

## **STATUS – INVESTIGATIONS UNDERWAY - Replacement of Kenwood Drive Bridge Status (Revive Lake Cathie Agenda Item)**

As at April 2020, Port Macquarie-Hastings Council had not written to the State Government regarding funding for the replacement of Kenwood Drive Bridge. As the owner of Kenwood Drive Bridge, Port Macquarie -Hastings Council is required to following protocol and engage with Member for Port Macquarie the Hon Leslie Williams to seek assistance.

In the current Operational Plan (OP) the upgrade or replacement of Kenwood Drive Bridge is not identified. This will be managed through the Coastal Management Program (CMP) process. All issues will be considered in stage 2 and 3 of the process and if determined to be a priority it will be included.

Kenwood Drive bridge was a lot wider when it was originally installed. It then got washed away in a flood and a 'temporary' smaller bridge was installed. Port Macquarie- Hastings Council has advised investigations has been included stage 2 investigation of the CMP specifically for Lake Innes/Lake Cathie estuarine system as a draft OP item in 2020/2021.

Previous studies have suggested that widening of Kenwood Drive to four times its current width would provide noticeable changes to water levels (increasing by up to 200mm) within Lake Cathie during spring tide conditions (entrance open). However previous modelling also suggested that widening the Kenwood Drive culvert would increase flood levels within Lake Cathie, which could adversely affect residential properties (particularly along Kenwood Drive), and as such, compensatory works (e.g. flood gates) would need to be provided to minimise impacts.

Results of modelling 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.

### **Councils November 2020 13.05 KENWOOD DRIVE BRIDGE LAKE CATHIE - REVIEW OF 2011 HYDRODYNAMIC REPORT FINDINGS - STATUS UPDATE - That Council:**

1. Note the information provided in this report.
2. Note that a review of the Lake Cathie/Lake Innes Estuary Hydrodynamic Model is warranted and should be undertaken as part of Stage 2 of the Coastal Management Program.
3. Consider funding opportunities to undertake the review of the Lake Cathie/Lake Innes Estuary Hydrodynamic Model with the development of the Draft 2021-2022 Operational Plan and budget.
4. Note that a review of the findings of the 2011 Lake Cathie/Lake Innes Estuary Hydrodynamic Model Development and Investigation Report cannot be undertaken until the Model has been reviewed and tested.
5. Request the General Manager to develop a project plan and indicative costings for the replacement or augmentation of the Kenwood Drive Bridge for consideration by Council in the development of the Draft 2021-2022 Operational Plan and future draft Delivery Program and Operational Plans.
6. In considering funding opportunities referenced in Item 3 above, also investigate any grant funding opportunities that are available once the CMP Scoping Study has been completed, with the inclusion of reference to the Hydrodynamic Model Review as a priority task.

**STATUS – Dredging of the entire Lake Cathie/Lake Innes Estuarine System -(Revive Lake Cathie Agenda Item)**

Upstream of Ocean Drive Bridge is listed as Lake Innes Nature Reserve and is managed by National Parks and Wildlife Service (NPWS). NPWS would have to approve dredging/sand extraction within the Nature Reserve.

**STATUS – INVESTIGATIONS UNDERWAY - Improve the health and amenity of the Lake Cathie /Lake Innes Estuarine System - Review decoupling Lake Innes - (Revive Lake Cathie Agenda Item)**

Lake Innes was originally a separate freshwater system, the largest in NSW. In 1933, a drain was excavated to connect Lake Innes to Cathie Creek. The drain subsequently widened and deepened under flood and tidal flows, causing Lake Innes to convert to an estuarine system.

Council is working in partnership with Fisheries NSW and the NPWS to investigate the gaps in data regarding the reversion of Lake Innes. Council is not the manager or landowner of either Lake Innes or Lake Cathie and as such has no decision making role in this situation. NPWS, Fisheries NSW and other relevant state organisations will be the decision makers around the decision to support decoupling Lake Innes from Lake Cathie. At the reporting stage, no solution has been posed to date to stop acid sulfate soil and surfactant contamination continuing to come down into Lake Cathie. As Cathie Lagoon is currently open, each tidal flow brings contamination further into Lake Cathie poisoning everything in its wake.

