



Item No: 4.5
Title: Adoption of Wyong River and Ourimbah Creek Floodplain Risk Management Studies and Plans
Department: Environment and Planning

28 October 2019 Ordinary Council Meeting

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Report Purpose

This report seeks the adoption of two Floodplain Risk Management studies and plans being Wyong River and Ourimbah Creek.

These studies and plans have been completed, publicly exhibited and recommended for adoption by the Tuggerah Lakes Catchments and Coast Committee.

Recommendation

- 1 That Council adopt the draft Wyong River Floodplain Risk Management Study and Plan.**
- 2 That Council adopt the draft Ourimbah Creek Floodplain Risk Management Study and Plan.**

Context: NSW Government Framework

The objective of the NSW Government's Flood Prone Land Policy (the policy) is to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone properties, and to reduce private and public losses resulting from floods. Under the policy, the primary responsibility for floodplain risk management in NSW rests with councils.

The NSW Government has established the *Floodplain Development Manual* (Gazetted April 2005) as a framework for councils to carry out these responsibilities. A council is considered to have acted in good faith, and thus is protected from legal liability under Section 733 Local Government Act 1993, if the floodplain risk management process is followed as set out in the *Floodplain Development Manual*.

The Floodplain Risk Management process involves the following four sequential stages.

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1 Preparation of a Flood Study

- To determine the nature and extent of the flood problem: flood levels, velocities, and associated flood mapping.

2 Preparation of a Floodplain and Risk Management Study

- To identify, assess and compare various risk management options.

3 Development of a Floodplain Risk Management Plan

- To recommend specific flood risk management measures to guide priorities for Council and the State Emergency Service (SES).
- Informs Council's planning instruments and works programs.

4 Implementation of the Plan

- To provide advice and carry out actions in accordance with the plan

The Wyong River and Ourimbah Creek Floodplain Risk Management studies and plans each represent steps 2 and 3 in the above process. The projects have been part funded by the NSW Government on a 2 State to 1 Council shared basis.

Adoption of Floodplain Risk Management Plans is a prerequisite in being eligible to seek further grant funding assistance for costs associated with the implementation of the recommended flood mitigation works and other management plan actions.

Preparation of the Plans

The preparation of the Wyong River and Ourimbah Creek Floodplain Risk Management studies and plans was carried out by consultants and overseen by the Tuggerah Lakes Catchments and Coast Committee (TLCCC). The TLCCC comprises community representatives, Councillors, Council staff and a representative from the NSW Department of Planning, Industry & Environment (DPIE). The NSW State Emergency Service (SES) has also been engaged throughout the preparation of the draft plans as a key stakeholder.

Public Exhibition

The studies and plans were on exhibition from 25 March until 26 April 2019 at Council's Wyong and Gosford offices.

Advertising of the exhibition material included:

- Local Central Coast Express Advocate – 21/3/19
- Council Website throughout exhibition period – 25/3/19 to 26/4/19
- Media releases to media groups
- Council Customer Service centres at Gosford and Wyong Administration buildings
- Letters were sent to all property owners who had provided information in the initial consultation phase of each project.

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Two community drop-in sessions were held in Wyong on 27 March 2019 and 2 April 2019. A Councillor Briefing was held on Monday 30th September 2019.

Outcomes of Public Exhibition

There was positive community support for the majority of the recommended options in both Plans drop-in sessions. There were 17 formal submissions, 8 submissions for Wyong River and 9 submissions for Ourimbah Creek. All submissions were considered by Council staff and consultants with the most significant change being for further investigation of South Tacoma Floodway as a potential management option. Changes were made, and results incorporated into the final reports.

Recommended Management Options from the Plans

Each study assessed many options to manage flood risk, including a multi-criteria analysis (cost, cost-benefit ratio, flood impact, emergency response, environmental impacts, and community feedback). The recommendations for implementation in the lists below which have been prioritised as high, medium and low priorities.

Wyong River Floodplain Risk Management Study and Plan

High priority options

- Local Flood Plan Updates [sub-plan of DISPLAN] (SES)
- Private Flood Plan Preparation (SES & Council)
 - Host meetings in various communities to promote the preparation of Home Emergency Plans
 - Conduct a Business FloodSafe breakfast
 - Target plan preparation for key floodplain exposures:
 - Wyong Aged Facility
 - Wyong Christian Community School
 - C3 Church
 - Meander Village
- Flood Warning System Upgrades (Council & SES)
 - Make real-time flood information more readily available
 - Help floodplain residents interpret real-time information
 - Establish river trigger levels for various gauges that issue phone messages or SMS directly to subscribers
 - Improve mobile coverage in Yarramalong and Dooralong Valleys (lobby Telcos)
 - Review of warning system is completed following each actual flood

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Medium priority options

- Community Education- Various education activities recommended (SES & Council)
 - Develop education messages targeting dangerous behaviours
 - Community meetings
 - Develop a flood information portal
 - Make property level flood information available
 - SES develop social media platforms for flood safe messaging.

