

Notice of Meeting

Extraordinary Floodplain Management Advisory Committee Meeting

An Extraordinary Floodplain Management Advisory Committee Meeting of Byron Shire Council will be held as follows:

| | |
|-------|--|
| Venue | Conference Room, Station Street, Mullumbimby |
| Date | Friday, 8 December 2023 |
| Time | 9:00am |

Phil Holloway
Director Infrastructure Services

I2023/1957
Distributed 01/12/23



BYRON
SHIRE
COUNCIL

CONFLICT OF INTERESTS

What is a “Conflict of Interests” - A conflict of interests can be of two types:

Pecuniary - an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person or another person with whom the person is associated.

Non-pecuniary – a private or personal interest that a Council official has that does not amount to a pecuniary interest as defined in the Code of Conduct for Councillors (eg. A friendship, membership of an association, society or trade union or involvement or interest in an activity and may include an interest of a financial nature).

Remoteness – a person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to a matter or if the interest is of a kind specified in the Code of Conduct for Councillors.

Who has a Pecuniary Interest? - a person has a pecuniary interest in a matter if the pecuniary interest is the interest of the person, or another person with whom the person is associated (see below).

Relatives, Partners - a person is taken to have a pecuniary interest in a matter if:

- The person’s spouse or de facto partner or a relative of the person has a pecuniary interest in the matter, or
- The person, or a nominee, partners or employer of the person, is a member of a company or other body that has a pecuniary interest in the matter.

N.B. “Relative”, in relation to a person means any of the following:

- (a) the parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descends or adopted child of the person or of the person’s spouse;
- (b) the spouse or de facto partners of the person or of a person referred to in paragraph (a)

No Interest in the Matter - however, a person is not taken to have a pecuniary interest in a matter:

- If the person is unaware of the relevant pecuniary interest of the spouse, de facto partner, relative or company or other body, or
- Just because the person is a member of, or is employed by, the Council.
- Just because the person is a member of, or a delegate of the Council to, a company or other body that has a pecuniary interest in the matter provided that the person has no beneficial interest in any shares of the company or body.

Disclosure and participation in meetings

- A Councillor or a member of a Council Committee who has a pecuniary interest in any matter with which the Council is concerned and who is present at a meeting of the Council or Committee at which the matter is being considered must disclose the nature of the interest to the meeting as soon as practicable.
- The Councillor or member must not be present at, or in sight of, the meeting of the Council or Committee:
 - (a) at any time during which the matter is being considered or discussed by the Council or Committee, or

- (b) at any time during which the Council or Committee is voting on any question in relation to the matter.

No Knowledge - a person does not breach this Clause if the person did not know and could not reasonably be expected to have known that the matter under consideration at the meeting was a matter in which he or she had a pecuniary interest.

Non-pecuniary Interests - Must be disclosed in meetings.

There are a broad range of options available for managing conflicts & the option chosen will depend on an assessment of the circumstances of the matter, the nature of the interest and the significance of the issue being dealt with. Non-pecuniary conflicts of interests must be dealt with in at least one of the following ways:

- It may be appropriate that no action be taken where the potential for conflict is minimal. However, Councillors should consider providing an explanation of why they consider a conflict does not exist.
- Limit involvement if practical (eg. Participate in discussion but not in decision making or vice-versa). Care needs to be taken when exercising this option.
- Remove the source of the conflict (eg. Relinquishing or divesting the personal interest that creates the conflict)
- Have no involvement by absenting yourself from and not taking part in any debate or voting on the issue as of the provisions in the Code of Conduct (particularly if you have a significant non-pecuniary interest)

Committee members are reminded that they should declare and manage all conflicts of interest in respect of any matter on this Agenda, in accordance with the [Code of Conduct](#).

RECORDING OF VOTING ON PLANNING MATTERS

Clause 375A of the Local Government Act 1993 – Recording of voting on planning matters

- (1) In this section, **planning decision** means a decision made in the exercise of a function of a council under the Environmental Planning and Assessment Act 1979:
- (a) including a decision relating to a development application, an environmental planning instrument, a development control plan or a development contribution plan under that Act, but
- (b) not including the making of an order under that Act.
- (2) The general manager is required to keep a register containing, for each planning decision made at a meeting of the council or a council committee, the names of the councillors who supported the decision and the names of any councillors who opposed (or are taken to have opposed) the decision.
- (3) For the purpose of maintaining the register, a division is required to be called whenever a motion for a planning decision is put at a meeting of the council or a council committee.
- (4) Each decision recorded in the register is to be described in the register or identified in a manner that enables the description to be obtained from another publicly available document and is to include the information required by the regulations.
- (5) This section extends to a meeting that is closed to the public.

