

# **COAST, ESTUARY & FLOODPLAIN ADVISORY SUB-COMMITTEE**

**Thursday 27 August 2020**

# Coast, Estuary & Floodplain Advisory Sub-Committee Meeting

Thursday, 27 August 2020

## Items of Business

Item	Subject	Page
07	<b>MEMBERSHIP OF THE COAST, ESTUARY &amp; FLOODPLAIN ADVISORY SUB-COMMITTEE - UPDATE ON THE EXPRESSION OF INTEREST (EIO) MEMBERSHIP RECRUITMENT CAMPAIGN</b>	
	Attachment 1: 17 June Ordinary Council Meeting - AGENDA .....	2
	Attachment 2: 17 June Ordinary Council Meeting - MINUTES.....	8
09	<b>ILLAROO ROAD REVETMENT WALL - COST BENEFIT ANALYSIS &amp; FUNDING MODEL - STATUS UPDATE</b>	
	Attachment : Coast, Estuary & Floodplain Advisory Sub- Committee AGENDA, November 2016.....	9
10	<b>KENWOOD DRIVE BRIDGE - UPDATE ON COUNCIL REPORTS</b>	
	Attachment 1: Ordinary Council Meeting AGENDA - 3 June 2020	14
	Attachment 2: Ordinary Council Meeting MINUTES - 3 June 2020...	15
	Attachment 3: Ordinary Council Meeting AGENDA - 15 July 2020 ...	16
	Attachment 4: Ordinary Council Meeting MINUTES - 15 July 2020 ..	21

## AGENDA

ORDINARY COUNCIL  
17/06/2020

---

Item: 13.04Subject: **MEMBERSHIP OF THE COAST, ESTUARY AND FLOODPLAIN  
SUB- COMMITTEE**Presented by: Development and Environment, Melissa Watkins

---

**Alignment with Delivery Program**

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

**RECOMMENDATION****That Council:**

1. Note the information contained in the report.
2. Determine that expressions of Interest for membership of the Coast, Estuary and Floodplain Sub-Committee be placed on exhibition for a minimum of four weeks, commencing on 24 June 2020.
3. Determine that all previous applicants be required to reapply.
4. Request the General Manager to provide a further report to the September 2020 meeting advising of the results of the EOI campaign.
5. Require the revised Charter be brought back to the October 2020 meeting for further consideration.

**Executive Summary**

Over the last few years there have been a number of departures from the Coast, Estuary and Floodplain (CE&F) Sub-Committee resulting in an uneven spread of expertise and local area representation with remaining community Sub-Committee members. This has resulted in limited expertise or knowledge in flood, coast and estuary planning/management and uneven representation of community members across the coastal and estuarine areas of the LGA.

Due to the strategic nature of flood, coast and estuary projects, the extensive regulatory planning requirements and the recent changes in coastal legislation, Council projects in this area have been slow to progress, resulting in reduced consultation with the Sub-Committee. It was widely acknowledged that it had been a

YOUR NATURAL AND  
BUILT ENVIRONMENT

Item 13.04

Page 99

## AGENDA

ORDINARY COUNCIL  
17/06/2020YOUR NATURAL AND  
BUILT ENVIRONMENT

number of years since the Sub-Committee had been utilised optimally or its composition and Charter reviewed.

Accordingly, to ensure appropriate membership composition and expertise on the Sub-Committee the Charter was reviewed to better reflect the roles and to improve representation and expertise distribution across the areas of coast, estuaries, and flooding. Further, the review was undertaken to ensure that it was consistent with other committees of Council and Council's adopted *Code of Conduct* and *Code of Meeting Practice*.

This report outlines the work completed to date in the recruitment of new members, the ongoing recruitment that is required and the intended timeframes around the new recruitment process. The report also provides updates to the membership composition, as numerous members have vacated the Sub-Committee and the membership composition has been slightly reviewed in order to better reflect the current focus on the Coastal Management Program (CMP), specifically the Lake Cathie/Bonny Hills area.

**Discussion**1. August 2019 Council Meeting

At the 21 August 2019 meeting, Council resolved to adopt a new CE&F Charter, a revised membership composition and proceed to seek formal Expressions of Interest (EOI) for recruitment of new members.

Following the August 2019 Ordinary Council meeting staff initiated an EOI process in order to recruit suitable new members to the CE&F Sub-Committee.

