



Coast, Estuary & Floodplain Advisory Sub-Committee

Business Paper

date of meeting: Thursday 24 November 2016

location: Function Room
Port Macquarie-Hastings Council
17 Burrawan Street
Port Macquarie

time: 3.00pm

Note: Council is distributing this agenda on the strict understanding that the publication and/or announcement of any material from the Paper before the meeting not be such as to presume the outcome of consideration of the matters thereon.

Coast, Estuary & Floodplain Advisory Sub-Committee

CHARTER

Adopted: OC 18/11/15

1. Advise Council on conditions and management issues for the coast, estuaries and floodplains of the Port Macquarie-Hastings local government area.
2. Advise Council on the development of coastal zone, estuary and floodplain risk management plans for the Port Macquarie-Hastings local government area.
3. Advise Council on the implementation of adopted coastal zone, estuary and floodplain risk management plans.
4. Act as a committee for the purpose of relevant NSW guidelines as they relate to estuary, coastline and floodplain management.



**PORT MACQUARIE
HASTINGS**

Coast, Estuary & Floodplain Advisory Sub-Committee

ATTENDANCE REGISTER

Member	29/09/15	09/02/16			
Councillor Lisa Intemann	✓	✓			
Councillor Sharon Griffiths	A	A			
Adrian Button (Waterways User Rep.)	A	✓			
Alan MacIntyre (Community Rep.)	✓	✓			
Bob Jolly (Community Rep. - Lake Cathie)	✓	✓			
Graeme Sayer (Development Industry Rep.)	X				
John Hough (Community Rep.)	✓	✓			
Kingsley Searle (Oyster Industry)	✓	✓			
Laurie Lardner (Community Rep.)	A	✓			
Patrick McEntee (Community Rep.)	✓	✓			
Paul Hyde (Hastings River Fisherman's Co-op)	X	✓			
Tony Troup (Oyster Industry)	✓	✓			
Staff					
Matt Rogers (PMHC)	✓	✓			
Tim Molloy (PMHC)	✓	A			
Gordon Cameron (PMHC)	✓	✓			
Dan Croft (PMHC)	✓	A			
Thor Aaso (PMHC)	✓	✓			
Jesse Dick (PMHC)	✓	✓			
Agencies					
Tina Clemens Jaimee Vlastuin (Lands Department)	A ✓	✓			
Lee Burdett Michael Northam (alternate) (DPI - Fisheries)	✓	✓			
Steve Atkins Eric Claussen Shaun Kerrigan (National Parks Wildlife Service)	A ✓	A ✓			
John Schmitt Kate Browning Nic Denshire Toong Chin (Office of Environment & Heritage)	A ✓	✓ ✓ A			
Matt Dawson Andre Uljee (Maritime Division - RMS)	✓	✓			
Anthony Day Ray Richards (SES Rep)	A ✓	✓			

Key: ✓ = Present
A = Absent With Apology
X = Absent Without Apology



**PORT MACQUARIE
HASTINGS**

Coast, Estuary & Floodplain Advisory Sub-Committee Meeting

Thursday 24 November 2016

Items of Business

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**PORT MACQUARIE
HASTINGS**

Item: 01

Subject: ACKNOWLEDGEMENT OF COUNTRY

"I acknowledge that we are gathered on Birpai Land. I pay respect to the Birpai Elders both past and present. I also extend that respect to all other Aboriginal and Torres Strait Islander people present."

Item: 02

Subject: APOLOGIES

RECOMMENDATION

That the apologies received be accepted.

Item: 03

Subject: CONFIRMATION OF PREVIOUS MINUTES

RECOMMENDATION

That the Minutes of the Coast, Estuary & Floodplain Advisory Sub-Committee Meeting held on 9 February 2016 be confirmed.

PRESENT

Members:

Councillor Lisa Intemann (Chair)
Adrian Button (Waterways User Rep.)
Alan MacIntyre (Community Rep.)
Bob Jolly (Community Rep. - Lake Cathie)
John Hough (Community Rep.)
Kingsley Searle (Oyster Industry)
Laurie Lardner (Community Rep.)
Patrick McEntee (Community Rep.)
Paul Hyde (Hastings River Fisherman's Coop)
Tony Troup (Oyster Industry)

Staff:

Matt Rogers (PMHC)
Gordon Cameron (PMHC)
Thor Aaso (PMHC)
Jesse Dick (PMHC)

Other Attendees:

Tina Clemens (Lands Department)
Michael Northam (DPI - Fisheries)
Shaun Kerrigan (National Parks Wildlife Service)
John Schmitt (Office of Environment & Heritage)
Nic Denshire (Office of Environment & Heritage)
Andre Uljee (Maritime Division - RMS)
Ray Richards (SES Rep)

The meeting opened at 3.01pm.

01 ACKNOWLEDGEMENT OF COUNTRY

The Acknowledgement of Country was delivered.

02 APOLOGIES

Graeme Sayer (Development Industry Rep.) was again absent without apology, possibly due to illness. Council staff to confirm Graeme's status prior to the next meeting.

Shaun Kerrigan represented Steve Atkins (NPWS), Nic Denshire represented Kate Browning/Toong Chin (OEH).

Shaun Kerrigan (NPWS) advised that Eric Claussen will no longer be the alternative NPWS representative for the sub-committee. Eric Claussen to be removed from mailing list & Shaun Kerrigan added as an alternative to Steve Atkins.

Nic Denshire (OEH) advised that Kate Browning will no longer be a representative on the sub-committee. Toong Chin (OEH) is to be added as an OEH representative.

Andre Uljee & Matt Dawson confirmed that they will alternate in their attendance as each member represents different waterways within the LGA (i.e. Hastings/Camden Haven catchments).

CONSENSUS:

That the apologies from the following members be accepted:

Councillor Sharon Griffiths, Tim Molloy (PMHC), Dan Croft (PMHC), Steve Atkins (National Parks & Wildlife Service) and Toong Chin (OEH).

03 CONFIRMATION OF MINUTES

CONSENSUS:

That the Minutes of the Coast, Estuary & Floodplain Advisory Sub-Committee Meeting held on 29 September 2015 be confirmed with the following edit:

10.05 'Blue Star' Weed Outbreak:

Alan MacIntyre alerted members to an outbreak of Blue Star 'Aristea ecklonii' weed on four properties in the Camden Haven. Thor Aaso to follow up.

04 DISCLOSURES OF INTEREST

There were no disclosures of interest presented.

05 BUSINESS ARISING FROM PREVIOUS MINUTES

Business Arising from Coast, Estuary & Floodplain Advisory Sub-Committee Meeting held on 29 September 2015:

Item 10.05: Alan MacIntyre clarified that the Blue Star weed outbreak was not confined to his property, rather it has also been sited on three neighbouring properties. Thor Aaso followed up on the initial enquiry and requested that Alan pursue a collective landowner response to the matter before engaging Council's Invasive Weeds Officer. Alan MacIntyre to follow up and contact Thor as required.

Updates on the Eco Health report, Vegetation Mapping & Biodiversity Strategy are to be provided on an ongoing basis. Updates are to be presented at the next meeting and will be listed as an ongoing item on the agenda.

06 CAMDEN HAVEN COASTAL ESTUARINE LINKAGES PROJECT GRANT OFFER

There was general discussion on various aspects of the grant offer. Matt Rogers & Thor Aaso confirmed that the areas which were identified for management were primarily selected as a result of land tenures but that the overriding factor was to satisfy the requirements of the grant funding criteria.

CONSENSUS:

That grant offers from North Coast Local Land Service NSW and Office of Environment and Heritage for the Camden Haven Coastal Estuarine Linkage Project be noted.

07 NSW GOVERNMENT REFORM PACKAGE FOR THE MANAGEMENT OF THE NSW COASTLINE

There was general discussion on various aspects of the reform package.

Additional issues raised are as follows:

Coastal Management Plans: Noted that there may be an ad-hoc implementation of coastal protection measures depending on the size of the council and their respective funding capacities.

Question 4: Noted that buffer zones can be affected by climate change. Need to have scope in the provisions to allow for changes to buffer zones to take climate change effects into consideration.

Question 6: Reform package notes that current land zonings have the potential to be amended to reflect the overriding coastal management goals. This is noted in Part B, Stage 3 of the NSW Coastal Management Manual.

Question 7: Watson Taylor lake considered appropriate to be added to the list of sensitive lakes.

Noted that the mapping has not yet been released therefore the submission will not be able to fully address all potential issues. The State govt should provide mapping and extend the cut-off period for submissions.

CONSENSUS:

That Council make a submission on the Reform Package for the Management of the NSW Coastline in line with the issues identified in the report and the following additional points as identified by the Coast, Estuary and Floodplain Advisory Sub-Committee:

1. Buffer zones proposed in the proposed State Environmental Planning Policy should be able to be reviewed to take climate change effects into consideration.
2. Watson Taylor Lake to be added to the list of sensitive lakes in Schedule 1 of the proposed State Environmental Planning Policy.

08 FLOOD EDUCATION PROGRAM

There was general discussion on various aspects of the flood education program and the measures identified within the report with the following specific issues being noted:

1. That the Flood Marker project consider artistic elements similar to the Camden Haven flood markers in order to limit vandalism and reduce community angst towards the markers potentially impacting on property values and the like.
2. That the SES be consulted if compiling publications (brochures, etc) in order to ensure consistency across organisations.
3. That the SES endorsed community plans (currently in place for North Shore/Settlement Point) be incorporated into any projects, including correspondence/publications and the like to ensure that specific measures in these plans are not contradicted or compromised by general flood education advice.

CONSENSUS:

That the flood education options identified in the report are endorsed.

09 LAKE CATHIE COASTAL ZONE MANAGEMENT PLAN UPDATE

Matt Rogers provided an update on the status of the updates to the Lake Cathie Coastal Zone Management Plan.

CONSENSUS:

That the report be noted.

10 GENERAL BUSINESS

10.01 Camden Haven Prawn Study:

Mick Northam confirmed that the prawn study in the Camden Haven is continuing and that some initial sampling and testing had been undertaken. Preliminary results will be provided when they are available.

10.02 Seagrass Mapping:

Tony Troup raised a question about the state of sea grass in Queens Lake. DPI Fisheries have undertaken two rounds of seagrass mapping in the local river systems. Mick Northam to provide mapping when available. It was noted that sea grass extent is variable on a seasonal basis.

10.03 Lake Cathie Opening:

Bob Jolly raised the recent illegal opening of Lake Cathie to the ocean. It was suggested that the opening did not appear to be as good as a mechanical opening and that this may result in a premature closure of the lake. Council to monitor the OEH gauge and note when the lake closes.

10.04 North Shore Fire Safety:

Kingsley Searle noted that the RFS website recommends the Hibbard ferry as the North Shore emergency evacuation point in a fire emergency and that this is not a desirable location. Matt Rogers will raise this issue with Jeff Sharp to address as a matter for Emergency Management Sub-Committee meeting.

10.05 DPI Licensing:

Tina Clemens provided a background on recent changes to DPI licensing arrangements for low impact environmental works, and that old licenses will be transferred to the new licensing arrangements. It was noted that where Council is the trustee manager we will need to continue following the reserve trust handbook.

10.06 Artificial Offshore Reef:

Mick Northam provided some background information on the artificial offshore reef. The works will be finished within coming days but installation will be weather dependent.

10.07 Hastings Fishermans Co-op:

Paul Hyde noted that the Fishermans Co-op will be closing at the end of May 2016. The committee paid respects to Paul, his family and all involved with the Co-op and wished them well into the future. Jesse Dick noted that the building is proposed for demolition under the foreshore management plan which is currently on exhibition and that committee members are encouraged to make a submission if they wish to express their opinion on the proposed removal of this building.

10.08 OEH Flood Grant Applications:

Nic Denshire confirmed that Floodplain Management Grant Applications were now open. Council will prepare relevant project for grant funding within coming weeks and will consult with OEH representatives where necessary. Nic noted that the flood marker project may qualify for grant funding and that Council should discuss this with OEH representatives if compiling a grant funding application for this project. Matt Rogers noted that the Hibbard Floodway Investigation project was a Council priority for grant funding.

10.09 Flynn's Beach Ocean Pool:

Patrick McEntee commented that was a social media campaign for an ocean pool. Matt Rogers advised that there are no current approvals in place for an ocean pool and significant environmental and approvals issues for such a proposal. However, any community group perusing an ocean pool should make a submission to Council.

10.10 Papyrus Weed - Intersection of The Boulevard & Diamond Head Road:

Alan MacIntyre noted that the Papyrus weed located on the eastern side of the intersection of The Boulevard & Diamond Head Road was spreading. Thor Aaso to follow up.

10.11 Recreational Needs:

Clr Lisa Intemann advised that some Councillors have raised the issue of 'recreational needs' being a higher focus for this committee. It was noted that all Coast and Estuary Management Plans cover recreational needs.

The meeting closed at 5.05pm.

Item: 04
Subject: DISCLOSURES OF INTEREST

RECOMMENDATION

That Disclosures of Interest be presented

DISCLOSURE OF INTEREST DECLARATION

Name of Meeting:
Meeting Date:
Item Number:
Subject:

I, declare the following interest:

☐

Pecuniary:

Take no part in the consideration and voting and be out of sight of the meeting.

☐

Non-Pecuniary - Significant Interest:

Take no part in the consideration and voting and be out of sight of the meeting.

☐

Non-Pecuniary - Less than Significant Interest:

May participate in consideration and voting.

For the reason that:
.....

Name:

Signed: Date:

(Further explanation is provided on the next page)

Further Explanation

(Local Government Act and Code of Conduct)

A conflict of interest exists where a reasonable and informed person would perceive that a Council official could be influenced by a private interest when carrying out their public duty. Interests can be of two types: pecuniary or non-pecuniary.

All interests, whether pecuniary or non-pecuniary are required to be fully disclosed and in writing.

Pecuniary Interest

A pecuniary interest is an interest that a Council official has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the Council official. (section 442)

A Council official will also be taken to have a pecuniary interest in a matter if that Council official's spouse or de facto partner or a relative of the Council official or a partner or employer of the Council official, or a company or other body of which the Council official, or a nominee, partner or employer of the Council official is a member, has a pecuniary interest in the matter. (section 443)

The Council official must not take part in the consideration or voting on the matter and leave and be out of sight of the meeting. The Council official must not be present at, or in sight of, the meeting of the Council at any time during which the matter is being considered or discussed, or at any time during which the council is voting on any question in relation to the matter. (section 451)

Non-Pecuniary

A non-pecuniary interest is an interest that is private or personal that the Council official has that does not amount to a pecuniary interest as defined in the Act.

Non-pecuniary interests commonly arise out of family, or personal relationships, or involvement in sporting, social or other cultural groups and associations and may include an interest of a financial nature.

