



# **CATCHMENTS TO COAST COMMITTEE MEETING**

**29 March 2023**



# COMMUNITY STRATEGIC PLAN 2018-2028

**ONE – CENTRAL COAST IS THE COMMUNITY STRATEGIC PLAN (CSP) FOR THE CENTRAL COAST LOCAL GOVERNMENT AREA**

**ONE – CENTRAL COAST DEFINES THE COMMUNITY'S VISION AND IS OUR ROADMAP FOR THE FUTURE**

**ONE – CENTRAL COAST BRINGS TOGETHER EXTENSIVE COMMUNITY FEEDBACK TO SET KEY DIRECTIONS AND PRIORITIES**

One - Central Coast will shape and inform Council's business activities, future plans, services and expenditure. Where actions are the responsibility of other organisations, sectors and groups to deliver, Council will work with key partners to advocate on behalf of our community.

Ultimately, every one of us who live on the Central Coast has an opportunity and responsibility to create a sustainable future from which we can all benefit. Working together we can make a difference.

## RESPONSIBLE

**WE'RE A RESPONSIBLE COUNCIL AND COMMUNITY, COMMITTED TO BUILDING STRONG RELATIONSHIPS AND DELIVERING A GREAT CUSTOMER EXPERIENCE IN ALL OUR INTERACTIONS.**

We value transparent and meaningful communication and use community feedback to drive strategic decision making and expenditure, particularly around the delivery of essential infrastructure projects that increase the safety, liveability and sustainability of our region. We're taking a strategic approach to ensure our planning and development processes are sustainable and accessible and are designed to preserve the unique character of the coast.

 **Good governance and great partnerships**

**G2** Engage and communicate openly and honestly with the community to build a relationship based on trust, transparency, respect and use community participation and feedback to inform decision making

There are 5 themes, 12 focus areas and 48 objectives

### COMMUNITY STRATEGIC PLAN 2018-2028 FRAMEWORK

All council reports contained within the Business Paper are now aligned to the Community Strategic Plan. Each report will contain a cross reference to a Theme, Focus Area and Objective within the framework of the Plan.

The infographic details the following structure:

- THEME: BELONGING**
  - Focus Area: OUR COMMUNITY (Objectives: G1, G2, G3, G4)
  - Focus Area: COMMUNITY GOVERNANCE AND LOCAL GOVERNMENT (Objectives: G5, G6)
- THEME: SMART**
  - Focus Area: A GROWING AND COMPETITIVE REGION (Objectives: C1, C2, C3, C4)
  - Focus Area: A PLACE OF OPPORTUNITY FOR PEOPLE (Objectives: D1, D2, D3, D4)
- THEME: GREEN**
  - Focus Area: ENVIRONMENTAL WELL-BEING FOR THE FUTURE (Objectives: E1, E2, E3)
  - Focus Area: INCREASED RAIN WATER RESILIENCE (Objectives: F1, F2)
- THEME: RESPONSIBLE**
  - Focus Area: GOOD GOVERNANCE AND GREAT PARTNERSHIPS (Objectives: G1, G2, G3, G4)
  - Focus Area: BELONGING THROUGH INFRASTRUCTURE (Objectives: H1, H2, H3, H4)
  - Focus Area: SAFETY AND WELLBEING (Objectives: I1, I2, I3, I4)
- THEME: LIVEABLE**
  - Focus Area: RELIABLE PUBLIC TRANSPORT AND CONNECTIVITY (Objectives: J1, J2, J3, J4)
  - Focus Area: RUST AND RUSTLE (Objectives: K1, K2, K3, K4)
  - Focus Area: HEALTHY LIFESTYLES (Objectives: L1, L2, L3, L4)



# Meeting Notice

**The Catchments to Coast Committee Meeting  
of Central Coast Council  
will be held Remotely – Online,  
on Wednesday 29 March 2023 at 2.00pm,  
for the transaction of the business listed below:**

## **1 Procedural Items**

- 1.1 Introduction: Welcome, Acknowledgement of Country, Apologies, Disclosure of Interest..... 4
- 1.2 Previous business: Confirmation of minutes, review action log ..... 4

## **2 Reports**

- 2.1 Update on Coastal Management.....18
- 2.2 Update on Flood & Stormwater Management .....22
- 2.3 Update on Coastal & Catchment Operations .....24
- 2.4 General Business.....28

Luke Sulkowski  
**Chairperson**

**1.1 INTRODUCTION: WELCOME, ACKNOWLEDGEMENT OF COUNTRY, APOLOGIES,  
DISCLOSURE OF INTEREST**

Chairperson

*We acknowledge the Traditional Custodians of the land on which we live, work and play.  
We pay our respects to Elders, past, present and emerging and recognise their continued  
connection to these lands and waterways.  
We acknowledge our shared responsibility to care for and protect our place and people.*