Council staff completed the EOI using the normal suite of methods and techniques that are typically used by Council when recruiting for new members to join Committees. The EOI process was undertaken as follows:

- Creation of a webpage on Council's website;
- Creation of a Council website homepage banner advertising the EOI;
- Promotion of the EOI through social media channels;
- Creation of an application profile on a recruitment platform (Scout);
- Publication of numerous *Community Now* notices within local newspapers;
- Advertising of the EOI to subscribers of Council's Construction Industry eNewsletter;
- Direct emails to environmental organisations;
- Direct email to all existing Sub-Committee members to request that they reach out to potential interested contacts.

At the close of the EOI period there was an insufficient pool of applications to progress to appointments of representatives of both industry and general community members.

2. December 2019 Council Meeting

Item 13.04

Page 100

## AGENDA

ORDINARY COUNCIL  
17/06/2020YOUR NATURAL AND  
BUILT ENVIRONMENT

Advice was provided to Council at the ordinary meeting held on 11 December 2019, that a new EOI recruitment phase would be needed as the first attempt had not been successful.

At the 11 December 2019 meeting, Council resolved to (among other matters) recommence the recruitment process, noting that there was an insufficient number of applications received to appoint positions under the first EOI round.

*RESOLVED: Intemann/Turner*

*That Council:*

- 1. Note the information contained in the report.*
- 2. Write to people who have submitted an application (Expression of Interest) and advise of Council's decision to re-initiate the recruitment process next year and that they do not need to re-apply.*
- 3. Appoint Councillor Peter Alley as the Chair of the Coast, Estuary and Floodplain Sub-Committee and Deputy Mayor Intemann as Alternate Chair.*
- 4. Recognise the highly valued and significant contribution to this Sub-Committee continuously since 1995 of Laurie Lardner and Patrick McEntee, sadly deceased during 2019, and report this resolution to the next meeting of the Sub-Committee.*
- 5. Council receive an update report on recruitment at the April 2020 Ordinary Council meeting.*

3. January 2020 CE&F Sub-Committee Meeting

The resolutions from the August and December Council meetings were formally reported to the CE&F Sub-Committee which was held on 30 January 2020 where the following matters were raised.

- Existing Sub-Committee members wished to be consulted when drafting a further revised EOI material in order to maximise likelihood of the new EOI approach being successful.
- Sub-Committee members agreed to recruit for the Fishing Industry Representative position due to the current member not attending meetings for some time and not being contactable.
- Agreed to extend an invitation to the Birpai LALC to join the Sub-Committee (This matter was identified at the Lake Cathie key community stakeholder and agency meetings held throughout 2019)
- Agreed that David Curry of Revive Lake Cathie be invited to attend Sub-Committee meetings as a guest (This matter was identified at the Lake Cathie key community stakeholder meetings held throughout 2019)

In addition to the above matters numerous other issues were discussed, primarily regarding the adopted Sub-Committee Charter. The suggested changes to the Sub-Committee Charter are still yet to be finalised. However, the comments and suggestions by Sub-Committee members from the January 2020 meeting have been recorded and will be considered in more detail before a report is prepared to Council. Accordingly, it is anticipated that the charter will be updated once a successful EOI recruitment phase has been completed. It is expected that both will be reported to Council in the hope that the new Charter and Sub-Committee membership matters are resolved at the same time. Given the upcoming CMP process separate special reference groups or informal working committees are also being considered for the 3 areas covered within the CMP.



Item 13.04

Page 101



## AGENDA

ORDINARY COUNCIL  
17/06/2020YOUR NATURAL AND  
BUILT ENVIRONMENT

Following the 30 January 2020 Sub-Committee meeting, Council staff intended to recommence the EOI procedure in February 2020. However due to competing interests and priorities and increased workloads (namely related to Lake Cathie) this timeframe was unfortunately not achieved and the new EOI campaign is yet to commence.

Considerable work has still been undertaken by staff during this time, with the following additional tasks completed in preparation for a new EOI campaign.

- A revised EOI recruitment form was produced to reflect the vacancy created by the non-attendance of the former Fishing Industry Representative.
- The Birpai LALC was contacted (via letter, email & phone) to obtain their interest in joining the Sub-Committee. It is noted that no response has been received to date, however follow up contact will be made during the EOI campaign.
- The revised EOI form was forwarded to all existing Sub-Committee members and comments were sought on the revised EOI approach.
- Comments were received from members of the Sub-Committee. The suggestions were considered and where possible incorporated into the document.

