Community impact area

Port Macquarie-Hastings Council
Kooloonbung Creek CMP

- Maximum camp extent
- Impacted resident 1
- Impacted resident 2
- Impacted resident 3
- Impacted resident 4



Job number: PR3995
Revision: 0
Author: KF
Date: 27/11/2018



0 25 50 100
Metres

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Metre



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 flying-foxes, 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 flying-fox 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/semi-permanent 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.).



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



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.

Table 7 Camp management options analysis

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	\$	Low cost, increasing awareness will help the community coexist with flying-foxes, providing options for landholders to reduce impacts is an effective long-term solution and can be undertaken quickly.	Education and advice itself will not mitigate all issues, and on its own would not be acceptable to the community.	Early consultation indicates the community is in favour of a range of educational tools and methods. 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	\$-\$	Property modification is one of the most effective ways to reduce amenity impacts of a camp without dispersal, relatively low cost, promotes conservation of FFs, can be undertaken quickly, will not impact on the site and may add value to the property. Property modification, such as glazing windows or installing insulation, will greatly assist with noise impacts inside residences and businesses. Installing shade sails, a car port or covering other affected areas will reduce the impacts of faecal drop.	May be cost-prohibitive for private landholders, however subsidies would assist.	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.

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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	\$	Planting dense screens and fragrant plants to assist with odour and noise. Provide for the trimming of vegetation to maintain a low growing form. Tall trees to be assessed and modified only by a suitably qualified arborist.	May take time for plants to provide the desired effect. May not work effectively for residents located immediately next to the camp but would assist for residents living in the vicinity of the reserve	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.	Will not generally mitigate amenity impacts for nearby landholders.	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	\$\$-\$\$\$	If successful in attracting FFs away from high conflict areas, dedicated habitat in low conflict areas will mitigate all impacts and helps FF conservation. Rehabilitation of degraded habitat that is likely to be suitable for FF use could be a more practical and faster approach than habitat creation. Improving potential alternative camp habitat should be part of a medium-long term plan.	Generally costly, long-term 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



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	\$-\$\$	Artificial roosting habitat could be considered to supplement the narrow available roosting space between the wetland and residential properties	No guarantee that flying-foxes would use artificial habitat, but collaborating with a researcher on varying design options would increase the likelihood of success.	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.	Will not mitigate amenity impacts, 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. Appraisal: Investigate further
Research	Noise Smell Faecal drop Health/wellbeing Property devaluation Lost rental return	\$	Support research that improve understanding and more effectively mitigates impacts. Develop understanding of native flowering event in area.	Generally cannot be undertaken quickly, management trials may require cost input.	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



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.	Will not generally mitigate current 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	\$-\$\$	Any vegetation removal should be done 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. Asset protection zones provide a buffering function in other areas of the Kooloonbung Creek where residents have not indicated high levels of impact.	Removing vegetation can also 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 inadvertent dispersal.	TEC vegetation in KCNP also is protected by coastal SEPP. Biodiversity Values mapped will require a Biodiversity Development Assessment Report in accordance with a Biodiversity Assessment Method. Further assessment and offsetting of this vegetation may not bring the intended mitigation and should be investigated further. Appraisal: Investigate further
Buffers without vegetation removal – canopy-mounted	Noise Smell Health/wellbeing	\$\$	Canopy-mounted water sprinklers – This method has been effective in deterring flying-foxes from designated buffer zones in Queensland (Ecosure pers. comm.).	This option can be logistically difficult regarding installation and water sourcing. Could alter design using flagpole structures. Would	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

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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).	Noise attenuation fencing is costly and can be considered unsightly for property fencing. Concerns regarding permeability of the landscape for animal movement particularly koalas. Area is also subject to some flooding	The committee did not show preference for this method. Appraisal: Disregard
Level 3 options					
Nudging	All	\$\$-\$\$\$	Can encourage flying-foxes to shift away from high conflict areas next to residential areas.	May lead to inadvertent dispersal if not done at the correct time, frequency or duration.	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.	Dispersal is rarely successful without significant vegetation removal (not appropriate at this location) or ongoing effort and excessive expenditure (e.g. several years and \$1M for Sydney Botanic Gardens). Flying-foxes will almost always continue to roost in the area (generally within 600m), and often splinter into several locations nearby (including many remaining at the original site) (e.g. a single camp	This option is not considered appropriate at this site. Appraisal: Disregard



Management options	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*.



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



- 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 Kooloonbung 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 canopy-mounted 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 awareness programs	Level 1	Adopt	Increase community understanding and improve perceptions of flying-foxes.	Short term (within 12 months)	\$4,000
			<ul style="list-style-type: none">· mail out flyers; disease risk; removal of non-natives in gardens (i.e. Cocos palms), removal of barbed wire fencing, using wildlife friendly netting		\$2,000
			<ul style="list-style-type: none">· produce webpage on Council's website summarising Council's approach to flying-fox management (or refer to sites such as http://littleaussiebat.com.au/healthy/)		\$10,000
			<ul style="list-style-type: none">· design and install signage promoting flying-fox ecology and conservation· train staff on positive flying-fox messaging		\$2,000
			Continue to consult with affected community members.		\$18,000
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 parameters	Short term (within 12 months)	
			<ul style="list-style-type: none">· location of flying-fox camp· proximity to residential areas· level of likely impacts from noise, odour, visibility		\$20,000
			Rebates/subsidies will be offered for		\$5,000
			<ul style="list-style-type: none">· water or electricity bills· double glazed windows· cleaning services· car covers		\$25,000
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



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.	(within 12 months)	\$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



Management option	Management level	Appraisal	Action(s)	Timing	Estimated cost
			Measures to avoid future impacts will be considered when assessing development applications.		



Figure 22: Community impact area and proposed management options

Port Macquarie-Hastings Council
Kooloonbung Creek CMP

- | | | |
|---------------------|---------------|---------------------------------------|
| Sprinkler | Impact area 1 | Optional tree thinning/removal - 10 m |
| Maximum camp extent | Impact area 2 | Subsidy area |
| | Impact area 3 | |
| | Impact area 4 | |



Job number: PR.3995
Revision: 1
Author: KF
Date: 4/01/2019



0 25 50 100
Metres

GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
Units: Metre



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.



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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.*



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.



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 $\geq 10,000$ 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.



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).

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.

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



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



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	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
GHFF												
BFF												
LRFF												

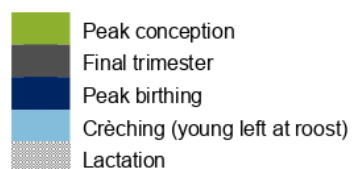


Figure 26 Indicative flying-fox reproductive cycle.

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.



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 (Snayman 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).



Appendix 3 Protected Matters



Australian Government
Department of the Environment and Energy

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 [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 16/11/18 16:27:53

[Summary](#)

[Details](#)

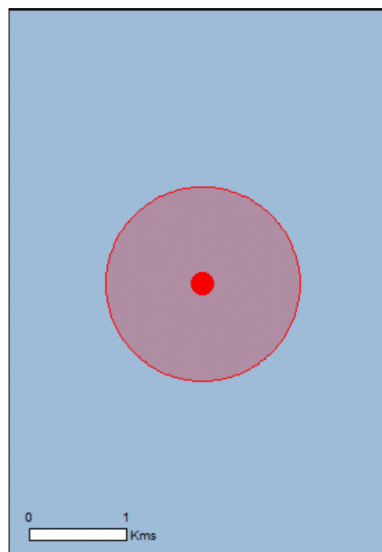
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

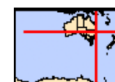
[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

Buffer: 1.0Km



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 [permit](#) 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
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information

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.

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 Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

<u>Diomedea sanfordi</u>		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<u>Erythrotriorchis radiatus</u>		
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
<u>Limosa lapponica menzbieri</u>		
Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
<u>Macronectes giganteus</u>		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<u>Macronectes halli</u>		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<u>Numenius madagascariensis</u>		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
<u>Pachyptila turtur subantarctica</u>		
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
<u>Thalassarche bulleri platei</u>		
Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area
<u>Thalassarche cauta cauta</u>		
Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
<u>Thalassarche cauta steadi</u>		
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
<u>Thalassarche impavida</u>		
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<u>Thalassarche melanophris</u>		
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
Fish		

Epinephelus daemeli		
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 population)		
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
Phascogale carolinensis (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
Allocasuarina thalassoscopia		
[21927]	Endangered	Species or species habitat known to occur within area
Cryptostylis hunteriana		
Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area
Euphrasia arguta		
[4325]	Critically Endangered	Species or species habitat may occur within area
Macadamia integrifolia		
Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat may occur within area
Melaleuca biconvexa		
Biconvex Paperbark [5583]	Vulnerable	Species or species habitat may occur within area
Phaius australis		
Lesser Swamp-orchid [5872]	Endangered	Species or species habitat may occur within area

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
Thesium australe		
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
Caretta caretta		
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas		
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
Eretmochelys imbricata		
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 on the EPBC Act - Threatened Species list.		
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		
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
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
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
Sternula albifrons		
Little Tern [82849]		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
Thalassarche eremita		
Chatham Albatross [64457]	Endangered	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 related behaviour likely to occur within area
Thalassarche steadi		
White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Caretta caretta		
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas		
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
Eretmochelys imbricata		
Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area
Lamna nasus		
Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
Manta alfredi		
Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris		
Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Natator depressus		
Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area

<u>Sousa chinensis</u>		
Indo-Pacific Humpback Dolphin [50]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
<u>Cuculus optatus</u>		
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
<u>Monarcha melanopsis</u>		
Black-faced Monarch [609]		Species or species habitat known to occur within area
<u>Monarcha trivirgatus</u>		
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
<u>Rhipidura rufifrons</u>		
Rufous Fantail [592]		Species or species habitat known to occur within area
Migratory Wetlands Species		
<u>Actitis hypoleucos</u>		
Common Sandpiper [59309]		Species or species habitat known to occur within area
<u>Arenaria interpres</u>		
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
<u>Calidris ferruginea</u>		
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
<u>Calidris ruficollis</u>		
Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area
<u>Charadrius bicinctus</u>		
Double-banded Plover [895]		Foraging, feeding or related behaviour known to occur within area
<u>Charadrius mongolus</u>		
Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area
<u>Gallinago hardwickii</u>		
Latham's Snipe, Japanese Snipe [863]		Foraging, feeding or related behaviour may occur within area
<u>Gallinago megala</u>		
Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely

		to occur within area
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area
Limosa lapponica 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
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area
Numenius phaeopus Whimbrel [849]		Foraging, feeding or related 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 Grey-tailed Tattler [851]		Foraging, feeding or related behaviour known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Xenus cinereus Terek Sandpiper [59300]		Foraging, feeding or related 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 scientific name on the EPBC Act - Threatened Species list.	
Name	Threatened
Birds	Type of Presence

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

Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat known to occur within area
Ardea ibis 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
Calidris acuminata Sharp-tailed Sandpiper [874]		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
Calidris melanotos 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 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 Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea gibsoni Gibson's Albatross [64466]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area

<u>Fregata ariel</u>			
Lesser Frigatebird, Least Frigatebird [1012]			Species or species habitat known to occur within area
<u>Fregata minor</u>			
Great Frigatebird, Greater Frigatebird [1013]			Species or species habitat likely to occur within area
<u>Gallinago hardwickii</u>			
Latham's Snipe, Japanese Snipe [863]			Foraging, feeding or related behaviour may occur within area
<u>Gallinago megala</u>			
Swinhoe's Snipe [864]			Foraging, feeding or related behaviour likely to occur within area
<u>Gallinago stenura</u>			
Pin-tailed Snipe [841]			Foraging, feeding or related behaviour likely to occur within area
<u>Haliaeetus leucogaster</u>			
White-bellied Sea-Eagle [943]			Species or species habitat known to occur within area
<u>Heteroscelus brevipes</u>			
Grey-tailed Tattler [59311]			Foraging, feeding or related behaviour known to occur within area
<u>Hirundapus caudacutus</u>			
White-throated Needletail [682]			Species or species habitat known to occur within area
<u>Limosa lapponica</u>			
Bar-tailed Godwit [844]			Species or species habitat known to occur within area
<u>Macronectes giganteus</u>			
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered		Species or species habitat may occur within area
<u>Macronectes halli</u>			
Northern Giant Petrel [1061]	Vulnerable		Species or species habitat may occur within area
<u>Merops ornatus</u>			
Rainbow Bee-eater [670]			Species or species habitat may occur within area
<u>Monarcha melanopsis</u>			
Black-faced Monarch [609]			Species or species habitat known to occur within area
<u>Monarcha trivirgatus</u>			
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
<u>Numenius madagascariensis</u>			
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
<u>Numenius phaeopus</u>			
Whimbrel [849]			Foraging, feeding or related behaviour known to occur within area