## **1.2 PREVIOUS BUSINESS: CONFIRMATION OF MINUTES, REVIEW ACTION LOG**

Chairperson

### **Attachments**

- 1** Catchments to Coast 14 December 2022 Minutes      D15494211

# Minutes

## Catchments to Coast Advisory Committee



**Date:** Wednesday 14<sup>th</sup> December 2022

**Time:** 2pm – 4:30pm

**Location:** Microsoft Teams

**Chairperson:** Luke Sulkowski, Unit Manager Environment Management

**Coordinator:** Luke Sulkowski, Unit Manager Environment Management

### Attendance

#### Members:

Michael Alsop

Michael Campbell

Ian Carruthers

Doug Darlington

Troy Gaston

Graham Hankin

Andrew Jones

Michael Kilp

Laurie Lewington

David Mylan

Marlene Pennings

Adrian Williams

Sam Willis

#### External agencies:

Chris Drummond, NSW Department of Planning and Environment

Philip Buchanan, NSW Department of Planning and Environment

Paul Donaldson NSW Department of Planning and Environment (arrived at 3.02pm)

#### Staff:

Rachel Callachor, Meeting Support Officer

Luke Sulkowski, Unit Manager Environmental Management

Peter Sheath, Section Manager Bushfire and Flood Risk Management

Ben Fullagar, Section Manager Catchment to Coast

James Lawson, Section Manager Environmental Infrastructure

Larry Melican, Section Manager Natural Assets and Biodiversity

Vanessa McCann, Team Leader Estuary Management

Parissa Ghanem, Team Leader Floodplain Management

#### Status:

Present

Present

Present

Present

Absent

Present

Present

Absent

Absent

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Absent

Absent

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Present

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# Minutes

## Catchments to Coast Advisory Committee



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### 1 Introduction 2.00pm

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The chairperson welcomed the group and completed an Acknowledgement of Country. Apologies received and members absent without apology were noted.

The chairperson called for any disclosures of interest. No disclosures were received.

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### 2 Previous business 2.03pm

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The group confirmed the minutes from the previous meeting as noted below, which were distributed to members via email and uploaded to Council's website:

- [Catchments to Coast Advisory Committee Minutes – 7 September 2022](#)

The action log was reviewed with updates recorded (see page 8).

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### 3 Davistown Wetlands 2.07pm

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Update from Larry Melican, Section Manager Natural Assets and Biodiversity regarding this matter, recently reported to Council (Minutes:

Background and information provided regarding the wetlands and fund including:

- Themes, Goals, Actions and Targets for the strategy and the Central Coast Conservation Fund
- Fees, charges and the variety of resources relating to the fund.
- Information regarding community engagement and the implementation of the Environmental Land acquisition program.

Council continues to hold restricted funds from both former Gosford Council and former Wyong Council, in the form of Development Contributions through bonus lot provisions, via COSS and Cl.14 which are not proposed to be reallocated into the proposed Central Coast Conservation Fund . Central Coast Conservation Fund will be the fund going forward that any new appropriate income specifically associated with environmental management and environmental land acquisition type activities will be directed to.

The former-Wyong Cl. 14 scheme was not bought to LEP 2013 and COSS scheme will be wound up.

Proposed fund to held as restricted revenue in revolving trust account, only to be used for Biodiversity strategy related actions.

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## Catchments to Coast Advisory Committee



Questions and discussions from Committee members regarding the fund, in relation to public information available and the balance of the current fund.

Clarification specifically in relation to the parcels known as Davistown Wetlands, was provided that the determination by Council not to pursue purchase of the land isn't an indication that the land shouldn't be preserved.

**Action:** Revised date of Friday 17 February 2023 for feedback from Committee members in relation to the Policy.

**Action:** Presentation to be distributed to Advisory Group members.

#### 4 Update Tuggerah Lakes Expert Panel report 3.10pm

Presentation by Vanessa McCann, Team Leader Estuary Management, a video presentation which covered the Tuggerah Lakes Expert Panel.

Feedback from Committee members regarding the good work of Central Coast Council  
Comment regarding the ongoing management of the Tuggerah Lakes and urgency.  
Noted and that it is a multidisciplinary approach and responsibility is shared across the board.

**Recommendation:** *That Council note the progress against the recommendations in the Tuggerah Lakes Expert Panel report.*

**Action:** Presentation to be distributed to Advisory Group members.

Note: The presentation will also be published on Council's website here: .