As detailed above, Council staff have commenced a review of the EOI application process and sought input from the Sub-Committee on this with the intent to make the application process less cumbersome/detailed and not such a barrier to community members expressing an interest.

As part of the new EOI process Council's communications team have been engaged to create short videos to assist us in reaching a wider target audience. One video will be to target a more technical audience, whilst the another will be aimed at community representatives. It is anticipated that the application process will be divided between the Development Industry Representatives and the Community Representatives. It is hoped that this will soften the language in the application questions that may otherwise deter suitable community minded applicants from applying.

The revised EOI package will be completed by the time this report is presented to Council. It is envisaged that the EOI package will be advertised for 4 weeks. With the intention of providing ample time for community members to express an initial interest and received feedback before proceeding with a full application.

#### 4. May 2020 CE&F Sub Committee Meeting

At the 28 May 2020 CE&F Sub-Committee meeting a report was presented to advise of progress made since the January 2020 CE&F Sub-Committee. At this meeting existing members were provided with information on how staff had revised the EOI process, using their feedback and suggestions, and that the new EOI campaign to recruit new members would commence soon.

Existing membership will be retained, however applicants that applied for vacant positions in the first EOI period will now need to reapply due to multiple changes made to the positions and application process that would render their original application void. This is contrary to the December Council resolution and therefore Council's concurrence is sought.



Item 13.04

Page 102

## AGENDA

ORDINARY COUNCIL  
17/06/2020YOUR NATURAL AND  
BUILT ENVIRONMENT5. June 2020 Recruitment and Charter Approach

As a result of the time that has elapsed since August 2019 (where it became apparent that additional membership was required and an updated Charter prepared), the focus of the recruitment drive has shifted somewhat. The unsuccessful recruitment campaign has also shaped Council's approach to the new EOI process, with changes being made to ensure that the new campaign is a success.

Consequently, when the charter was prepared in August 2019 only five (5) 'community vacancies' were apparent however, in the intervening period additional vacancies have been created. Additionally, the Lake Cathie key community stakeholder and agency meetings held throughout 2019 and the CE&F committee meetings held in 2019 and 2020 also identified additional positions that should be included. These being the Birpai and Bunyah LALC's.

Furthermore, the representation that Council was seeking in August 2019 was focussed on flooding projects, as there were numerous flood projects happening at that time however, the focus has now shifted to Coastal and Estuary related matters with the progression of the Coastal Management Program, especially the development of a CMP for the Lake Cathie/Bonny Hills area.

The recommended changes to the Charter (as discussed at the January 2020 CE&F meeting) further compounded matters and have added another layer of complexity around finalising the Charter, in addition to recruiting additional members.

Consequently, the new recruitment campaign aims to attract applicants for the following 10 positions:

1. Development Industry Representatives - two (2) to represent the Hastings, Camden Haven and Lake Cathie/Bonny Hills catchments - Flood/Coast/Estuary.
2. Community Representatives - five (5) to represent the Hastings, Camden Haven and Lake Cathie/Bonny Hills catchments - Flood/Coast/Estuary
3. Fishing Industry Representative - one (1) to represent the Hastings, Camden Haven and Lake Cathie/Bonny Hills catchments - Coast/Estuary.
4. Birpai Local Aboriginal Land Council (LALC) Representative - one (1) to represent the Birpai LALC area within the PMH LGA.
5. Bunyah Local Aboriginal Land Council (LALC) Representative - one (1) to represent the Bunyah LALC area within the PMH LGA.

**Options**

The following options are available to Council:

1. Proceed with recruitment for the 10 positions nominated in this report.
2. Not proceed with recruitment and leave positions vacant.
3. Not proceed with recruitment and have further consultation with the CE&F committee.



Item 13.04

Page 103

**AGENDA****ORDINARY COUNCIL**  
17/06/2020

4. Not proceed with recruitment until the revised CE&F charter is adopted.
5. Not proceed with recruitment and consider reviewing the committee structure.
6. Resolve in some other manner.

**Community Engagement and Internal Consultation**

The proposal to review the CEF Sub-Committee has been discussed with Council staff, the CE&F Sub-Committee and Councillors.