OATH AND AFFIRMATION FOR COUNCILLORS

Councillors are reminded of the oath of office or affirmation of office made at or before their first meeting of the council in accordance with Clause 233A of the Local Government Act 1993. This includes undertaking the duties of the office of councillor in the best interests of the people of Byron Shire and the Byron Shire Council and faithfully and impartially carrying out the functions, powers, authorities and discretions vested under the Act or any other Act to the best of one's ability and judgment.

BYRON SHIRE COUNCIL

BUSINESS OF MEETING

1. APOLOGIES

2. DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

3. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

- 3.1 Adoption of Minutes from Previous Meeting 6

4. STAFF REPORTS

Infrastructure Services

- 4.1 Floodplain Management Advisory Committee Goals for 2024 12
- 4.2 Community Education Strategy and Review of Flood Options - Project
Update 16
- 4.3 Post 2022 Event Flood Behaviour Analysis - Brunswick River - Final Draft
Report - September 2023-NSW Department of Planning & Environment 20
- 4.4 Byron Bay Drainage Upgrade Update 25

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Adoption of Minutes from Previous Meeting

Directorate: Infrastructure Services

5 **File No:** I2023/1931

RECOMMENDATION:

10 **That the minutes of the Floodplain Management Advisory Committee Meeting held on 21 November 2023 be confirmed.**

Attachments:

15 1 Minutes 21/11/2023 Floodplain Management Advisory Committee, I2023/1821 , page 8  

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

Report

The attachment to this report provides the minutes of the Floodplain Management Advisory Committee Meeting of 21 November 2023 .

5

Report to Council

The minutes to reported to Council in February 2024.

Minutes of Meeting

Floodplain Management Advisory Committee Meeting

| | |
|-------|--|
| Venue | Conference Room, Station Street, Mullumbimby |
| Date | Tuesday, 21 November 2023 |
| Time | 11.30am |



BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE MEETING MINUTES
NOVEMBER 2023

21

Minutes of the Floodplain Management Advisory Committee Meeting held on Tuesday, 21 November 2023

File No: I2023/1821

PRESENT:

| | | |
|--------------|---|-----------|
| Councillors: | Cr M Lyon | In person |
| | Cr C Coorey | Apology |
| | Cr D Dey | In person |
| Staff: | Phil Holloway (Director Infrastructure Services) | Apology |
| | Samuel Frumpui (Manager Works) | Zoom |
| | James Flockton (Infrastructure Planning Coordinator) | In person |
| | Steve Twohill (Natural Disaster Flood Planning Officer) | In person |
| | Chloe Dowsett (Coast and Biodiversity Coordinator) | In person |
| | Dominika Tomanek (Minute Taker) | In person |
| Members: | Scott Moffett (Dept of Planning and Environment) | In person |
| | Peter Mair (State Emergency Service) | In person |
| | Jeremy Carpenter (SES) | In person |
| | Karl Allen | In person |
| | Rebecca Brewin | In person |
| | Matthew Lambourne | In person |
| | Steven Harris | In person |
| | Catherine Lane | In person |
| | Robert Crossley | In person |

Visitors: Dan Woods (WMA Water) – In Person, Ben Fitzgibbon (DPE) – In Person, Toong Chin (DPE) - Zoom, Martin Rose (DPE) - Zoom

Cr Lyon (Chair) opened the meeting at 11:35 am and acknowledged that the meeting was being held on Bundjalung Country.

ATTENDANCE VIA AUDIO-VISUAL LINK:

APOLOGIES:

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

FLOODPLAIN MANAGEMENT ADVISORY COMMITTEE MEETING MINUTES
NOVEMBER 2023

21

PROCEDURAL MOTION

Committee Recommendation:

That the apologies from Cr Coorey, Ziwar Sattouf and Phillip Holloway be accepted and a leave of absence granted. (Lyon/Dey)

The recommendation was put to the vote and declared carried.

DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

There were no declarations of interest.