Birds		
Pachyptila turtur Fairy Prion [1066]		Species or species habitat 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
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
Sterna albifrons Little 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
Thalassarche eremita Chatham Albatross [64457]	Endangered	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 related behaviour likely to occur within area
Thalassarche sp. nov. Pacific Albatross [66511]	Vulnerable*	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Xenus cinereus Terek Sandpiper [59300]		Foraging, feeding or related behaviour known to occur within area
Mammals		
Dugong dugon Dugong [28]		Species or species habitat may occur within area
Reptiles		

Caretta caretta		
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas		
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
Eretmochelys imbricata		
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
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 included.		
Name	State	
North East NSW RFA	New South Wales	
Invasive Species		[Resource Information
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 Resources 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 likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia		
Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata		
Nutmeg Mannikin [399]		Species or species habitat likely to occur

	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
Rattus rattus Black Rat, Ship Rat [84]	Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]	Species or species habitat likely to occur within area
Plants	
Alternanthera philoxeroides Alligator Weed [11620]	Species or species habitat likely to occur within area
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

Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425] Asparagus plumosus Climbing Asparagus-fern [48993]	Species or species habitat likely to occur within area Species or species habitat likely to occur within area
Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171] Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]	Species or species habitat likely to occur within area 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
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]	Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]	Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large- leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]	Species or species habitat likely to occur within area 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 Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]	Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]	Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]	Species or species habitat likely to occur within area

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

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.

Please feel free to provide feedback via the [Contact Us](#) page.

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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



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 flying-foxes 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).

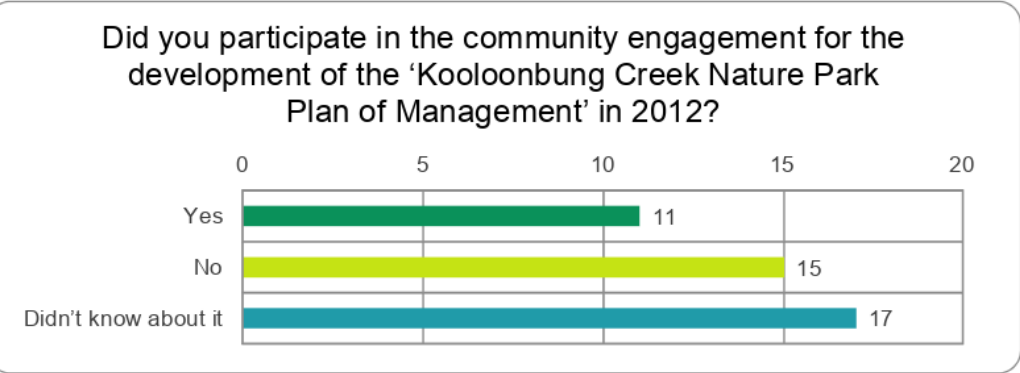


Figure 27 Responses regarding participation in the development of ‘Kooloonbung Creek Nature Park Plan of Management’ in 2012

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).

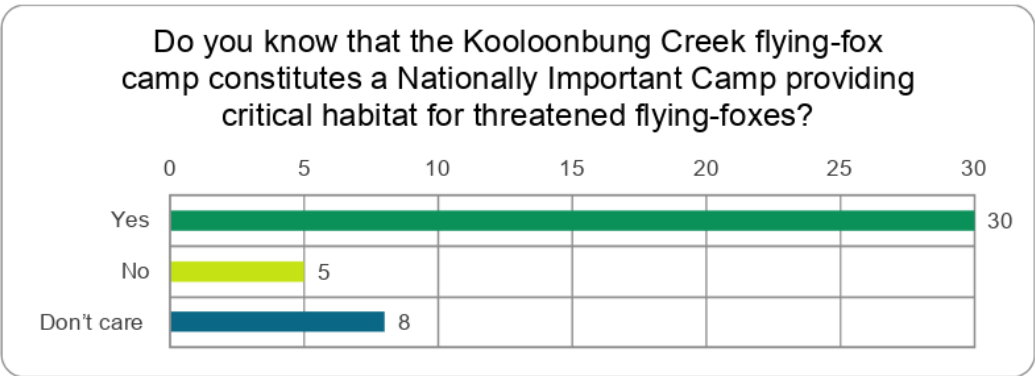


Figure 28 Knowledge of the classification of the camp as a Nationally Important Camp

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).

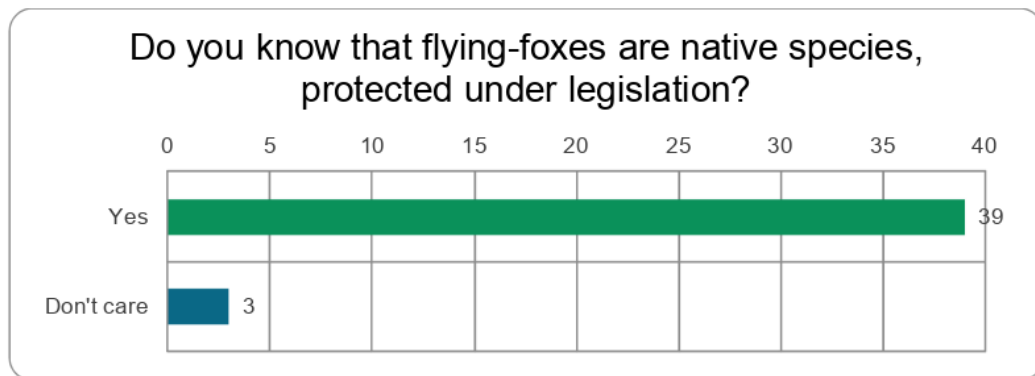


Figure 29 Knowledge of the status of flying-foxes

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.

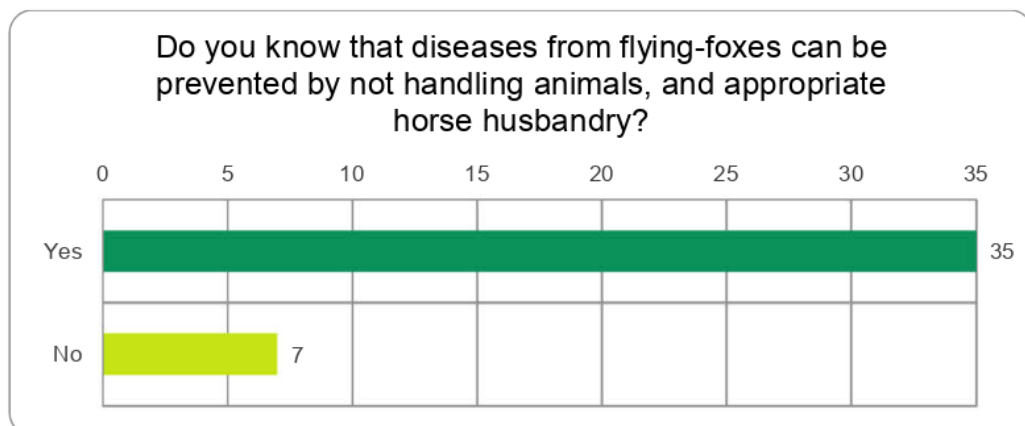


Figure 30 Disease from flying-foxes

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).

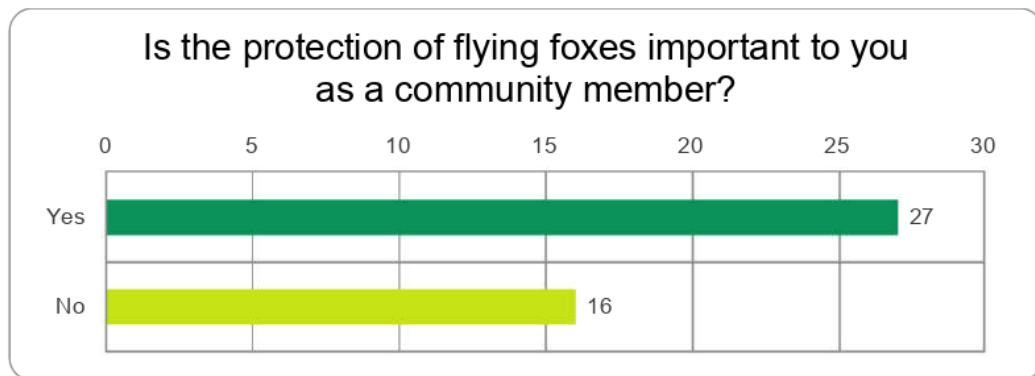


Figure 31 Protection of flying-foxes

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).

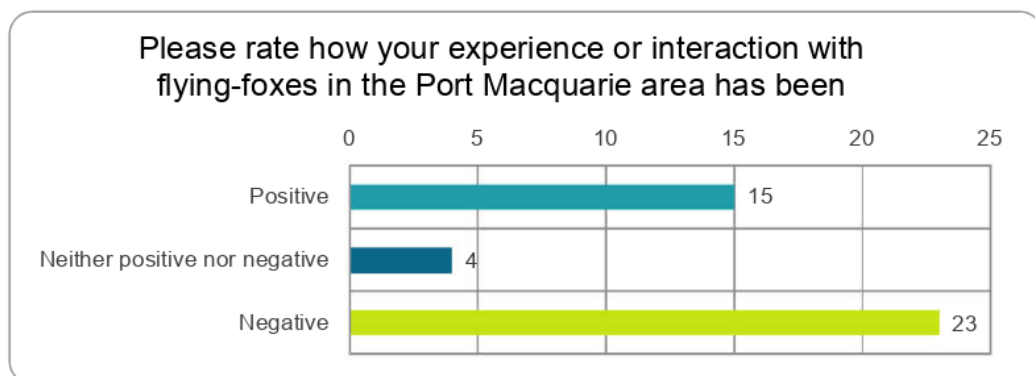


Figure 32 Experience with flying-foxes

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.

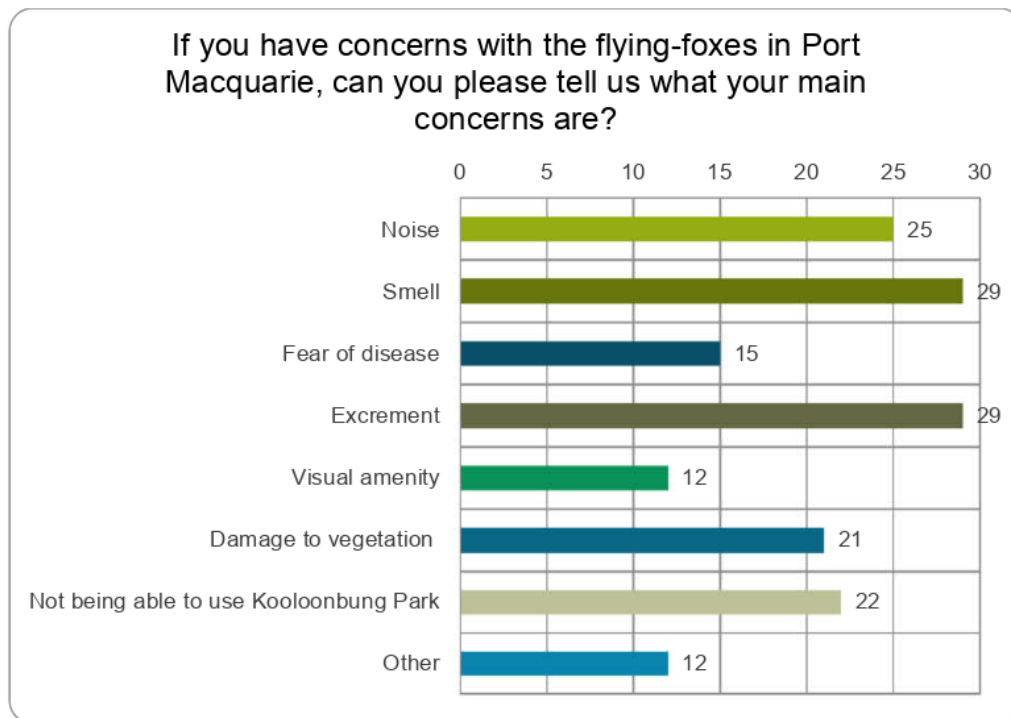


Figure 33 Main concerns about flying-foxes

In relation to costs associated with any management actions, the majority of respondents answered that it 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).