#### 5 Flood and Stormwater management update 2.37pm

Peter Sheath, Section Manager Bushfire and Flood Risk Management, provided update and presentation addressing the following key points:

- Update provided on the Flood Plain Management Program
- Review of the Tuggerah Lakes Flood study has commenced;
- Local Government Recovery Program Grant Application- 2 rounds verbal approval received from OLG- Awaiting written approval
- Grant applications 2023 – successful with 1 application, 3 other applications were unsuccessful.
  - **Kariong & Somersby Catchments Overland Flood Study - Successful**



# Minutes

## Catchments to Coast Advisory Committee



- Wagstaffe to Daleys Point Catchments Flood Study - unsuccessful
- Patonga Creek Catchment Flood Study - unsuccessful
- Burns Road Ourimbah Boom Gates - unsuccessful
- Status update regarding non-grant funded projects: Narara Creek Floodplain Risk Management Study and Plan
- NSW Govt emergency response fund (ERF) – guidelines expected to be released in early 2023, May include: levee assessment, flood warning infrastructure and voluntary house raising (Council to fund 25% of VHR – needs reporting to and endorsement by Council)
- Update on Olney Drive Blue Haven Gross Pollutant Trap
- Update on San Remo water quality improvement project
- Water sensitive urban design standard drawing review
- Long Jetty boardwalk, educational signage to be installed within the next week.
- Council Response to 2022 flood inquiry (State Govt). Report handed down late July, 29 recommendations. Council's response supports 16 in full, another 12 in principle, and further improvements for 12 recommendations. Summary provided of Council's response and comments. Letters sent to MPs stating Council's position.
- Tuggerah Lakes Interim Entrance Management Triggers: consideration of information from the Yarramalong and Ourimbah water level gauges be used to assist as per Council's interim entrance management procedure for Tuggerah Lakes
- Analysis of actual flood events over the past 20 years.

Comment from Philip Buchanan - DPE Floodplain Management Grant applications will open again in February 2023.

DPE will continue to work with Council regarding their grant applications and understands the resource levels for these applications for Council.

NSW Reconstruction Authority (NSWRA) is proposed to be established July 2023.

Question in relation to whether the NSWRA is proposed to cover all natural hazards/disasters.

Response provided that it is the understanding there is the intention to do so.

Parissa participated in workshops regarding the response to inquiry at a meeting and workshop held by FMA last month. The points of Central Coast Council were provided to Floodplain Management Australia who also submitted a response to the inquiry.

Comments and congratulations from the Committee to the Council team for work on response, and on the prediction tool, members interested to get more details.

**Recommendation:** "That Council instruct staff to implement an additional intervention trigger as part of the Interim Entrance Management Procedure where actions in accordance with the relevant

# Minutes

## Catchments to Coast Advisory Committee



entrance condition are also implemented if there is a flood level of both 7mAHD on the Yarramalong Water NSW gauge 211014 and 6mAHD on the Ourimbah Creek Water NSW 211013 gauge.”.

**Action:** Presentation to be distributed to Advisory Group members.

### 6 Catchment Operation

3.38pm

James Lawson provided update on Catchment Operation. Key points raised:

- Wrack collection
- Little Tern program update
- Lagoon monitoring
- Staffing over Christmas

Question regarding Canton Beach and weeds on foreshore, comment that sandstone falling over and access to the water is also an issue.

Information provided by Luke Sulkowski: Restoration and upgrade is planned for the beach. Weeds on beach addressed last summer, so may need to be re-visited. Noted the lake is low and sea grass leaves are visible on surface of water making the live seagrass appear like free and floating wrack

Further details provided regarding a qualitative focus on wrack collection program. Next financial year looking to move away from measurement, towards wrack management strategy and best outcomes for the estuary. Volumes to still be reported, however there will be a different focus.

Contract with wrack provider has been extended for another year, plus one year option

**Action:** Presentation to be distributed to Advisory Group members.

### 7 Update on Coastal Management (Standard Item)

3.48pm

Presentation by Ben Fullagar, Section Manager Catchments to Coast provided an update.

Key topics covered included:

- Update on Wamberal Seawall Advisory taskforce (Action 42): Last meeting was held 30 August 2022, the Terms of Reference were revised with future focus around sand nourishment opportunities at a regional/state-wide scale. Next meeting is planned for March 2023.
- Update on Water & Sewer Avoca Lagoon (Action 13)
- Update on CMPs and ways to get involved during consultation period.
- Tuggerah Lakes CMP – Entrance Options Paper Community Focus Group– first meeting to be held 14/12/2022

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## Catchments to Coast Advisory Committee



- Lake Macquarie CMP completed and draft on public exhibition for comment till 3 February 2023.
- Update on Info from MIDO regarding scope of dredging works (Action 17) – dredging likely mid-2023, at the earliest.
- Water Quality Report Card and Beachwatch – see Council's website for full results.