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Adoption of Minutes from Previous Meeting
File No: I2023/1801

Committee Recommendation:

That the minutes of the Floodplain Management Advisory Committee Meeting held on 19 September 2023 be confirmed. (Dey/Lyon)

The recommendation was put to the vote and declared carried.

BUSINESS ARISING FROM PREVIOUS MINUTES

DPE Independent review of the 2022 February flood event, briefing presentation from WMA Water.

STAFF REPORTS - INFRASTRUCTURE SERVICES

Reports 4.1 (Community Education Strategy and Review of Flood Options - Project Update), 4.2 (Floodplain Management Advisory Committee Goals for 2024) and 4.3 (Byron Bay Drainage Upgrade Update) were deferred to the 8 December 2023 Extraordinary Meeting.

There being no further business the meeting concluded at 1:35pm .

STAFF REPORTS - INFRASTRUCTURE SERVICES

**Report No. 4.1 Floodplain Management Advisory
Committee Goals for 2024**

5 **Directorate:** Infrastructure Services

Report Author: James Flockton, Infrastructure Planning Coordinator
 Steve Twohill, Flood and Drainage Engineer

File No: I2023/1928

Summary:

10 Community members of the Floodplain Advisory Committee met after the previous meeting and listed what they would like the Committee to deal with over the last year of its life when the committee ends at the end of the Council term.

The list of items is as follows and is discussed in this report

1. Fill on floodplains.
- 15 2. Fill under dwellings that are being raised because they were flooded in 2022 but are deemed outside the floodplain.
3. Website property information such flood, ground and floor levels.
4. Flood warnings and warning systems.
5. Flood information and education.

20

RECOMMENDATION:

That the Floodplain Management Advisory Committee note the report.

25

Report

Community members of the Floodplain Advisory Committee met after the previous meeting and listed what they would like the Committee to deal with over the last year of its life when the committee ends at the end of the Council term.

5 The list of items is discussed below:

1. Fill on floodplains.

10 Fill on floodplains is managed via a Development Control Plan (DCP) 2014 Chapter C2 - Areas Affected by Flood. Proposed Updates arising from review of this DCP will go through a public consultation process and this will allow the community and committee to be involved in the process.

Further reporting to the committee has been requested from the Strategic Planning team, the committee may wish to seek Council support of a recommendation to receive this reporting.

15 2. Fill under dwellings that are being raised because they were flooded in 2022 but are deemed outside the floodplain (e.g., DA 2023 / 77)

Committee goals in this area can be discussed at the committee meeting.

Fill outside of no fill zones is a legitimate way for property owners to manage issues on their land, however, management of the impacts of this fill to surrounding properties needs to be a consideration. Ideally this is done through the Development Application process.

20 There are likely examples of this filling happening without Development Approval and this is a compliance matter. However, Council's compliance teams cannot be across everything, and they do rely upon the community raising concerns regarding any works that are considered inappropriate.

25 A further report to the committee can be provided following Council support of a recommendation from the committee.

3. Website property information such flood, ground, and floor levels.

Council has an online Geographic Information System (GIS) available at <https://byron-council.maps.arcgis.com/apps/instant/sidebar/index.html?appid=c741bd7f05e2485fb288bd45cc1a2c5c>

30 Some flood information is available in this GIS system. Additional information such as floor levels, ground levels and design flood levels can be added to this system if Council support the information being added following a recommendation from the committee.

4. Flood warnings and warning systems.

35 Council operates the Byron Flood Warning Network and Disaster Dashboard. The Dashboard can be found at <https://emergency.byron.nsw.gov.au/>

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

5 Various flood related information is provided on The Dashboard, and this can be increased during times of flood to include evacuation routes and centres and warnings to the community via an Opt In warning system. This is typically the sharing of SES warnings and orders. SES are the lead agency; therefore, Council's role is to support the SES rather than take their role.

Behind The Dashboard is Council's Guardian Incident Management System, this system manages what The Dashboard is presenting to the community and has the Flood Intel system.

10 Flood Intel issues flood forecasts and observations to users. It also provides forecast flood maps, dwellings likely to be inundated due to a forecast flood, rainfall forecasts, storm tracker, cyclone tacker, water level graphs and accumulated rainfall observed and predicted for various forecasts.

15 A presentation of the system can be provided to another meeting of the committee via a committee recommendation to Council. Further opportunities and improvements can be discussed as part of this presentation.

