**Title:** Supplementary Report - Adoption of Woy Woy

Floodplain Risk Management Study and Plan

**Department:** Environment and Planning

27 June 2023 Ordinary Council Meeting

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## **Report Purpose**

The purpose of this report is to provide a summary on outcomes of the community and stakeholder consultation undertaken as part of the Draft Woy Woy Peninsula Floodplain Risk Management Study and Plan.

#### Consultation

### **Community Newsletter and Survey**

A project website was established for the duration of the project to provide project information and community updates on Council's Your Voice Our Coast (YVOC) platform. Media releases were used throughout the study to inform the community of key project updates and opportunities to provide input.

A one-page community newsletter was distributed in February 2021 to over 8500 lot owners within the study area. An online version of the questionnaire was also available through Council's Have Your Say webpage and the project website. The recipients were identified where they were in the Probable Maximum Flood (PMF) extent.

Following the distribution and availability of the community survey on the website, 389 responses were received, representing a return of 5% of direct distribution.

An additional 30 people attended drop-in sessions (February 2021) to provide input face to face. The community members that attended the drop-in information session provided valuable insights about the flooding issues experienced in the Woy Woy Peninsula and how they can be addressed. The inputs from the community generally included:

- flooding issues reported at specific roads and public locations.
- need for revision of Council's 'Black Spot' program.
- use of infiltration solutions to accommodate runoff during storm events.
- need for maintenance and improvement of existing drainage infrastructure.
- raising of landform to address sea level rise was, in general, considered acceptable.

#### **Agency Consultation**

DPE has been consulted throughout the project in the form of attendance at site inspections, progress meetings, report reviews and options identification and prioritisation.

DPE and SES were engaged further as part of the public exhibition period. No significant additional project inputs were received.

#### **Internal Engagement**

Phase 1: Staff from various departments were invited to attend a options identification and prioritisation workshop including a presentation from the consultants DHI and Rhelm at Wyong Council on 21 April 2021. Eleven staff attended the workshop and provided their feedback on the options to be selected for detail assessment.

Phase 2: Prior to the public exhibition, a memo outlining the details of the draft Floodplain Risk Management Study (FRMS) and Floodplain Risk Management Plan (FRMP) and links to download the draft reports were distributed to all the relevant staff within various directorates in November 2022.

Feedback was received from Water and Sewer, Engineering Services and Community Development, which were responded to and incorporated in the draft reports where relevant prior to the exhibition.

#### **Public Exhibition**

The Draft FRMS and FRMP were placed on public exhibition from 18 January 2023 to 15 February 2023 with additional allowance for late submissions until 22 February 2023 to give members of the public and all relevant stakeholders an opportunity to provide feedback.

Twenty-two submissions were received via the online submission form, and an additional 16 submissions were received via direct email to Council's and Rhelm's community engagement staff.

The public were invited to an open drop-in session on 1 February 2023 at the Country Women's Association Hall (30/32 The Boulevarde, Woy Woy). At this session, community members were able to meet with the project team to discuss their comments about the Draft Woy Woy FRMS and FRMP.

Forty-five members of the community attended the drop-in sessions where DHI, Rhelm and Council staff members discussed the findings of the Draft Woy Woy FRMS and FRMP.

#### **Outcomes of Public Exhibition**

All submissions were considered by Council staff and consultants and relevant changes were made to the draft FRMS and FRMP in preparation for Council consideration of adopting a final version.

The major comments and issues arising from the public exhibition period and actions/responses within the FRMS and FRMP are summarised in Table 1 below.

