



# **BUSINESS PAPER**

Notice is hereby given in accordance with the *Local Government Act 1993* and *Local Government (General) Regulation 2005* of the below mentioned meeting.

## **Coastal and Flood Risk Management Advisory Committee Meeting**

**Wednesday, 12 June 2024**

**Commencing at 10:00 AM**

**Shellharbour Civic Centre**

# **AGENDA**

- 1 Acknowledgement to Country**
- 2 Apologies / Leave of Absence**
- 3 Confirmation of Notes / Minutes**
- 4 Disclosures of Interest**
- 5 Presentations**
- 6 Reports**
  - 6.1 Coastal Update
  - 6.2 Draft Elliot Lake-Little Lake Floodplain Risk Management Study and Plan
- 7 General Business**
- 8 Next Meeting**

## **1. Acknowledgement to Country**

Shellharbour City Council acknowledges the Traditional Custodians of the Dharawal Country and recognise their continued connection to the land we meet on today. We pay our respects to Elders past, present and emerging and the contribution they make to the life of this city and this region and extend our recognition to their descendants who continue to live on country.

## **2. Apologies / Leave of Absences**

## **3. Confirmation of Notes / Minutes**

3.1 Coastal and Flood Risk Management Advisory Committee Meeting 13 February 2024

3.2 Coastal Management Advisory Committee 20 September 2023

#### **4. Disclosures of Interest**

Note: Councillors and staff who declare an Interest at the Meeting are also required to complete a Declaration of Interest form.

#### **5. Presentations**

## **6 Reports**

### **6.1. Coastal Update**

The Committee will receive an Update on Coastal Matters in the meeting.

## 6. Reports

### 6.2 Draft Elliot Lake-Little Lake Floodplain Risk Management Study and Plan

To the Chief Executive Officer

**Directorate:** Infrastructure Services  
**Business Unit:** Technical and Recreation Services

**Author:** Matthew Apolo, Executive Manager Technical and Recreation Services  
**Approver:** Ben Stewart, Executive Director Infrastructure Services

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#### Summary

The purpose of this report is to seek endorsement from the Coastal and Flood Risk Management Advisory Committee of the Draft Elliot Lake-Little Lake Floodplain Risk Management Study and Plan to be presented to an Ordinary Council Meeting for consideration of public exhibition.

#### Background

The Elliot Lake-Little Lake catchment encompasses the suburbs of Warilla, Barrack Point, Barrack Heights, Blackbutt, Flinders and parts of Mount Warrigal, Dunmore, Croom and Shellharbour as shown in **Attachment 1**.

The review of the Elliot Lake-Little Lake Floodplain Risk Management Study and Plan (Study and Plan) (**Attachments 2, 3 and 4**) has been undertaken by consultants Rhelm who commenced in December 2020. The Study and Plan updates the previous Elliot Lake-Little Lake Floodplain Risk Management Study and Plan (2016) with the new flood estimation and modelling methods outlined in Australian Rainfall and Runoff 2019 (ARR2019) and has defined the existing flood behaviour for all major tributaries and drainage lines within the catchment.

The Study and Plan reviews management issues, investigates flood mitigation options, and recommends suitable options to form Council's plan for managing flood risk in the catchment. The specific objectives of the Study and Plan are:

- to identify and describe the various potential flood problems and specific future flooding issues.

- to review the flood provisions in Council's existing environmental planning policies and instruments.
- to identify and assess potential management and mitigation measures for existing developed areas.
- to assess the benefits and cost of the potential management and mitigation measures.
- to identify modifications required to current policies in the light of investigations.

To date, consultation has been undertaken in a number of stages, including a Community Newsletter and Questionnaire, Project Stakeholder Consultation and Consultation via Council's Coastal and Flood Risk Management Advisory Committee.

The Study and Plan identifies a number of measures to manage flood risk within the catchment that can generally be classified as either Flood Modification, Property Modification or Response Modification options. The options recommended by the Study and Plan are summarised below:

*Flood Modification Measures*

- LR-1 Caravan Park Raising
- DB-8 Andrew Park Basin
- FM-7 Combined Northern Basins

*Property Modification*

- PM1 Planning and Development Controls

*Response Modification*

- EM1 Prediction Based Flash Flood Warning System
- EM2 Data handover to SES
- EM3 Flood Education
- EM4 Flood warning signs
- EM5 Flood Free Shelter in Caravan Parks
- EM6 Update of Emergency response documentation
- EM7 Post Flood Inspection Checklist