5. Flood information and education.

20 Councils Communications Team and Recovery Team have developing education opportunities to help educate the community about The Dashboard, this includes a video on what The Dashboard offers and how to use it. An update can be requested from these teams as requested.

Council also has various flood related information on the website at the following locations:

[Floodplains - Byron Shire Council \(nsw.gov.au\)](https://www.nsw.gov.au/floodplains)

[Emergency Management - Byron Shire Council \(nsw.gov.au\)](https://www.nsw.gov.au/emergency-management)

[Floods and flood recovery - Byron Shire Council \(nsw.gov.au\)](https://www.nsw.gov.au/floods-and-flood-recovery)

25 [Review of floodplain management in north Byron Shire - Byron Shire Council \(nsw.gov.au\)](https://www.nsw.gov.au/review-of-floodplain-management-in-north-byron-shire)

Staff are currently reviewing the website information. Further opportunities and improvements can be discussed at the committee meeting and reported back to the committee as requested via a committee recommendation.

Strategic Considerations

Community Strategic Plan and Operational Plan

| CSP Objective | CSP Strategy | DP Action | Code | OP Activity |
|-------------------------|--|---|-------------|---|
| 3: Nurtured Environment | 3.3: Protect the health of coastline, estuaries, waterways, and catchments | 3.3.2: Floodplain management - Mitigate the impact of flooding on private and public property | 3.3.2.3 | Floodplain Risk Management Committee coordination |

Recent Resolutions

- N/A

5 Legal/Statutory/Policy Considerations

Further information can be provided to specific items when further reporting is provided.

Financial Considerations

Nil

Consultation and Engagement

10 Nil

Report No. 4.2 Community Education Strategy and Review of Flood Options - Project Update

Directorate: Infrastructure Services

Report Author: Steve Twohill, Flood and Drainage Engineer
Chloe Dowsett, Biodiversity and Sustainability Coordinator

File No: I2023/1927

Summary:

At the 19 September 2023 Floodplain Management Advisory Committee meeting were provided an introduction and presentation on the newly commenced project 'Community Education Strategy and Review of Flood Options'. The project aims to explore the status of flood mitigation options and to improve community understanding of flooding in general, and flood studies and flood management work completed by Council to date focussing on the Northern Byron Shire Area.

The purpose of the study is to address the concerns and requests of the Northern Byron Shire community as related to flood management and mitigation options. The project focus is primarily on the North Byron villages of New Brighton, Ocean Shores, Billinudgel and South Golden Beach.

This report provides a quarterly project update to committee members on project status and progression.

RECOMMENDATION:

That the Floodplain Management Advisory Committee note the update on the 'Community Education Strategy and Review of Flood Options' project which focusses on the Northern Byron Shire communities.

Report

Background:

- 5 The purpose of the project is to address the concerns and requests of the community as related to flood management and mitigation options. The project aims to explore the status of flood mitigation and options to reduce the impact of flooding and to improve community understanding of the work completed to date. It involves peer reviewing existing investigations, analysing mitigation options and their previous modelling (such as dredging and rock wall modifications), engaging with directly affected residents and key stakeholders, and providing community education on the flood modelling process.
- 10 The project will be conducted through a combination of desktop analysis, literature review, flood modelling peer review, and community engagement initiatives. The ultimate goal is to contribute to the social recovery and well-being of the affected residents by informing them about the issues and potential solutions related to flooding.

Key outcomes of the project are:

- 15
- Improved community and stakeholder understanding.
 - Education on flood risk and flood risk management.

Outputs of the project will be a report that will include:

- Findings of review of flood studies, options and recommendations as to which options (if any) should progress to further consideration.
- 20
- Findings of stakeholder and community consultation.
 - Any final opportunities or recommendations for further investigations.

JBP Scientists and Engineers have been engaged by Council to deliver the 'Community Education Strategy and Review of Flood Options' project which commenced in June 2023.