Questions from Committee members and responses as follows:

- CPM and community consultation. Will there be a briefing on this topic? Query regarding role for the Advisory Committee in this process - could it be briefed in early 2023.  
Confirmation that advisory committee will be included in consultation and Council would like to work with members in early 2023 on the best way to be involved.
- Question re: rock wall, southern end of The Entrance North– contamination.  
Information provided that residents are engaging with coastal engineering and contamination consultants and have met with council regarding this.  
Emergency Protection Works - Karagi beach accessway, was completed late 2021– the beach is recovering well, a lot of sand has come back.
- Wamberal Sea wall – Comment to give credit to council for changes made to the engineering requirements following community consultation.  
Sand nourishment state-wide program - Letters were issued as per the Council resolution, will follow up regarding response received, next steps.  
Comment on work with other Councils who are also seeking a similar styled program.
- An overview of the *Tuggerah Lakes Riverine and Catchment Health Monitoring Program* was provided by Vanessa McCann, Team Leader Estuary Management to address Action 24.

**Action:** Presentation to be distributed to Advisory Group members.

Copy of *Tuggerah Lakes Riverine and Catchment Health Monitoring Report* for Central Coast Council to be distributed to Advisory Group members.

### 8 Update on Porters Creek Wetland Stormwater Management study (Action 36) 4.16pm

Peter Sheath, Section Manager Bushfire and Flood Risk Management provided update and presentation addressing the following key points:

- Completion of Porters Creek revegetation study.
- Project has completed so no further update required or ongoing actions regarding this item.

Further information provided regarding Warnervale Contributions Plan, Porters Creek wetland.

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## Catchments to Coast Advisory Committee



Some land has been transferred to Council for conservation purposes, in the area of Minnesota Road and back to the railway line. Council looking to see if these funds can be utilised to restore and enhance this site to the east of the wetland and look to restore the flood plain to some degree. A further update will be provided to the Committee as this matter advances.

**Action:** No further action required - completed.

### 9 General business

4.20pm

- Update from Committee member, Graham Hankin, regarding contact from SES Wyong after July flood, seeking local knowledge for the SES.  
A small group has been established, made of up residents of Chittaway Bay and Chittaway Point, who now have direct contact with SES and provide updates regarding what's happening on the ground, reducing the need for the SES to send crews out to collate information.  
Information provided includes updates regarding which streets are usually first effected by flooding, car parking options, etc.  
A Sandbag demonstration / workshop day was held – good feedback received on the usefulness of the information, how to correctly sandbag and keep the majority of the water out. Leaflets will be circulated, for residents who may have to do their own sandbagging.  
  
Question regarding promotion of these activities and if Council can get involved to assist with advertising this information.  
Noted there is a similar group in the Hunter which covers a number of suburbs/areas within the LGA.
- Vanessa McCann will be departing the organisation and will commence a new role at the NSW Department of Planning and Environment, commencing in February 2023.  
Chair thanked Vanessa for her passion, knowledge and dedication to her role which includes the long-term involvement over many projects in her time at Council, particularly in relation to Tuggerah Lakes.

### X Close

Next meeting: 29 March 2023  
2pm-4pm  
TBC

Meeting closed at 4.30pm

Minutes approved by Chairperson, Luke Sulkowski, on 27 January 2023.

## Action log

## Catchments to Coast Advisory Committee



Action Number	Meeting Date	Action	Responsible Party	Action Update	Status
36 (Tuggerah Lakes)	27/02/2019	A presentation on the Stormwater Management Plan currently under review for the Porters Creek Wetland catchment to be provided at a future meeting	Section Manager Flood Planning and Strategy	2/6/21: Update on Porters Creek Wetland to be standing item on agenda until further notice 8/12/21: No further updates currently from last meeting. Proceeding with trying to get costing prepared for options. Regarding recent motion to remove buffer zones, there were restricted activities in buffer zone, and these have now been removed so activities (mowing) can take place, but must still occur within SEPP. 2/3/22: No further update – cost estimate of works underway 10/05: PS – No further update – cost estimate of works is still underway Investigation regarding funding nexus, Dev. Contributions Plan, revegetation strategy 17/11/22 Council has recently completed the Porters Creek Wetland & Catchment Stormwater Modelling, Revegetation Plan and Monitoring Plan (Cardno 2022). The plan shows that the proposed revegetation will provide little reduction in stormwater flows entering the wetland from developments.	Completed

## Action log

## Catchments to Coast Advisory Committee



Action Number	Meeting Date	Action	Responsible Party	Action Update	Status
				Therefore Council is currently investigating other potential stormwater management opportunities for the wetland. Until such time as a new stormwater management strategy is developed & adopted, all new development will be assessed in accordance with Council's LEP, DCP and Civil Works Specifications. 14/12/22: Update provided at Item 8.	
42 (Brisbane Waters)	24/11/2020	Update on Wamberal Seawall Advisory Taskforce to be standing item on future agendas, with Project Manager to attend meetings.	Section Manager Catchments to Coast	2/6/21: Update on Wamberal Seawall Advisory Taskforce to be standing item on agenda until further notice 1/6/22: It was noted that another meeting of the Advisory Taskforce was to be arranged in the coming weeks. 10/08: standing agenda item. 14/12/22: Update provided at Item 7.	Ongoing
2	2/06/2021	Members to be notified once MHL reports for Tuggerah Lakes Entrance Management Study are available.	Section Manager Catchments to Coast	Link to Stage 1 report shared via email 13/9/21. 8/12: Further reports will be uploaded as available 10/05: BF – get MHL to present at the next committee meeting – 20 minutes	Completed – link distributed