Flood Planning Area

The Flood Planning Area (FPA) is an important tool in floodplain risk management. The FPA is derived from a combination of a Defined Flood Event (DFE) and a freeboard and is utilised by Council to provide development controls for managing future flood risk. The methodology and guidance of ARR19 and the NSW Government's Flood Risk Management Manual (Manual) require Council to consider climate change impacts when determining its DFE

for the catchment and is defined as:

DFE = 1% AEP flood + Sea Level Rise + Increased Rainfall due to Climate Change + Blockage Factors + Local Factors (if applicable)

The FPA is then determined as:

FPA = DFE + freeboard\*

\* Freeboard is applied to account for uncertainty in modelling and prediction as well as localised hydraulics that aren't captured in models (e.g. the wake that is created from a vehicle driving through flood waters or floating debris).

Council's Climate and Sustainability Policy (2022) recognises that as a coastal community Council has a role in building climate resilience for our current community and future generations, which includes reducing flood risk. Representative Concentration Pathways (RCP) 8.5, a very high emissions scenario, is the most aligned model to the currently implemented global policies. Australia's CSIRO and Taskforce for Climate-related Disclosures recommends RCP8.5 models for testing assets and systems for the physical risks of Climate Change and have been adopted in the development of this Study and Plan.

The following parameters have been determined as the most appropriate for the evaluation of the DFE:

Sea Level Rise = 0.9m

Rainfall Increase = 16.9%

Blockage Factors = Variable blockage has been applied in accordance with industry guidance

Local Factors = Nil

Freeboard = 0.5m

Determination of the Flood Planning Area is consistent with the methodology of the recently adopted Macquarie Rivulet Floodplain Risk Management Study and Plan (2024).

## **Financial / Resources Implications**

The Elliot Lake-Little Lake Floodplain Risk Management Study and Plan project is grant funded by the NSW Department of Climate Change, Energy, the Environment and Water (formerly Department of Planning and Environment) based on a 2:1 funding agreement, meaning the state government provides \$2 for every \$1 contributed by Council. Public exhibition and engagement with the community on the Study and Plan is a



key milestone within the project and is funded accordingly.

The Study and Plan identifies a number of management and mitigation measures to address the flood risk within the catchment. However, implementation of a number of actions will be a shared responsibility between Council, a number of NSW State Agencies and private landowners. Projects will be implemented when resources and funding is available.

In addition, with the adoption of a final Floodplain Risk Management Plan, Council will be able to apply for grant funding under the NSW Floodplain Management Program to implement the measures identified in the final plan and in accordance with State Government priorities. The future financial considerations will be identified in Council Delivery Programs.

## **Public / Social Impact**

The intent of the NSW Government's Flood Prone Land Policy and Flood Risk Management Process as outlined in the Manual, is to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land and to reduce private and public losses resulting from flooding.

The public exhibition of the Draft Elliot Lake-Little Lake Floodplain Risk Management Study and Plan (**Attachments 2, 3 and 4**) will increase public awareness of flooding within the catchment and assist Council and key emergency personnel in creating community readiness for the risk associated with flood.

## **Link to Community Strategic Plan**

This report supports the following objectives, strategies and actions of the Community Strategic Plan:

### **2.2 We are a beautiful and connected City**

2.2.1 Our planning reflects the unique character of our city and natural environment and is responsive to the evolving needs of our community

2.2.1.07 Manage stormwater and floodplains across the City by developing strategies and plans that inform the community and increase resilience

## **Consultation**

## **Internal**

Executive Manager Strategic Planning and Environment  
Executive Manager Works and Services  
Manager Asset Planning  
Manager Environment  
Construction and Maintenance Manager  
Senior Strategic Planner

## **External**

NSW Department of Climate Change, Energy, the Environment and Water

In addition, external consultation has been undertaken in a number of stages, including Letters inviting feedback, Project Stakeholder Consultation and Consultation via the former Flood Risk Management Committee (now Coastal and Flood Risk Management Advisory Committee).