Project Status:

- 25 Status of tasks is provided below.
1. Preparation of a Key Stakeholder and Engagement Plan - community consultation and stakeholder engagement has commenced:
 - Creation of project webpage - here
 - Online Survey on Council's website closing 1 December 2023.
- 30
- Media Release
 - Social Media posts

- Emails to key stakeholders and community groups
- Adverts in The Echo
- Posters (Attachment 1) at locations around the northern villages (community halls, shops)
- 5 ○ Staff handing out Flyers (Attachment 2) at the New Brighton Farmer's Market
- Targeted Workshop with stakeholders – confirmed for 6 December 2023.
- 2. Desktop review of data, studies and investigations – a comprehensive literature review has been completed and preliminary findings have been compiled.
- 10 3. Analysis of sedimentation in Marshalls Creek – a review of literature and data in relation to sedimentation within the north arm of the Brunswick Estuary to understand morphology, sedimentation and process is progressing.
- 4. Review of community interest flood risk management options – progressing as community feedback is being received.
- 5. Reporting and recommendations to Council – draft reporting has commenced.

15 **Next steps**

The Floodplain Advisory Management Committee will be updated as the project progresses. Committee members will be provided an opportunity to be further involved during the later stage of the project at an options workshop (date not yet confirmed).

Strategic Considerations

20 **Community Strategic Plan and Operational Plan**

| CSP Objective | CSP Strategy | DP Action | Code | OP Activity |
|-------------------------|--|---|---------|---|
| 3: Nurtured Environment | 3.3: Protect the health of coastline, estuaries, waterways, and catchments | 3.3.2: Floodplain management - Mitigate the impact of flooding on private and public property | 3.3.2.3 | Floodplain Risk Management Committee coordination |

Legal/Statutory/Policy Considerations

5 The study will align with the framework established by the NSW Floodplain Development Manual and national best practice as outlined in the Australian Institute for Disaster Resilience Handbook 7: Managing the floodplain: best practice in flood risk management in Australia (AIDR, 2017).

Financial Considerations

This is a grant funded project comprising consultancy fees only of \$37,940 (excl. GST).

Consultation and Engagement

10 A Community and Stakeholder Engagement Plan (CSEP) has been developed for the project for implementation. The CSEP aims to collate community and stakeholder concerns and ideas and address all concerns after reviewing management options and data. The CSEP considers different approaches to communications and engagement, following the IAP2 Public Participation Spectrum. The key outcomes of the project is improved community and stakeholder understanding and education on flood risk and flood
15 risk management, as such the below is proposed:

- Council Staff/DPE representatives are given a steering role (Empowered).
- Council's Advisory Committees are *Involved*
- The community is *Involved* within the project. This is deliberately not at a level that would allow their request for new mitigation scenarios to be tested without checks from
20 flood engineers to ensure they are viable; however, it will ensure they are a focus on this project.

Report No. 4.3 **Post 2022 Event Flood Behaviour Analysis - Brunswick River - Final Draft Report - September 2023-NSW Department of Planning & Environment**

5 **Directorate:** Infrastructure Services

Report Author: Steve Twohill, Flood and Drainage Engineer

File No: I2023/1935

Summary:

10 The NSW Department of Planning & Environment (DPE) have circulated a confidential
 “Post 2022 Event Flood Behaviour Analysis - Brunswick River - Final Draft Report -
 September 2023” for review and input from the Flood Advisory Committee (FAC).

 DPE are seeking feedback and input from the FAC, so they can update and formally
 release this review to the public. DPE have commissioned this assessment and review
 report which is being undertaken by WMA Water.

15

RECOMMENDATION:

- 20 1. **That the Floodplain Management Advisory Committee endorses the “Post 2022
 Event Flood Behaviour Analysis - Brunswick River - Final Draft Report -
 September 2023” - NSW Department of Planning & Environment (DPE) – per
 attachment.**
- 25 2. **That the Floodplain Management Advisory Committee provides written advice
 to DPE in respect to any feedback to the “Post 2022 Event Flood Behaviour
 Analysis - Brunswick River - Final Draft Report - September 2023”. This written
 advice shall be provided to DPE by 20 December 2023.**

Attachments:

- 30 1 Confidential - 1. Post 2022 Event Flood Behaviour Analysis - Confidential Post 2022 Event
 Flood Behaviour Analysis - Brunswick River - Final Draft Report - September 2023” - NSW
 Department of Planning & Environment (DPE), E2023/107513
- 2 Confidential - Confidential Post 2022 Event Flood Presentation Updated, E2023/127526

Report

The NSW Department of Planning & Environment (DPE) have commissioned an assessment of the major 2022 flood event/s that affected the NSW Northern Rivers.