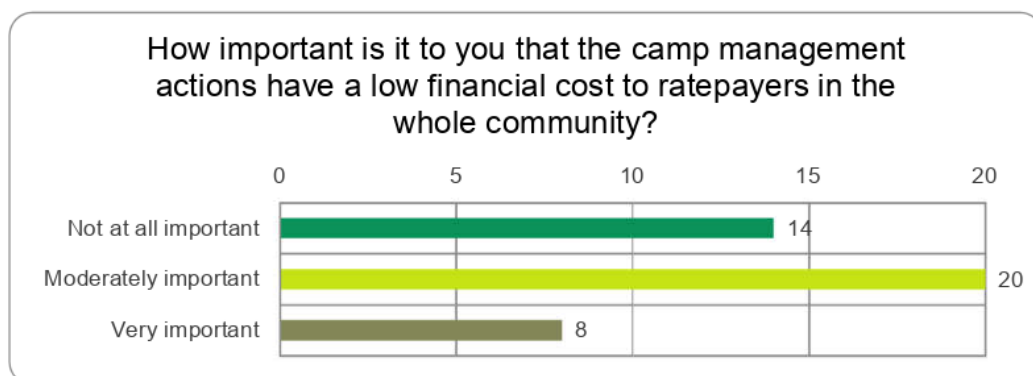


Figure 34 Financial impacts to ratepayers

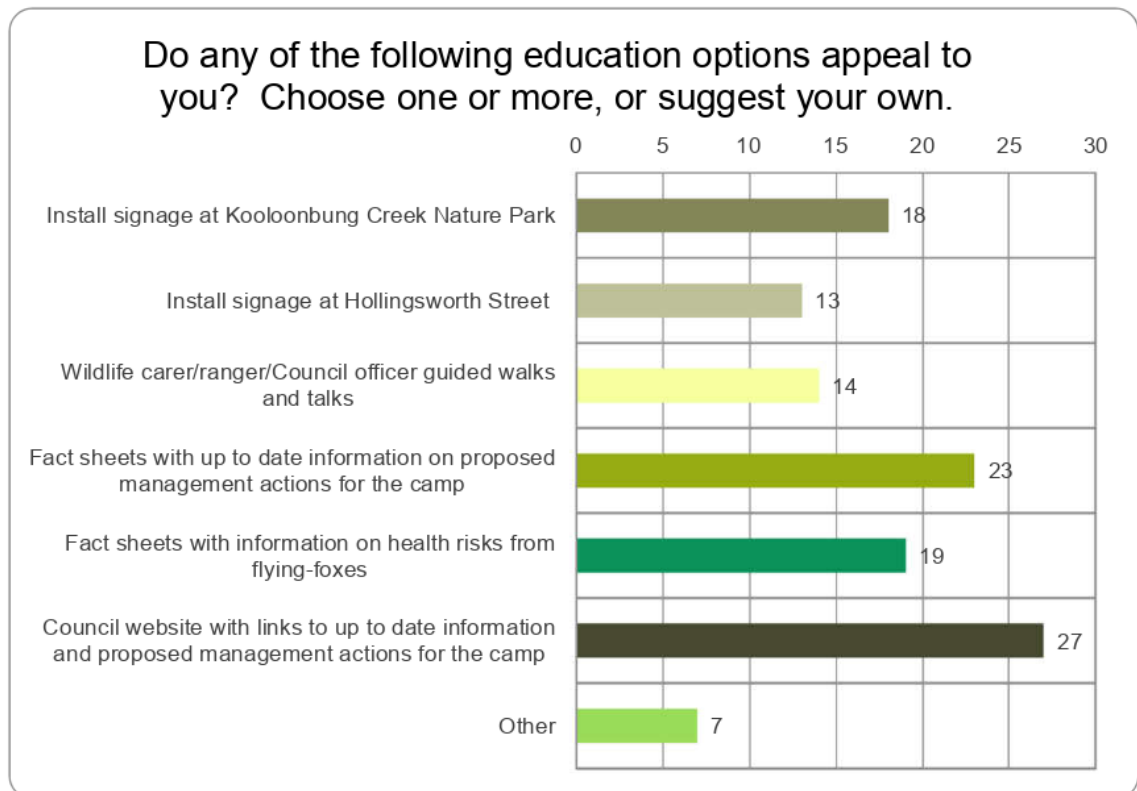


Figure 35 Educational options

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'.

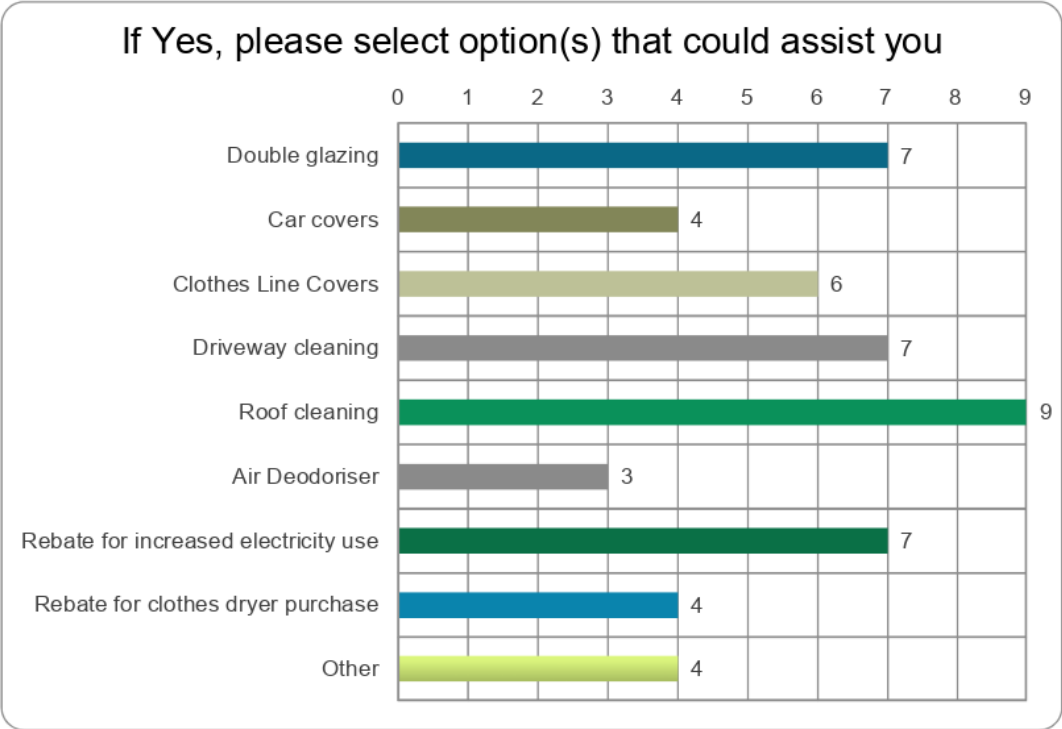


Figure 36 Management options to assist

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.

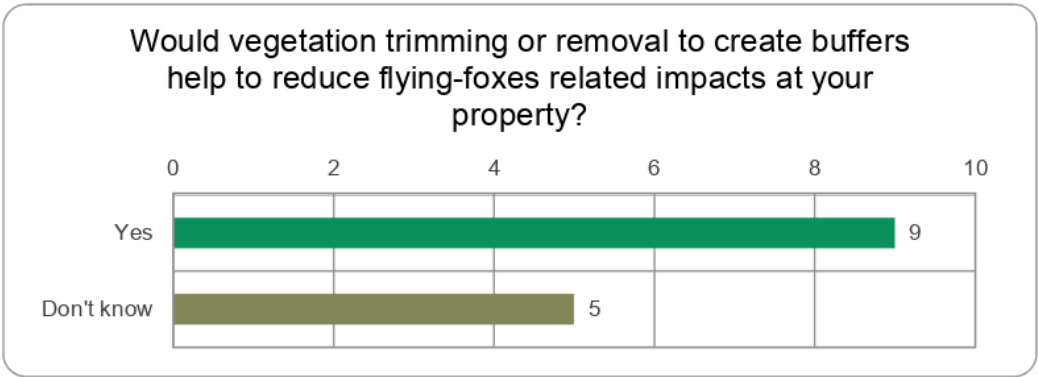


Figure 37 Buffer creation to reduce flying-fox related impacts

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".

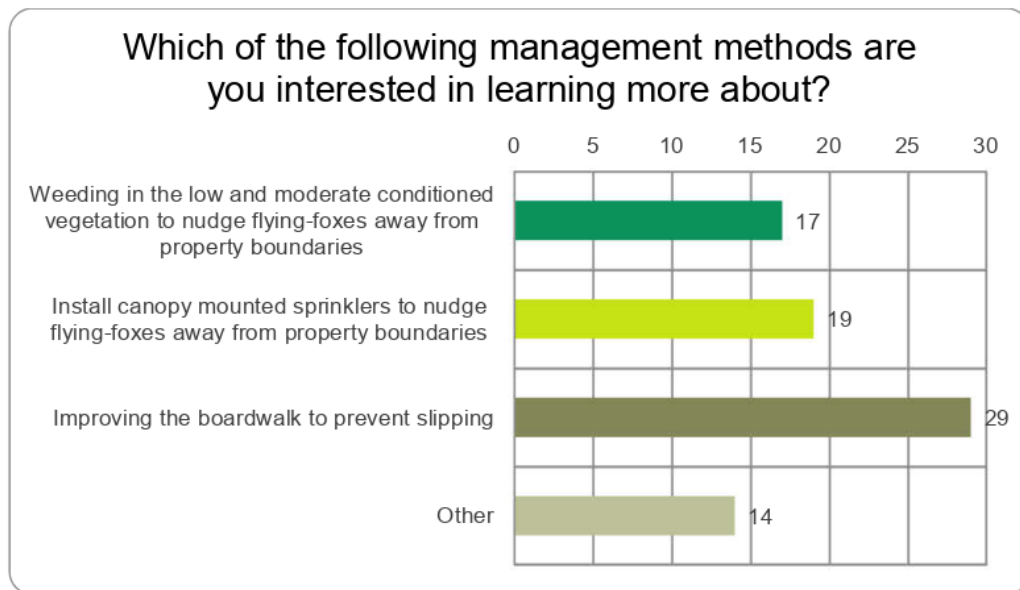


Figure 39 Management options that participants are interested in learning

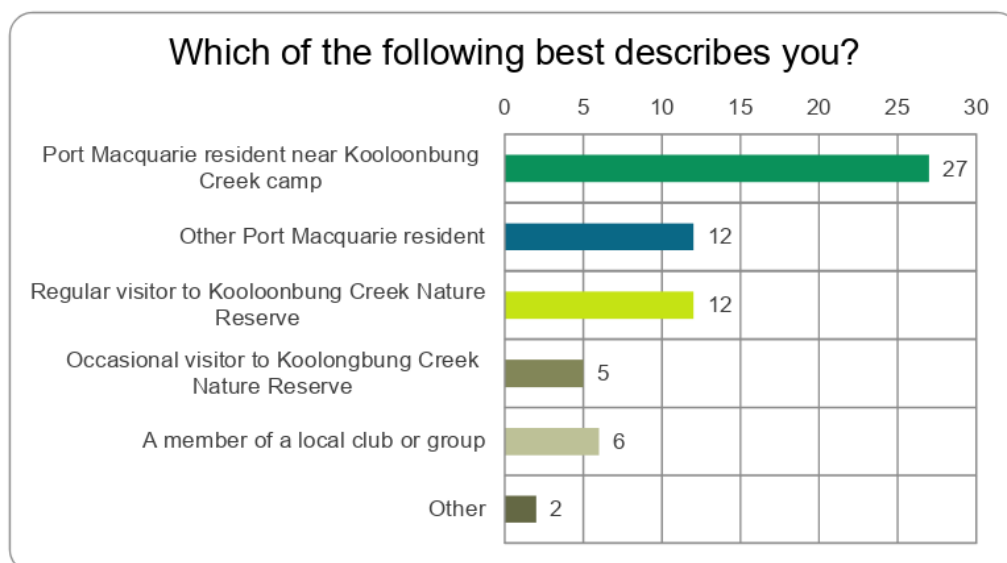


Figure 38 Survey distribution.