The reversion of Lake Innes to its former freshwater state would provide a secure permanent breeding habitat for many species of waterbird, both freshwater and salt-tolerant species, and would provide a drought refuge to those species restricted to freshwater. It will increase the available open freshwater on the mid north coast from 40 hectares to more than 700 hectares. A freshwater lake will also result in a higher biomass of aquatic vegetation and a more complex lake margin. This in turn will lead to more species diversity, an increase in frog and turtle species and expand the food supply for microbats and birds.

**Where is Council at in addressing acid sulfate soil contamination of the lake cathie/lake innes estuarine system?**

Council applied for 50:50 funding from the State Government under the Coastal and Estuary Management Program for an Acid Sulphate Study for the Lake Cathie-Lake Innes estuarine system. On 27 March 2020 Council was advised the application was unsuccessful for the 20/21 funding round. Following the 20 May 2020 Council resolution, Council wrote to the NSW Department of Planning, Industry and Environment (DPIE) and State Member for Port Macquarie Leslie Williams MP on 2 June 2020 seeking a review of this decision and urgent funding assistance for the acid sulphate study as it is a recommended element of Council's Coastal Management Program (CMP). Without funding for this study the CMP development will be delayed.- **WHATS THE UPDATE HERE**

**STATUS – DIGITAL ENGAGEMENT – Engagement about the Lake System with the Community**

In April 2020 Port Macquarie-Hastings Council advised on Council is committed to engaging with our community to discuss at length the CMP and also the specific issues affecting the Lake Cathie/Lake Innes estuary. The COVID-19 pandemic a digital platform was created and Council's website updated to provide better information on a more timely basis for the community.

**STATUS – UNDER REVIEW – Future proof our lake - Management of the Lake Cathie/Lake Innes Estuarine System - (Revive Lake Cathie Agenda Item)**

Refer to Revive Lake Cathie’s Management Matrix attached for more information on who manages what in the system.

In summary, Port Macquarie-Hastings Council Council’s ongoing physical responsibilities for the management of the Crown owned Lake Cathie waterbody are strictly limited to the responsibilities of flood mitigation, stormwater drainage and community protection only.

Any actions outside of this scope (including public health issues and complaints about water quality, odour, colour, mosquitoes, fish kills, fish health, ecology of the waterway, salinity, acid sulphate soils, pollution, water safety and the like) will be directed to the NSW Department of Planning, Industry and Environment - Crown Lands as the owner of the waterbody.

The Coastal Management Plan (CMP) will set the long-term strategy for the coordinated management of the coastal zone.

INSERT 3 STAKEHOLDER MAPS ALSO 2 on COUNCILS website and 1 from NPWS

**WHERE IS COUNCIL UPTO WITH THE COASTAL MANAGEMENT PLAN (CMP)**

Council resolved on 20 May 2020 to place the scoping Study for the development of our Coastal Management Program (CMP) on public exhibition until 26 June 2020. Public submissions were received and the Draft Scoping Study has been reviewed to reflect issues raised. The reviewed Scoping Study is to be presented to Council on 17 February 2021. The Scoping Study was adopted, work will progress on Stage 1 of the Coastal Management Program, being the Lake Cathie/Lake Innes and Bonny Hills Estuary & Coastline.

The CMP will achieve the purpose and objectives of the Coastal Management Act. Now the scoping study has been finalised, the remainder of the CMP will be divided into four ‘chapters’ these are:-

1. Lake Cathie/Lake Innes and Bonny Hills Estuary & Coastline - incorporating the open coastline from the 4 x 4 access track adjacent to Dirah Street, Lake Cathie to the southern side of Grants Head at Bonny Hills
2. Hastings River Estuary
3. Camden Haven River
4. Port Macquarie-Hastings Open Coastline (excluding the open coastline that is covered in the Lake Cathie/Bonny Hills area).