Background Information and Context

- 5 • The NSW Government provides technical and funding support to local councils through the Floodplain Management Program. This enables councils to understand and manage their flood risk through the preparation and implementation of flood risk management plans in accordance with the Floodplain Development Manual (2005),
10 or the new NSW Flood Risk Management Manual (2023). Within this framework, councils can consider a full range of flooding scenarios, including extreme events such as the Probable Maximum Flood (PMF).
- In 2022, the Department of Planning and Environment (DPE) commissioned seven post-flood behaviour analysis reports following the unprecedented flooding in the Northern Rivers Region during late February and March 2022.
- 15 • The reports provide a technical review of the 2022 flood extent and behaviour across Northern Rivers catchments including Tweed River, Tweed coastal creeks, Brunswick River, Belongil Creek, Tallow Creek, Richmond River and Wilsons River.
- The reports are intended to improve knowledge of rare to extreme flood events and identify opportunities to improve flood modelling and flood risk management
20 decisions.
- The reports are highly technical, requiring significant input and review by specialists within DPE.
- The draft reports will be released to relevant councils for their review and feedback. Once finalised, the reports will be made publicly available and may be used by local
25 councils in the review and update of their floodplain risk management plans.
- DPE will continue to provide local councils with funding and technical support on their flood risk management activities through the Floodplain Management Program.
- Recent media in the Byron Shire has been critical of the time taken for the post-flood reports to be made available by DPE. DPE has been working closely with project
30 consultants on developing and refining the reports. However, finalisation of the reports has taken longer than anticipated due to the complex nature of flood assessment and modelling.

Key issues

Byron Shire Post Flood Reports

- 35 • Byron Shire Council has prepared floodplain risk management studies and plans for the catchments of the Byron Local Government Area to examine options and make decisions on how they manage their flood risk. These studies and plans inform land-

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.3

use planning decisions and enable Council to consider a full range of flooding scenarios, including extreme events such as the Probable Maximum Flood (PMF).

- Three of the post-flood reports commissioned by DPE are relevant to Byron Shire Council: Brunswick River, Belongil Creek catchment and Tallow Creek catchment.
- 5 • The post-flood reports assess the nature of the 2022 flooding in these catchments. They identify opportunities to improve flood modelling, but do not define the extent or height of predicted future flood events across the landscape.
- Any improvements to flood models recommended in the post-flood reports may be implemented by the Council reviewing and updating their floodplain risk management studies and plans under the NSW Floodplain Management Program.
- 10 • The Draft Byron Shire Housing Options Paper was released in 2023 and is currently in the consultation phase with the community, ahead of planned adoption by Council in 2024.
- DPE Biodiversity and Conservation Division (BCD) will share the post-flood reports with DPE Planning and can provide additional information and interpretation of the reports as needed.
- 15

Brunswick River post-2022 flood report

- The Brunswick River post-flood report has been released to Byron Shire Council as a confidential working draft for Council's review and feedback. It shall not be circulated or made public outside of the Flood Advisory Committee.
- 20 • DPE will design a workshop with Council during the review period to improve understanding and interpretation of the report findings and recommendations.
- Once BCD receives feedback from Council, the draft report will be finalised and placed on the NSW Flood Data Portal, where it will be available for public access.

25 Tallow Creek catchment and Belongil Creek catchment

- The draft Tallow Creek and Belongil Creek post-2022 flood reports are under review by BCD to improve their technical rigour.
- BCD is working closely with the project consultants on these reports and anticipate drafts will be sent for Byron Shire Council's review in December 2023.
- 30 • BCD will also offer a workshop with Council on the Tallow Creek and Belongil Creek reports in early 2024.

Strategic Considerations

Community Strategic Plan and Operational Plan

| CSP Objective | CSP Strategy | DP Action | Code | OP Activity |
|-------------------------|--|---|---------|---|
| 3: Nurtured Environment | 3.3: Protect the health of coastline, estuaries, waterways, and catchments | 3.3.2: Floodplain management - Mitigate the impact of flooding on private and public property | 3.3.2.3 | Floodplain Risk Management Committee coordination |

Recent Resolutions

- 23-271, 23-094, 22-606, 22-352

5 Legal/Statutory/Policy Considerations

The Floodplain Development Manual supports the policy and guides councils through the floodplain risk management process. The manual helps councils develop and implement local floodplain risk management plans and outlines the technical assistance provided by the NSW Government.