'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.



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	<i>"Just get rid of the problem".</i>
Remove flying-fox	<i>"NONE - get rid of them. All of these management options cost money and don't solve the problem".</i>
Remove flying-fox	<i>"Rebates for water, double glazing, etc. I want population reduced and none of the options listed will achieve that".</i>
Remove flying-fox	<i>"Weeding - can't see how this helps unless it involves removal of future roosting & paper bark tree seedlings".</i>
Remove flying-fox	<i>"I would to have them removed as the smell is repulsive".</i>
Remove flying-fox	<i>"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".</i>
Remove flying-fox	<i>"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 world...We don't need to axe the rain forest the bats execute the demise effortlessly".</i>
Remove flying-fox	<i>"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".</i>
Remove flying-fox	<i>"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".</i>
Remove flying-fox / cull	<i>"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".</i>
Remove flying-fox / cull	<i>"Don't see how it will work as the smell and flying foxes will still be there with the above options".</i>
Remove flying-fox / cull	<i>"Remove them completely. Thats it - get them out of there".</i>
Remove flying-fox / cull	<i>"No.... none of these address the real issue. Management is not on my agenda! Eradication is.... is is feasible and achievable!".</i>
Management method	<i>"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"</i>
Management method	<i>"Sprinklers - water costs money".</i>
Management method	<i>"Canopy-mounted sprinklers sounds like it would require a lot of infrastructure to be</i>



Response type	Respondents comments
	<i>installed, this may be expensive and require vegetation to be removed or disturbed".</i>
Management method	<i>"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"</i>
Management method	<i>"FKCNP are already involved with the other management methods listed above".</i>

Table 10 Further comments to survey from participants

Theme	Respondents comment
Relocate flying-fox	<i>"Relocate them to a nonresidential or recreational area if possible".</i>
Relocate flying-fox	<i>"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".</i>
Relocate flying-fox	<i>"I want Council \$ spent on reducing population of FFs in KCR, not on education or writing management reports with no tangible outcomes".</i>
Relocate flying-fox	<i>"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!"</i>
Relocate flying-fox	<i>"I am sure the bats will move on to another site when it suits them, when is another question".</i>
Relocate flying-fox	<i>"Please do something urgently, they have moved and settled into our area in the last 12 months"!!</i>
Relocate flying-fox	<i>"GET RID OF THEM!!!!!! WE WANT OUR ENVIRONMENT BACK SO WE CAN USE IT AND BE SAFE".</i>
Relocate flying-fox	<i>"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".</i>
Engagement process	<i>"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.</i>



Theme	Respondents comment
	<i>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".</i>
Engagement process	<i>"Proof read your surveys before sending them out! Too repetitive".</i>
Engagement process / relocate flying-fox	<i>"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".</i>
Park closure	<i>"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".</i>
Health problems	<i>"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..... Word gets around".</i>
Flying-fox advocate	<i>"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".</i>
Flying-fox advocate	<i>"if people had the opportunity to interact like the koala hospital they would realise there is more to them then the smell".</i>
Flying-fox advocate	<i>"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".</i>
Flying-fox advocate	<i>"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".</i>
Flying-fox advocate	<i>"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".</i>
Support for reserve	<i>"Please save the Reserve....it is unique to Port Macquarie and should be available for all to enjoy".</i>



Theme	Respondents comment
Support for education	<i>"I applaud the educational approach adopted by the council, education is the best option to work with people who live in the area".</i>
Support for education	<i>"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 really 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 a lot 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".</i>
Support for education	<i>"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".</i>
Council responsiveness	<p><i>"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.</i></p> <p><i>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.</i></p> <p><i>3 - Intending to seek funding from the State Government, without mentioning in this survey, the relevance of the State Government's Code seems odd.</i></p> <p><i>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.</i></p> <p><i>5 - Engaging and educating community members is inadequate where it relates only to some input and little after that.</i></p> <p><i>Council should commit to:</i> <i>informing the community of decisions taken;</i> <i>planned actions and timeframes;</i> <i>performance measures</i> <i>and the results of the actions. A considered management plan could do this.</i></p> <p><i>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".</i></p>
Council responsiveness	<i>"I encourage Council to effectively deal with this problem in the near future as residents, particularly those close to Kooloonbung Creek, have suffered the effects for far too long".</i>
Council responsiveness	<i>"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".</i>
Council responsiveness	<p><i>"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 if you wish, contact me if you need any clarification on my thoughts.</i></p> <p><i>Thank you for the opportunity</i></p>



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 non-breeding 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.



- Works will be postponed on days predicted to exceed 35°C (or ideally 30°C), and for one day following a day that reached $\geq 35^{\circ}\text{C}$. 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 flying-foxes 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 flying-fox 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.



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: <ul style="list-style-type: none"> - panting - saliva spreading - located on or within 2 m of the ground 	Works to cease for the day.
Fatigue	In-situ management <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - A flying-fox appears to have been injured/killed on site (including aborted fetuses) - dependent/crèche 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.



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
		<i>Kooloonbung Friends educate at schools</i>		
		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 <ul style="list-style-type: none"> - Information on council website - Advice on tree trimming Medium – signage at Kooloonbung Creek <ul style="list-style-type: none"> - 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 Advice on tree trimming or removal	Signage in Kooloonbung Fact sheets on flying-fox disease risk information on council website wildlife educator at schools or clubs	
			Signage already there	



Level	Theme	Actions to prioritise	Actions to disregard	How or where to implement
			Signage not required	
			Wildlife educator	
	Property acquisition	priority		
		✓✓		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 Ocean Drive – mostly paperbark 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 sound 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		
		Subsidies 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



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 within 5 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	



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



Revision 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, Principal Wildlife Biologist	
01	04/01/2018	PR3995 Kooloonbung Creek Camp Management Plan.DR2	Emily Hatfield, Senior Wildlife Biologist	Julie Whelan, Senior Environmental Scientist	
02	06/03/2019	PR3995 Kooloonbung Creek Camp Management Plan.DR3	Emily Hatfield, Senior Wildlife Biologist	Jess Bracks, Principal Wildlife Biologist	
03	22/03/2019	PR3995 Kooloonbung Creek Camp Management Plan.DR4	Emily Hatfield, Senior Wildlife Biologist	Jess Bracks, Principal Wildlife Biologist	

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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

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File Ref. No: BFS19/2109
TRIM Ref. No: D19/51603
Contact: Conor Hackett

5 August 2019

General Manager
Port Macquarie-Hastings Council
PO Box 84
PORT MACQUARIE NSW 2444

Email: council@pmhc.nsw.gov.au

Attention: Manager Compliance/Fire Safety

Dear Sir / Madam

**Re: INSPECTION REPORT
BAGO TAVERN
235 HIGH ST, WAUCHOPE ("the premises")**

Pursuant to the provisions of Section 9.32(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), an inspection of 'the premises' on 22 June 2019 was conducted by Authorised Fire Officers from the Fire Safety Compliance Unit of Fire and Rescue NSW (FRNSW). The inspection was also conducted in the company of Officers from the NSW Police Force.

The inspection was limited to the following:

- A visual inspection of the essential Fire Safety Measures as identified in this report only.
- A conceptual overview of the building, where an inspection had been conducted without copies of the development consent or copies of the approved floor plans.

On behalf of the Commissioner of FRNSW, the following comments are provided for your information in accordance with Section 9.32(4) and Schedule 5, Part 8, Section 17(1) of the EP&A Act. Please be advised that Schedule 5, Part 8, Section 17(2) requires any report or recommendation from the Commissioner of FRNSW to be tabled at a Council meeting.

Fire and Rescue NSW

ABN 12 593 473 110

www.fire.nsw.gov.au

Community Safety Directorate
Fire Safety Compliance Unit

1 Amarina Ave
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COMMENTS

This report is limited to observations and sections of the building accessed at the time of the inspection. As such, this report lists potential deviations from the National Construction Code 2019 Building Code of Australia (NCC). Please be advised that whilst the report is not an exhaustive list of non-compliances, the items as listed may relate to the building's age or contradict development consent approval. In this regard, it is at council's discretion as the appropriate regulatory authority to consider the most appropriate action and determine whether an investigation is required.

The following items were identified as concerns during the inspection:

1. Essential Fire Safety Measures

- 1A. Annual Fire Safety Statement (AFSS) – Clause 181(1)(c) of the Environmental Planning and Assessment Regulation 2000 requires each essential and critical measure to be identified in the statement. A Fire Hose Reel was noted on the premises and not listed as a fire safety measure on the statement. An inspection and a review of council's records may be required.

2. Access & Egress

- 2A. Discharge from exits – The following comments are based on observations at the time. In this regard, council as the appropriate regulatory authority may need to review its records and consider the most appropriate action:
- A. Slide bolts and a deadlock were installed to the final exit doors from the main restaurant seating area, contrary to the requirements of Clause 184 and Clause 186 of the EP&A Regulation.
 - B. The final exit door adjacent to the disabled toilet, contained a deadbolt which is capable of being locked with a key as well as a tulip style handle, contrary to the requirements of Clause D2.21 of the NCC. Furthermore, the door swings against the direction of egress, contrary to the requirements of Clause D2.20 of the NCC.
 - C. The exit door from the tavern, contained a deadbolt which is capable of being locked with a key, contrary to the requirements of Clause D2.21 of the NCC.

FRNSW is therefore of the opinion that there are inadequate provisions for fire safety within the building.

RECOMMENDATIONS

FRNSW recommends that Council:

Inspect and address any other deficiencies identified on 'the premises', and require item no. 1 through to item no. 2 of this report be addressed appropriately.

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This matter is referred to Council as the appropriate regulatory authority. FRNSW therefore awaits Council's advice regarding its determination in accordance with Schedule 5, Part 8, Section 17(4) of the EP&A Act.

Should you have any enquiries regarding any of the above matters, please do not hesitate to contact Conor Hackett of FRNSW's Fire Safety Compliance Unit on (02) 9742 7434. Please ensure that you refer to file reference BFS19/2109 for any future correspondence in relation to this matter.

Yours faithfully



Edren Ravino
Senior Building Surveyor
Fire Safety Compliance Unit

Unclassified



File Ref. No: BFS19/2108 (7960)
TRIM Ref. No: D19/54293
Contact: Conor Hackett

6 August 2019

General Manager
Port Macquarie-Hastings Council
PO Box 84
PORT MACQUARIE NSW 2444

Email: council@pmhc.nsw.gov.au

Attention: Manager Compliance/Fire Safety

Dear Sir / Madam

**Re: INSPECTION REPORT
BONNY HILLS BEACH HOTEL
1045 OCEAN DR, BONNY HILLS ("the premises")**

Pursuant to the provisions of Section 9.32(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), an inspection of 'the premises' on 22 June 2019 was conducted by Authorised Fire Officers from the Fire Safety Compliance Unit of Fire and Rescue NSW (FRNSW). The inspection was also conducted in the company of Officers from the NSW Police Force.

The inspection was limited to the following:

- A visual inspection of the essential Fire Safety Measures as identified in this report only.
- A conceptual overview of the building, where an inspection had been conducted without copies of the development consent or copies of the approved floor plans.