The political views of a Councillor do not constitute a private interest.

The management of a non-pecuniary interest will depend on whether or not it is significant.

Non Pecuniary – Significant Interest

As a general rule, a non-pecuniary conflict of interest will be significant where a matter does not raise a pecuniary interest, but it involves:

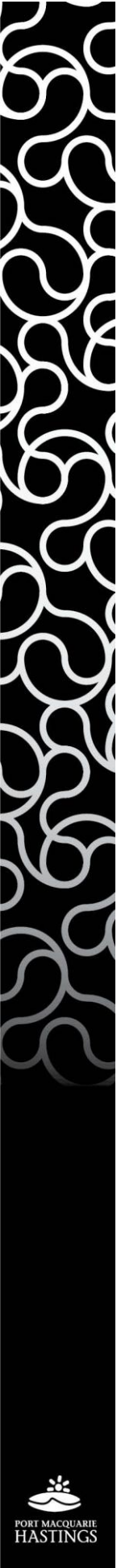
- (a) A relationship between a Council official and another person that is particularly close, for example, parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child of the Council official or of the Council official's spouse, current or former spouse or partner, de facto or other person living in the same household.
- (b) Other relationships that are particularly close, such as friendships and business relationships. Closeness is defined by the nature of the friendship or business relationship, the frequency of contact and the duration of the friendship or relationship.
- (c) An affiliation between a Council official an organisation, sporting body, club, corporation or association that is particularly strong.

If a Council official declares a non-pecuniary significant interest it must be managed in one of two ways:

1. Remove the source of the conflict, by relinquishing or divesting the interest that creates the conflict, or reallocating the conflicting duties to another Council official.
2. Have no involvement in the matter, by taking no part in the consideration or voting on the matter and leave and be out of sight of the meeting, as if the provisions in section 451(2) apply.

Non Pecuniary – Less than Significant Interest

If a Council official has declared a non-pecuniary less than significant interest and it does not require further action, they must provide an explanation of why they consider that the conflict does not require further action in the circumstances.



SPECIAL DISCLOSURE OF PECUNIARY INTEREST DECLARATION

By <i>[insert full name of councillor]</i>	
In the matter of <i>[insert name of environmental planning instrument]</i>	
Which is to be considered at a meeting of the <i>[insert name of meeting]</i>	
Held on <i>[insert date of meeting]</i>	
PECUNIARY INTEREST	
Address of land in which councillor or an associated person, company or body has a proprietary interest (<i>the identified land</i>)	
Relationship of identified land to councillor [Tick or cross one box.]	<input type="checkbox"/> Councillor has interest in the land (e.g. is owner or has other interest arising out of a mortgage, lease trust, option or contract, or otherwise). <input type="checkbox"/> Associated person of councillor has interest in the land. <input type="checkbox"/> Associated company or body of councillor has interest in the land.
MATTER GIVING RISE TO PECUNIARY INTEREST	
Nature of land that is subject to a change in zone/planning control by proposed LEP (<i>the subject land</i>) ⁱⁱⁱ [Tick or cross one box]	<input type="checkbox"/> The identified land. <input type="checkbox"/> Land that adjoins or is adjacent to or is in proximity to the identified land.
Current zone/planning control [Insert name of current planning instrument and identify relevant zone/planning control applying to the subject land]	
Proposed change of zone/planning control [Insert name of proposed LEP and identify proposed change of zone/planning control applying to the subject land]	
Effect of proposed change of zone/planning control on councillor [Tick or cross one box]	<input type="checkbox"/> Appreciable financial gain. <input type="checkbox"/> Appreciable financial loss.

Councillor's Name:

Councillor's Signature: **Date:**

Important Information

This information is being collected for the purpose of making a special disclosure of pecuniary interests under sections 451 (4) and (5) of the *Local Government Act 1993*. You must not make a special disclosure that you know or ought reasonably to know is false or misleading in a material particular. Complaints made about contraventions of these requirements may be referred by the Director-General to the Local Government Pecuniary Interest and Disciplinary Tribunal.

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

-
- i. Section **443** (1) of the *Local Government Act 1993* provides that you may have a pecuniary interest in a matter because of the pecuniary interest of your spouse or your de facto partner or your relative^{iv} or because your business partner or employer has a pecuniary interest. You may also have a pecuniary interest in a matter because you, your nominee, your business partner or your employer is a member of a company or other body that has a pecuniary interest in the matter.
 - ii. Section **442** of the *Local Government Act 1993* provides that a **pecuniary interest** is an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person. A person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to the matter or if the interest is of a kind specified in section **448** of that Act (for example, an interest as an elector or as a ratepayer or person liable to pay a charge).
 - iii. A pecuniary interest may arise by way of a change of permissible use of land adjoining, adjacent to or in proximity to land in which a councillor or a person, company or body referred to in section **443** (1) (b) or (c) of the *Local Government Act 1993* has a proprietary interest..
 - iv. **Relative** is defined by the *Local Government Act 1993* as meaning your, your spouse's or your de facto partner's parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descendant or adopted child and the spouse or de facto partner of any of those persons.

Item: 05

Subject: BUSINESS ARISING FROM PREVIOUS MINUTES

Item:	10.01	Date:	09/02/2016
Subject:	Camden Haven Prawn Study:		
Action Required:	Mick Northam confirmed that the prawn study in the Camden Haven is continuing and that some initial sampling and testing had been undertaken.		
Current Status:	Mick Northam to provide preliminary results when they are available.		

Item:	10.02	Date:	09/02/2016
Subject:	Seagrass Mapping:		
Action Required:	Tony Troup raised a question about the state of sea grass in Queens Lake. DPI Fisheries have undertaken two rounds of seagrass mapping in the local river systems.		
Current Status:	Mick Northam to provide mapping when it is available.		

Item:	10.03	Date:	09/02/2016
Subject:	Lake Cathie Opening:		
Action Required:	Bob Jolly raised the recent illegal opening of Lake Cathie to the ocean. It was suggested that the opening did not appear to be as good as a mechanical opening and that this may result in a premature closure of the lake.		
Current Status:	Council is monitoring the MHL gauge and is making regular inspections of the opening. Staff will note when the lake closes.		

Item:	10.04	Date:	09/02/2016
Subject:	North Shore Fire Safety:		
Action Required:	Kingsley Searle noted that the RFS website recommends the Hibbard ferry as the North Shore emergency evacuation point in a fire emergency and that this is not a desirable location. Matt Rogers will raise this issue with Jeff Sharp to address as a matter for Emergency Management Sub-Committee meeting.		
Current Status:	Jeff Sharp provided advice to Kingsley via email. Matt Rogers noted to contact the RFS directly if further information was needed.		

Item:	10.08	Date:	09/02/2016
Subject:	OEH Flood Grant Applications:		
Action Required:	Nic Denshire confirmed that Floodplain Management Grant Applications were now open. Council will prepare relevant project for grant funding within coming weeks and will consult with OEH representatives where necessary.		
Current Status:	Floodplain grant applications submitted. Report in the agenda dealing with grant application status.		

Item:	10.10	Date:	09/02/2016
Subject:	Papyrus Weed - Intersection of The Boulevard & Diamond Head Road		
Action Required:	This plant has been present in this locality for over 10 years and has been monitored since its establishment. This Giant Papyrus		

	species does not have the same invasive attributes as Dwarf Papyrus, and is the main reason why it has not been declared noxious under the Noxious Weeds Act. Council has approached the landholder about removing this environmental weed in the past, however there has been no compulsion to do so.
Current Status:	The plant is confined to a small area that is sufficiently deep enough to sustain the plant. Councils observations over the last 10 years would suggest the plant is not spreading. Council will continue to monitor this infestation at this point in time.

Item:	05	Date:	09/02/2016
Subject:	Vegetation Mapping, Biodiversity Strategy & EcoHealth Monitoring		
Action Required:	Updates on the Eco Health report, Vegetation Mapping & Biodiversity Strategy are to be provided on an ongoing basis. Updates are to be presented at the next meeting and will be listed as an ongoing item on the agenda.		
Current Status:	<p>Vegetation Mapping: Baseline vegetation community and endangered ecological mapping is completed. Ongoing review of the accuracy of these data continues as data comes to hand. This mapping was integral in the determining of priority and repair areas as part of the Biodiversity Strategy.</p> <p>Biodiversity Strategy: All mapping and modelling is completed. Expert and community panel are now proceeding with finalising the action table. Final draft is expected to be completed in Jan-Feb 2017 from which it will go on public exhibition and reported to Council for adoption.</p> <p>EcoHealth Monitoring: Monitoring and data analysis is completed and report from UNE is expected by end of the calendar year. This project has been delayed by 2 months due an illness with principle UNE researcher.</p> <p>Refer to Implementation Update report for further details.</p>		

Item: 06

**Subject: IMPLEMENTATION UPDATE ON FLOODPLAIN RISK, ESTUARY AND
COASTAL ZONE MANAGEMENT PLAN PROJECTS**

Presented by: Development and Environment Services, Matt Rogers

RECOMMENDATION

That the Committee note the status of action for each Coast, Estuary and Floodplain Risk Management Plan.

Discussion

This report provides a status of actions listed in current Coast, Estuary and Floodplain Risk Management Plans.

Floodplain Risk Management Plans

Port Macquarie-Hastings Council (PMHC) currently has Floodplain Risk Management Plans for the Hastings River and the Camden Haven River.

PMHC and relevant stakeholders have been working progressively to undertake the actions proposed in the Plans.

As noted in the Floodplain Sub-Committee Meeting held on 3 December 2014, many of the actions of the Camden Haven River Management Plan have been completed. Work has only recently on the actions in the Hastings River Flood Risk Management Plan given its finalisation in May 2014. See attached Action Plan for details.

The outstanding actions from each Plan, as well as any ongoing management actions, will be progressively considered for incorporation into Council's annual Operational Plans as funding permits. Some items have been completed since the last report to the committee on 29 September 2015. See attachment for details.

Estuary Management Plans:

PMHC currently has Estuary Management Plans for the Hastings River, Lake Cathie/Lake Innes and Camden Haven River estuaries.

As noted in the Coast & Estuary Sub-Committee Meeting held on 24 April 2014, most of the actions in each Plan have been completed.

Remaining items and ongoing management actions will be considered for incorporation into Council's ongoing Operational Plans as funding permits.

Attached is a summary of the outstanding action items together with the corresponding status for the Committee's information. Again, some items have been completed since the last report to the committee on 29 September 2015.

Coastal Zone Management Plans

Coastal Zone Management Plans have been prepared for Town Beach and for Lake Cathie.

At this point in time, key actions from the Town Beach Coastal Zone Management Plan have been implemented and ongoing management actions will be considered for incorporation into Council's annual Operational Plans as funding permits.

The Lake Cathie Coastal Zone Management was certified by the Minister for Planning in November 2016 and is the subject of a separate report in this agenda. Council has commenced a number of actions including stormwater outlet reconstruction, landuse planning responses, stormwater network redirection detailed design and the design of the revetment along Illaroo Road.

Attached is a summary of the outstanding action items from each of the plans mentioned above, together with the corresponding status for the Committee's information. Some items have been completed since the last report to the committee on 29 September 2015.

Items which have had a change in status have been highlighted for ease of reference.

Attachments

1 [View](#). Coast, Estuary & Floodplain Management Plan Status - Updated

Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Hood	Key Issues	Management Action Required	Sub Tasks	Status Comment
5	Camden Haven	Estuary Management	WATER QUALITY	Develop Stormwater Catchment Action Plans for all urban and rural sub-catchments draining directly to the estuary (in accordance with the Hastings Stormwater Management Plan).		Commenced - 1 sub catchment completed
49	Camden Haven	Estuary Management	RECREATION	Maintain existing foreshore vegetation around Queens Lake		Commenced - Project planning phase underway. Scope, objectives, site-based activities and community consultation planning underway. Vertebrate Pest Control Plan drafted. Project Officer engaged.
43	Camden Haven	Estuary Management	RECREATION	Prepare a 'Significant Bushland Overlay' for Council's GIS based on the mapping of priority conservation areas within the Vegetation Management Plan.		Completed mapping, to be presented in Biodiversity Strategy report.
38	Camden Haven	Estuary Management	RECREATION	Upgrade parking facilities at Dunbogan Boat Launching Ramp		Detailed design for upgrade of Dunbogan Boatramp is currently being completed. The design includes some improvement of parking areas through current budget allocation is for boatramp widening and pontoon installation only. A timeline for parking improvements is not known at this time.
37	Camden Haven	Estuary Management	RECREATION	Upgrade the boat launching ramp within Henry Kendall Reserve.		RMS has commissioned a study of the Camden Haven River to identify priorities to meet the needs of current and future users. The importance of this action will be tested through this study.
4	Camden Haven	Estuary Management	WATER QUALITY	Determine and adopt target values for water quality parameters for different reaches of the estuary consistent with the Interim Environmental Objectives of the NSW Water Reforms.		2nd round of Ecohealth Monitoring is currently being finalised for completion in December. Regional specific targets to be developed by UNE
40	Camden Haven	Estuary Management	RECREATION	Support local Landcare Groups to retain or reinstate riparian vegetation along river and creek corridors to provide a 30 metre wide strip along each bank.		ongoing
54	Camden Haven	Estuary Management	RECREATION	Identify and map derelict oyster leases and those that are not in production		Ongoing
7	Camden Haven	Estuary Management	WATER QUALITY	Identify, prioritise, design and construct stormwater management mechanisms (eg. Gross Pollutant Traps and constructed wetlands) at key locations within the drainage system so that better control of catchment runoff to the estuary can be effected.		Ongoing - as stormwater upgrade works proceed
16	Camden Haven	Estuary Management	WATER QUALITY	Undertake specific actions to prevent future threats to estuary water quality		Ongoing - managed through the rezoning and development assessment processes
12	Camden Haven	Estuary Management	WATER QUALITY	Establish an estuary wide water quality monitoring program		Ongoing - SoE process
13	Camden Haven	Estuary Management	WATER QUALITY	Undertake water quality monitoring program		Ongoing - SoE process
48	Camden Haven	Estuary Management	RECREATION	Monitor seagrass growth throughout the estuary		Ongoing - SoE process
8	Camden Haven	Estuary Management	WATER QUALITY	Establish a stormwater quality monitoring program.		Ongoing - SoE process
42	Camden Haven	Estuary Management	RECREATION	Pursue gains for the environment through negotiated conditions on any new developments.		Ongoing and supported through DA process.
26	Camden Haven	Estuary Management	BANK EROSION	Identify areas where stock access should be restructured on individual properties to either: a) prohibit livestock access to creeks by fencing, with watering afforded by pumping to off-channel farm dams; or to, b) control livestock access so that watering only occurs at selected and rotated watering points.		Ongoing - Council opportunistically engages with landholders who show a willingness to co-operate.
25	Camden Haven	Estuary Management	BANK EROSION	Develop vegetated buffer strips along major creek lines such as Stingray Creek, Stewarts River and the upper reaches of the Camden Haven River.		Ongoing - Council opportunistically engages with landholders who show a willingness to co-operate.