**Planning and Policy Implications**

Council is required to have a community reference Sub-Committee for the development of all Floodplain Management Plans. Similarly, a community reference group or committee is also recommended for the development of the new Coastal Management Program and may take the form of a special reference group or informal working committee, not necessarily a formal committee of Council.

**Financial and Economic Implications**

There are no financial or economic implications in relation to this report.

**Attachments**

Nil

YOUR NATURAL AND  
BUILT ENVIRONMENT



Item 13.04

Page 104





**MINUTES**  
**Ordinary Council Meeting**  
**17/06/2020**

---

#### **13.04 MEMBERSHIP OF THE COAST, ESTUARY AND FLOODPLAIN SUB-COMMITTEE**

---

*RESOLVED: Alley/Intemann*

That Council:

1. Note the information contained in the report.
2. Determine that expressions of Interest for membership of the Coast, Estuary and Floodplain Sub-Committee be placed on exhibition for a minimum of four weeks, commencing on 24 June 2020.
3. Determine that all previous applicants be required to reapply.
4. Request the General Manager to provide a further report to the September 2020 meeting advising of the results of the EOI campaign.
5. Require the revised Charter be brought back to the October 2020 meeting for further consideration.

*CARRIED: 7/0*

*FOR: Alley, Dixon, Griffiths, Hawkins, Intemann, Pinson and Turner*

*AGAINST: Nil*

---

AGENDA  
COMMITTEECOAST, ESTUARY & FLOODPLAIN ADVISORY SUB-  
24/11/2016

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.



Item 09

Page 59

**AGENDA  
COMMITTEE****COAST, ESTUARY & FLOODPLAIN ADVISORY SUB-  
24/11/2016**

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



ATTACHMENT

COAST, ESTUARY & FLOODPLAIN ADVISORY SUB-COMMITTEE  
24/11/2016**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
8 NOV 2016	
Keyword	
Activity	
Subject	
Folder	562/1773-0

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](mailto:don.arnold@environment.nsw.gov.au).

Yours sincerely

**Rob Stokes**  
Minister for Planning

Enclosure

1 NOV 2016

GPO Box 5341, Sydney NSW 2001  
Phone: (61 2) 8574 6707 Fax: (61 2) 9339 5554 Email: [office@stokes.minister.nsw.gov.au](mailto:office@stokes.minister.nsw.gov.au)

Item 09  
Attachment 1  
Page 61

Item 09  
Attachment 1  
Page 11

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.

## AGENDA

ORDINARY COUNCIL  
03/06/2020YOUR NATURAL AND  
BUILT ENVIRONMENT

---

Item: 13.05Subject: NOTICE OF MOTION - KENWOOD DRIVE BRIDGE, LAKE CATHIE -  
CONCEPT DESIGNS

---

Mayor Pinson has given notice of her intention to move the following motion:

## RECOMMENDATION

That Council:

1. Acknowledge community sentiment following the opening of Lake Cathie.
2. Request that the General Manager give consideration to commencing the development of concept designs for the Kenwood Drive Bridge, Lake Cathie as part of the 2020-2021 Operational Plan.
3. In light of Recommendation No. 2 above, request that the General Manager table a report at Ordinary Council Meeting on 17 June 2020 detailing any impacts undertaking the concept designs for the Kenwood Drive Bridge will have on existing priorities listed in the draft 2020-2021 Operational Plan, as well as identifying a potential funding source for the concept design work to be undertaken during 2020-2021.
4. Request that the General Manager write to the Hon. Leslie Williams MP (Member for Port Macquarie) and Dr David Gillespie MP (Federal Member for Lyne), advising of these actions being taken by Council.

Comments by Mayor Pinson (if provided)

Nil.

## Attachments

Nil



Item 13.05

Page 100



**MINUTES**  
**Ordinary Council Meeting**  
**03/06/2020**

---

**13.05 NOTICE OF MOTION - KENWOOD DRIVE BRIDGE, LAKE CATHIE -  
CONCEPT DESIGNS**

---

*RESOLVED: Pinson/Turner*

That Council:

1. Acknowledge community sentiment following the opening of Lake Cathie.
2. Request that the General Manager give consideration to commencing the development of concept designs for the Kenwood Drive Bridge, Lake Cathie as part of the 2020-2021 Operational Plan.
3. In light of Recommendation No. 2 above, request that the General Manager table a report at the Ordinary Council Meeting on 15 July 2020 detailing any impacts undertaking the concept designs for the Kenwood Drive Bridge will have on
  - a) existing priorities listed in the draft 2020-2021 Operational Plan,
  - b) priorities that arise from the COVID-19 Working Group's proposed infrastructure prioritisation matrix,as well as identifying a potential funding source for the concept design work to be undertaken during 2020-2021.
4. Request that the General Manager write to the Hon. Leslie Williams MP (Member for Port Macquarie) and Dr David Gillespie MP (Federal Member for Lyne), advising of these actions being taken by Council.