On behalf of the Commissioner of FRNSW, the following comments are provided for your information in accordance with Section 9.32(4) and Schedule 5, Part 8, Section 17(1) of the EP&A Act. Please be advised that Schedule 5, Part 8, Section 17(2) requires any report or recommendation from the Commissioner of FRNSW to be tabled at a Council meeting.

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COMMENTS

This report is limited to observations and sections of the building accessed at the time of the inspection. As such, this report lists potential deviations from the National Construction Code 2019 Building Code of Australia (NCC). Please be advised that whilst the report is not an exhaustive list of non-compliances, the items as listed may relate to the building's age or contradict development consent approval. In this regard, it is at council's discretion as the appropriate regulatory authority to consider the most appropriate action and determine whether an investigation is required.

The following items were identified as concerns during the inspection:

1. Essential Fire Safety Measures

- 1A. Zone Block Plan – Typically, Section 3.10 of the Australian Standard 1670.1-2015 requires a Zone Block Plan to be securely mounted and located adjacent to the Fire Indicator Panel (FIP). At the time of the inspection, a Zone Block Plan could not be located beside the FIP.

2. Access & Egress

- 2A. Door swing / Operation of Latch – At the time of the inspection the following items may require council to inspect and review its records to confirm whether the configuration of the exit to the bottle shop has been approved:
- A. Clause D2.20 of the NCC requires swinging doors in a required exit, or forms part of a required exit to swing in a direction that does not impede the path or direction of egress. The exit door swings against the direction of egress and does not appear to be fitted with a device for holding it in the open position
- B. Clause D2.21 of the NCC requires that if the door is located in a required exit, or forms part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress. At the time of the inspection the door contains a snib lock hardware in lieu of a downward action lever handle.

FRNSW is therefore of the opinion that there are inadequate provisions for fire safety within the building.

RECOMMENDATIONS

FRNSW recommends that Council inspect and address any other deficiencies identified on 'the premises', and require items no. 1 and 2 of this report be addressed appropriately.

Unclassified

This matter is referred to Council as the appropriate regulatory authority. FRNSW therefore awaits Council's advice regarding its determination in accordance with Schedule 5, Part 8, Section 17(4) of the EP&A Act.

Should you have any enquiries regarding any of the above matters, please do not hesitate to contact Conor Hackett of FRNSW's Fire Safety Compliance Unit on (02) 9742 7434. Please ensure that you refer to file reference BFS19/2108 (7960) for any future correspondence in relation to this matter.

Yours faithfully



Edren Ravino
Senior Building Surveyor
Fire Safety Compliance Unit

Unclassified

(FUTURE) PUBLIC EXHIBITION DATES

31 July to 28 August 2019

Planning Proposal under section 3.33 of the EP&A Act

***Port Macquarie-Hastings LEP 2011
(Amendment No 55)***

Administrative Review

Ccl ref: PP2019 – 1.2
DP&E ref: PP_2019_PORTM_002_00
Date: 22 June 2019



Planning Proposal under sec 3.33 of the EP&A Act

Administrative Amendment

Planning Proposal status (for this copy)

Stage	Version Date (blank until achieved)
Reported to Council (section 3.33)	20 Feb 19
Referred to Department under (sec 3.34 (1))	17 May 19
Gateway Panel determination (sec 3.34 (2))	9 June 19
Revisions required: Yes	17 June 19
Public Exhibition (Sch 1 cl 4)	31 July - 28 Aug 19
For Council review (sec 3.35 (1))	
Adopted by Council for submission to Minister's delegate (sec 3.36 (2))	

Council reference: PP2019 - 1.2

(Amendment No will initially be blank) Port Macquarie-Hastings LEP 2011 (Amendment No 55)

Department of Planning & Environment reference: PP_2019_PORTM_002_00

Council Address	Contact Officer
Port Macquarie-Hastings Council PO Box 84 PORT MACQUARIE NSW 2444	Stephanie Baker Strategic Land Use Planner Email: stephanie.baker@pmhc.nsw.gov.au Phone: 6581 8056

Adoption of the Planning Proposal**1. For initial Gateway determination**

The undersigned Council delegate endorsed this Planning Proposal on 17 June 2019:

Signed 

Name Peter Cameron

Position Group Manager Strategic Land Use Planning

2. For section 3.36 finalisation

This Planning Proposal was endorsed on by Port Macquarie-Hastings Council, or the undersigned Council delegate (delete one):

Signed

Name

Position

Planning Proposal under sec 3.33 of the EP&A Act

Administrative Amendment

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*Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment*

Executive Summary

This is a Planning Proposal prepared under section 3.33 of the *Environmental Planning and Assessment Act 1979*, in relation to a proposed amendment to *Port Macquarie-Hastings Local Environmental Plan 2011* (LEP 2011). It will be assessed by Port Macquarie-Hastings Council, the NSW Department of Planning, Industry and Environment.

This proposal addresses seven minor issues in the LEP 2011 map series and seeks to make refinements and adjustments to correct errors or anomalies that have been identified.

The changes apply to various properties, and affect multiple landowners, as detailed in **Part 2**.

The issues are:

- 1) Lot 1 DP1185603 Heritage item I089 (Wauchope Railway Station group), Wauchope - map updates required.
- 2) Lot 203 DP 1112804, Laurieton (Council owned land) - rezone from E3 Environmental Management to E2 Environmental Conservation.
- 3) Phar Lap Circuit, Port Macquarie - remove Koala Habitat mapping from road.
- 4) Lot 4 DP1010172 Comboyne showground- rezoning from RU1 Primary Production to RE2 Private Recreation; apply the Height of Buildings map to the subject lands; and remove the Lot Size map from the subject lands
- 5) Lot 100 DP 1107348 and Lot 69 DP 1103700, Kew - Acoustic map to be reinstated.
- 6) Lot 39 DP 219719, Queens Grant subdivision, North Shore - update Land Reservation Acquisition Map.
- 7) Map tidy-ups for the Land Reservation Acquisition Map series.

Port Macquarie-Hastings Council is the applicant for this proposal.

Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment

Part 1 - Objectives or Intended Outcomes

Planning Proposal

Part 1 - Objectives or Intended Outcomes

To review and refine the Port Macquarie Hastings Local Environmental Plan 2011 (LEP 2011) to correct seven errors and/or anomalies that have been identified in a number of maps (further details in Part 2). This will facilitate efficient operation of the LEP and the development application process.

Part 2 - Explanation of Provisions

The intended outcomes are proposed to be achieved by making the following changes to the LEP 2011, Council's principle planning instrument. Details of the seven amendments, as reported to Council on 20 February 2019 (refer to Appendix B) are as follows:

Mapping Corrections

Issue 1. Lot 1 DP1185603 - Heritage item I089 (Wauchope Railway Station group), Wauchope

Heritage Item I089 forms part of the Wauchope Railway Station group, which is a Heritage Item of State Significance. The land subject to this proposal is formally known as Lot 1 DP 1185603. There is a minor cadastral anomaly on this item, meaning that the existing Heritage map partially encroaches onto Lot 2 DP 953945 to the north. The proposed changes follow the northern boundary of Lot 1 DP1185603, and are shown in **Part 4 Mapping**.

Proposal:

Amend the Heritage mapping as described for Heritage Items I089 Wauchope.

Issue 2. Lot 203 DP 1112804 - Bayside Circuit, Laurieton (Council owned land)

The subject land is located off Bayside Circuit in Laurieton and is owned by Council. The land formed part of DA 2017-956.1, which involved the Dunbogan Flood Access Road Upgrade.

As part of the above DA, the Office of Environment and Heritage (OEH) were consulted. OEH has a statutory responsibility in relation to biodiversity, Aboriginal and historic heritage, National Parks and Wildlife Service estate, flooding and estuary management.

OEH raised the following issues relevant to the subject site: *'inadequacies with the proposed mechanism for establishing and managing the proposed offset site'*. The OEH recommended that, prior to determining the DA, that Council consider *'rezoning the proposed offset site from E3 (Environmental Management) to E2 (Environmental Conservation)'*.

The DA has been issued but the site is required for offsets. Subsequently, the rezoning is logical as it will provide additional protection to the biodiversity values on the land. The land to which the proposed rezoning applies is shown in **Figure 1** below.

Part 2 - Explanation of Provisions

Proposal:

Issue 3. Phar Lap Circuit, Port Macquarie

The intent of Council's Koala Habitat mapping is to protect core koala habitat. In this instance, the mapping extends to Phar Lap Circuit, which is a road (refer to **Figure 2** for aerial of Phar Lap Circuit). In some instances the mapping minimally encroaches in to the residential lots on the opposite side of the road. In the areas where the map encroaches into these properties, further assessment is triggered at DA stage. It is proposed to remove the mapping from the road areas at Phar Lap Circuit.

Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment

Part 2 - Explanation of Provisions



Figure.2 Phar Lap Circuit vicinity

Proposal:

Amend the Koala Habitat mapping for Phar Lap Circuit, Port Macquarie, as described above and illustrated in Part 4 Mapping.

Issue 4. Lot 4 DP 1010172 - Comboyne showground

The Comboyne showground is currently zoned RU1 Primary Production. The objectives of the RU1 Primary Production zone are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining uses.

The current use of the land does not fulfil the objectives of the zone. Furthermore, minimum lot size for land in the RU1 Primary Production zone is 40ha. The total area of the site is approximately 4ha.

The subject land associated with the showground is privately owned. As such, it does not have a classification of either community or operational land and should therefore be zoned for private recreation rather than public recreation purposes.

Changing the zone of this Lot to RE2 Private Recreation would better reflect the existing use of the land. The RE2 Private Recreation zone has the following objectives:

- To enable land to be used for private open space or recreational purposes.

Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment

Part 2 - Explanation of Provisions

- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.

As identified above, the showground is more closely aligned with the objectives of the RE2 Private Recreation zone. Further, there are additional permitted uses associated with a RE2 Private Recreation zoning, such as camping grounds, which may allow for an additional income generation opportunity on the land. This rezoning would be in line with other showgrounds within the Port Macquarie-Hastings Local Government Area as the Wauchope and Kendall showgrounds are both zoned RE2 Private Recreation.

Currently there is no Height of Building map applying to the subject site, however the Wauchope showground has a 14.5m height limit and Kendall showground has applied an 8.5m height limit. Given that the Comboyne showground is located within a village, it is considered reasonable to apply a 8.5m maximum, which would be consistent with the controls applied at Kendall showground. Conversely, neither the Kendall or Wauchope showground have a minimum lot size requirement, so it is proposed that the 40ha minimum lot size be removed from the subject site. Refer to **Table 1** below for a comparison of provisions across the three showgrounds.

Table 1 - Comparison of provisions

	Wauchope Showground	Kendall Showground	Comboyne Showground (Current)	Comboyne Showground (Proposed)
Zoning	RE2 Private Recreation	RE2 Private Recreation	RU1 Primary Production	RE2 Private Recreation
Floor Space Ratio	No maximum	No maximum	No maximum	No maximum
Height of Building	14.5m maximum	8.5m maximum	No maximum	8.5m maximum
Lot Size	No minimum	No minimum	40ha minimum	No minimum

Proposal:

Amend the Land Zoning map for Lot 4 DP1010172 Comboyne showground. Apply the Height of Buildings map to the subject lands; and remove the Lot Size map from the subject lands, as described in table 1 above and illustrated in Part 4 Mapping; and amend all maps in the Height of Building Map series to include the new HOB_007A in the map grid in the legend Bar.

Issue 5. Lot 100 DP 1107348 and Lot 69 DP 1103700, Kew

Amendment 11 to LEP 2011 commenced on 10 August 2012 and involved rezoning rural land to facilitate an expansion of Kew village.

Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment

Part 2 - Explanation of Provisions

As part of the State Government Agency consultation for Amendment 11, the NSW Environment Protection Authority raised concerns about the Noise Impact Assessment (prepared by SLR Global Solutions), noting that *'two standards were used, one being the conditions applicable for hotel noise and the NSW Road Noise Policy (OEH 2011), for Pacific Highway noise'*.