Table 1 Public Exhibition Feedback and FRMSP Updates

Public Exhibition Feedback	FRMS and FRMP Updates
Sea level rise predictions have been taken from Council's Sea Level Rise projection originally adopted in March 2015 by Gosford Council. This policy is scheduled to be updated once every five years or when the latest International Panel on Climate Change (IPCC) report is published. The FRMS does not take into account the latest changes in sea level rise predictions.	Sea level rise projections utilise the predictions from Council's Sea Level Rise Scenario Projections RCP 8.5 (Gosford, 2015). While changes to this projection is outside of the scope of this FRMS and FRMP, future feasibility studies and design of floodplain works resulting from the FRMP (e.g. Landform Adaptation) can take into account any updates to Council's Sea Level Rise Policy or newly published IPCC reports.
	Relevant sections of the FRMS and FRMP have been updated to note the impact of future review of Council's Sea Level Rise projections.
Emergency management planning needs further attention for protection of transportation routes, consideration of access to the railway, and access to larger regional hospitals such as Gosford Hospital.	In an extreme flood event such as the PMF, evacuation of the Peninsula is not likely possible given the lack of warning time in an overland flash flood event. Raising of evacuation routes is not viable given the significant capital costs involved and the likelihood of these works negatively impacting flood behaviour on private properties.
	In the FRMS, discussion has been added to <b>Section 9.1.3</b> and <b>9.1.2</b> regarding the service capabilities of Woy Woy Public Hospital and Gosford Private Hospital. Discussion has also been included in <b>Section 9.1.2</b> regarding access and evacuation during extreme flood events.
General concern across the community about the degree of development in the Woy Woy Peninsula and the increase in impervious surfaces on private property.	Planning recommendation 7 (Section 4.2.2 of the FRMP) recommends that as part of any future development, infiltration and open spaces should be increased, and any rezoning consider more flood compatible development types.
	This recommendation has been further emphasised in the FRMP recommendations.

Public Exhibition Feedback	FRMS and FRMP Updates
Landcare management plans should be considered in the FRMS. In particular, the Bushland Management Plan at Umina and the Iluka Lagoon Management Plan.	These Landcare specific plans have been added for consideration for potential works in the floodplain in <b>Section</b> Error! Reference source not found
Naming convention: Ettalong Creek should be called Ettymalong Creek.	For the purposes of this study, the name of Ettalong Creek can be considered interchangeable with Ettymalong Creek.
	<b>Section</b> Error! Reference source not found. of the FRMS has been updated to indicate this.
Concerns that industrial areas and sewage treatment plant at the bottom of Woy Woy Road are not included in the FRMS. These areas may be the source of pollutants discharge into Brisbane Water.	This area is not included in this FRMS and FRMP but is covered in the study area of the Brisbane Water FRMS and FRMP.
	While these land uses are potentially higher risks with respect to water quality, the scope of this FRMS and FRMP deals with flooding and flood risk to the study area.
Cowper Road is a key access road for North Pearl Estate and should be listed as such.	Location ID 21 (Cowper Road at Ettalong Creek) added for <b>Figure 10.1, Table 10.1 and Table 10.2.</b>
Risk of landslip at Blackwall Mountain and access to service infrastructure along Bay View Crescent.	Although intense rainfall may exacerbate existing geotechnical issues, assessment of landslip hazard is not within the scope of this FRMS and FRMP.
	Access to Blackwall Mountain infrastructure via Bay View Crescent during a significant rainfall event is likely to be difficult; however, inundation durations are expected to be in the magnitude of minutes or hours and the location would be accessible following such a catchment flooding rainfall event.
Location of sewer pump stations along Cowper and Yarrabin Roads not included. No recommendations to address the flood risk to these.	<b>Section 10.1</b> updated to include these locations. The flood risk associated with this infrastructure is not significant enough to necessitate changes to the current sewer or water pump stations.
Concerns regarding the ranking of Options FM06A Review Kahibah Creek system maintenance and FM06B- Increase Kahibah Creek system maintenance.	Multi Criteria Assessment (MCA) scoring and ranking has been updated based on comments received. Changes made to the scoring of these options did not result in any changes to their respective multi-criteria assessment rankings or the overall outcomes of the FRMP recommendations.

# Adoption of Northern Lakes Floodplain Risk Management Study and Plan (contd.)

Public Exhibition Feedback	FRMS and FRMP Updates
No clear mentioning of the connection between Brisbane Water flooding and local catchment flooding.	Text has been added to the executive summary acknowledging the that elevated Brisbane Water levels can restrict the capacity of the existing drainage network managing local catchment flooding.
Concern that the flood planning level recommendations are inconsistent with the recommendations in the Brisbane Water Foreshore FRMS and FRMP.	The recommendation for flood planning levels have been revised to ensure consistency with the Brisbane Water Foreshore FRMS and FRMP.  Section 10.2.3 and Table 13.10 in the FRMS, as well as the flood planning level recommendations in the FRMP have been updated.

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