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Hoof d	Key Issues	Management Action Required	Sub Tasks	Status Comment
44	Camden Haven	Estuary Management	RECREATION	Throughout the rural hinterland (ie., Kew, Kendall, Heron's Creek Catchment) encourage conservation of valued terrestrial vegetation through voluntary conservation agreements and retain existing riparian vegetation. Target areas should include: - land adjoining the eastern perimeter of Queens Lake - extensive forested areas and existing riparian vegetation around Heron's creek - large tract of undisturbed old growth forest adjacent to Dooragan National Park		Ongoing - Council opportunistically engages with landholders who show a willingness to co-operate.
50	Camden Haven	Estuary Management	RECREATION	Encourage the establishment of native vegetation on private property by providing tube stock to foreshore property owners.		Ongoing - Council opportunistically engages with landholders who show a willingness to co-operate.
17	Camden Haven	Estuary Management	WATER QUALITY	Enforce erosion and sediment controls for development and activities which have the potential to impact on the estuary.		Ongoing through the DA process
15	Camden Haven	Estuary Management	WATER QUALITY	Promote use of existing boat effluent pump out facilities.		Ongoing through Waterways
45	Camden Haven	Estuary Management	RECREATION	Re-establish vegetation along the cleared parts of the Queens Lake foreshore		Ongoing - Part of the Camden Haven Estuarine Lake Linakges project
33	Camden Haven	Estuary Management	FISHERY	Verify the extent of the reported reduction in fish stocks.		Fisheries advice required
36	Camden Haven	Estuary Management	FISHERY	Develop strategies to halt the decline in fish stocks		Fisheries advice required
6	Camden Haven	Estuary Management	WATER QUALITY	Develop a community education program for responsible stormwater runoff management within the urban areas adjacent to the estuary.		Yet to commence
41	Camden Haven	Estuary Management	RECREATION	Justify and recommend that wetland areas identified as regionally significant be rezoned to "Environmental Protection" under Hastings LEP 2000, or be incorporated within SEPP 14.		Yet to commence - Back-zoning currently not supported by State Planning Departments. However, important areas secures as part of individual rezoning processes.
46	Camden Haven	Estuary Management	RECREATION	Justify and support the rezoning to "Environmental Protection" of the following within land that drains to the estuary: (a) Priority 1 and 2 status vegetation identified and mapped in the draft Hastings Vegetation Management Plan that fall within a 500 metre wide band that is parallel to and extends around the perimeter of the estuary shoreline; (b) Native vegetation that exists within a 250 metre wide band along either side of the banks of all estuary tributaries where that vegetation is considered to be of value.		Yet to commence - Back-zoning currently not supported by State Planning Departments. However, important areas secures as part of individual rezoning processes.
5	Camden Haven	Floodplain Management		Emergency Management Measures		Commenced - Camden Haven Flood Plan Complete - New Hastings SES Flood Plan expected to be complete in 2015. SES to confirm current status. Flood Action Plans to be included as part of the flood awareness and education program in 15/16.
6	Camden Haven	Floodplain Management		Improved Flood Access		Dunbogan flood access project is underway. Project includes Raising of Reid Street, Diamond Head Road, The Boulevard and Dunbogan Tip Road to provide a flood immunity to the 1:20 year flood level. Project to raise Ocean Drive from the Roundabout at The Parade to the Ocean Drive Intersection has not yet been programmed. Road works to be progressively undertaken in conjunction with Council capital works program. Current priority is Dunbogan Flood Access Road.
1	Camden Haven	Floodplain Management		Planning & Development Controls		Completed.

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Hood	Key Issues	Management Action Required	Sub Tasks	Status Comment
8	Camden Haven	Floodplain Management		Small Levee in Lakewood Village		Yet to be scheduled - 2016-17 Grant funding application not successful - proposed for 2017-18 subject to grant funding.
7	Camden Haven	Floodplain Management		Voluntary House Raising		Yet to commence - Audit undertaken in 2007 showed project of high cost and mixed interest from owners. Pilot scheme was suggested to gauge likely issues. The pilot has not been commenced at this time.
4.3.1	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Enhance foreshore habitat of Kooloonbung Creek between Gordon and William streets		Commenced - planning and environmental approvals obtained
4.1.4	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Strategic planning to protect high value conservation areas		Mapping completed as part of Biodiversity Strategy. Protection of high value conservation undertaken as part of any individual rezoning process.
	Hastings	Estuary Management	Salvinia control in Upper Maria River	Eradicate Salvinia from upper Maria River and Connection Creek and undertaken annual inspections of target farm dams		Ongoing
	Hastings	Estuary Management	Control Upper estuary vine weeds	Control invasive vines weeds in the upper Hastings estuary		Ongoing
	Hastings	Estuary Management	Fish Stock Monitoring	Seek opportunities to develop fish stock monitoring.		Ongoing
	Hastings	Estuary Management	Significance/Protected Area Mapping	Continue working on Biodiversity Strategy to highlight key environmental assets (including wetlands and riparian) necessary for protection.		Ongoing
	Hastings	Estuary Management	Estuary Sedimentation	Determine significant sediment sources and educate where appropriate.		Ongoing
1.2.2	Hastings	Estuary Management	Acid Sulphate soils	Initiate regulatory and enforcement action to unlawful ASS management activities		ongoing
2.5.5	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Provide opportunities for direct community participation in review of the plan		ongoing
4.2.2	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Council and DUAP to Monitor and enforce compliance with SEPP 14 & SEPP 26		ongoing
4.2.1	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Council to Ensure compliance with development consent conditions for habitat conservation		ongoing
4.3.5	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Maintain existing rock wall protection		ongoing
4.3.6	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Prepare plans for strategic retreat of ancillary buildings and infrastructure		Ongoing
4.2.3	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Council to Monitor and enforce compliance with tree preservation policy		ongoing
4.3.3	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Review management plans for foreshore reserves		ongoing
5.1.4	Hastings	Estuary Management	Manage interactions of Recreational Users	Complete open space, community, cultural and recreational facilities study		ongoing
2.2.1	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Monitoring and enforcement of soil and water management and habitat protection provisions of development consent		ongoing
2.2.2	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Audit Planning decisions to ensure consistent response to issues affecting the health of the estuary		ongoing

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Coast/Estuary/Hoofloodplain Management Area	Key Issues	Management Action Required	Sub Tasks	Status Comment
2.3.1	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Stormwater management for Koolboonbung Creek	ongoing
4.3.2	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Support Landcare groups or landowners to carry out riparian zone rehabilitation	Ongoing
3.2.1	Hastings	Estuary Management	Sedimentary Processes and Dredging Management	Council, DLWC, NSW Fisheries and EPA use regulatory powers strategically to enhance environmental outcomes	ongoing
2.4.5	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Establish and maintain tourism databases	ongoing
3.0	Hastings	Estuary Management		Implement urban stormwater measures, Wauchope and lower priority areas of Port Macquarie	ongoing
7.0	Hastings	Estuary Management		Continue to negotiate landholder agreements for drain operation, maintenance, restoration of high conservation land	ongoing
3.3.1	Hastings	Estuary Management	Sedimentary Processes and Dredging Management	Prepare statutory documentation for urgent navigation dredging (REF) and confirm funding options	Ongoing - Competed as part of specific proposals
2.1.3	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Scenic Amenity and conservation plan	Ongoing - component of landuse and open space planning
5.2.1	Hastings	Estuary Management	Manage Interactions of Recreational Users	Maintain and enforce no wash zones in narrow channel areas (Maria River and Limeburners Creek)	Ongoing - RMS
1.4.3	Hastings	Estuary Management	Acid Sulphate soils	Collate information on performance indicators such as fish kills, water quality etc	Ongoing - SoE process
2.4.1	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Establish monitoring programs for core indicators of estuary health	Ongoing - SoE process
4.4.1	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Establish assessment and monitoring protocol for riparian vegetation to be reported in SoE	Ongoing - SoE process
2.5.1	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Report on core suite of sustainability indicators	Ongoing - SoE process
2.1.6	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Maintain integrate socio-economic databases with environmental databases	Ongoing - SoE process
2.4.4	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Maintain 3 yearly ecological and sediment monitoring of Koolboonbung Creek	Ongoing - SoE process
1.4.2	Hastings	Estuary Management	Acid Sulphate soils	Initiate ecological monitoring program	Ongoing - SoE process
3.4.2	Hastings	Estuary Management	Sedimentary Processes and Dredging Management	Extend river Styles assessment to the estuary	Ongoing - SoE process
4.4.3	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Conduct community surveys on usage/ satisfaction with foreshore park facilities	Ongoing - through existing community engagement processes
2.5.4	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Provide direct and well publicised Council contact on environmental matters via estuary education	ongoing (NRO) position

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Hood	Key Issues	Management Action Required	Sub Tasks	Status Comment
2.3.5	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Maximise opportunities for sustainable reuse of sewage effluent		ongoing and fully funded through the delivery of recycled waste water (purple pipe) for new developments such as Area 13.
2.5.2	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Continue to promote and fund Urban Landcare		ongoing and funded through Environmental Levy
3.4.1	Hastings	Estuary Management	Sedimentary Processes and Dredging Management	Establish an ongoing program of channel survey to monitor rates of shoaling at key locations, bed form and refine maintenance dredging program		ongoing Dept of Lands
4.1.6	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Focus riparian vegetation protection measures in Maria River and Limeburners Creek		ongoing requires landholder willingness
2.3.3	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Septic safe program - Onsite sewerage management plan		ongoing through provision of rural village sewer programme and OSMS inspections
2.5.3	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Involve local aboriginal community in ongoing estuary management activities		ongoing through representation on the Committee and other estuary related matters
8.0	Hastings	Estuary Management		Ongoing monitoring and reporting of sustainability indicators for the estuary		Ongoing through the Regional State of the Environment reporting
4.1.1	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Establish voluntary conservation agreements with landholders		ongoing where suitable
2.3.4	Hastings	Estuary Management	Sustainable Urban Growth and waterway use	Onsite Effluent management - North Shore Village		Completed, North Shore sewerage, Village sewer program ongoing.
5.4.1	Hastings	Estuary Management	Manage interactions of Recreational Users	Provide baseline data on recreational fishing effort and catches		Fisheries advice required
4.0	Hastings	Estuary Management		Provide additional boat ramp to Vauchope area		This action was not identified as a priority in the Mid North Coast Regional Boating Plan as adopted by the RMS in 2015. A floating pontoon is being installed at Rocks Ferry Reserve this financial year to improve facilities for recreational boaters in this area.
5.5.1	Hastings	Estuary Management	Manage interactions of Recreational Users	Provide clear information and Guidance to visitors and residents on issues such as recreational boating, swimming areas, water conservation etc		Yet to commence
5.1.2	Hastings	Estuary Management	Manage interactions of Recreational Users	Implement ongoing projects under HIMS-T system		Yet to commence
4.3.4	Hastings	Estuary Management	Habitat rehabilitation & Riparian Zone Management	Fund Blackmans Point Landcare to continue installation of log walls		Yet to commence - currently under investigation by Dept of Lands
7	Hastings	Floodplain Management		Commission a Climate Change Assessment Study to investigate and quantify the implications of climate change on existing design flood predictions to Year 2100	1. Prepare Brief defining climate change scenarios to be investigated 2. Engage consultant to undertake associated modelling 3. Undertake investigations and compare results to Design Levels adopted in Hastings FRMS (2011) 4. Adopt revised Design Flood Levels (as appropriate) 5. Determine and map Updated Flood Planning Area (as required)	Commenced - expect draft report to be exhibited early 2017.

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Floodplain Management Area	Key Issues	Management Action Required	Sub Tasks	Status Comment
8	Hastings	Floodplain Management		Commission a Hibbard Precinct Floodway Refinement Study to investigate potential options for the management of the designated floodway between Fernbank Creek and Hibbard, including potential options to modify the current floodway to accommodate existing development, while at the same time maintaining flow conveyance	<ol style="list-style-type: none"> 1. Undertake "local scale" investigation to identify potential alternative floodway alignments through Hibbard Precinct 2. Consult with stakeholders including landowners to identify feasible floodway alternatives 3. Identify potential properties for buy back over time (potential may exist for voluntary purchase depending on funding availability). Funding opportunities to be determined in association with OEH. 4. Determine recommended alternate / refined floodway corridor 5. Identify potential properties for voluntary purchase 6. Develop Implementation Plan 	Commenced - Grant funding confirmed. Request for Quotes process underway. Expect to award contract at February Council meeting.
11	Hastings	Floodplain Management		Develop flood interpretation software package which incorporates flood warning data for use as a flood management tool	<ol style="list-style-type: none"> 1. Identify flood interpretation software; e.g., waterRIDE or other software 2. Engage consultant to develop flood forecasting tool 3. Develop Flood Forecasting Tool 4. SES have obtained relevant software licenses and are currently working on producing inundation mapping and incident management plans for critical areas. A MOU is in place with MIDROC to provide a technical officer as part of the incident management Team. 5. Undertake training of SES personnel in the use of the Flood Forecasting Tool 	Commenced - SES have obtained relevant software licenses and are currently working on producing inundation mapping and incident management plans for critical areas. A MOU is in place with MIDROC to provide a technical officer as part of the incident management Team.
5	Hastings	Floodplain Management		Prepare and Adopt LGA Wide Flood DCP/ Policy.	<ol style="list-style-type: none"> 1. Prepare LGA Wide Flood DCP in line with Draft DCP recommendations to apply across the entire LGA, incorporating: <ul style="list-style-type: none"> - provision for climate change impacts on design flood levels and flood planning area - protocols for approvals on land within the Hibbard South Precinct 2. Exhibit draft Flood DCP in accordance with statutory requirements. Incorporate community feedback as a result of public notification. 4. Council Adoption of Flood DCP 5. Public notification of changes & incorporation of community feedback. 	Complete.
2	Hastings	Floodplain Management		Construct Settlement Point Flood Protection Levee	<ol style="list-style-type: none"> 1. Review results of Supplementary Study into climate change impacts on Design Flood Characteristics and determine short, medium and long term implications for Settlement Point. Establish projected timescale for levee that acknowledges community based safety requirements. 2. Undertake local scale stakeholder consultation to educate local community on implications of climate change on design flood characteristics and associated risk to life. 3. Prepare REF/EIA for Settlement Point Levee. Develop preliminary concept design that recognises staggered impacts of climate change. 4. Apply for funding under the floodplain management grants program 5. Develop formal concept design incorporating additional stakeholder / community consultation 6. Undertake Detail Design 7. Undertake staged construction as per climate change impact 	Community consultation and preliminary design programmed for 2017/18 subject to grant funding.