## Action log

## Catchments to Coast Advisory Committee



Action Number	Meeting Date	Action	Responsible Party	Action Update	Status
8	22/09/2021	Updates about Airport Masterplan and related matters to be communicated to members as part of ongoing consultation.	Unit Manager Economic Development and Property	Response from Unit Manager Economic Development and Property emailed to members 14 February 2022 10/05/2022: PS – a verbal update will be provided at the next committee meeting. Any further updates can be directed to the EPD section (via the AG) 10/08: Update to be provided during the Action Log item at the next meeting.	Pending – presentation will be requested.
13	8/12/2021	Staff to get advice from Water and Sewer about works in Avoca Lagoon and report back to members when appropriate.	Section Manager Catchments to Coast	Update to be provided at 2 March 2022 meeting 10/05/2022: BF – a verbal update will be provided at the next committee meeting. Any further updates can be directed to the W&S section (via the AG) 1.9km of sewer re-lined in the Avoca area. 14/12/22: Update provided at Item 7.	Ongoing
14	08/12/2021	Staff to bring updates on relevant policies and DCP review to group when available.	Section Manager Flood Planning and Strategy	DCP review is still deferred. Update to be provided at 2 March 2022 meeting 2/3/22 – Peter Sheath advised Planning team can't provide update on DCP currently, but Flood Planning team are focusing on updating Flood Policy 10/05: PS – nothing further to report, quick verbal update 1/06: No finalised policies	Ongoing

# Action log

## Catchments to Coast Advisory Committee



Action Number	Meeting Date	Action	Responsible Party	Action Update	Status
				or DCP chapter. Drafted flood policy update – reviewed and additional information. New Sea Level Rise policy. LGA wide chapter in Development Control Plan to be developed. Public exhibition will occur for any policies.	
17	02/03/2022	Info from MIDO regarding scope of dredging works to be shared with members	Section Manager Catchments to Coast	10/05: BF – will reach out to MIDO to get an update (website with contact details). AW to follow up the process for circulating information to members prior to the meeting (and then for the meeting itself) 10/08: BF to follow up circulation of information via the AG. 14/12/22: Update provided at Item 7.	Ongoing
21	02/03/2022	Update on draft Flood Policy to be provided at next meeting	Section Manager Flood Planning and Strategy	10/05: PS – defer item/update to the following meeting – verbal update to be given 10/08: Update to be provided during the Action Log item at the next meeting.	Update to be provided with DCP update.
23	7/09/2022	Luke Sulkowski to distribute link for updated TOR	Luke Sulkowski - Unit Manager Environment Manager	21/11 Civic support distributed link.	Completed



## Action log

### Catchments to Coast Advisory Committee



Action Number	Meeting Date	Action	Responsible Party	Action Update	Status
24	7/09/2022	Michael Campbell - Request for Jess Preston to attend December Meeting, Ben Fullagar to make contact with Jess Preston.	Ben Fullagar - Section Manager Catchments to Coast	Information on Tuggerah Lakes Riverine and Catchment Health Monitoring Program report was provided by Vanessa McCann, Team Leader Estuary Management to address questions from Michael Campbell.	Completed
26	14/12/2022	Copy of <i>Tuggerah Lakes Riverine and Catchment Health Monitoring Report for Central Coast Council</i> to be distributed to Advisory Group members.	Ben Fullagar - Section Manager Catchments to Coast		



**Item No:** 2.1  
**Title:** Update on Coastal Management  
**Department:** Environment and Planning

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29 March 2023 Catchments to Coast Committee Meeting

Reference: F2021/00832 - D15585040  
Author: Ben Fullagar, Section Manager, Catchments to Coast  
Manager: Luke Sulkowski, Unit Manager, Environmental Management  
Executive: Alice Howe, Director Environment and Planning

## **Recommendation**

*That the Committee note the report.*

## **Report purpose**

To provide an update on Council's coastal and estuary management activities and programs.

## **Executive Summary**

The report outlines Council's progress on the following:

- Coastal Hazard Study update – Presentation by Bluecoast Consulting Engineers;
- Update on Coastal Management Programs (CMPs);
- Discussion on forward community engagement program for CMPs;
- Update on Environmental Restoration Fund grant project progress;
- Wamberal seawall updates including Taskforce (action 42);
- Update on Community Focus Group (CFG) for The Entrance options paper;
- Info from Transport for NSW – Maritime Infrastructure Delivery Office (MIDO) regarding scope of Ettalong dredging works (action 17); and
- Update from Council's Water and Sewer directorate on works in Terrigal and Lagoon catchments (action 13).