*CARRIED: 8/0*

*FOR: Alley, Dixon, Griffiths, Hawkins, Intemann, Levido, Pinson and Turner*

*AGAINST: Nil*

## AGENDA

ORDINARY COUNCIL  
15/07/2020YOUR NATURAL AND  
BUILT ENVIRONMENT

---

Item: 13.01

Subject: KENWOOD DRIVE BRIDGE LAKE CATHIE

Presented by: Infrastructure, Dan Bylsma

---

**Alignment with Delivery Program**

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

**RECOMMENDATION****That Council:**

1. Note the information provided in this report.
2. Review the prioritisation of widening Kenwood Drive Bridge as an estuary system management solution as part of the Lake Cathie/Lake Innes & Bonny Hills Estuary & Coastline Coastal Management Program.

**Executive Summary**

At the 3 June 2020 Council Meeting a Notice of Motion was raised for Kenwood Drive Bridge, Lake Cathie - Concept Designs. In response to this motion, Council resolved:

**RESOLVED: Pinson/Turner****That Council:**

1. Acknowledge community sentiment following the opening of Lake Cathie.
2. Request that the General Manager give consideration to commencing the development of concept designs for the Kenwood Drive Bridge, Lake Cathie as part of the 2020-2021 Operational Plan.
3. In light of Recommendation No. 2 above, request that the General Manager table a report at the Ordinary Council Meeting on 15 July 2020 detailing any impacts undertaking the concept designs for the Kenwood Drive Bridge will have on:
  - a) existing priorities listed in the draft 2020-2021 Operational Plan,
  - b) priorities that arise from the COVID-19 Working Group's proposed infrastructure prioritisation matrix, as well as identifying a potential funding source for the concept design work to be undertaken during 2020-2021.
4. Request that the General Manager write to the Hon. Leslie Williams MP (Member for Port Macquarie) and Dr David Gillespie MP (Federal Member for Lyne), advising of these actions being taken by Council.

**CARRIED: 8/0****FOR: Alley, Dixon, Griffiths, Hawkins, Intemann, Levido, Pinson and Turner****AGAINST: Nil**

This report addresses point 2 and 3 of the above resolution.



Item 13.01

Page 83

**AGENDA****ORDINARY COUNCIL**

15/07/2020

YOUR NATURAL AND  
BUILT ENVIRONMENT**Discussion**

Under the currently adopted 2020-2021 Operational Plan, Council has committed to completing at least 30 transport related projects and programs across the region.

This commitment will see our internal project management and infrastructure planning resources at full capacity throughout the financial year. The projects will be delivered using a mix of internal and external resources, all of which require an internal project management resource to oversee.

Additionally, the COVID-19 Working Group have proposed a number of priority projects for 2020-2021 to support recovery activities across the Port Macquarie-Hastings Local Government Area (LGA) following the global pandemic. These priority projects have been tabled as a separate report to 15 July 2020 Ordinary Council Meeting and will have further resourcing impacts on the adopted 2020-2021 Operational Plan.

Of the projects/programs already adopted, nine relate to priority bridge works. These are: Kindee Bridge structural repairs; Kindee Bridge replacement investigations and design; various timber bridge renewals and repairs; three bridge upgrade designs as part of the Pembroke Road and Stoney Creek Road upgrade design project; Scrubby Creek Bridge replacement; Thompsons Bridge replacement; Pappinbarra Bridge replacement and the design of two bridge replacements as part of the Bril Bril Road upgrade design. The priority of these projects is supported through asset management, impacts on community levels of service, road safety upgrades and the recent detailed structural inspection and assessment of all bridge assets.

The Kenwood Drive Bridge currently ranks 86th of the 140 bridges in the Port Macquarie-Hastings LGA in regards to condition. The bridge is not currently identified within our future works programs for renewal or rehabilitation based on its current condition and risk.