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Floodplain Management Area	Key Issues	Management Action Required	Sub Tasks	Status Comment
4	Hastings	Floodplain Management		Update Port Macquarie-Hastings LEP 2011 to reflect latest standard clauses for the management of flood prone land	<ol style="list-style-type: none"> 1. Develop recommended changes in wording for flood related clauses within Port Macquarie - Hastings LEP 2011 2. Submit recommended clause changes to Council's Planning Department for consideration 3. Workshop with Council's Dept of Planning (as required) 4. Submit final recommended clause changes to Council for acceptance 5. Following Council acceptance, forward to NSW Dept of Planning 6. Infrastructure for adoption and incorporation into LEP 2011 7. Public notification of changes & incorporation of community feedback. 	Yet to be scheduled - to be reviewed with Council's Strategic Planning Section once Hastings River Climate Change Mapping & Wrights Creek Flood Study Projects completed.
10	Hastings	Floodplain Management		Investigate options for properties / dwellings that fall within the floodway corridors for house raising	<ol style="list-style-type: none"> 1. Identify relevant floodway areas: <ul style="list-style-type: none"> - Oaks Crescent - Blackmans Point - Fernbank Creek 2. sections along Hastings River Drive in Hibbard 3. Engage consultant to investigate feasibility and cost for house raising works 4. Consult with residents and landowners to gauge their support for house raising 5. OEH guidelines confirm that grant funding for house raising is not available where the development falls within a floodway. However it is dependent on the individual circumstances of the site and each proposal would be assessed on a case by case basis. 	Yet to be scheduled
19	Hastings	Floodplain Management		Develop and initiate flood education and awareness program for vulnerable groups and flood affected communities	<ol style="list-style-type: none"> 1. Vulnerable Group to include: <ul style="list-style-type: none"> - Heritage Christian School at Hibbard - Wauchope High School - St Josephs Primary School and Regional High School 2. Priority flood affected communities to target: <ul style="list-style-type: none"> - Settlement Point - Hibbard - Fernbank - Blackmans Point 3. Review results of Supplementary Climate Change Modelling Investigation (Item 7) and prepare Brief defining climate change adaptation investigation requirements 4. Engage consultant 5. Undertake Investigations and Develop Adaptation Strategy 	Yet to be scheduled - 2016-17 Grant funding application not successful - proposed for 2017/18 subject to grant funding.
9	Hastings	Floodplain Management		Commission a Climate Change Adaptation Study for the lower Hastings River Estuary that sets a strategy for protecting (or otherwise) existing infrastructure that will be exposed to more frequent fluvial and tidal flooding as climate change impacts manifest	<ol style="list-style-type: none"> 1. Review results of Supplementary Climate Change Modelling Investigation (Item 7) and prepare Brief defining climate change adaptation investigation requirements 2. Engage consultant 3. Undertake Investigations and Develop Adaptation Strategy 	Yet to be scheduled - proposed for 2017/18 subject to grant funding.
12	Hastings	Floodplain Management		Install additional rainfall and streamflow gauges, particularly at Dennis Bridge and Telegraph Point and identify any additional sites required	<ol style="list-style-type: none"> 1. Engage with BOM/MHL to identify process for installation of streamflow gauges 2. Procure gauge and commission installation 	Yet to be scheduled - proposed for 2017/18 subject to grant funding.

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Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Floodplain Management Area	Key Issues	Management Action Required	Sub Tasks	Status Comment
1	Hastings	Floodplain Management		Construct North Shore Flood Protection Levee	<ol style="list-style-type: none"> 1. Review results of Supplementary Study into climate change impacts on Design Flood Characteristics and determine short, medium and long term implications for North Shore. Establish projected timescale for levee that acknowledges community based safety requirements. 2. Undertake local scale stakeholder consultation to educate local community on implications of climate change on design flood characteristics and associated risk to life. 3. Prepare REF/EIA for North Shore Levee. Develop preliminary concept design that recognises staggered impacts of climate change. 4. Apply for funding under the Floodplain management grants program 5. Develop formal concept design incorporating additional stakeholder / community consultation 6. Undertake Detail Design 7. Undertake staged construction as per climate change impact 	Yet to be scheduled. Due to the inconclusive response from residents construction of a ring levee at North Shore may depend on community acceptance or a future change in flood policy.
13	Hastings	Floodplain Management		Raise Settlement Point Road between the ferry wharf and Park Street	<ol style="list-style-type: none"> 1. Prepare REF/EIA for road raising 2. Apply for funding under the Floodplain management grants program 3. Prepare concept & detail design 4. Undertake construction works 	Yet to commence
14	Hastings	Floodplain Management		Raise Hastings River Drive from west of Boundary Road to Tuffins Lane	<ol style="list-style-type: none"> 1. Prepare REF/EIA for road raising 2. Apply for funding under the Floodplain management grants program 3. Prepare concept & detail design 4. Undertake construction works 	Yet to commence - Road works to be progressively undertaken in conjunction with Council capital works program. Current priority is HRD from Hughes Place to Boundary Street and Boundary Street from HRD intersection to Airport.
15	Hastings	Floodplain Management		Raise Hastings River Drive between Fernbank Creek bridge and the existing Pacific Highway	<ol style="list-style-type: none"> 1. Prepare REF/EIA for road raising 2. Apply for funding under the Floodplain management grants program 3. Prepare concept & detail design 	Yet to commence - Road works to be progressively undertaken in conjunction with Council capital works program. Current priority is HRD from Port Home Zone to Boundary Street and Boundary Street from HRD intersection to Airport.
16	Hastings	Floodplain Management		Raise Fernbank Creek Road	<ol style="list-style-type: none"> 1. Prepare REF/EIA for road raising 2. Apply for funding under the Floodplain management grants program 3. Prepare concept & detail design 4. Undertake construction works 	Yet to commence - Road works to be progressively undertaken in conjunction with Council capital works program. Current priority is HRD from Port Home Zone to Boundary Street and Boundary Street from HRD intersection to Airport.
18	Hastings	Floodplain Management		Raise short section of Shoreline Drive (near Riverside Drive intersection) (interim emergency response measure)	<ol style="list-style-type: none"> 1. Prepare REF/EIA for road raising 2. Apply for funding under the Floodplain management grants program 3. Prepare concept & detail design 4. Undertake construction works 	Yet to commence - Road works to be progressively undertaken in conjunction with Council capital works program. Current priority is HRD from Port Home Zone to Boundary Street and Boundary Street from HRD intersection to Airport.
17	Hastings	Floodplain Management		Raise Shoreline Drive and North Shore Drive (subject to construction of North Shore and Settlement Point Levees)	<ol style="list-style-type: none"> 1. Prepare REF/EIA for road raising 2. Apply for funding under the Floodplain management grants program 3. Prepare concept & detail design 4. Undertake construction works 	Yet to commence - Road works to be progressively undertaken in conjunction with Council capital works program. Current priority is HRD from Port Home Zone to Boundary Street and Boundary Street from HRD intersection to Airport.
2.1	Lake Cathie	Coastal Management	Development Controls	Review interim development controls with reference to the NSW Coastal Planning Guideline: Adapting to Sea Level Rise (DoP 2010) to provide more guidance including a definition of relocatable structures, triggers for relocation and requirements for geotechnical/ coastal engineer's reports for foundation design.	<ol style="list-style-type: none"> 3. Prepare concept & detail design with consideration of existing stormwater drainage issues 4. Undertake construction works 	Commenced - Development Controls reviewed. And have been formatted into the Development Control Plan (DCP) format. Proposed to be reported to December 2016 Council meeting.

Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Floodplain Management Area	Key Issues	Management Action Required	Sub Tasks	Status Comment
3.2	Lake Cathie	Coastal Management	Stormwater Management	Redirect Illaroo Rd stormwater to minimize the direct outflow of stormwater onto the beach. Illaroo Road only included as a contingency pending confirmation of the timing of the construction of the Revetment.		Commenced - Grant funding confirmed for detailed design component.
3.1	Lake Cathie	Coastal Management	Stormwater Management	Continue to upgrade the stormwater outlets to the beach e.g: placement of rock at outlets to reduce beach scour.		Commenced - numerous beach outlets upgraded within past 5 years. Remainder programmed to be upgraded pending grant funding applications
5	Lake Cathie	Coastal Management	Ongoing Beach Nourishment	Any sand dredged/ excavated from the Lake Cathie entrance to be placed on the beach adjacent to Illaroo Road.		Ongoing
7.4	Lake Cathie	Coastal Management	Foreshore Management	Batter back any storm erosion escarpment that forms at Foreshore Reserve (or in other locations) to ensure public safety and maintain park amenity.		Ongoing
9.2	Lake Cathie	Coastal Management	Public Access	Continue to monitor and rehabilitate informal beach access tracks		Ongoing
9.3	Lake Cathie	Coastal Management	Public Access	Reduce erosion escarpments at the base of beach accessways and carry out any necessary repairs following storm erosion		Ongoing
6	Lake Cathie	Coastal Management	Stormwater Management	Continue to upgrade the stormwater outlets to the beach e.g: placement of rock at outlets to reduce beach scour.		Ongoing, subject to funding availability.
7.1	Lake Cathie	Coastal Management	Foreshore Management	Continue to control/ remove bitou bush along with regeneration/ revegetation with locally indigenous vegetation species.		Ongoing, subject to funding availability.
8.1	Lake Cathie	Coastal Management	Reserve Improvements	Prepare masterplan for foreshore reserves (Aqua Reserve, Foreshore Reserve and Johnathon Dixon Reserve), incorporating the following improvements: - additional lighting at Johnathon Dixon Reserve and in the vicinity of the Foreshore Reserve barbeque facilities - upgrade Johnathon Dixon Reserve to relieve pressure on Foreshore Reserve by providing shade, shelter and play areas.		To be undertaken 2016/17 to support community driven improvement of these resources
2.2	Lake Cathie	Coastal Management	Development Controls	Upgrades should allow for revetment end effects. Review area subject to controls following construction of the revetment and when the hazard lines are reviewed. Note that the 50 year impact line would move over time due to shoreline recession (and possibly affect additional properties, e.g. along Chepana Street).		Yet to be scheduled
3.5	Lake Cathie	Coastal Management	Revetment	Call tenders and construct revetment.		Yet to be scheduled
3.6	Lake Cathie	Coastal Management	Revetment	Finalise private/ public cost-sharing arrangements including private payment plans.		Yet to be scheduled
3.7	Lake Cathie	Coastal Management	Revetment	Carry out post-storm assessments to identify revetment maintenance requirements and actions to address exacerbated erosion in front of, and at the ends of, the revetment.		Yet to be scheduled
4.1	Lake Cathie	Coastal Management	Contingency Measures	Develop a Servicing Strategy in consultation with other service providers in the event that access and services to Illaroo Road properties are threatened by coastal erosion, prior to construction of a revetment.		Yet to be scheduled

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Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Hood	Key Issues	Management Action Required	Sub Tasks	Status Comment
4.2	Lake Cathie	Coastal Management	Contingency Measures	Designate Aqua Crescent/ Bundella Avenue and Illaroo as a one-way loop in a Local Area Traffic Management Plan in the event that damage to the road reserve occurs as a result of erosion events and the road pavement width needs to be reduced to maintain safe access, prior to the construction of a revetment.		Yet to be scheduled
17.3	Lake Cathie	Estuary Management	Lower Lake Cathie Creek (North)	Linking pathways		Commenced
17.4	Lake Cathie	Estuary Management	Lower Lake Cathie Creek (North)	additional seating		Commenced
5	Lake Cathie	Estuary Management	Shoaling in the lower estuary	Monitor shoaling and initiate entrance closure if required		Ongoing
10	Lake Cathie	Estuary Management	Water Quality	Continue and expand WQ monitoring		Ongoing
17.8	Lake Cathie	Estuary Management	Lower Lake Cathie Creek (North)	water quality monitoring		Ongoing
17.27	Lake Cathie	Estuary Management	Lake Innes and Lake Cathie	vehicle and bike barriers		Ongoing
13	Lake Cathie	Estuary Management	Water Quality	Construct water quality control structures		Ongoing - as stormwater upgrade works proceed
6	Lake Cathie	Estuary Management	Shoaling in the lower estuary	Undertake EIS and dredge lower estuary		Ongoing - currently waiting entrance closure
11	Lake Cathie	Estuary Management	Water Quality	Investigate pollution impacts and establish nutrient budgets		Ongoing - incorporated in Ecohealth Programme
24	Lake Cathie	Estuary Management	Sedimentation	Construct sediment control structures		Ongoing as necessary
1	Lake Cathie	Estuary Management	Lake Cathie Entrance Opening	Implement combined entrance opening strategy (when to open)		Opening strategy identified opening at 1.6m. Ongoing as required
17.22	Lake Cathie	Estuary Management	Upper Cathie Creek	creek pathway		National Parks and Wildlife Service advice required
17.26	Lake Cathie	Estuary Management	Lake Innes and Lake Cathie	linking pathways		National Parks and Wildlife Service to advise
14	Lake Cathie	Estuary Management	Water Quality	Undertake community education program		No longer considered necessary
16	Lake Cathie	Estuary Management	Flooding	Prepare Floodplain management Plan		No longer considered necessary
	LGA Wide	Estuary Management	Undertake coastal improvements as per coastal zone management plans	Undertake coastal improvements as per coastal zone management plans		Commenced and ongoing.
	LGA Wide	Estuary Management	Significant coastal Vegetation Mapping	Complete priority repair and conserve mapping for coastal vegetation as part of a wider Biodiversity Strategy		Completed mapping to be presented in Biodiversity Strategy report.
	LGA Wide	Estuary Management	Undertake ASS audit	Audit high risk structures and assist with repair where required over 5 years		Completed, next audit due in 2020
	LGA Wide	Estuary Management	Monitoring and reporting of waterway health	Undertake regional State of the Environment / Ecohealth monitoring and reporting		Ongoing
	LGA Wide	Estuary Management	Coastal floodplain Habitat Improvements	Control invasive weeds and feral animals on public management bushland and participating private land to improve the coastal vegetation habitat on the floodplain		Ongoing
	LGA Wide	Estuary Management	Abandoned Oyster lease clean up	continue to remove abandoned oyster infrastructure from estuaries		Ongoing
	LGA Wide	Estuary Management	Environmental Improvements to Stormwater	Undertake environmental upgrade works as per stormwater management plan		Ongoing - as Stormwater works are implemented
	LGA Wide	Estuary Management	Implement recreational users infrastructure plan	as per plan		Ongoing and in accordance with Recreation Plan