## **Coastal Hazard Study update – Presentation by Bluecoast Consulting Engineers**

Bluecoast Consulting Engineers are undertaking an updated Coast Hazard Assessment to support both the Open Coast and the Coastal Lagoons Coastal Management Programs (CMPs). Its purpose is to inform coastal management decisions in later stages of the CMP by summarising the current knowledge on coastal processes and hazards experienced in the study area. This is done by addressing and filling knowledge gaps to provide:

## **2.1 Update on Coastal Management (contd)**

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- A sand budget that quantifies the pathways and rates of sand movement within and along the study area's coastline and describes the underlying coastal processes driving the observed changes,
- A detailed review and update of Council's previous coastal hazard assessments using contemporary data and a probabilistic hazard assessment approach, Including:
  - Coastal erosion and recession
  - Coastal inundation
  - Coastal lagoon entrance instability
  - Coastal cliff/slope stability and geotechnical hazards
- Identification of key coastal assets that are exposed to coastal hazards.

A presentation by Bluecoast Consulting Engineers will be provided at the meeting.

### **Update on Coastal Management Programs (CMPs)**

Council was recently advised that it has been successful in its application for funding for the Open Coast CMP under the NSW coastal and estuary grant program. The \$303,333 funding is provided to complete Stages 3 and 4 of the CMP, with funding provided on a 2:1 basis.

Council was also advised, as one of the six partner councils, that \$432,000 grant funding for the Hawkesbury Nepean CMP has also been provided under the coastal and estuary grant program.

An update on progress for the following CMPs will be presented during the committee meeting:

- Hawkesbury Nepean CMP (with five other partner councils);
- Open Coast CMP;
- Coastal Lagoons CMP;
- Tuggerah Lakes CMP; and
- Lake Macquarie CMP (with Lake Macquarie City Council).

### **Discussion on forward community engagement program for CMPs**

Council is currently planning the community consultation and engagement for the next CMP stages. It is planned to discuss during the meeting the level of involvement the Committee would like to have during these engagement sessions and what time members have available to contribute.

### **Update on Environmental Restoration Fund grant project progress.**

Council is nearing completion on the three Environmental Restoration Grant funding projects underway:

- Tuggerah Lakes restoration project;
- Green and Gold Bell Frog project; and
- Clean4Shore project.

These three projects have a completion date of 31 March 2023, with reporting against the grant requirements to be submitted after this date. An update on these projects will be provided to the Committee.

### **Wamberal seawall updates including Taskforce (action 42)**

Council is continuing to assist with development of a Wamberal seawall solution. This includes working with residents as a partner and public land owner for preparation of a development application for terminal protection works. Council will also assess the application once submitted. Appropriate probity controls have been established to manage these different roles.

Council is also continuing to participate in the Wamberal seawall taskforce including progressing actions on land ownership and funding opportunities. The last meeting of the Taskforce was held on 1 March 2023.

### **Update on Community Focus Group for The Entrance options paper**

Council recently completed the third Community Focus Group (CFG) workshop with community representatives, NSW DPE representatives and consultants to progress the options paper for the entrance to Tuggerah Lakes. This work will assist in the next stages of the Tuggerah Lakes CMP, which includes the development of an entrance management strategy to update the current interim approach.

### **Info from MIDO regarding scope of Ettalong dredging works (action 17)**

MIDO is progressing the planning for dredging of the Ettalong channel. Council is working to assist with the preparation of the Review of Environmental Factors including identifying potential nourishment locations to assist with beach erosion at Ettalong. Last advice was that dredging was planned for mid 2023, dependant on the completion of the project approvals.

## **2.1 Update on Coastal Management (contd)**

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### **Update from Water and Sewer on works in Terrigal and Lagoon catchments (action 13)**

Council's Water and Sewer Directorate continues to assess and repair/reline sewer infrastructure in the Terrigal Beach and Coastal Lagoon catchments. An update on the latest inspection and relining statistics will be presented at the meeting.

### **Attachments**

*Nil.*



**Item No:** 2.2  
**Title:** Update on Flood & Stormwater Management  
**Department:** Environment and Planning

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29 March 2023 Catchments to Coast Committee Meeting

Reference: F2021/00832 - D15566275  
Author: Peter Sheath, Section Manager, Flood Strategy and Planning  
Manager: Luke Sulkowski, Unit Manager, Environmental Management  
Executive: Alice Howe, Director Environment and Planning

## **Recommendation**

*The Committee note the report.*

### **Report purpose**

Update on Flood and Stormwater Management

- Updates on relevant policies and DCP (action 14 & 21)
- Woy Woy Peninsula Floodplain Risk Management Study

### **Update on relevant policies and DCP**

The NSW Department of Planning and Environment, in response to the recommendations from the NSW Flood Inquiry, proposes to strengthen planning rules to better protect and manage new development in areas that could be at risk during floods. They propose to amend the special flood considerations clause 5.22 in Local Environmental Plans.