Their concern was in relation to the impacts of noise from the proposed light industrial area on the adjoining block to the north east to the proposed residential section of the subject site (Refer to **Figure 3**). Furthermore, they acknowledged the lack of analysis around the cumulative impacts of all three noise sources on the subject sites, which were being proposed for residential and light industry purposes. Subsequently, as part of Amendment 11 Council introduced an Acoustic Control, which applied to Lot 100 DP 1107348 and Lot 69, DP 1103700, being the sites subject to this administrative amendment. This control ensures that adverse noise impacts and unnecessary land use conflict are avoided from the outset.

The Acoustic Control was detailed in both the Planning Proposal and gazette notice of Amendment 11, and was applied by way of an update to map sheet CL1_011B of the LEP 2011.



Figure. 3 Subject site and surrounding noise impacts

Amendment 16 subsequently commenced on 28 June 2013 and included, amongst other things, the introduction of an Acoustic Control at 2394 Oxley Highway in Wauchope. This involved creating a new map sheet, which is known as CL1_010B.

As part of the process in creating a new map sheet, all of the associated map sheets in the series (e.g. all other Acoustic Control maps in LEP 2011) need to be updated to reference this new map sheet. Therefore, map sheet CL_011B was updated to recognise this new map sheet being CL1_010B. Unfortunately, as part of this administrative process, the Acoustic Controls applying to the subject site (being Lot Lot 100 DP

Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment

Part 2 - Explanation of Provisions

1107348 and Lot 69 DP 1103700) were inadvertently omitted from the map. Refer to **Figure 4** for further details.

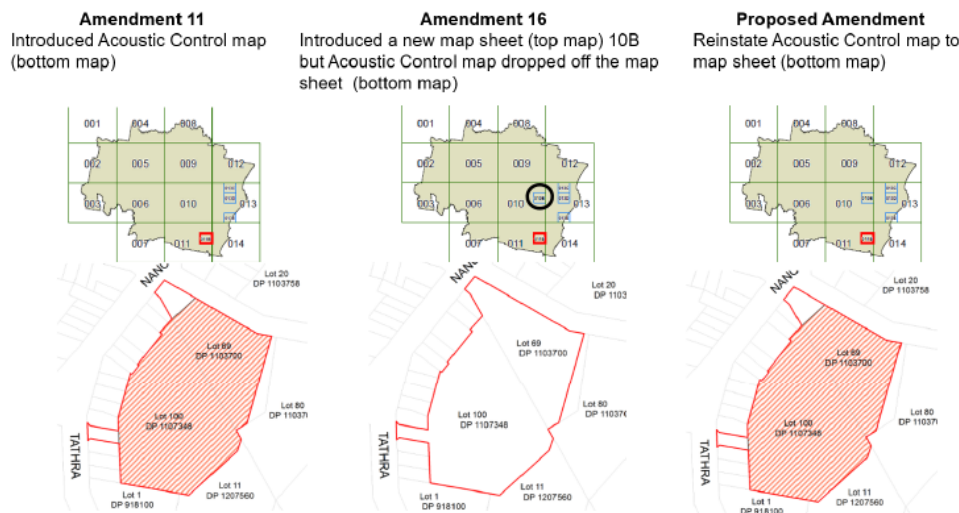


Figure. 4 Acoustic Controls

Proposal:

That the Acoustic Controls map CL1_011B be reinstated for Lot 100 DP 1107348 (12 Tathra Road) and Lot 69 DP 1103700 (2 Ocean Drive), Kew, as described above and illustrated in Part 4 Mapping.

Issue 6. Lot 39 DP 219719 - Queens Grant subdivision, North Shore

Council has recently acquired a Lot in the Queens Grant subdivision. This Lot is identified for acquisition on the LEP 2011 Land Reservation Acquisition (LRA) map. Now that the land has been acquired, it is appropriate that the designation for acquisition be removed.

This leaves 10 lots in the Queens Grant subdivision designated for future acquisition by Council (as initially considered by Council at its 20 July 2016 meeting).

Proposal:

That the LRA map be amended for the North Shore locality by removing the feature labelled 'Environment Conservation' (E2) from Lot 39 DP 219719, as described above and illustrated in Part 4 Mapping.

Issue 7. Map tidy-ups for the Land Reservation Acquisition Map Series

In the 2018 Administrative Amendment (Amendment 52), the LRA map was updated to remove a number of parcels in the Limeburners Creek National Park and Queens Grant Estate. This resulted in the maps being removed from the purchased properties, similarly to the properties above at Lot 39 DP 219719 (Issue 6). These updates meant that there was no remaining land designated for reservation within LRA_013F map sheet. However,

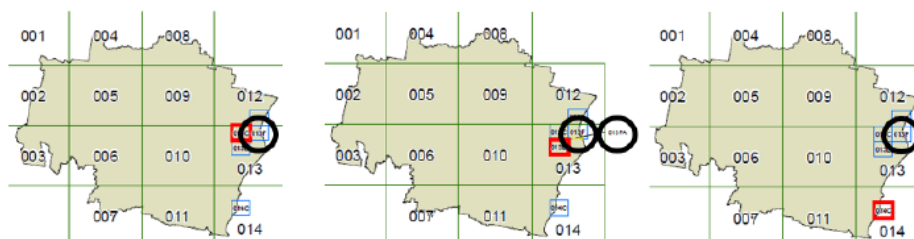
Planning Proposal under sec 3.33 of the EP&A Act
Administrative Amendment

Part 2 - Explanation of Provisions

this map sheet is still referenced in a number of other map sheets in the series. This Proposal is to remove any remaining reference to the above map sheet.

LRA_013FA has also previously been removed from the series due to having no remaining land designated for reservation. However, this sheet is also still referenced in one of the maps in the series. It is proposed that any reference to LRA_013FA also be removed from the other map sheets in the Land Reservation Acquisition map series. Refer to **Figure 5** below for details of the proposed changes.

Existing Land Reservation Acquisition Maps



Proposed Land Reservation Acquisition Maps

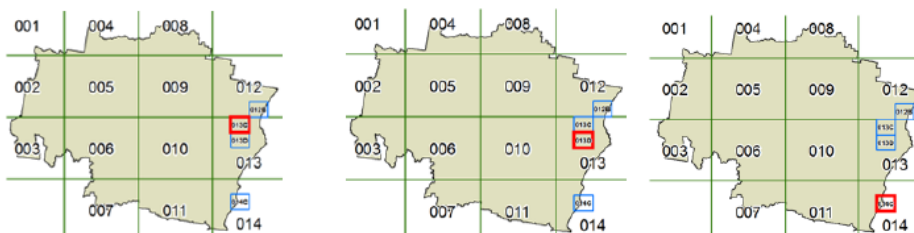


Figure. 5 Land Reservation Acquisition map sheet existing and proposed

Proposal:

Amend map sheets LRA_013C and LRA_014C to remove reference to LRA_013F and amend map sheet LRA_013D to remove reference to LRA_013F and LRA_013FA as described above and illustrated in Part 4 Mapping.

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Part 3 – Justification

Part 3 – Justification

A - Need for the planning proposal.

1. Is the planning proposal a result of any strategic study or report?

As the Planning Proposal is to amend a number of small anomalies and errors in LEP 2011, it is not the result of a specific study.

2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The Planning Proposal is the only means to achieve the intended outcome as amendments to the LEP 2011 are required.

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?

The proposed amendments are administrative in nature and the Planning Proposal aims to ensure quality outcomes for the long term benefit of Port Macquarie Hastings residents through ensuring the accuracy and consistency of its planning controls. The correction of minor anomalies and inconsistencies in LEP 2011 are not inconsistent with the objectives and actions of the North Coast Regional Plan, specifically:

Goal 1 - The most stunning environment in NSW

Direction 2: Enhance biodiversity, coastal and aquatic habitats, and water catchments

Action 1.1: 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 significance.

The land at Bayside Circuit in Laurieton (Issue 2) is a Council owned offset site which is currently zoned E3 Environmental Management. The planning proposal intends to rezone the land to E2 Environmental Conservation in accordance with OEH advice. This zoning will ensure the continued protection of the site.

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.

Heritage Item 1089 (Issue 1), Bayside Circuit, Laurieton (Issue 2) and Lot 39 in Queens Grant subdivision (Issue 6) are all within the coastal environment area.

This proposal is to address mapping anomalies for these three issues. The map updates will not increase the chances or likelihood of a development consent on these properties.

Goal 2 - A thriving, interconnected economy

Direction 11: Protect and enhance productive agricultural lands

Action 11.4: Encourage niche commercial tourist and recreation activities that complement and promote a stronger agricultural sector, and build the sector's capacity to adapt to changing circumstances.

Comboyne Showground (Issue 4) is mapped by the State government as containing Regionally Significant Farmland (Mid North Coast Farmland Mapping Project) and

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Part 3 – Justification

Biophysical Strategic Agricultural Land. The Direction of the State in relation to these lands is to protect them.

Where relevant, justification for the planning proposal must be considered under the *Important Farmland Interim Variation Criteria, North Coast Regional Plan 2036*.

Port Macquarie-Hastings Council considers this proposal is in accordance with action 11.4 as the Comboyne showground is a complementary activity within an agricultural area, which provides a recreational opportunity that generates income into the local economy by way of attracting people to the racing and associated activities on the subject site.

An assessment in accordance with the important farmland *Interim Variation Criteria* is provided in the following table.

Table 2 - Important Farmland Interim Variation Criteria Assessment

<p>Agricultural Capability</p> <ul style="list-style-type: none"> <i>Is the land isolated from other important farmland and is not capable of supporting sustainable agricultural production</i> <p><u>Comment:</u></p> <p>Although the site is not isolated from other important farmland, it has a long standing existing use as a showground. It is considered that this use is a “supportive” agricultural use as horses need to graze. A rural showground such as this attracts people to Comboyne and therefore stimulates the local economy which is predominantly based on agriculture.</p> <p>Traditional standalone grazing operations are unlikely to be viable on this size plot, which is approximately 4ha. While small-scale agricultural activities such as horticulture may be plausible on the site, the surrounding farming activities are predominantly cattle grazing, which is the dominant agricultural activity in this area.</p>
<p>Land Use Conflict</p> <ul style="list-style-type: none"> <i>The land use does not increase the likelihood of conflict and does not impact on current or future agricultural activities in the locality</i> <p><u>Comment:</u></p> <p>The recreational nature of the land has not contributed to the loss of productive agricultural potential in the locality or significantly limited or restricted the agricultural activities of adjoining owners of regionally significant farmland. This proposal does not change the existing use, it simply reflects what is on the ground and offers additional uses with consent e.g. camping grounds. Further, the proposal will assist the showground committee in diversifying the opportunities on the land to ensure it continues to be viable.</p>
<p>Infrastructure</p> <ul style="list-style-type: none"> <i>The provision of infrastructure (utilities, transport, open space, communications, and stormwater) required to service the land is physically and economically feasible at no cost to State and Local Government. Adverse impacts on adjoining farmland must be avoided</i>

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<p><u>Comment:</u></p> <p>The proposal does not increase the use of the existing infrastructure. The infrastructure used to service the existing showground will not pose any additional costs to State or Local Government as the use is existing and has been in place for many years, providing a valuable community facility.</p>
<p>Environment and Heritage</p> <ul style="list-style-type: none"> <i>The proposed land uses do not have an adverse impact on areas of high environmental value, and Aboriginal or historic heritage significance</i>
<p><u>Comment:</u></p> <p>The site is not identified as being of Aboriginal or historic heritage significance.</p> <p>The Throne River runs along the sites western boundary. This river and its buffer are identified as being potentially of high environmental value in the North Coast Regional Plan.</p> <p>Although, there is a small strip of vegetation running along the site's western boundary, the objectives of the RU1 Primary Production zone (current zoning on the site) are specifically relevant to promotion and protection of agricultural activities; the vegetation is not protected under this zone.</p> <p>The proposal is not to intensify the existing uses on the land and it is submitted that proposed RE2 Private Recreation zone provides better protection for vegetation, with an objective specifically including the protecting and enhancement of the natural environment.</p>
<p>Avoiding Risk</p> <ul style="list-style-type: none"> <i>Risks associated with physically constrained land are avoided and identified, including flood prone land, bushfire prone land, highly erodible land, severe slope and acid sulphate soils</i>
<p><u>Comment:</u></p> <p>Although the site and surrounds are only sparsely vegetated, the site is mapped as bushfire prone land, as is the whole of Comboyne village and surrounding land.</p> <p>The site is not mapped as being subject to flooding or as having acid sulphate soils, but is identified as being a high soil loss erosion risk.</p> <p>Council's initial assessment of these issues is that they do not limit the existing use of the site for private recreation as a showground.</p>

Goal 3 - Vibrant and engaged communities

Direction 19: Protect historic heritage

Action 19.2: Prepare, review and update heritage studies in consultation with the wider community to identify and protect historic heritage items, and include appropriate local planning controls.