Low priority options

- Open and maintain fire trails to allow access to/from upper catchment during floods (primarily emergency services access)
- Encourage take up of flood insurance
- Install automatic flood gates at road overtopping locations (Council)

Ourimbah Creek Floodplain Risk Management Study and Plan

High priority options

Response modification measures

- Telephone Dial-out System (SES/Council)
- Flood Warning Messages based on flood gauges (SES/Council)
- Create SES Flood Intelligence Card for Lees Bridge (SES)
- Prepare Flood Education Program (SES)
- Updating of Wyong and Gosford Local Flood Plans (Council/SES)
- Assist Key Floodplain Exposures to Create Emergency Response Plan (Council/SES)
- Resourcing of Wyong and Gosford SES units (SES)
- Assist Flood Affected Residents to Create Emergency Response Plan (SES/Council)
- Additional Gauges Recommended for Installation (Council)
- Provide Accessible Real-time Flood Information (Council/SES)
- Early Notification and Road Closures (Council/RMS)
- Burns Road: Automatic Road Closures and Boom Gates, and/or Automatic Warning Signs and Depth Indicators, and/or Camera fines (RMS/Council)
- Assessment of Feasibility of Gauge Use for flood warning (Council)

Flood modification measures

- Existing Flood Levee Survey and Maintenance (Council)
- University Lower Carpark Filling (UoN/Council)

Property modification measures

- Future changes to Flood DCP and LEP clauses to consider this Plan (Council)
- Future Planning Proposals for land use zoning to consider this Plan (Council)

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Medium priority options

- Shelter-in-place Feasibility Assessment for existing flood affected communities (SES, in collaboration with Council) – refuge in an appropriate building
- Relocation of Wyong Evacuation Centre (Ourimbah Lisarow RSL) to other existing facilities that are more accessible during flooding (SES)
- Improved access -The Boulevard at the University of Newcastle Ourimbah Campus (UoN) – this section of road, on University land, becomes unsafe for vehicles in small floods. This is to flag the issue with the university and to provide the opportunity for them to seek grant funding.
- Voluntary House Raising (NSW Government grants program)
- Voluntary House Purchase (NSW Government grants program)

Low priority options

- Road works for improved access (Council): This list of potential road and culvert upgrades are financially viable if grant funding is provided.
 - Orchard Road, Link Road (being constructed by others)
 - Tuggerah Street at the Pacific Highway
 - Elmo Street near Footts Road
 - Tapley Road, Mount Elliot
 - Macdonalds Road near Indigo Place
 - Pacific Highway at Dog Trap Gully
 - Burns Road Raising and Culvert Upgrades
 - Howes Road, Link Road, Ourimbah
 - Coachwood Drive North of Mahogany Close, Ourimbah
 - Tall Timbers, Link Road
 - Tuggerah Street and Cutrock Road near Pluim Park
 - Chittaway Road near Burns Road
 - Burns Road Bridge (listed for the sake of supporting Ourimbah Masterplan)

Climate Change

Both studies include an assessment of the sensitivity to Climate Change for both sea level rise and increases in rainfall intensity. Flooding in both catchments are sensitive to increases in rainfall intensity, but not sensitive to sea level rise.

The studies do not set additional planning controls for climate change.

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Financial Impact Statement

The recommended management options in the plans do require a commitment of financial investment for Council and other authorities. There is no required timeframe for implementation of these works and other options, which can be either performed as business-as-usual or ranked and listed for consideration of funding through relevant grant programs and Council's long-term financial plan.

Link to Community Strategic Plan

Theme 4: Responsible

Goal I: Balanced and sustainable development

R-13: Ensure land use planning and development is sustainable and environmentally sound and considers the importance of local habitat, green corridors, energy efficiency and stormwater management.

Conclusion

These documents have been developed in accordance with the NSW Government's Flood Prone Land Policy and represent a best practice approach to managing development on the floodplains.

Following the public exhibition and recommendation of adoption by the Tuggerah Lakes Catchment and Committee, this report seeks Council's adoption of the Floodplain Risk Management studies and plans for Wyong River and Ourimbah Creek catchments.

Attachments

1	Part 1 of 2_Ourimbah_FRMS&P_Report25July2019	Enclosure	D13621585
2	Part 2 of 2_Ourimbah_FRMS&P_Report25July2019	Enclosure	D13621586
3	Wyong River FRMS&P - Volume 1 of 5 - Report	Enclosure	D13621607
4	Wyong River FRMS&P - Volume 2 of 5 - Figures part 1 of 4	Enclosure	D13621627
5	Wyong River FRMS&P - Volume 3 of 5 - Figures part 2 of 4	Enclosure	D13621634
6	Wyong River FRMS&P - Volume 4 of 5 - Figures part 3 of 4	Enclosure	D13621638
7	Wyong River FRMS&P - Volume 5 of 5 - Figures part 4 of 4	Enclosure	D13621644