The special flood considerations clause would apply to:

- sensitive and hazardous development, such as caravan parks, hospitals and seniors housing, between the flood planning area and the probable maximum flood level
- development that is not sensitive or hazardous on land that the consent authority considers that, in a flood, may pose a particular risk to life and where people may need to evacuate, or where there are other safety concerns.

The existing Central Coast LEP 2022 transitional clause effectively already picks up the first dot point. But the second dot-point above is new; the fact that it will be embedded in the LEP rather than the DCP means that has higher weight in the development assessment process. It will require Council to specifically consider evacuation requirements for communities that become isolated during flooding.

## **2.2 Update on Flood & Stormwater Management (contd)**

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Council staff have been reviewing the existing DCP flooding chapter and flood policy, with the view to accounting for consideration of this change to the LEP clause, revising the treatment of climate change based on the more recent Intergovernmental Panel on Climate Change Assessment Report 6, as well as utilising updated flood hazard mapping that is currently publicly available on Council's Online Mapping.

An update of this work will be provided at the meeting.

### **Woy Woy Floodplain Risk Management Study and Plan**

The Draft Woy Woy Peninsula Floodplain Risk Management Study and Plan was placed on public exhibition from 18 January till 15 February 2023 to seek community feedback. The community was also invited to attend an in-person drop-in information session on 1 February 2023, schedule a call-back service from a project officer and/or submit feedback via the online submission form.

Forty-five people attended the drop-in session and 32 submissions have been received on the draft reports, which are currently being considered by the consultant. No major changes will be required.

Minor amendments are being made to the report to incorporate relevant feedback from the community, which are mainly small corrections or statements to improve clarity. The changes will be highlighted in the report to Council seeking adoption of the Plan.

### **Attachments**

*Nil.*



**Item No:** 2.3  
**Title:** Update on Coastal & Catchment Operations  
**Department:** Environment and Planning

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29 March 2023 Catchments to Coast Committee Meeting

Reference: F2021/00832 - D15566272  
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### **Recommendation**

*That the Committee note the report.*

### **Report purpose**

To provide information on Council's Coastal and Catchment Operations to the Catchments to Coast Committee.

### **Executive Summary**

This report to the Catchments to Coast Committee provides information on the following projects:

- Wrack and algae collection;
- Management of loggerhead sea turtle nest at Shelly Beach; and
- Outcomes of the little tern breeding season at Karagi Point, The Entrance North.

### **Background**

Council adopted the *Central Coast Council Biodiversity Strategy* on 28 September 2020. Of the six themes of the Biodiversity Strategy, the projects outlined in this report align closely with:

- Theme 1: Planning and Managing Biodiversity in Council's Natural Areas
- Theme 3: Promoting community appreciation and participation in biodiversity conservation

### **Current Status**

The report provides a status report on the wrack and algae collection, and on two threatened species being managed by Council.



## Report

### Wrack and Algae Collection

Wrack and algae collection includes the requirement to improve public amenity of the shoreline, maintain and enhance the health of the lake ecosystem, and reduce social impact of wrack and algae on public and private foreshores in the Tuggerah Lakes. Central Coast Council's Wrack and Algae Collection Program is undertaken by Australian Environmental Services under contract until 29 August 2024. Council staff also assist by removing wrack and algae from drying pads and transporting to Council's Green Waste facility. A total of 5117m<sup>3</sup> of material has been collected during 2022/23 up to February 2023, compared to the KPI target of 3333m<sup>3</sup>. A presentation will be provided to the Committee showing the annual cumulative volume of wrack removed by month from 2013/14 to present.

### Loggerhead sea turtle nest at Shelly Beach

In mid-January members of the community reported turtle tracks on Shelly Beach. The community members contacted local wildlife carers who in turn contacted NSW Turtle Watch. National Parks and Wildlife Service (NPWS) officers attended the site and confirmed that the tracks were the nesting crawl of the loggerhead sea turtle (*Caretta caretta*). The NPWS officers confirmed that a clutch of eggs had been laid near the toe of the dunes above high tide mark. The Shelly Beach site is the most southerly record of a loggerhead nest.

NPWS is the lead agency in monitoring and protection of the nesting site, and supporting the successful hatching of the eggs, but contacted Council for support as the land manager of the beach. Working together, Central Coast Council, NPWS, NSW Turtle Watch, members of the Darkinjung Local Aboriginal Land Council and volunteers formed a working group to best manage the nest of this endangered species.