Although the updates to Heritage item 1089 (Issue 1) are not a result of a heritage study, the proposed cadastre update ensures that this item of State Significance is accurately mapped, and accurately reflected in local planning controls.

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4. Will the planning proposal give effect to Council's Community Strategic Plan and Urban Growth Management Strategy 2017 – 2036?

The proposed amendments in the Planning Proposal are consistent with Council's Community Strategic Plan and Urban Growth Management Strategy 2017-2036.

5. Is the planning proposal consistent with applicable State Environmental Planning Policies?

Table 2 below considers the relevant SEPPs that apply to this Planning Proposal.

Table 3 – Assessment of the Planning Proposal against SEPPs of relevance

State Environmental Planning Policies	Consistency
SEPP 44 Koala Habitat Protection	<p>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.</p> <p>The applicable land at Issue 3, which is subject to the Koala Habitat mapping is a designated road within a R1 General Residential area. Roads are not safe havens for Koalas. Subsequently this land does not qualify as Potential Koala Habitat under the SEPP 44 assessment criteria. The proposal is <u>consistent</u> with the SEPP.</p>
SEPP (Coastal Management) 2018	<p>Promotes 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</p> <p>The lands at Issues 1, 2 and 6 is subject to this SEPP and all mapped as being in the Coastal Environment Area.</p> <p>Issue 1 is adjusting the LEP map to align with the cadastre. This will not result in any change to the development potential of the land.</p> <p>The proposal for Issue 2 is to strengthen the environmental protection of the land by changing the zone from E3 Environmental Management to E2 Environmental Conservation. This is a mapping change and will not increase development potential of the land.</p> <p>Issue 6 arises as a result of the land coming into public ownership. Conservation is the primary objective. The proposal is <u>consistent</u> with the SEPP.</p>
SEPP (Primary Production and Rural Development) 2019	<p>To facilitate the orderly and economic use and development of rural lands for primary production and to reduce land use conflict.</p> <p>Issue 4 is identified as being important farmland and therefore subject to this SEPP. In part 3B - 3 above, an</p>

Planning Proposal under sec 3.33 of the EP&A Act
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Part 3 – Justification

State Environmental Planning Policies	Consistency
	<p>assessment against the <i>Important Farmland Interim Variation Criteria</i> has been undertaken, which provided the following conclusions:</p> <ol style="list-style-type: none"> 1. The site has a low long term potential for standalone agricultural production. 2. The existing use of the land as a showground does not result in a land use conflict and this is unlikely to change. 3. The rezoning won't place an added strain on the existing infrastructure. 4. The site is not identified as having Aboriginal or historic heritage; any vegetation of high environmental value along the creek line (sites western boundary) will be better protected by a RE2 zone than it currently is under a RU1 zone. 5. Bushfire risk does not limit the existing use of the land as a showground and therefore there won't be an increased risk as a result of the rezoning. <p>On this basis, it is considered that the proposal is <u>consistent</u> with the SEPP.</p>
SEPP 55 Remediation of Land	<p>Provides a Statewide approach to regulation of contaminated land and its remediation. Specific requirements for consideration of planning proposals seeking to rezone contaminated lands.</p> <p>None of the Issues in this proposal are identified on Council's contaminated land register. Subsequently, the Planning Proposal does not seek to materially change the development potential of any land that is known to be contaminated; and it is considered that the proposal is <u>consistent</u> with the SEPP.</p>

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Part 3 – Justification

6. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

Table 3 below considers the relevant s9.1 directions that apply to this Planning Proposal.

Table 3 – Assessment of the Planning Proposal against s9.1 directions of relevance

Section 9.1 Directions and Objectives	Consistency
1 Employment and Resources	
1.2 Rural Zones The objective of this direction is to protect the agricultural production value of rural land.	Issue 4 proposes to rezone the Comboyne showgrounds from RU1 Primary Production to RE2 Private Recreation. While this zone change makes the direction applicable as it affects an existing rural zone, it is considered that the proposal is <u>consistent</u> with the Direction as the rezoning to a recreational zone is to reflect the existing uses of the land as a showground and does not contain provisions that will increase permissible density of the land.
1.5 Rural Lands The objectives of this direction are to: (a) protect the agricultural production value of rural land, (b) facilitate the orderly and economic development of rural lands for rural and related purposes.	Issue 4 is identified as being important farmland and therefore subject to this Direction. An assessment against the Important Farmland Interim Variation Criteria has been undertaken and the conclusions listed in Part 3B -3 of this Planning Proposal. Further, it is considered that Comboyne showground is a complementary activity within an agricultural area, which provides a recreational opportunity that generates income into the local economy by way of attracting people to the racing and associated activities on the subject site. On this basis, it is considered that the proposal is <u>consistent</u> with the aims of this Direction
2 Environment and Heritage	
2.1 Environmental Protection Zones The aim of this direction is to protect and conserve environmentally sensitive areas.	This proposal is to strengthen the environmental zoning at Issue 2 by rezoning the land from E3 Environmental Management to E2 Environmental Conservation. Therefore it is considered that the Proposal is <u>consistent</u> with this Direction.
2.2 Coastal Management The aim of this direction is to protect and manage coastal areas of NSW.	Issues 1, 2 and 6 relate to land subject to this Direction as the lands are identified as being in the Coastal Environmental Area. The proposed changes are addressing mapping anomalies and do not change the development potential of the land. The proposal is <u>consistent</u> with this Direction.
2.3 Heritage Conservation The aim is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.	Issue 1 realigns the heritage mapping. This mapping change is administrative in nature and does not impact on the conservation of the heritage item. Therefore it is considered that the Proposal is <u>consistent</u> with this Direction.
4 Hazard and Risk	
4.1 Acid Sulfate Soils The Direction applies to land that has been identified as containing potential Acid Sulfate Soils (ASS).	Issues 2 and 3 contain category 1 & 2, 3 & 4 ASS respectively. An ASS study has not been prepared.

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Section 9.1 Directions and Objectives	Consistency
	This inconsistency is considered to be of minor significance as the proposed administrative changes will not result in disturbance of the lands.
4.3 Flood Prone Land This Direction seeks to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy.	Issues 1, 2, 3 and 6 are partly mapped as being flood prone. However this proposal is not making any changes to development potential on the land. Therefore it is considered that the proposal is <u>consistent</u> with this Direction.
4.4 Planning for Bushfire Protection This Direction seeks to discourage incompatible land uses in bushfire prone areas and to encourage sound management of bushfire prone areas.	Issue 2 is situated in a category 1 and 2 bushfire area. The proposal is seeking to protect the land as an offset site and this rezoning is in accordance with OEH advice. The proposal does not make any changes to development potential on the land. Therefore, it is considered that the proposal is <u>consistent</u> with this Direction. Issue 4 is also in a bushfire prone area and similarly to above, the proposal does not increase the development potential on the land and therefore the risk is not increased. It is considered that this proposal is <u>consistent</u> with the Direction. The direction requires that Council consult with the Commissioner of the NSW Rural Fire Service after a Gateway Determination has been issued.

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?

All of the changes are minor or administrative in nature. Therefore, it is not considered that this Planning Proposal will have an adverse impact on ecological communities or threatened species habitat.

8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

This proposal is administrative in nature and the changes are unlikely to result in detrimental environmental effects.

9. How has the planning proposal adequately addressed any social and economic effects?

The Planning Proposal is not anticipated to have any negative social or economic impacts. The aim of the Planning Proposal is to ensure that the LEP is accurate and consistent with Council's strategic policy direction.

The proposed rezoning of the Comboyne Showground (Issue 4) will continue to encourage this venue as an economic generator within the Comboyne community. Further, it will provide additional options for income stream as camping is a use in the RE2 Private Recreation zone that is permitted with consent.

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Part 3 – Justification

D - State and Commonwealth interests.**10. Is there adequate public infrastructure for the planning proposal?**

This Planning Proposal does not enable new development that would lead to unforeseen demands on public infrastructure.

11. What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

Should the proposal be supported, the Department of Planning and Environment's Gateway Determination will specify consultation requirements.

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Part 4 – Mapping

Part 4 – Mapping

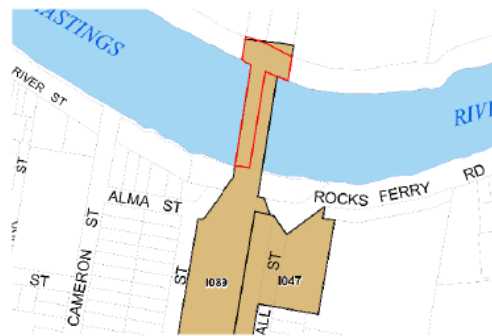
A - Affected land Current and Proposed

Proposed map amendments to the LEP 2011, as outlined in **Part 2** of this Planning Proposal are illustrated below. The site is shown in red outline.

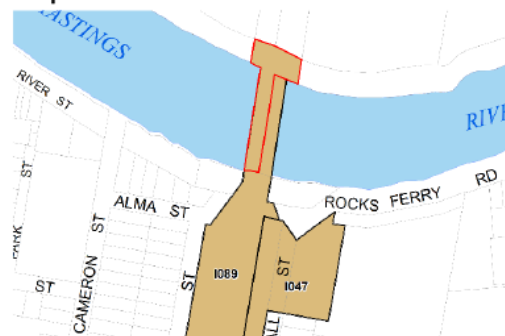
Issue 1. Lot 1 DP 1185603 Heritage item I089 (Wauchope Railway Station group), Wauchope

Heritage map (HER_010B)

Current



Proposed



Issue 2. Lot 203 DP 1112804 - Bayside Circuit, Laurieton (Council owned land)

Land Zone map (LZN_014A)

Current



Proposed



Zones code

R1 - General Residential
E2 - Environmental Conservation
IN2 - Light Industrial

W1 - Natural Waterways
RE1 - Public Recreation

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Part 4 – Mapping

Issue 3. Phar Lap Circuit, Port Macquarie

Koala Habitat map (KHA_013D)

Current



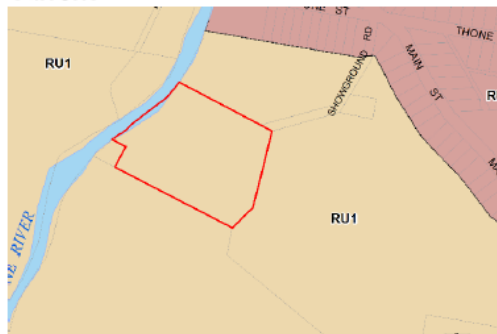
Proposed



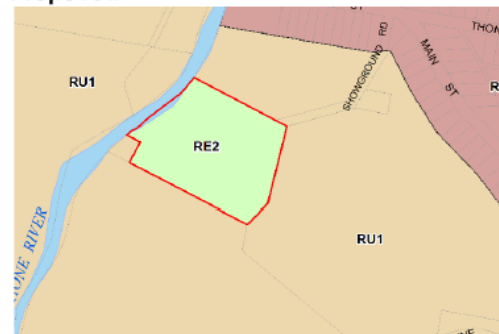
Issue 4. Lot 4 DP 1010172 - Comboyne showground

Land Zone map (LZN_007A)