In order to include concept designs on Kenwood Drive Bridge, one of the above bridge projects would need to be deferred, impacting other parts of the community and delaying high priority asset renewal projects.

The average costs associated with a concept design for a bridge are approximately \$100,000, when geotechnical investigations and a detailed site survey are included. Unfortunately, this project could not be included in the 2020-2021 Operational Plan unless another similar project is deferred.

Over the past 25 years, a number of studies (NSW PWD, 1984; WMA, 1994a; Umwelt, 2004) have investigated the effect of widening Kenwood Drive Bridge with respect to tidal and flood behaviour. Other benefits of widening the bridge have also been suggested by residents, which include an increase to the size of the ocean entrance and improved waterway usage. Computer modelling undertaken by WMA (1994a) noted that widening of the culvert structure would have some minor effect on entrance opening and closing processes, increasing breakout flows by approximately 4% during the critical early breakout period, and increase tidal flows through the entrance by less than 2%. The effect of widening the culvert was reported to increase flow volumes into Lake Cathie however in the context of discharges at other locations within the Estuary would still be relatively small. Based on previous modelling investigations, the basis for widening Kenwood Drive Bridge primarily relates to



Item 13.01

Page 84



## AGENDA

## ORDINARY COUNCIL

15/07/2020

YOUR NATURAL AND  
BUILT ENVIRONMENT

increasing tidal flow and mixing within the Estuary and establishing conditions that would benefit entrance morphodynamics rather than other potential ecological impacts to flora and fauna as a result of increased tidal inundation.

A report to the July 2011 Port Macquarie-Hastings LGA Coast and Estuaries Management Sub-Committee indicated that the shoals downstream of Kenwood Drive Bridge are present in all historical aerial photos over the past 50-60 years, so it would appear that their existence is not a direct consequence of changes to the bridge crossing during this time. Established vegetation within and near to these shoals would also support that they are not frequently changing their position, size etc. Of the management options investigated, widening Kenwood Drive Bridge (and isolation of Lake Innes) pose the greatest threat to local ecology and/or other social or economic values.

Following recommendation from the Port Macquarie-Hastings LGA Coast and Estuaries Management Sub-Committee, Council resolved:

31 RECOMMENDED ITEM TO COUNCIL FROM PMH LGA COAST & ESTUARIES  
MANAGEMENT SUB-COMMITTEE - LAKE CATHIE / LAKE INNES  
HYDRODYNAMIC MODEL & INVESTIGATION REPORT  
ADOPTED:

1. That the Lake Cathie/Lake Innes Estuary Hydrodynamic Model Development and Investigation report (2011) be noted.
2. That the following management responses be adopted for each of the scenario options;
  - a. Kenwood Drive bridge
    1. That Kenwood Drive bridge be widened as part of any future asset upgrade or replacement works
  - b. Lake opening strategy
    2. That the current opening level of 1.6m AHD remain unchanged.
  - c. Isolation of Lake Innes from Lake Cathie
    3. That the hydrodynamic model be made available to the NSW Office of the Environment & Heritage (or others) for use in any further investigation of the reversion of Lake Innes to freshwater.
  - d. Dredging of tidal flushing channels  
That no dredging works be undertaken between the Ocean Drive Bridge and the Kenwood Drive Bridge. That dredging works be limited to removal of sediment from the entrance downstream of the Ocean Drive bridge.

As outlined above Kenwood Drive Bridge currently ranks 86th of the 140 bridges in the Port Macquarie-Hastings LGA based on asset condition and with no further development proposed beyond the bridge there are no plans for any upgrades or replacement of the bridge based on level of service or asset condition.

The current opening beneath Kenwood Drive Bridge controls tidal flow and substantially reduces the tidal range in Lake Cathie relative to that experienced along Cathie Creek. The widening of Kenwood Drive has been proposed to specifically address concerns regarding tidal exchange between Cathie Creek and Lake Cathie. The model results show that widening the bridge opening would increase tidal discharge into and out of Lake Cathie and the range of water levels in the waterbody. Under proposed conditions, the modified hydrodynamic conditions would increase the extent of tidal inundation gradually altering the distribution of saltmarsh and other



Item 13.01

Page 85

**AGENDA****ORDINARY COUNCIL  
15/07/2020**YOUR NATURAL AND  
BUILT ENVIRONMENT

inter-tidal vegetation species within Lake Cathie as they adapt to new water level conditions.