Management of the site has included establishing an exclusion zone and fencing, installing signage and fox monitoring and control. Support from the beach users and broader community was seen as being very important, including to minimise inadvertent damage to the turtle nest. Council has worked with the other stakeholder groups on social media posts and media releases. A high level of interest in the turtle nest has been expressed by members of the community.

Given that the loggerhead turtle nest is southward of its usual breeding zone, there is concern that the sand at Shelly Beach will not naturally retain the temperate required for incubation.

Sea turtle nests need an average sand temperature of above approximately 25 degrees to allow the hatchlings to develop. A temperature data logger has been placed near the nest at the same depth to allow the temperatures to be monitored. Turtle eggs cannot be moved in the first three to four weeks after being laid, as the embryos are very sensitive to movement.

When the temperature of the nest dropped below 25 degrees, black sand was placed over the top of the nest to increase heat absorption and attempt to increase the temperature. This has

## 2.3 Update on Coastal & Catchment Operations (contd)

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been successful and has raised the temperature of the nest by approximately 1 degree, though it's now a waiting game to see if sand temperatures can stay above the minimum required.

If the nest temperature continues to decline, the eggs may potentially be excavated and incubated for these endangered hatchlings to survive. Extended exposure to temperatures below 22 degrees will be fatal to the embryos. If sand temperatures can be maintained at 25 degrees for the duration of gestation, then hatching can be expected in late March / early April. The contingency plan should the sand temperature fall below the optimal temperature is to transfer the eggs to an incubator at Taronga Zoo.

Loggerhead sea turtles will generally lay approximately 120 eggs per clutch and can generally lay around 1 to 5 clutches of eggs per season. This sea turtle usually lays its nests in tropical and sub-tropical beaches of Queensland – they are usually not found this far south.

Sea turtles have temperature dependant sex determination, where the sex of the hatchling is determined in the middle third of incubation. Warmer temperatures produce females and cooler temperatures produce males. Climate change is resulting in the generalised warming of nests, potentially producing more females. Nests laid in more southern latitudes, such as this one and others in NSW, are important as they are likely to produce male hatchlings.

Loggerhead turtles face many anthropogenic threats including climate change, ingestion of marine debris and by-catch in international fishing and since the mid 1970's there has been a general decline in the size of the annual nesting population at all monitored Turtle rookeries in eastern Australia, making it more important that this nest is saved, since every sea turtle nest might contain 50 to 150 eggs.

Sea turtles also possess a trait called natal philopatry, where they will return to the beach where they hatch to lay in the future. This means that if this nest is successful, the hatchlings that emerge may return in 30 or so years to nest on this beach. This may be an important adaptive process to combat changing climates.

### Little Tern breeding site at Karagi Point, The Entrance North

The Little Tern breeding season commenced at Karagi Point, The Entrance North in early November 2022 and the site was abandoned by late January 2023.

After two successive record-breaking seasons there was anticipation of an exceptional 2022/23 breeding season and at one point Council was predicting up to 150 fledged birds.

Unfortunately, due in part to predation by silver gulls, only 31 chicks were confirmed to have fledged. This was down from 56 and 96 in the two previous years, and while numbers are still to be confirmed, it appears that the Karagi Point site was second in terms of chicks fledged in NSW this year, with the Wollumboola Lake site in the Shoalhaven recording 55 fledglings.

## **2.3 Update on Coastal & Catchment Operations (contd)**

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From 2000 to 2020 an average of only 11.5 chicks fledged per season at Karagi Point. This included 12 seasons where nesting either wasn't attempted or was deemed a complete failure due to predation or inundation.

The average number of fledged chicks over the last three breeding seasons is 61, which validates the current approach taken by Council in managing the site. This success is likely in part due to management including:

- habitat enhancement works to reduce the threat of inundation;
- installation of secure fencing that excludes people and dogs;
- the development of interpretive and regulatory signage;
- a program of fox control;
- regular rubbish collection to reduce the potential for food scraps that may attract avian/terrestrial predators;
- a program of weekly monitoring; and
- effective community engagement and education strategy to raise awareness of the endangered Little Tern and the importance of Karagi Point.

### **Consultation**

Consultation in relation to the wrack and algae collection program has been undertaken with users of the Tuggerah Lakes estuary including the local residents and community organisations, as well as relevant NSW Government agencies.

Consultation in relation to the Little Tern program has been undertaken with users of the Karagi Point, The Entrance North area including the local residents and community organisations, as well as relevant NSW Government agencies.

Consultation in relation to the loggerhead sea turtles has been undertaken with NPWS, NSW Turtle Watch, members of the Darkinjung Local Aboriginal Land Council and volunteers formed a working group to best manage the nest of this endangered species.

### **Attachments**

*Nil.*

**2.4 GENERAL BUSINESS**