Current



Proposed



Zones code

RU1 - Primary Production

RE2 - Private Recreation

RU5 - Village

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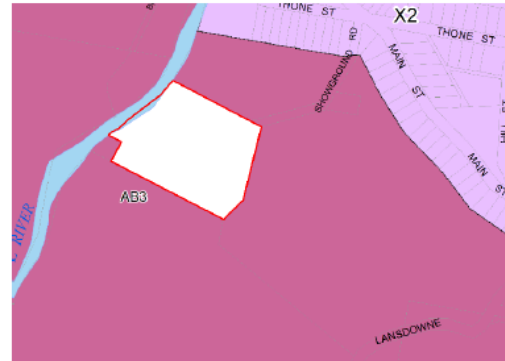
Part 4 – Mapping

Lot Size map (LSZ_007A)

Current



Proposed



Minimum lot size code

AB3 - 40ha

X2 - 8000sqm

Blank - no minimum

Height of Building map (HOB_007A)

Current



Proposed



Maximum height of buildings code

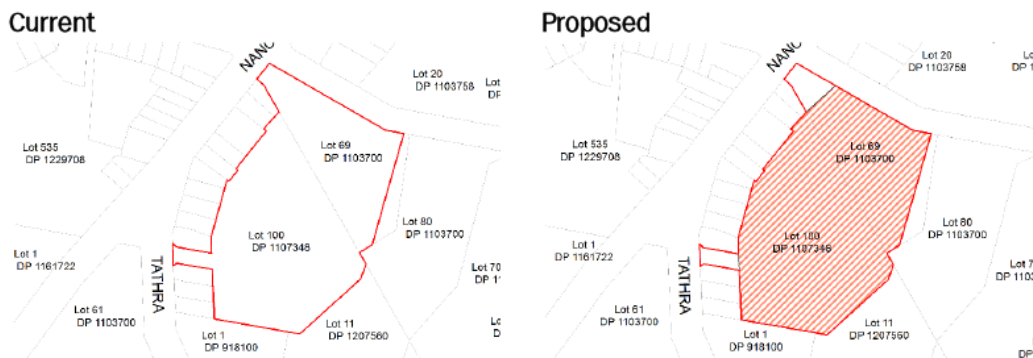
I - 8.5m

Blank - no maximum

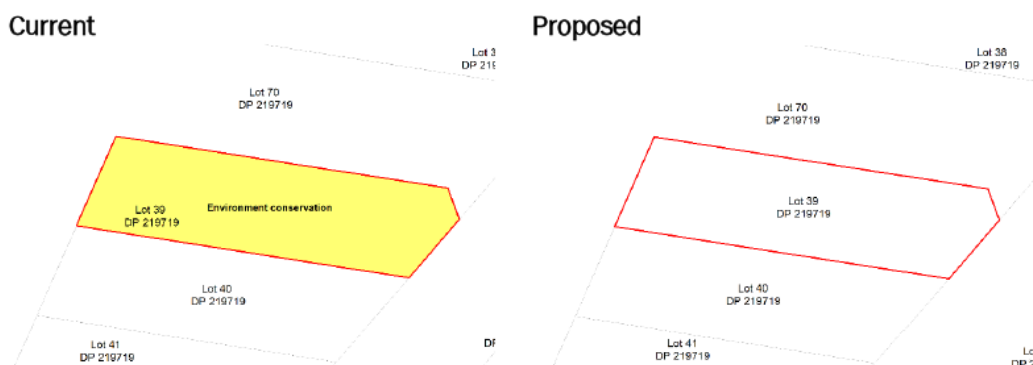
Note: HOB_007 is a new map, therefore all of the maps in the Height of Building Map series will be amended to include the new HOB_007A in the map grid in the legend bar.

Part 4 – Mapping

Acoustic Control map (CL1_011B)



Land Reservation Acquisition map (LRA_012B)

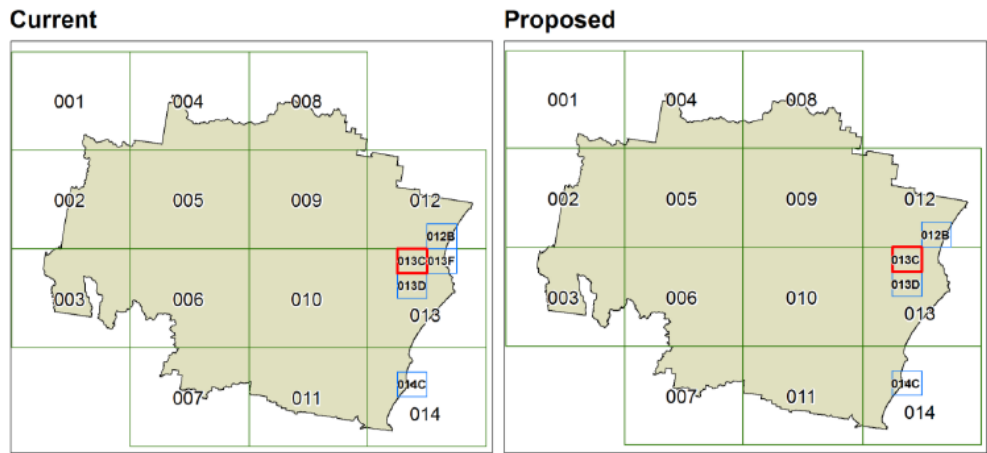


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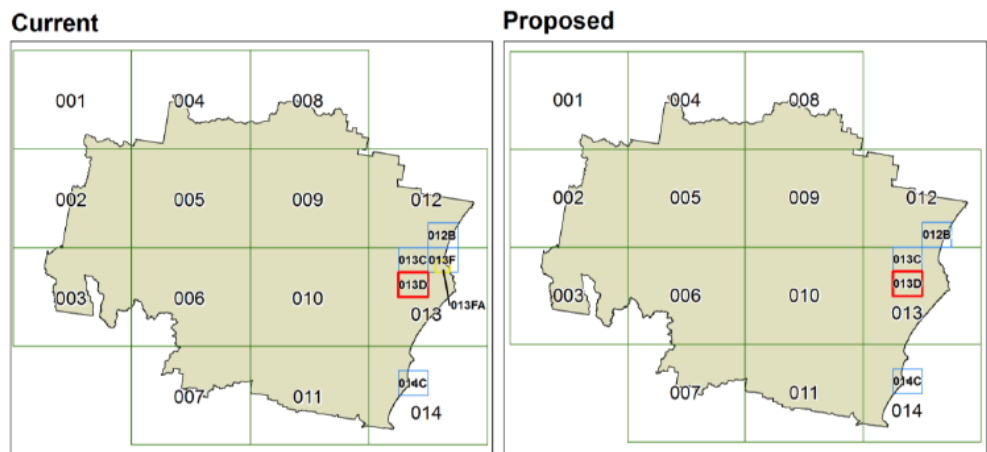
Part 4 – Mapping

Issue 7. Map tidy-ups for the Land Reservation Acquisition Map Series

Land Reservation Acquisition map (LRA_013C)



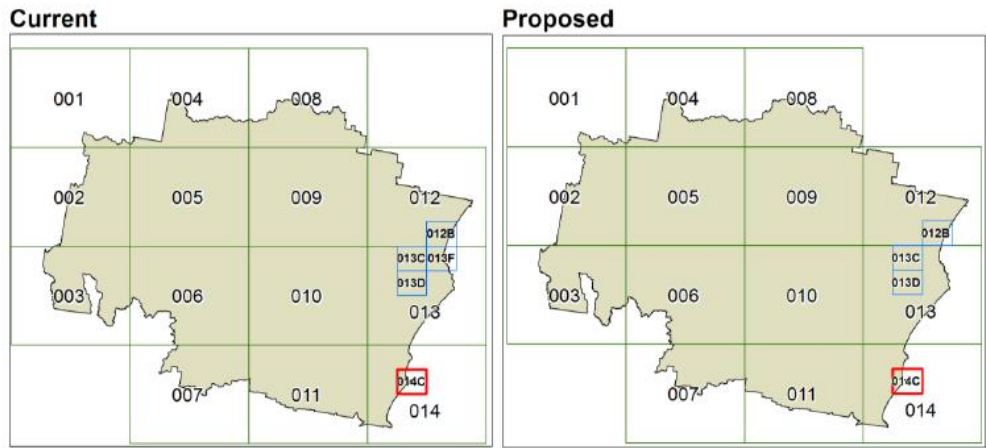
Land Reservation Acquisition map (LRA_013D)



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Part 4 – Mapping

Land Reservation Acquisition map (LRA_014C)



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Part 5 – Community Consultation

Part 5 – Community Consultation

In accordance with 'A Guide to Preparing Local Environmental Plans' prepared by the Department of Planning and Environment (2013), the Planning Proposal will be exhibited for a minimum of 28 days. The exhibition includes:

Advertisement in local newspaper

An advertisement has been placed in local papers.

Consultation with affected owners and adjoining landowners

A letter to landowners and adjoining landowners for Issues 1 - 6 have been posted. Opportunities for one-on-one consultations to discuss the proposals are available at request.

Displays at the Council Head Quarters, Wauchope and Laurieton branch offices.

The Planning Proposal is displayed at the Council Head Quarters (17 Burrawan Street, Port Macquarie), Wauchope (49 High Street, Wauchope) and Laurieton (9 Laurie Street, Laurieton).

Exhibition on the Council website

The Planning Proposal is exhibited on the Council *haveyoursay* website (<https://haveyoursay.pmhc.nsw.gov.au/>).

In addition, as issues 2 and 6 relate to Council owned land, statements to address the requirements specified in the Department of Planning and Environment's '*LEPs and Council Land Best Practice Guide 1997*' forms part of the public exhibition material (Appendix C). The Best Practice Guideline is also on display.

Direct contact

The contact officer for this proposal is Stephanie Baker (Strategic Landuse Planner)

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Part 6 – Project Timeline

Part 6 – Project Timeline

This project timeline is based on anticipated dates and timeframes, though there can be unexpected delays. It is assumed that Council will have authorisation to carry out certain plan-making functions. It is anticipated that authorisation will be exercised by Council's General Manager or the Director of Strategy and Growth.

Action	Timeframe
Commencement date (date of Gateway determination)	June 19
Timeframe for government agency consultation (if required)	July - Aug 2019
Public exhibition period	July - Aug 19
Dates of public hearing (if required)	Aug 19
Consideration of submissions	Sep 19
Timeframe for the consideration of a proposal post exhibition	Sep 19
Submissions to the Department for Parliamentary Counsel Opinion	Oct 19
Anticipated date Council will make the Plan (if authorised)	Nov 19
Anticipated date Council will forward to the Department for notification	Nov 19

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Appendix A – Gateway Determination

Appendix A – Gateway Determination

A copy of the Gateway Determination for this Planning Proposal is provided on the following pages.

The Section 3.34 Gateway Determination processing requirements are as follows:

- (1) Prior to public exhibition, the planning proposal is to be amended to include:
 - a) reference in the Executive Summary for issue 4 that the change in the minimum lot size and height of buildings map is proposed for the Comboyne Showground
 - b) reference in Part 2 Explanation of Provisions and Part 4 Mapping for issue 4 that all the maps in the Height of Buildings Map series will be amended to include the new HOB_007A in the map grid in the legend bar; and
 - c) an assessment of consistency against State Environmental Planning Policy 55 - remediation of Land to be included in Table 2

Response: The above updates are described in the above sections of the Planning Proposal:

- Executive Summary - Issue 4, p.4.
- Part 2 - Explanation of Provisions - Issue 4, p.8
- Part 4 - Mapping - Issue 4, p.22.

- (2) Public exhibition is required for a minimum of 28 days.
- (3) Consultation is required with NSW Rural Fire Services NSW Office of Environment and Heritage for a minimum of 21 days
- (4) A public hearing is not required
- (5) Council is authorised as the local-plan making authority
- (6) The timeframe for completion is 9 April 2020

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Appendix B - Council Meeting and Minutes

Appendix B - Council Meeting and Minutes

Planning Proposal under sec 3.33 of the EP&A Act

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Appendix C - LEPs and Council Land Best Practice Guide 1997

Appendix C - LEPs and Council Land Best Practice Guide 1997