NOTE: YELLOW HIGHLIGHTING DENOTES CHANGE TO STATUS SINCE LAST COMMITTEE MEETING WAS HELD

Page 10 of 12

Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Management Area	Coast/Estuary/Hoofloodplain Management	Key Issues	Management Action Required	Sub Tasks	Status Comment
	LGA Wide	Estuary Management	Climate Change Operational Strategy	Undertake climate change strategy for the LGA		Complete
	LGA Wide	Estuary Management	Comprehensive coastal zone management plan	complete a LGA-wide coastal zone management plans		Yet to be scheduled
	LGA Wide	Floodplain Management	Complete stormwater catchment management plans	complete stormwater management action plans for all sub catchments currently outstanding		Commenced and ongoing.
26	Town Beach	Coastal Management		Maintain relatively natural pathway surfaces around southern headland (Flagstaff Hill)		Commenced - Footpath surfaces to be determined a part of detailed design for upgrades having regard for access requirement and asset durability.
24	Town Beach	Coastal Management		Design and install stormwater gross pollutant traps in car park at southern kiosk and car parks east and north of Gaol Point		Commenced - GPP installed adjacent to kiosk.
14	Town Beach	Coastal Management		Provide formalised stairway access from Gaol Point to the back beach area, on north and south faces of Gaol Point		Commenced - Stairs on southern face complete. Northern yet to be scheduled.
8	Town Beach	Coastal Management		Construct new amenities building to service the northern reserve area		Commenced, programmed for completion in 2016/17
10	Town Beach	Coastal Management		Install additional seating, tables and lighting in the northern reserve, in the same general style as that in the southern reserve		Commenced.
16	Town Beach	Coastal Management		Upgrade pathways in Rotary Park and enhance landscaping to improve connectivity between the park, beach and adjacent accommodation		Commenced.
20	Town Beach	Coastal Management		Install shade structures in the back beach reserve at the southern end of Town Beach, to complement planting of shade trees		Commenced. Facilities installed in northern part of the reserve. Future works proposed for southern portion in future years.
21	Town Beach	Coastal Management		Continue to use local flowering small trees for shade and to provide local habitat for foraging native species		Commenced. Facilities installed in northern part of the reserve. Future works proposed for southern portion in future years.
1A	Town Beach	Coastal Management		Maintain Southern Breakwall of the Hastings River entrance, to replace dislodged rock and protect the wall core and raise crest height to 4.6 mAH		Ongoing
1B	Town Beach	Coastal Management		Ongoing maintenance of Southern Breakwall		Ongoing
2	Town Beach	Coastal Management		Remove displaced rock from the surf zone to reduce safety hazards to swimmers and surfers		Ongoing
22	Town Beach	Coastal Management		Continue to remove weeds from coastal bluff grassland vegetation communities, replacing weeds with local coastal shrub and ground cover species		Ongoing
25	Town Beach	Coastal Management		Highlight pedestrian linkages from Town Green to Town Beach and beyond in tourist information and in sign posting/maps all key junctions along the walking paths. Develop major theme to integrate the walking track system. Sign posting to also be provided at Flagstaff Hill to highlight special visual features such as whale watching.		Ongoing
27	Town Beach	Coastal Management		Review safety of all pathways, stairways, elevated walkways and lookout fencing around Flagstaff Hill		Ongoing
28	Town Beach	Coastal Management		Ensure that any further development of facilities in the woodland areas at Flagstaff Hill and beyond does not detract from the natural landscape character of this area.		Ongoing
11	Town Beach	Coastal Management		Upgrade and install pathways in the northern reserve, two metres wide and including art work or natural/cultural heritage information in the surface		Complete.
15	Town Beach	Coastal Management		Provide interpretative signage at Gaol Point about the history of the site, the harbour entrance, surf conditions, passing whales and dolphins, walking trails etc.		Complete.

NOTE: YELLOW HIGHLIGHTING DENOTES CHANGE TO STATUS SINCE LAST COMMITTEE MEETING WAS HELD

Page 11 of 12

Coast, Estuary and Floodplain Management Plan Action Status

Specific Plan Action Number	Catchment/Man- agement Area	Coast/Estuary/Hoo- id	Key Issues	Management Action Required	Sub Tasks	Status Comment
7	Town Beach	Coastal Management		Construct a rotunda adjacent to the children's playground area		Yet to be scheduled
17	Town Beach	Coastal Management		Prepare Traffic Management Plan that includes investigation of the closure of the southern end of Stewart Street and installation of traffic calming devices to minimize potential conflicts with pedestrians		Yet to be scheduled
18	Town Beach	Coastal Management		Implement Traffic Management Plan		Yet to be scheduled

NOTE: YELLOW HIGHLIGHTING DEMOTES CHANGE TO STATUS SINCE LAST COMMITTEE MEETING WAS HELD

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Item: 07

**Subject: DRAFT LAKE CATHIE COASTAL MANAGEMENT DEVELOPMENT
CONTROL PLAN (DCP) PROVISIONS**

Presented by: Development and Environment Services, Matt Rogers

RECOMMENDATION

That it be a recommendation to Council that the Lake Cathie Coastal Management Development Control Plan (DCP) provisions be placed on public exhibition for a period of 28 days.

Discussion

One of the actions of the *Lake Cathie Coastal Zone Management Plan (CZMP)* is the implementation of 'Interim Planning Controls pending construction of the Revetment'. These controls relate to development proposed in the *immediate* coastal erosion hazard zone (primarily along Illaroo Road) before a revetment wall is constructed. The planning controls seek to minimise future damage to private development, manage safety and limit the impacts on the environment from coastal storm events.

The Interim Planning Controls currently include reference to relocatable buildings as an appropriate form of development in high hazard areas. The Interim Planning Controls also note that appropriate coastal erosion 'trigger' points (that determine when these buildings would be relocated off-site) need to be developed.

To date, there has been minimal development activity along Illaroo Road with only minor alterations/additions being proposed. Recent discussions with residents of Illaroo Road and local planning consultants have identified the need to update the planning controls to provide clarity and certainty to those wishing to undertake development in the *immediate* coastal erosion hazard zone.

It is noted that these development controls will apply to development undertaken prior to the construction of the revetment wall. Upon completion of the construction of the revetment wall the development controls will need to be reviewed.

Consultation has occurred with residents to develop suitable trigger points that would initiate the removal of relocatable buildings. Council sought comments from the owners along Illaroo Road on the following:

- What issues should be considered when determining appropriate removal path (obstacles, adjoining properties, side roads etc)?
- What is a suitable timeframe for relocation works to be undertaken?
- What is an appropriate size, shape and configuration of relocatable buildings to permit quick dismantling and removal?

Details of feedback received is discussed in the Community Engagement section below.

Council staff have prepared draft Development Control Plan (DCP) provisions following resident feedback. The draft DCP provisions are broadly consistent with the original Interim Planning Controls with the main changes relating to the following:

- The setting of a trigger point to initiate moving of relocatable structures.
- Size of relocatable structures.
- A plan has been developed to aid in the interpretation of trigger points and relocation removal routes.
- Floor Area Calculation method clarification to meet the intent of the CZMP which seeks to limit development to a 10% increase in the 'ground floor footprint' of the existing dwelling.
- Confirming that development control will be cumulative in its application, i.e. a 10% increase in GFA is only permitted once.
- Setting development objectives.
- Rationalising and simplifying the wording for development provisions relevant to each zone.
- Nominating development types which will require additional detailed assessment, e.g. child care developments and the like.
- Development consent conditions will be imposed which reflect the management responses detailed throughout the assessment phase.
- 149 Certificate notifications and 88B instrument to be updated to ensure landowners and prospective purchasers are aware of coastal risks and that relocation management responses may be applicable to the land.

In view of the short time available for the Sub-Committee to review the draft DCP, members are encouraged to provide input on the draft provisions during the public exhibition period.

It is proposed that the draft DCP provisions be placed on exhibition for the statutory period (28 days). Members of the public (including committee members) will be able to make comment on the proposed development controls during this time. Following the exhibition period, all submissions will be reviewed and updates to the DCP made as necessary. The final provisions will be incorporated into Council's DCP (2013).

A copy of the draft DCP chapter is attached.

Community Engagement

An Issues Paper was prepared and sent to all Illaroo Road residents on 9 June 2016. The paper outlined key issues that needed to be considered by Council and the community when setting a 'trigger point' for relocatable buildings. Council encouraged all Illaroo Road residents to read and discuss the issues paper and provide their feedback by 8 July 2016.

Feedback was received via an Issues Paper feedback form and via email. In total, five (5) responses were received from residents of Illaroo Road.

A summary of the feedback received is provided below:

Trigger Point & Distance

- Needs to be special consideration for relocation trigger points for those on corner lots as alternative access is available via Kywong & Kalang streets.

- Residents should be able to decide when to initiate relocation.
- Council should not specify a distance to trigger relocation.
- Coastal edge of road should be used as the trigger point.
- 30 metres should be used as the trigger distance from the coastal edge of the road.
- Closest part of the building should be used as the trigger point.
- 20 metres should be used as the trigger distance from the closest part of the building.

Comment: Trigger points and distances are considered necessary to ensure relocation procedures are initiated at an appropriate time. Setting trigger points ensure that appropriate and consistent assessment of proposed developments can occur. Variable trigger points have been included to reflect alternative relocation routes available for corner blocks. Trigger points have been set as the seaward edge of the road (for blocks fronting Illaroo Road) and 10m from relocatable structure (for corner blocks).

Relocation Path

- Relocation should be undertaken on the paved road surface only.
- Size of the machinery to remove the buildings should be considered.
- Need to consider where the relocatable buildings are moving to as a substantial area will be needed to store the buildings.

Comment: The trigger points mentioned above have been set to ensure that at least one (1) lane of Illaroo Road can be used for the relocation of structures. The destination for the storage of relocatable structures has not been specified due to the multitude of possibilities available to individual residents for the storage of the removed structures. This aspect will need to be assessed on merit at DA stage.

Use of Neighbouring Properties

- This should not be recommended for consideration.
- Legal agreement could be used if agreed to by all landowners.
- Individual landowners reserve right to refuse relocation of buildings through their property.
- Relocating through neighbouring sites is impractical unless relocation path is clear.

Comment: No provision has been made to encourage or require relocation of structures between or through properties. Primary relocation routes are to be road carriageways (or part thereof). This aspect will need to be assessed on merit at DA stage.

Timeframe for Relocation

- No timeframe for relocation to occur should be specified. Residents should be able to undertake relocation in their own timeframe.
- 30 days is an appropriate timeframe for the relocation works to be undertaken.
- Limited contractors will be available to carry out the works assuming buildings are to be relocated at the same time.
- 7 days is an appropriate timeframe for the relocation works to be undertaken.

Comment: No timeframe has been specified for the relocation of structures due to the variable nature of securing contractors and specific of each storm events impacts. The landowner will need to determine a suitable time needed based on actual storm conditions and the availability of contractors and equipment. This aspect will need to be assessed on merit at DA stage.

Building Specifications

- Building specifications should be determined by engineering specifications.
- Council should not be specifying building configurations, rather engineers certification of capacity to relocation is considered sufficient.
- An appropriate size should be specified to ensure each section will fit on a truck.
- Size and shape of relocatable buildings will be dependent on contractors truck size and traffic and transport authorities. For quick removal, buildings will need to navigate long and narrow sections.

Comment: Maximum building dimensions have been provided. The dimensions that have been identified reflect the nature of the sites and the primary evacuation routes available including maximum load sizes for NSW roads.

Copies of submissions are attached.

Attachments

- 1 [View](#). Planning Guidelines Submission - Burr - Redacted
- 2 [View](#). Planning Guidelines Submission - Fraser-Martin - Redacted
- 3 [View](#). Planning Guidelines Submission - Morison - Redacted
- 4 [View](#). Planning Guidelines Submission - Smith - Redacted
- 5 [View](#). Planning Guidelines Submission - Unknown Resident - Redacted
- 6 [View](#). Draft Lake Cathie Coastal Management DCP Chapter

RJ + JH BURR
 "Tarwanni"
 NUNDLE NSW

(P.i)

ISSUES PAPER

LAKE CATHIE COASTAL HAZARD INTERIM PLANNING CONTROLS

TRIGGER POINT FOR REMOVAL OF RELOCATABLE BUILDINGS

Port Macquarie-Hastings Council (PMHC) has developed interim planning controls to manage the coastal hazards at Lake Cathie. The interim planning controls apply to any new development that occurs prior to a revetment wall being constructed.

The interim planning controls require various things to occur including reference to relocatable buildings for high hazard areas. Approval may be granted for relocatable buildings on the understanding that a relocatable building will be removed should coastal erosion come within close proximity of any building.

This 'trigger point' where relocatable buildings would be removed is now being considered. PMHC is therefore seeking the views of residents on the setting of an appropriate trigger for the removal of relocatable buildings affected by the interim planning controls.

In determining the most suitable trigger point for the removal of a relocatable buildings, Council and the community need to consider the following key issues:

1. Should the trigger point be based on when coastal erosion (leading edge of erosion) reaches a specific distance to various aspects including:
 - 1.1. the property boundary (ie. front fence)?
 - 1.2. the closest part of the building?
 - 1.3. the edge of the road (coastal side)?
 - 1.4. the centre of the road?

What is an appropriate trigger distance? 10 metres, 20 metres other? In considering an appropriate trigger distance from an erosion escarpment Council needs to be mindful that slumping of the escarpment (zone of slope adjustment) may occur sometime after an initial erosion event.

Feedback box 1

1.2 - 20 from closest part of the building.

2. Each of the above trigger points may require a different relocation path for the relocatable buildings, including:

- 2.1. on the road
- 2.2. on the verge (subject to services - power poles etc)
- 2.3. on neighbouring properties

What issues should Council consider when approving relocation paths.

R3 + 24 Burr

(P2)

Feedback box 2

Size of Crane or machinery to remove the relocatable building.

Removal time.

3. If a trigger point is set that requires the removal of a building through neighbouring private property, how will this be secured in to the future? Is a legal agreement between landowners allowing access through neighbouring properties an appropriate mechanism?

Feedback box 3

Legal agreement between all parties.

4. What is an appropriate timeframe for the relocation works to be undertaken:

- 4.1. Seven (7) days?
- 4.2. Fourteen (14) days?
- 4.3. Thirty (30) days?

Feedback box 4

7 days.

5. What is an appropriate; size, shape and configuration of a relocatable building that will allow quick dismantling and removal?

Feedback box 5

an appropriate size that each section fit on a truck.

I appreciate the opportunity to answer the questions as per your discussion paper that I received 10th of June 2016.

Please note all comments relate to Illaroo Road, Lake Cathie.