- 10 The manual details the roles and responsibilities of various NSW agencies and includes information on:

- the preparation of flood studies, floodplain risk management studies and plans
- floodplain risk management options
- flood planning levels and areas

- 15
- hydraulic and hazard categorisation
 - emergency response planning.

The manual was originally gazetted in 2005 with a new updated manual being gazetted in 2023. It is the manual relating to the development of flood-labile land for the purposes of section 733 of the Local Government Act 1993.

20 Financial Considerations

There are no financial considerations in this instance as the report is being commissioned by NSW DPE.

Consultation and Engagement

NSW DPE have provided this final draft report as a confidential document for the review and input from the Flood Advisory Committee only. Once review feedback has been provided NSW DPE shall release as a final report to the public.

Report No. 4.4 Byron Bay Drainage Upgrade Update

Directorate: Infrastructure Services

Report Author: Steve Twohill, Flood and Drainage Engineer

File No: I2023/1929

5 Summary:

The Byron Bay Drainage Upgrade Strategy is a Floodplain Management Measure in the Council adopted Belongil Creek Floodplain Risk Management Plan (2015).

10 The project is funded by the "Preparing Australian Communities" grant to develop the drainage strategy through Concept Design to Detailed Design. Essentially developing a construction ready project.

This report provides a status update for the project.

15 RECOMMENDATION:

That the Floodplain Management Advisory Committee note the update on the Byron Drainage Upgrade Strategy.

Report

The Byron Bay Drainage Upgrade Strategy is a Floodplain Management Measure in the Council adopted Belongil Creek Floodplain Risk Management Plan (2015). The project is funded by the "Preparing Australian Communities" grant to develop the drainage strategy through Concept Design to Detailed Design. Essentially developing a construction ready project.

The project has three (3) proposed stages that make up the Byron Bay Drainage Upgrades. They can be delivered separately or together as follows:

- Town Centre – Includes upgrades of the gravity drainage system within the town centre.
- Shirley Street – Includes construction of the town's main pump station, a levee protecting the properties of the Shirley Street area from regional flooding and installation of flood pumps to cater for local drainage within the leveed area.
- Cowper Street – Includes construction of a flood storage basin (Sandhills wetland) and upgrades to Cowper Street pipe outlet to Clarkes Beach. It also includes upgrades to cross drainage linkages between the Town Centre drainage, Cowper Street trunk drainage and possible flood pump. (The Sandhills Wetland can be delivered separately to the peripheral works).

Further to the recommendations of the previous Floodplain Advisory Committee meeting, Engeny are investigating a Gravity Only Drainage Network (i.e. without Flood Pump systems). This is a departure from the agreed funding grant conditions. This work is iterative ranging between changes in piped network configuration/s and checking the flood afflux impacts with the flood model. This work is expected to be completed by early December 2023. Noting this option will not deliver the 10 year AEP objective of the piped network.

There are five (5) stages to deliver the detailed design of the drainage upgrades. The scope, status, dependencies and updated timeframes are summarised below:

| Stage | Scope | Status | Dependencies / Update | Program Timeframe |
|--------------|---|-------------------|--|--------------------------|
| 1 | Strategy Review | | | |
| | Deliverable: Strategy Review report identifying issues with the current strategy and opportunities for optimisation in concept design | 100% Completed | Review is complete and has resulted in the original concept being generally fit for purpose. A copy of the outcomes report is provided at attachment | 14/4/2023 |

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.4

| | | | | |
|----|---|----------------|---|------------|
| | | | 1. | |
| 2 | Detailed Survey of project area | | | |
| | | 100% Completed | All accessible surface and pipe inverts have been collected. A small amount of inaccessible pits will be collected as part of the pot holing process to collect below ground utilities information. | 30/4/2023 |
| 3 | Concept Design of drainage upgrades | | | |
| 3a | Deliverable: Draft Concept Design Drawings and report including flood modelling results and mapping | 75% | Concept design process is well underway. Works are delayed beyond the program timeframe due to delays in completing the detail survey. Adoption of the concept design is not currently delayed. | 25/8/2023 |
| 3b | Councillor Workshop | 100% Completed | Project review and general concept discussion | 5/10/2023 |
| 3c | Deliverable: Final Concept Design Drawings and report | 95% | Draft Review and milestone Meeting with Technical Staff. Concept Design includes assessment of | 1/12/2023 |
| 3d | Report to Council General Meeting Council Adoption of Concept Design | 0% | Finalisation of Concept Design | 14/12/2023 |
| 4 | Environmental | | | |