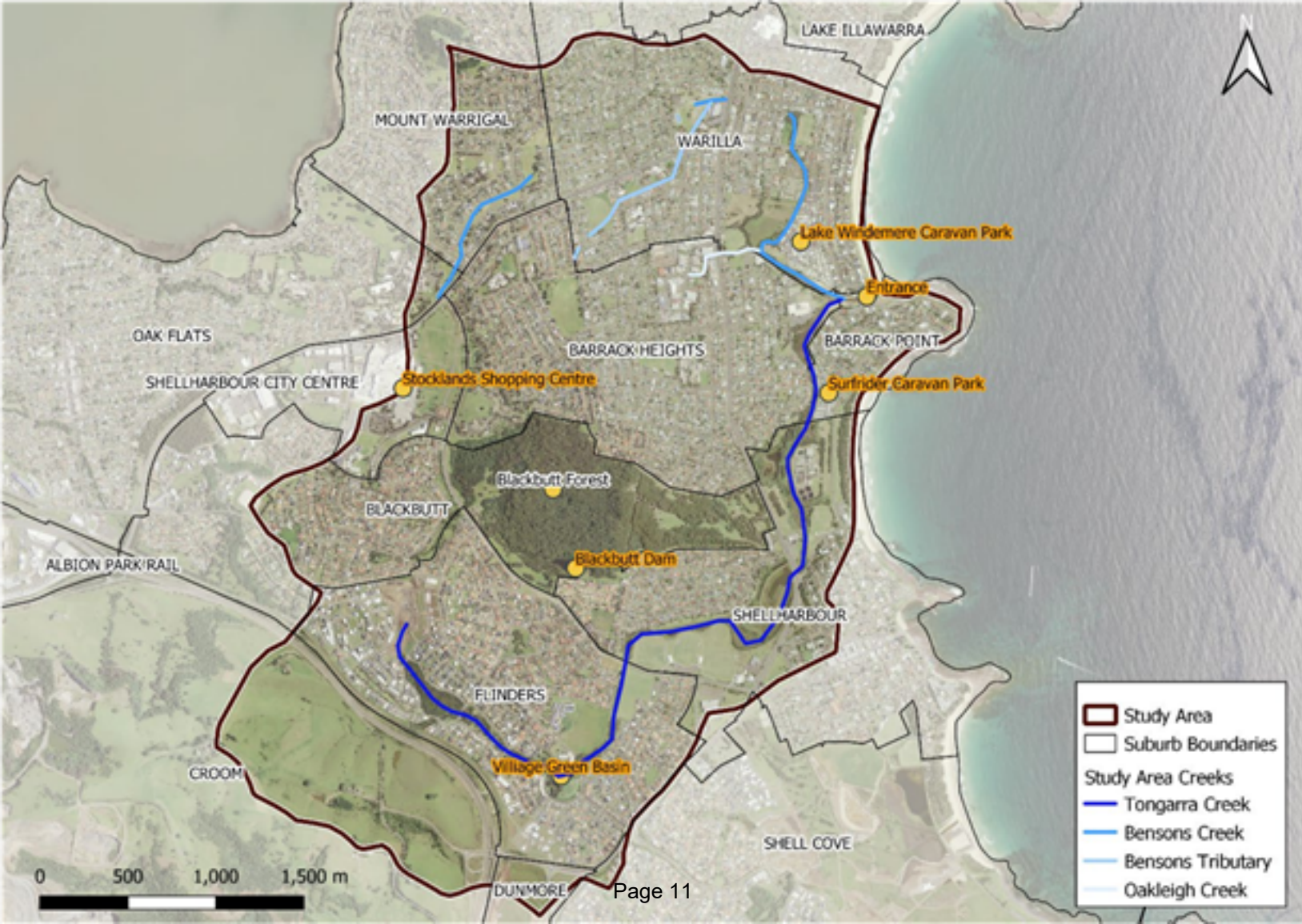
An introductory letter framed the first contact for the residents involvement in the Study and Plan. The letter was distributed to all residents and landowners within the study area in June 2021. The key objective was to gain an understanding of residents' opinions on flood management options as well as an understanding of historical flooding that has occurred within the catchment.

## **Committee Recommendation**

**That the Coastal and Flood Risk Management Advisory Committee endorse the Draft Elliot Lake-Little Lake Floodplain Risk Management Study and Plan (Attachments 2, 3 and 4) to be presented to Council for the purposes of public exhibition.**

## **Attachments**

1. Study Area
2. Draft Elliot Lake-Little Lake Floodplain Risk Management Study (issued separately)
3. Draft Elliot Lake-Little Lake Floodplain Risk Management Plan (issued separately)
4. Draft Elliot Lake-Little Lake Floodplain Risk Management Study Stage 3 Report Map Compendium-Compiled (issued separately)



## **7. General Business**

## **8. Next Meeting**

TBC