55 : Trigger Point

Feed back box 1

55.3 (edge of road - coastal side)

As at Time/Point trucks and equipment are still able to access from Illaroo Rd. for relocation of homes. All existing infrastructure - Power, Water, Sewage are still in operation

I believe there is a CZMP for either Old Bar or similarly affected beach homes in the Taree Council area that allows residents to select their own timing for relocating as long as they absolve their Council of any responsibility for their homes being lost to erosion should the homes not be moved quickly enough.

I believe that a final CZMP incorporating the above has gone before The State Government for consideration and acceptance. I believe this is the model that needs to be used.

It is inconceivable that Council could specify an actual distance between the erosion escarpment and homes before a council officer informs a resident to relocate. I believe Council should leave the decision to relocate in the hands of the homeowner, they having absolved Council of any responsibility for damage to the homes from erosion.

Just try to imagine you or an officer of Council or a Court appointed sheriff arriving with a throng of media and forcing homeowners out of their homes. What a great look that will be for Port Macquarie Hastings as a tourist venue. We will quite reasonably be adjudged as a heartless, inconsiderate and callous shire. Who would want to come to a beach suburb or district whose Council so badly treats its own residents.

56 : Relocation Paths

Feedback box 2

Where are the relocatable homes moving too. (Temporary or Permanent)

If 20 houses are to be moved, substantial area will be needed for the houses.

57

Feedback box 3

'Through' neighbouring sites, does this assume existing homes are to be moved at the same time allowing access and clearances.

This solution is impractical unless adjoining site is clear.

58

Feedback box 4

58.3 - Thirty (30) days

Maximum time needed, assuming numerous houses are to be relocated at the same time, with limited contractors to carry out the work.

59

Feedback box 5

Size, shape for relocatable homes will be dependent to some degree on contractors truck size, traffic and transport authorities. Quick removal, houses need to be long and narrow sections.

N.B This should be determined by engineering drawings. Council should have nothing to do with the building configuration as it will not be responsible for the house not being moved in time to escape erosive destruction. At present an engineer's certificate describing relocation processes is already specified by Council as a necessary ingredient in getting a Development Approval. Nothing more is needed of council.

I do believe Council should be supporting the residents of Lake Cathie and should be applying its energies in obtaining an \$8 million portion of the \$78 million the State Government is setting aside for coastal repairs for the building of the revetment.

I would like to be able to enjoy my property in my retirement and the council should be welcoming permanent residents to the area that will help the economy grow and be prosper.

In that respect, has Council applied formally for Revetment Funds ?

Margaret Fraser-Martin

ISSUES PAPER

LAKE CATHIE COASTAL HAZARD INTERIM PLANNING CONTROLS TRIGGER POINT FOR REMOVAL OF RELOCATABLE BUILDINGS

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The interim planning controls require various things to occur including reference to relocatable buildings for high hazard areas. Approval may be granted for relocatable buildings on the understanding that a relocatable building will be removed should coastal erosion come within close proximity of any building.

This 'trigger point' where relocatable buildings would be removed is now being considered. PMHC is therefore seeking the views of residents on the setting of an appropriate trigger for the removal of relocatable buildings affected by the interim planning controls.

In determining the most suitable trigger point for the removal of a relocatable buildings, Council and the community need to consider the following key issues:

55. Should the trigger point be based on when coastal erosion (leading edge of erosion) reaches a specific distance to various aspects including:

- 55.1. the property boundary (ie. front fence)?
- 55.2. the closest part of the building?
- 55.3. the edge of the road (coastal side)?
- 55.4. the centre of the road?

What is an appropriate trigger distance? 10 metres, 20 metres other? In considering an appropriate trigger distance from an erosion escarpment Council needs to be mindful that slumping of the escarpment (zone of slope adjustment) may occur sometime after an initial erosion event.

NOTE - ALL COMMENTS RELATE TO ILLAROO RD.

Feedback box 1

*TRIGGER POINT - 55.3 (EDGE OF THE ROAD - COASTAL SIDE)
AS AT TIME/POINT TRUCKS & EQUIPMENT ARE STILL
ABLE TO ACCESS FROM ILLAROO RD FOR RELOCATION OF
HOMES. ALL EXISTING INFRASTRUCTURE - POWER, WATER,
SEWERAGE ARE STILL IN OPERATION.*

56. Each of the above trigger points may require a different relocation path for the relocatable buildings, including:

- 56.1. on the road
- 56.2. on the verge (subject to services - power poles etc)
- 56.3. on neighbouring properties

What issues should Council consider when approving relocation paths.

1/3

Feedback box 2

- WHERE ARE THE RELOCATABLE HOMES MOVING TO
(TEMPORARY OR PERMANENT)
IF 20 HOUSES ARE TO BE MOVED, SUBSTANTIAL
AREA WILL BE NEEDED FOR THE HOUSES.

57. If a trigger point is set that requires the removal of a building through neighbouring private property, how will this be secured in to the future? Is a legal agreement between landowners allowing access through neighbouring properties an appropriate mechanism?

Feedback box 3

'THROUGH' NEIGHBOURING SITES, DOES THIS ASSUME
EXISTING HOMES ARE TO BE MOVED AT SAME TIME
ALLOWING ACCESS AND CLEARANCES.
THIS SOLUTION IS IMPRACTICAL UNLESS ADJOINING SITE
IS CLEAR.

58. What is an appropriate timeframe for the relocation works to be undertaken:

- 58.1. Seven (7) days?
58.2. Fourteen (14) days?
58.3. Thirty (30) days?

Feedback box 4

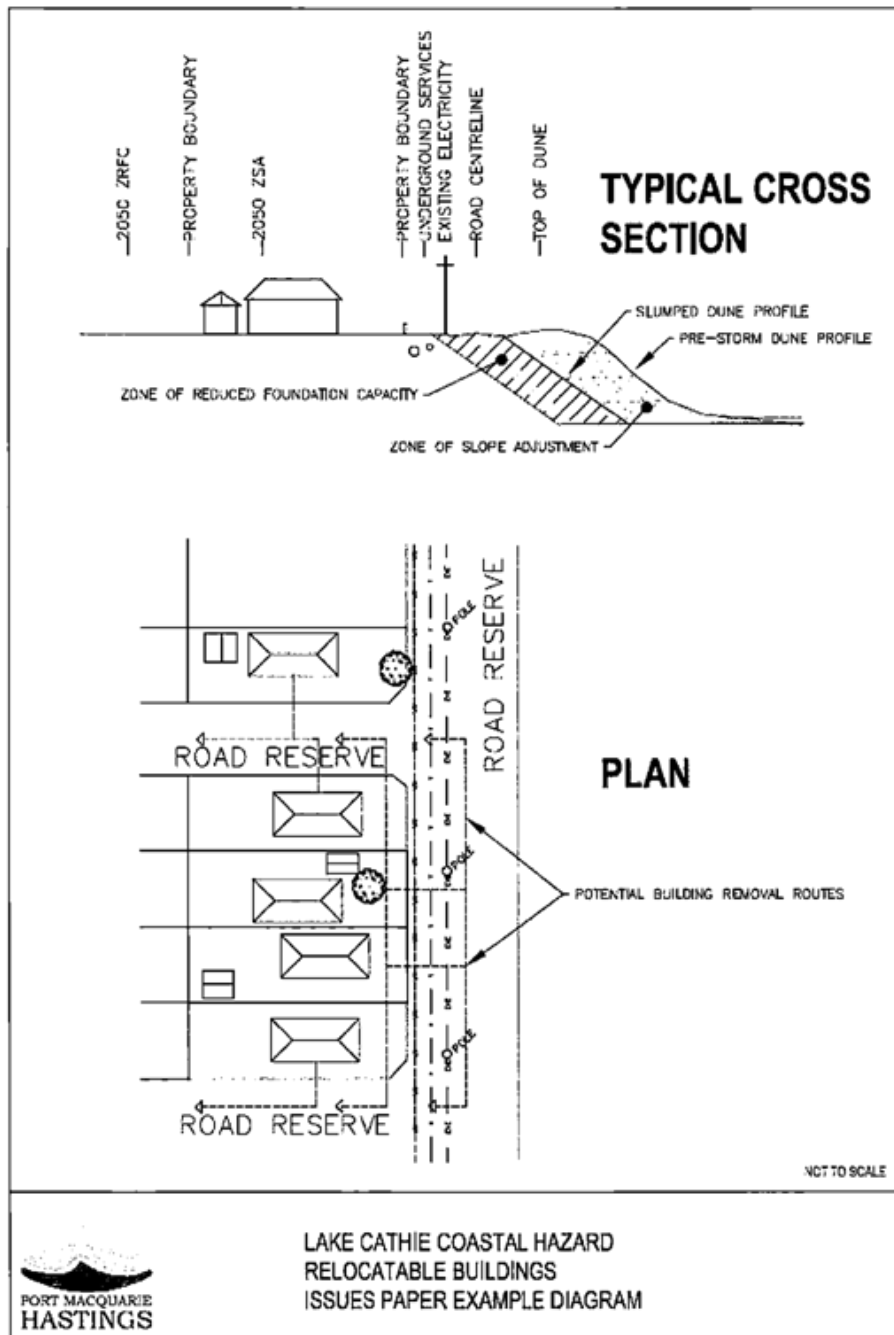
58.3 - THIRTY (30) DAYS.
MAXIMUM TIME NEEDED, ASSUMING NUMEROUS HOUSES
ARE TO BE RELOCATED AT SAME TIME, WITH
LIMITED CONTRACTORS TO CARRY OUT WORK.

59. What is an appropriate; size, shape and configuration of a relocatable building that will allow quick dismantling and removal?

Feedback box 5

SIZE, SHAPE FOR RELOCATABLE HOMES WILL BE
DEPENDANT TO SOME DEGREE ON CONTRACTOR'S
TRUCK SIZE, TRAFFIC & TRANSPORT AUTHORITIES.
QUICK REMOVAL, HOUSES NEED TO BE LONG
& NARROW SECTIONS

2/3



3/3

PO Box 84

PORT MACQUARIE NSW 2444

(02) 6581 8629

Connect with Council:



From: Jeanette Morison [REDACTED]
Sent: Wednesday, 25 May 2016 3:10 PM
To: Council
Subject: Trigger point for removal of relocatable homes.

Tim Malloy

Dear Sir,

Please let it be known that I did not receive your letter dated 15/4/16 about Illaroo Rd and the plans to allow relocatable homes and how removal would occur. We were given questions to answer. I found out about the said letter only after conversing with a neighbor.

In this email I will endeavor to answer your question without having a copy of that letter.

First let it be known that Illaroo Rd is not how a relocatable home would be removed from my property and as such the demise of Illaroo Rd will not have any impact on the removal of a relocatable home from my property at 31 Illaroo.. As such I do not believe that I should be included in the greater plan. I will never need to remove a relocatable dwelling over a neighbors property either. I must be considered as an exception and a separate plan be written for 31 and number 5 Illaroo.

Greg Smith at number 5 on the corner of Kalang Rd and myself at 31 on the corner of Kywong Street have the ability to set our relocatable home well back from the boundary of Illaroo thus minimizing our risk should Illaroo be threatened.. We also both have clear escape routes, mine being by Kywong and Smiths by Kalang Rd. Neither Kywong or Kalang Rd will be threatened in the way that Illaroo might be. My Street is indeed flat and open and removal of a relocatable home would be relatively easy. Smith also on an easy access corner block would be similar. I believe that we should be able to choose our removal time because of the easy access and unique nature of our block compared to those that only have access via Illaroo. We deserve to be considered differently than those who must use Illaroo or a neighbors property to remove their homes. We should be made to remove our homes when our access rd in my case Kywong Street is threatened or in Smiths case when Kalang St is threatened. Please allow us to make this decision.

Thank you for taking time to read my email,

Kathleen Jeanette Morison

Owner 31 Illaroo Rd Lake Cathie

PO Box 72

Ettalong Beach NSW 2257



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From: Gregory Smith [mailto: [REDACTED]]
Sent: Sunday, 22 May 2016 10:22 PM
To: [REDACTED]
Subject: Trigger Points Illaroo Rd

Hi Jeanette, send something like this off to Council if you can. Did you get the scanned docs ?

Tim Malloy PMHC

Hello Tim

I appreciate the opportunity to answer the questions as per your discussion paper dated 15th April.

Firstly, I believe I and the Morrisons at 31 Illaroo Rd are in a completely different position from all the other homes. The difference is that both of us can relocate via Kywong and Kalang Roads. We do not require an exit path onto Illaroo Rd. We would thus have many more years habitation than new relocatables along Illaroo Rd. This major difference must form part of any Plan Council finally devises on our behalf.

re' 1. Distance.

I believe there is a CZMP for either Old Bar or similarly affected beach homes in the Taree Council area that allows residents to select their own timing for relocating as long as they absolve their Council of any responsibility for their homes being lost to erosion should the homes not be moved quickly enough.

I believe that a final CZMP incorporating the above has gone before The State Government for consideration and acceptance. I believe this is the model that needs to be used.

It is inconceivable that Council could specify an actual distance between the erosion escarpment and homes before a council officer informs a resident to relocate. I believe Council should leave the decision to relocate in the hands of the homeowner, they having absolved Council of any responsibility for damage to the homes from erosion.

Just try to imagine you or an officer of Council or a Court appointed sherrif arriving with a throng of media and forcing homeowners out of their homes. What a great look that will be for Port Macquarie Hastings as a tourist venue. We will quite reasonably be adjudged as a heartless, inconsiderate and callous shire. Who would want to come to a beach suburb or district whose Council so badly treats its own residents.

Re' 2.relocation paths

I believe the only path available is via a road ie Illaroo Kywong and Kalang roads.

Re' 3. neighbours. No.

Re' 4. Timeframe. See first answer ie no time specified. Council is absolved from responsibility with an Agreement with homeowners and thus no time period is relevant.

Re' 5 building specs.

This should be determined by engineering drawings. Council should have nothing to do with the building configuration as it will not be responsible for the house not being moved in time to escape erosive destruction. At present an engineers certificate describing relocation processes is already specified by Council as a necessary ingredient in getting a Development Approval. Nothing more is needed of council.

Council should be allowing residents to leave when they consider their own homes are in danger. Council should instead be applying its energies in obtaining an \$8 million portion of the \$78 million the State Government is setting aside for coastal repairs for the buiding of the revetment.

In that respect, has Council applied formally for Revetment Funds ? If not, when do you intend doing so ?

Thanking you for the opportunity to air my thoughts.

Thanks and Regards

Greg Smith (5 Illaroo Rd)

Gregory Smith | CPA



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ISSUES PAPER

LAKE CATHIE COASTAL HAZARD INTERIM PLANNING CONTROLS

TRIGGER POINT FOR REMOVAL OF RELOCATABLE BUILDINGS

Port Macquarie-Hastings Council (PMHC) has developed interim planning controls to manage the coastal hazards at Lake Cathie. The interim planning controls apply to any new development that occurs prior to a revetment wall being constructed.