Of the other management scenarios investigated in the past, the isolation of Lake Innes is expected to result in the most significant change to estuarine processes.

Council is working on the development of a Coastal Management Program (CMP), which aims to provide a long term, coordinated strategy for managing the coastal zone in accordance with the Coastal Management Act 2016 (CM Act) and the local objectives. In accordance with the Coastal Management Framework, there are five stages to the writing of a CMP. Council has decided, for efficiency and to better manage localised issues, the CMP will be divided into four 'chapters' based on geographic areas. The four chapters include:

1. Lake Cathie/Lake Innes & Bonny Hills Estuary & Coastline
2. Hastings River Estuary
3. Camden Haven Estuary
4. Port Macquarie- Hastings Council

Following completion of the Stage 1 scoping study which is currently underway, Council will commence implementation of Stage 2 for the Lake Cathie/Lake Innes & Bonny Hills Estuary & Coastline chapter, expected to commence in July 2020. The focus of this stage involves undertaking detailed studies that will assist Council to identify, analyse and evaluate risks, vulnerabilities and opportunities. The aim is to gather enough information to start providing clarity on what the priority management objectives will be for the system. For example, this may include recreation and flooding as the top priorities or perhaps managing for ecology.

With clarity around the issues, opportunities and associated risks, Council will move to Stage 3 of the CMP, which will undertake an analysis of the potential solutions for performance feasibility and cost/benefit. This will provide a list of solutions that are feasible and cost effective to reach the determined priority management objectives.

As such, it is considered premature to commit to planning for widening Kenwood Drive Bridge as a management strategy for the system until at least Stages 2 and possibly 3 of the CMP have been completed.

Completing the CMP will ensure State Government grant funding can be applied to the highest priority management solutions. A 2/3<sup>rd</sup> to 1/3<sup>rd</sup> funding split between the State Government and Council is available for the investigation, design and construction of the management solutions identified through the CMP process.

**Options**

Council can elect to defer a current bridge related project from the 2020-2021 Operational Plan to accommodate the concept design works for Kenwood Drive Bridge.

Council can elect to list the Kenwood Drive Bridge concept designs for consideration and prioritisation in the draft 2021-2022 Operational Plan.

Council can elect to defer the Kenwood Drive Bridge concept designs and planning until sufficient information is available through the CMP to ensure it is the highest



Item 13.01

Page 86

**AGENDA****ORDINARY COUNCIL**  
15/07/2020

priority management strategy for the Lake Cathie/Lake Innes system before investing resources, which is recommended.

**Community Engagement and Internal Consultation**

No community engagement was undertaken in relation to this report.

Internal consultation has occurred with:

- Director Infrastructure
- Group Manager Infrastructure Planning
- Group Manager Project Delivery
- Natural Resources Manager

**Planning and Policy Implications**

If Council resolve to include this project in the 2020-2021 Operational Plan, there will be planning implications in so far as the deferral and reprioritisation of projects and allocation of resources.

**Financial and Economic Implications**

There is currently no available funding to complete the concept designs for Kenwood Drive Bridge. Should a current bridge related project be deferred then the funding allocated to that project may be able to be allocated to the concept designs for Kenwood Drive Bridge should it not be from a restricted source, such as development contributions or grant funding.

There may be future financial implications should the design work be completed ahead of the CMP, being State Government Grant funding opportunities may be missed.

**Attachments**

Nil

YOUR NATURAL AND  
BUILT ENVIRONMENT



Item 13.01

Page 87



**MINUTES**  
**Ordinary Council Meeting**  
**15/07/2020**

---

### **13.01 KENWOOD DRIVE BRIDGE LAKE CATHIE**

---

The Mayor displayed photos of Kenwood Drive Bridge, Lake Cathie.

**RESOLVED:** *Pinson/Intemann*

That Council:

1. Note this information provided in this report.
2. Request the General Manager provide a further report to the September 2020 Ordinary Council meeting outlining the process and costs involved in reviewing the findings of the 2011 Lake Cathie/Lake Innes Estuary Hydrodynamic Model Development and Investigation Report and developing a program for the replacement or augmentation of Kenwood Drive Bridge to improve water levels and sediment transport within areas between Lake Cathie and the entrance.

**CARRIED:** 7/0

**FOR:** *Alley, Dixon, Griffiths, Hawkins, Intemann, Pinson and Turner*

**AGAINST:** Nil

---