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.4

| | Assessment | | | |
|---|---|-----|---|-----------|
| | Deliverable: Environmental studies, documentation and proposed approvals | 75% | Identification of planning and regulatory pathways (Note that timing will vary depending on specialist studies and need for EIS) Finalise Concept Design | 6/11/2023 |
| 5 | Detailed Design | | | |
| | Deliverable: Construction drawings and specifications | 0% | Council adoption of concept design Pot holing to obtain utility depths Environmental assessments and approvals Electrical design and Essential Energy approvals (for pump stations) | 28/6/2024 |

Key issues

The project scope overlaps with several other Council projects currently in progress and future masterplan projects. The drainage design upgrades will need to integrate with:

- 5 • Sandhill's Wetland – The detailed design of the Sandhills Wetland is complete, and EIS is currently being prepared.
- 10 • Road Reconstruction projects - Including the underground drainage upgrades with road reconstruction / renewals is the best delivery method for Council. It benefits the community by minimising disruption and avoids the costs associated with temporary works or reinstatement costs that would be necessary if drainage works were solely undertaken separately from road works.
- 15 • The detailed design of the drainage upgrades will cover the necessary underground works required within the footprint of the Lawson Street and Byron Street Road reconstruction projects currently in Councils Capital Works program.

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.4

- Consultant Engeny will work with the Place Manager for Byron Bay to develop a civil works scoping report for locations where the road and footpath shape will likely remain unchanged or changed. The locations where change is warranted or planned would be the higher priority for full street upgrades. This reporting will help guide full street upgrade designs that need to be prepared.
- The Clarks Beach Master Plan is about to commence on Main Beach reserve and will need to include any upgrade works that will be required to the Cowper Street Outfall. This is in the early stages and will be a point of discussion at steering committee meetings.
- Byron Bay Town Centre Master Plan -The drainage strategy has also been requested / listed at the next Byron Town Centre Master Plan meeting for a presentation / briefing for early April to coincide with the completion of the Drainage Strategy Review Report.

The contracted program from Engeny planned delivery of detail design in March 2024 ahead of the grant deadline of June 2024. Due to the delays in detail survey collection, it is unlikely this deadline will be met. However, delivery within the grant deadline is expected.

Next steps

- Commence detail design and community consultation.

Strategic Considerations

Community Strategic Plan and Operational Plan

| CSP Objective | CSP Strategy | DP Action | Code | OP Activity |
|-------------------------|--|---|---------|--|
| 3: Nurtured Environment | 3.3: Protect the health of coastline, estuaries, waterways, and catchments | 3.3.2: Floodplain management - Mitigate the impact of flooding on private and public property | 3.3.2.5 | Undertake survey and concept design for Byron Bay drainage upgrade |

Recent Resolutions

- 22-608, 22-573, 22-350

Legal/Statutory/Policy Considerations

- 5 The Floodplain Development Manual supports the policy and guides councils through the floodplain risk management process. The manual helps councils develop and implement local floodplain risk management plans and outlines the technical assistance provided by the NSW Government.
- 10 The manual details the roles and responsibilities of various NSW agencies and includes information on:
- the preparation of flood studies, floodplain risk management studies and plans
 - floodplain risk management options
 - flood planning levels and areas
 - hydraulic and hazard categorisation
- 15 • emergency response planning.

The manual was gazetted in 2005 as the manual relating to the development of flood-liaible land for the purposes of section 733 of the *Local Government Act 1993*.

Financial Considerations

- 20 The budget for this stage of the project is \$1,280,000.00.
- Detailed Design is a provisional item within the contract for Engineering Design and will be subject to final pricing at the completion and adoption of concept design when the scope can be confirmed.
- 25 Environmental planning assessments are excluded from the Engeny's engineering design scope and is subject to a separate engagement. Appointment of a planning consultant planned is underway.
- The project is currently projected to be delivered on budget.
- Staff are currently seeking funding for the construction stages of the project and will update the committee as opportunities arise.

30 Consultation and Engagement

A communication plan has been prepared in consultation with Council's Communications team and is discussed at the monthly internal Project Reference Group meeting.

Community engagement will commence once Council have supported the concept design.