The interim planning controls require various things to occur including reference to relocatable buildings for high hazard areas. Approval may be granted for relocatable buildings on the understanding that a relocatable building will be removed should coastal erosion come within close proximity of any building.

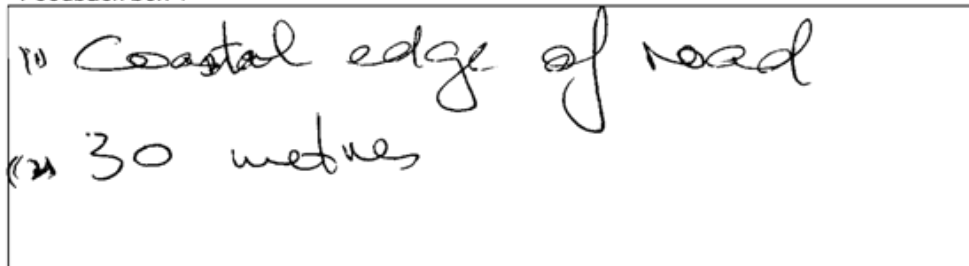
This 'trigger point' where relocatable buildings would be removed is now being considered. PMHC is therefore seeking the views of residents on the setting of an appropriate trigger for the removal of relocatable buildings affected by the interim planning controls.

In determining the most suitable trigger point for the removal of a relocatable buildings, Council and the community need to consider the following key issues:

1. Should the trigger point be based on when coastal erosion (leading edge of erosion) reaches a specific distance to various aspects including:
 - 1.1. the property boundary (ie. front fence)?
 - 1.2. the closest part of the building?
 - 1.3. the edge of the road (coastal side)?
 - 1.4. the centre of the road?

What is an appropriate trigger distance? 10 metres, 20 metres other? In considering an appropriate trigger distance from an erosion escarpment Council needs to be mindful that slumping of the escarpment (zone of slope adjustment) may occur sometime after an initial erosion event.

Feedback box 1



10 Coastal edge of road
30 metres

2. Each of the above trigger points may require a different relocation path for the relocatable buildings, including:
 - 2.1. on the road
 - 2.2. on the verge (subject to services - power poles etc)
 - 2.3. on neighbouring properties

What issues should Council consider when approving relocation paths.

Feedback box 2

On the road only.

3. If a trigger point is set that requires the removal of a building through neighbouring private property, how will this be secured in to the future? Is a legal agreement between landowners allowing access through neighbouring properties an appropriate mechanism?

Feedback box 3

Legal agreement appropriate
Also right of refusal to use
property to move relocatable necessary

4. What is an appropriate timeframe for the relocation works to be undertaken:
- 4.1. Seven (7) days?
 - 4.2. Fourteen (14) days?
 - 4.3. Thirty (30) days?

Feedback box 4

30 days.

5. What is an appropriate; size, shape and configuration of a relocatable building that will allow quick dismantling and removal?

Feedback box 5

unable to respond

PART 2 GENERAL PROVISIONS
Chapter 2.4 Hazards Management

Lake Cathie Coastal Hazard Management
<p>2.4.3.7 Objective</p> <ul style="list-style-type: none"> • To ensure new development or redevelopment of existing properties is undertaken to avoid significant adverse impacts from coastal hazards. • To encourage land use that reduces exposure to risks from coastal hazards, including through siting, design, construction and operation decisions. • To ensure uses are compatible with coastal risks. • To mitigate current and future risk from coastal hazards by taking into account the effects of coastal processes and climate change. • To inform landowners of development measures in place and any actions proposed to manage or mitigate coastal risks associated with the land.
<p>Development Provisions</p> <ol style="list-style-type: none"> a) The following DCP provisions are intended to assist in the interpretation of Coastal Hazard lines for areas covered by the <i>Lake Cathie Coastal Zone Management Plan (2016)</i> and are in accordance with the Council resolution 25 July 2012. b) Development shall not proceed unless it can be demonstrated that the provisions of each applicable development zone can be met. c) The development zone provisions relate to the 2050 planning horizon as shown on Figure 2.4.1. d) The 2050 planning horizon is shown on Figures 2.4.2, 2.4.3 & 2.4.4 and are defined as; <ol style="list-style-type: none"> 1) ZRFC (<i>Zone of Reduce Foundation Capacity</i>) as shown by the <u>dashed purple line</u>. 2) ZSA (<i>Zone of Slope Adjustment</i>) as shown by the <u>solid purple line</u>. e) Development shall be limited to a single dwelling within Zones B and C. Refer to Figure 2.4.1 & Table 2.4.1. f) No subdivision is permitted within Zones B and C. Refer to Figure 2.4.1 & Table 2.4.1. g) As a guide, the following types of development proposals in coastal risk areas will require further detailed assessment of risks to life, property and/or the environment: <ol style="list-style-type: none"> i. increasing the size of existing buildings or structures; ii. child care, aged care developments and the like; especially where evacuating people may be particularly difficult; iii. material change of use that substantially increases the number of people living, working on and/or attending the site. h) Should any subsequent Development be proposed under a separate application within Zones B and C, Council will consider all previous Development subjected to the provisions of this chapter.

- i) Development consent conditions relating to the management responses and adaptation actions necessary for the relocation or removal of development will be imposed on development subjected to the provisions of this chapter.
- j) The Section 149 certificate and Section 88b instrument for the property shall be updated to inform and keep landowners aware of issues relating to coastal risks, that development restrictions may apply and development consent requirements necessary for the relocation or removal of the development.

Applicants are encouraged to contact Council for a pre-lodgement meeting to discuss the merits of the proposed development.

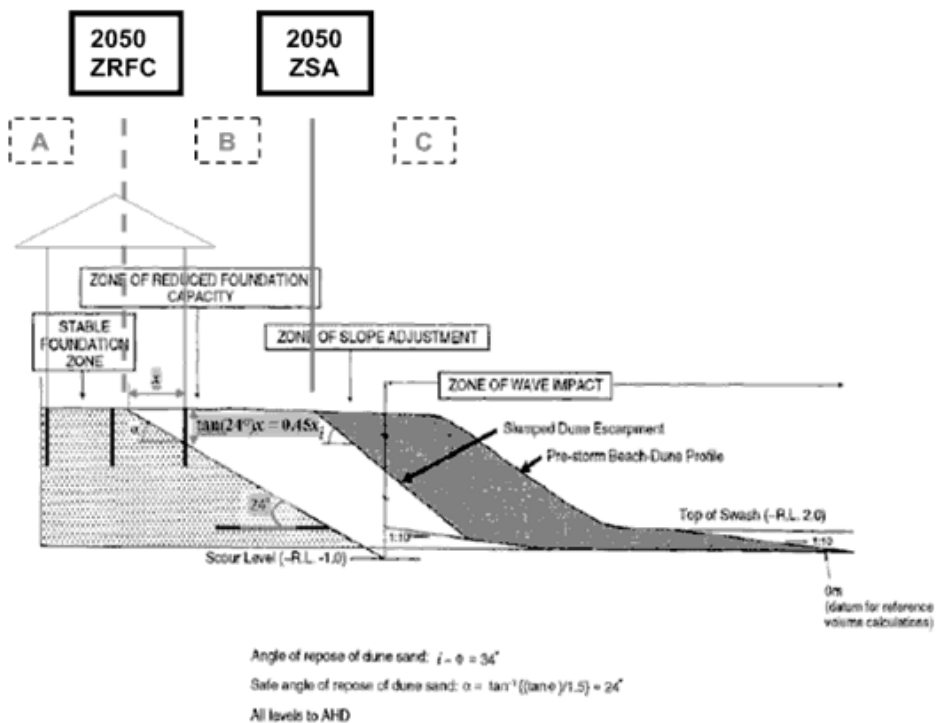


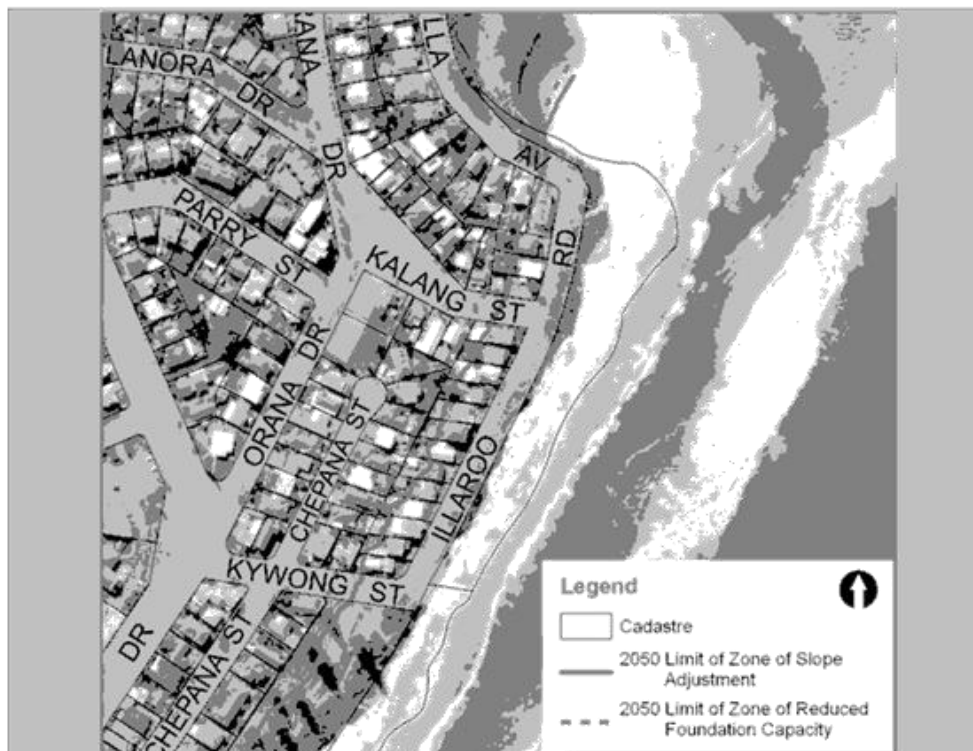
Figure 2.4.1 - 2050 Hazard Zones and Stable Foundation Zone calculation guidelines

Table 2.4.1: 2050 Development zone provisions	
ZONE A	No coastal hazard development restrictions apply. Normal relevant planning controls apply.
ZONE B	<p>The following controls apply for properties behind the 2050 zone of slope adjustment and forward of the 2050 zone of reduced foundation capacity.</p> <ol style="list-style-type: none"> 1. Development to existing dwellings be limited to a one off maximum 10% increase in Gross Floor Area (refer to <i>PM-H LEP 2011</i> definition), calculated from the ground floor footprint only, unless provided with foundation footings extending into the stable foundation zone or the development is undertaken as relocatable structures. 2. Refer to Figure 2.4.1 for engineering calculation requirements.
ZONE C	<p>The following controls apply for properties forward of the 2050 zone of slope adjustment.</p> <ol style="list-style-type: none"> 1. Development to existing dwellings be limited to a maximum 10% increase in Gross Floor Area (calculated from the ground floor footprint only) or be undertaken as relocatable structures. 2. Ancillary development (decks/patios, carports, detached garages outbuildings and structures (including pools) must be undertaken as relocatable structures). 3. Refer to Figure 2.4.1 for engineering calculation requirements.

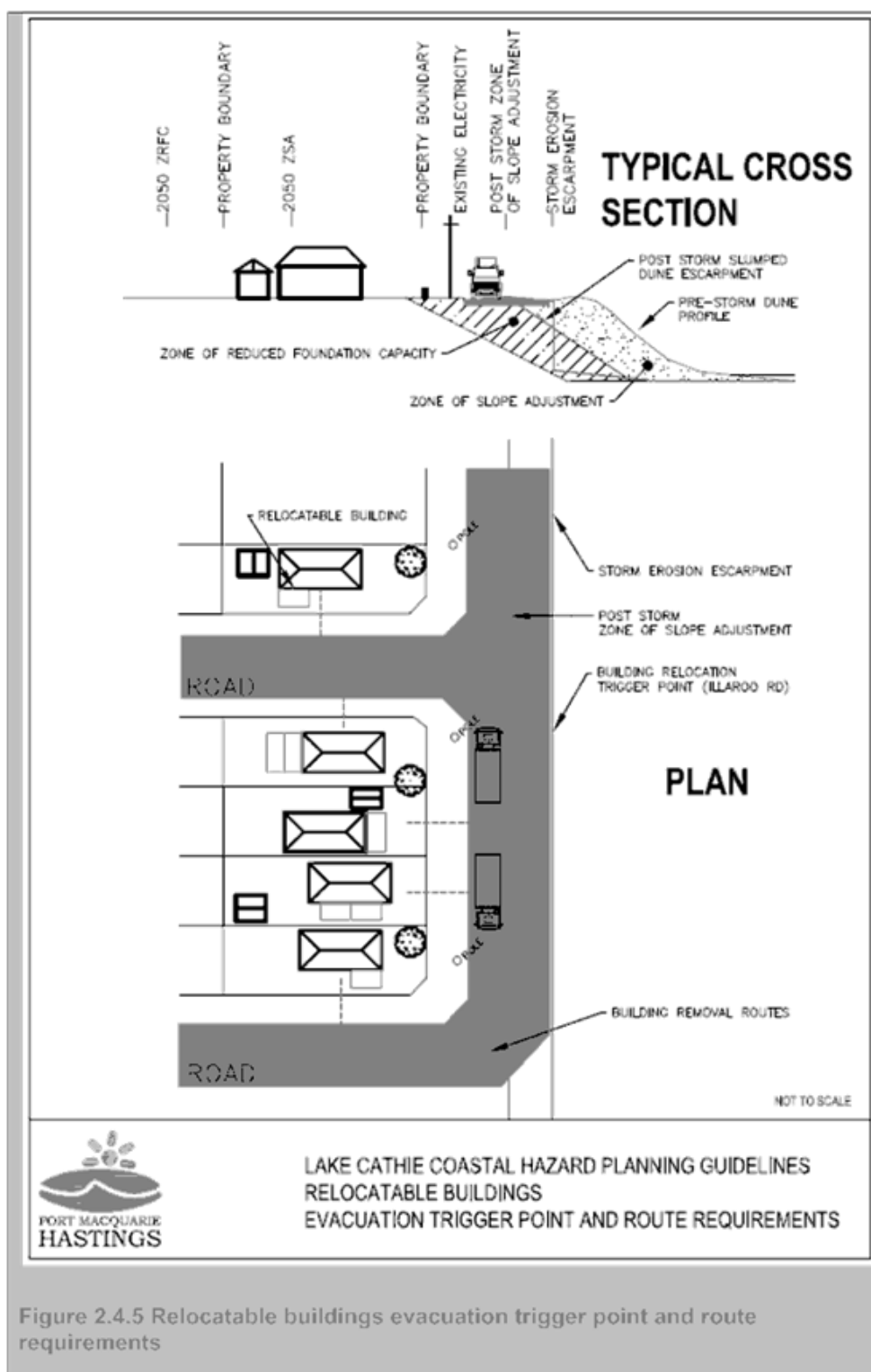
<p>2.4.3.8 Objective</p> <ul style="list-style-type: none"> • To enable removal of relocatable structures in coastal risk areas in an emergency. • To adopt coastal management strategies that reduce exposure to coastal hazards. • To improve the resilience of coastal development and communities by improving adaptive capacity and reducing reliance on emergency responses.
<p>Development Provisions</p> <ol style="list-style-type: none"> a) Relocatable structures must be designed and constructed so that they can be quickly and easily removed from the site by road vehicle. b) A certificate is to be provided from a structural engineer as to the adequacy of the relocatable structure and its capacity to be easily dismantled and readily removed. Relocatable structures must satisfy the following specifications: <ul style="list-style-type: none"> • Single storey. • Modular in construction. • Maximum weight = 5,000kg. • Maximum height = 3.0m • Maximum width = 4.6m • Maximum length = 8.8m c) Ancillary elements (decks, patios, detached garages/sheds and the like) must also be readily capable of being dismantled and if adequate space is available

on the site, the ancillary elements can be temporarily relocated/stored outside the *Immediate Zone of Reduced Foundation Capacity* (green lines on council's GIS system).

- d) No works will be permitted on the property which may hinder the easy relocation of the building. Such works may include the construction of walls, fences, screens, enclosures, brick veneering, water tanks, landscaping etc. Existing structures may be required to be removed or demolished to enable safe and easy access to the relocatable structure.
- e) A detailed relocation procedure must be submitted with the application.
- f) Plans and specification for the building must be provided which demonstrate that the building can be easily dismantled and prepared for removal and that removal is practical and achievable.
- g) Removal of the building must be undertaken using the existing formed road.
- h) The proposed removal route and destination must be identified and detailed via submission of a detailed plan.
- i) If adequate area is available on the site, ancillary structures can be relocated and temporarily stored in an area outside the *Immediate Zone of Reduced Foundation capacity*. Temporary storage areas shall be identified on the Relocation Management Plan.
- j) For sites with direct frontage to Illaroo Road, relocation of the building must be initiated once the erosion escarpment reaches the seaward edge of the existing formed road surface (i.e. the sealed bitumen edge) directly seaward the site frontage, or if the erosion escarpment reaches such a point on the last available relocation route that would inhibit relocation of buildings offsite.
- k) For sites located on a corner block (i.e. corner of Illaroo Road and Kywong Street, Kalang Street or Bundella Avenue) relocation of the building must be initiated once the erosion escarpment is within 10m of the relocatable building.
- l) The erosion escarpment distance is to be measured from the closest point of the site, or for corner sites, the closest point of the relocatable building.
- m) All approvals will include a condition of consent requiring removal of structures if the above trigger occurs.
- n) Refer to Figure 2.4.5 for evacuation trigger point and removal route information.







Item: 08

Subject: COAST, ESTUARY & FLOODPLAIN GRANT APPLICATION UPDATE

Presented by: Development and Environment Services, Matt Rogers

RECOMMENDATION

That the status of the Coast, Estuary and Floodplain Grants be noted.

Discussion

This report provides an update on the current Coast, Estuary and Floodplain Management grants.

Floodplain Management

Successful Grant Applications

- 2015-16-FM-0083: Hibbard Floodway Investigation. \$50,000
Successful grant application under 2015-16 Floodplain Management funding round. Project is underway with the Request for Quotes expected to be advertised either late this year or early next year (project release is dependent on Hastings River Climate Change Modelling project). Procurement phase is expected to be completed early 2017.
- 2015-16-FM-0084: Hastings River Climate Change Modelling. \$30,000
Successful grant application under 2015-16 Floodplain Management funding round. Project is nearing completion. Expected completion this calendar year with all grant requirements fulfilled. Refer to separate report for details.
- 2015-16-FM-0085: Wrights Creek Flood Study Update, Climate Change Modelling & Floodplain Risk Management Study & Plan. \$130,000
Successful grant application under 2015-16 Floodplain Management funding round. Project is underway with the tender recently being advertised. Procurement phase is expected to be completed early next year.
- 2016-17-FM-0091: Boundary Street Flood Access Detailed Design. \$166,667.67
Successful grant application under 2016-17 Floodplain Management funding round. Project is in initial stages of development. Tendering expected to be undertaken early 2017.
- 2016-17-FM-0094: North Brother Local Catchments Flood Study. \$160,000.00
Successful grant application under 2016-17 Floodplain Management funding round. Project is in initial stages of development. Tendering expected to be undertaken early 2017.
- Floodplain Maintenance Works - Annual Program. \$9,700
Recurring grant to cover maintenance costs associated with floodplain levee and drainage infrastructure originally constructed by NSW Public Works.

Unsuccessful Grant Applications

- 2016-17-FM-0093: Hastings River Flood Education Program.
Unsuccessful grant application under 2016-17 Floodplain Management funding round. Project to be considered for 2017-18 Operational Plan and grant funding sought.
- 2016-17-FM-0092: Lakewood Levee Investigation and Design.
Unsuccessful grant application under 2016-17 Floodplain Management funding round. Numerous unsuccessful grant applications have been made to obtain grant funding for this project. Applications have been made over the past four (4) successive years. Recent advice has confirmed that the project is lowly ranked by OEH and that it is not likely to be successful in obtaining grant funding in its current form.

It is proposed to review the current need for the Lakewood Levee and if a need still exists, Council will fully fund the detailed design, estimated at \$20,000. It is proposed to list this item for consideration in the 17/18 Operational Plan.

Coastal Management

Successful Grant Applications

- 2016-17-CEMP-0004: Illaroo Road Stormwater Redirection Detailed Design.
\$25,000
Successful grant application under 2016-17 funding round. PMHC undertaking the design. Project is in initial stages of development.
- 2015-16-CM-0032: Flynn's Beach Retaining Wall Replacement (stage 1).
\$922,500 awarded from OEH.
Successful grant application under 2015-16 NSW Coastal Program funding round. Variation requested to alter the staging of the project has been submitted to the Office of Environment & Heritage (OEH). This variation not yet approved, however OEH advice has been positive and it is likely that the variation will be supported.

PMHC are currently undertaking the procurement and tendering phase.

Grant Applications Outcome Pending

- Lake Cathie (Middle Rock & Chepana Street) Stormwater Outlet Repair Works.
Grant application not determined at this point in time.

Estuary Management

Successful Grant Applications

- 2015-16-EM-0044: Estuarine Lake Linkages: Protecting the Islands & Foreshores of the Camden Haven. \$186,063
Successful grant application under 2015-16 Estuary Management funding round. Project is underway and is progressing well. Project officer position has been filled and management works are on track.

Attachments

Nil

Item: 09

**Subject: LAKE CATHIE COASTAL ZONE MANAGEMENT PLAN MINISTERIAL
CERTIFICATION**

Presented by: Development and Environment Services, Matt Rogers

RECOMMENDATION

That the Ministerial certification of the Lake Cathie Coastal Zone Management Plan be noted.

Discussion

This report has been prepared to provide the Sub-Committee with advice about the certification of the *Lake Cathie Coastal Zone Management Plan (CZMP)*.

The CZMP was adopted by Council at the Ordinary Council meeting held on 20 November 2013.

Council requested certification of the CZMP from the Minister for the Environment on 17 March 2014. In a letter dated March 2015 the Minister subsequently requested a number of tasks be undertaken before the CZMP could be certified.

A revised draft CZMP was prepared by Council and Office of Heritage and Environment (OEH) staff. The revised draft CZMP was endorsed by the Sub-Committee at the meeting held on 9 February 2016. The revised draft CZMP was adopted by Council at the Ordinary Council meeting held on 20 April 2016 and was subsequently forwarded to the Minister for the Environment for certification on 4 May 2016.

Advice was received from the Minister for Planning on 1 November 2016 that the *Lake Cathie Coastal Zone Management Plan* has been certified. This means that the Plan can now be implemented and actions under the plan are eligible for funding under the *NSW Coastal Program*.

The NSW Coastal Panel, in their advice to the Minister, as part of the certification process, has recommended that the next step for Council is "*the urgent development of a workable funding model based on a distributional analysis that accords with the provisions of the new Coastal Management Manual.*"

Council will review the implications of this advice in due course to ensure a feasible funding approach is developed.

The NSW Coastal Panel also recommended that Council consider some design changes to the proposed revetment wall based on the latest research into how these structures perform in the coastal environment. This will be dealt with in advance of any construction tender.

The CZMP is proposed to be published in the *NSW Government Gazette*, as required under the *Coastal Protection Act*.

The valuable contributions of Sub-Committee members are acknowledged for this project. The input and contributions have greatly helped with the coastal management planning process and the ultimate certification of the *Lake Cathie Coastal Zone Management Plan*.

Attachments

1 [View](#). CZMP Certification Letter



Rob Stokes
Minister for Planning

MD16/1742

Mr Craig Swift-McNair
General Manager
Port Macquarie-Hastings Council
PO Box 84
PORT MACQUARIE NSW 2444

PORT MACQUARIE HASTINGS	
TRIM No	CRM No
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Dear Mr Swift-McNair

Certification of the Revised Lake Cathie Coastal Zone Management Plan

Thank you for submitting the revised Lake Cathie Coastal Zone Management Plan (CZMP) for certification under the *Coastal Protection Act 1979*. I referred the CZMP to the NSW Coastal Panel for advice under section 55G(3) of the Act. The panel provided its advice to me and I enclose a copy for your consideration.

I am pleased to certify the CZMP in accordance with section 55G of the Act. This certification is not an endorsement of specific proposed management actions.

I commend Port Macquarie-Hastings Council for preparing a CZMP which appears to provide a practical and pragmatic direction for managing this coastal hotspot, and which has significant support from the community. I appreciate council's willingness to work closely with the Office of Environment and Heritage (OEH) and attend to the range of studies previously suggested by the panel.

I note from the panel's advice that the critical next step in seeking to implement the proposed management strategy will be the urgent development of a workable funding model based on a distributional analysis that accords with the provisions of the new Coastal Management Manual.

The panel's advice also draws council's attention to a range of issues relating to the detailed design of the proposed revetment structure. These matters are for council's consideration and are not prerequisites to be addressed for certification of the plan. The panel is happy to meet with council to discuss these matters further should council wish to do so.

Please arrange for council to publish the CZMP in the NSW Government Gazette, as required under section 55H of the Act. If you have any questions about the certification, please contact Mr Don Arnold, Regional Manager North East, OEH, on 6659 8232 or don.arnold@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rob Stokes'.

Rob Stokes
Minister for Planning

Enclosure

1 NOV 2016

Advice to the Minister for the Planning on the revised Lake Cathie CZMP**Recommendations**

The NSW Coastal Panel recommends that the Minister for Planning:

- Commends Port Macquarie – Hastings Council for preparing a CZMP for this coastal “hotspot” area that provides a practical and pragmatic direction that would appear to also have significant support from the community;
- Commends Port Macquarie – Hastings Council for diligently working with OEH in undertaking all additional elements recommended previously by the Coastal Panel to provide a more authoritative underpinning to the strategic management of the Lake Cathie CZMP;
- Note that in the opinion of the Coastal Panel, the revised Lake Cathie CZMP is **suitable for certification** in accordance with provisions of the *Coastal Protection Act 1979*; and
- Include advice to Port Macquarie – Hastings Council noting that the critical next step in seeking to implement the advised strategy will be the urgent development of a workable funding model based on a distributional analysis that accords with the provisions of the new Coastal Management Manual. Council would be encouraged to continue working closely with OEH to meet the requirements of the new Manual and potential OEH grant funding programs.
- Include advice to Port Macquarie – Hastings Council concerning improving the robustness of elements of the detailed design of the revetment structure, should be considered further by Council prior to tendering for any construction activities, but, are not considered a pre-requisite to be addressed in order to certify the Plan. The Panel are happy to meet with Port Macquarie – Hastings Council to discuss these issues further, which in the opinion of the Panel, have the potential to result in unforeseen cost escalation if not properly resolved including:
 - (i) Consideration of the appropriateness of the toe scour level adopted (-1m AHD). A recent paper (Carley, J.T., Coghlan, I.R., Flocard, F., Cox, R.J. and Shand, T.D., 2015. Establishing the design scour level for seawalls. In: *Australasian Coasts & Ports Conference 2015: 22nd Australasian Coastal and Ocean Engineering Conference and the 15th Australasian Port and Harbour Conference*, Engineers Australia and IPENZ) suggests that the design scour level might be lower than that adopted for the Lake Cathie revetment structure. The toe scour level, in part, determines the height of a depth limited breaking wave at the structure which affects the determination of the size of the primary armour used for stability assessment;
 - (ii) Consideration of another recent paper (Coghlan, I.R., Carley, J.T., and Cox, R.J., 2016. Hindsight is 20/20? A review of Preliminary Empirical Seawall design at Kingscliff Beach after Physical Modelling. *Proceedings of the 6th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science (Coastlab16)*. Ottawa, Canada, May 10-13) which highlights the role of physical modelling to resolve inherent uncertainties with design approaches to ensure stability of the final adopted rock armour size. It is noted the detailed design report recommends physical modelling which is strongly endorsed by the Coastal Panel;
 - (iii) There are some inconsistencies between Figures in Appendix B of the detailed design report and the detailed design drawings regarding the toe scour level (-1m AHD). The toe scour level of the structure must be founded at the design scour level rather than set upon an upper level where indurated sand or clay are encountered; and
 - (iv) It is acknowledged the detailed design makes some provision for future extension of the structure to the south to combat end effects and possible future outflanking. However, the realisation of these impacts are uncertain and their management will require a proactive approach to ensure the integrity of the engineering structure is retained and that beach amenity and public access are adequately maintained.

Next Steps

The Coastal Panel recommends the following next steps:

- That the Minister writes to Port Macquarie – Hastings Council congratulating them on what they have achieved in the development of the Lake Cathie CZMP to date and the specific aspects which have been outlined above.
- Notifies Council, if the Minister agrees, that the Minister is prepared to **certify** the Plan in accordance with provisions of the *Coastal Protection Act 1979*.
- Notifies Council of some suggestions from the Coastal Panel concerning detailed design aspects of the proposed revetment structure, which might improve the robustness of the design, but are not considered a pre-requisite in order to certify the plan and denoted in points (i) to (iv) above.