

Central Floodplain Risk Management Committee

Meeting Date: Friday, 08 April, 2022

Location: Email Meeting

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Agenda

1. Apologies

2. Confirmation of Minutes

- Central Floodplain Risk Management Committee - 11 August 2021 1

3. Declarations of Interest

4. Presentations (sent to members via email)

CFM22.1 Presentation - Purpose of the FRMC and NSW Government Flood Program – Department of Planning and Environment.

CFM22.2 St Georges Basin Flood Study - Cardno

5. Reports

CFM22.3 Update on Filling the Current Central FRMC vacancy 6

CFM22.4 St Georges Basin Floodplain Risk Management Study and Plan Update 8

CFM22.5 General Update on Flood Projects 12

Membership

Chairperson – appointed by Committee

All Councillors

CEO or nominee

Community representatives:-

Richard Carpenter

David Tarbert

Zachariah Cleary

Peter Foggitt

Janis Natt

Government Agency representatives:-

Local Aboriginal Land Council

NSW State Emergency Services

Department of Planning, Environment and Industry (DPIE)

Other relevant Government Agency representatives

Quorum – Three (3) provided that a minimum of the Chairperson and two community representatives are present.

Purpose:

The principal objective of the Central Floodplain Risk Management Committee is to assist Shoalhaven City Council in the development and implementation of one or more floodplain risk management plans for the central area of the Council. This will need to be in accordance with the NSW Floodplain Development Manual. The central area applies to the following catchments:

- St Georges Basin (includes Sussex inlet);
- Jervis Bay;
- Currambene Creek;
- Moona Moona Creek;
- Currarong Creek;
- Berrara Creek
- Callala Creek; and
- Swan Lake

Role:

1. To assist the Council in the development and implementation of the floodplain management plan for the areas listed under 'Purpose' (see above);
2. To assist the Council monitoring and assessing the effectiveness of the management plans during and after its implementation; and
3. To assist the Council providing input into known flood behaviour as part of the flood study.

MINUTES OF THE CENTRAL FLOODPLAIN RISK MANAGEMENT COMMITTEE

Meeting Date: Wednesday, 11 August 2021
Location: Council Chambers, City Administrative Centre, Bridge Road, Nowra
Time: 4:05pm

The following members were present:

Clr Patricia White – Chairperson
Mr Zachariah Cleary (remotely)
Mrs Janis Natt

Others Present:

Mr Phil Costello – Director – City Development
Mr Mark Stone – Senior Floodplain Engineer
Mr Tanvir Ahmed – Floodplain Engineer
Mr Michael Roberts – Manager of Environmental Services (Remotely)
Mr Nigel Smith – Coastal Management Program Coordinator (Remotely)
Mr Nathan Pomfret - Department of Planning, Environment and Industry (DPIE) (Remotely)
Mr Julian Skipworth - Water Modelling Solutions (Remotely)
Mr William McInnes – State Emergency Service (Remotely)

Apologies / Leave of Absence

An apology was received from David Tarbert.

Confirmation of the Minutes

RESOLVED (Janis Natt / Zachariah Cleary)

That the Minutes of the Central Floodplain Risk Management Committee held on Wednesday 21 April 2021 be confirmed.

CARRIED

Declarations of Interest

Nil

REPORTS

CFM21.7 Changes to DPIE Floodplain Risk Management Representative for the Shoalhaven LGA

**HPERM Ref:
D21/276757**

Mr Mark Stone – Senior Floodplain Engineer, welcomed Mr Nathan Pomfret as the new DPIE Floodplain Risk Management Representative, taking over from long standing representative Mr John Murtagh.

Mark Stone thanked John Murtagh for his efforts and commitment to the Shoalhaven region as the DPIE representative on the Floodplain Risk Management Committees. John’s knowledge has been invaluable to understand and manage the flood risk to the Shoalhaven over the past 17 years.

Mark passed the following message on to the meeting, on behalf of John Murtagh:

“I would appreciate it if my heartfelt thanks for all the great collaboration I have received from the SCC Councillors, staff and communities could be conveyed to the meeting”.

Recommendation (Item to be determined under delegated authority)

That the Committee receive the report for information.

RESOLVED (Janis Natt / Clr White)

That the Committee receive the report for information.

CARRIED

CFM21.9 Final Currarong Creek Flood Study

**HPERM Ref:
D21/276760**

Mark Stone advised members that Council had received feedback from the community during the public exhibition period in relation to the Currarong Creek Flood Study via the “Get Involved” web page, surveys, email submissions as well as attendance at the Drop in Session and direct enquiries between community members and Council staff.

The outcomes of the public exhibition and community consultation phase identified the need to progress the Currarong Creek Flood Study through to a Floodplain Risk Management Study and Plan (FRMS&P).

A copy of the presentation for items CFM21.8, CFM21.9 and CFM21.10 is attached to these Minutes.

Recommendation (Item to be determined under delegated authority)

That the Committee receive the Final Currarong Creek Flood Study report for information and endorse the adoption of the Final Flood Study report by Council.

RESOLVED (By consent)

That the Committee receive the Final Currarong Creek Flood Study report for information and endorse the adoption of the Final Flood Study report by Council.

CARRIED

CFM21.10 Update on St Georges Basin FRMS&P

**HPERM Ref:
D21/276761**

Mark Stone provided an update on the St Georges Basin FRMS&P. The following milestones have been or will be completed by the end of the DPIE funding term which ends in November 2021:

- The data collection, model development and calibration – Completed.
- The first round of community consultation – Completed in February 2019.
- External peer review - Completed by WMA Water in early 2021.
- The draft Flood Study report. This is currently being prepared by the consultant.

The aspects of the FRMS&P that are not completed by the project completion date are expected to be able to be funded through a capital budget bid and Council’s flood program budget if required.

Council have recently applied for one year project extension from DPIE Grants. If one year extension is successful the funding term completion date will be November 2022. This would cover DPIE staff time, but may not cover the DPIE 2/3 contribution towards the FRMS&P phases.

Clr White requested that staff take into consideration when planning the community consultation and public exhibition period for the St Georges Basin FRMS&P that people are often away and busy in January and if possible the consultation period be extended into February.

Recommendation (Item to be determined under delegated authority)

That the Committee receive the report for information.

RESOLVED (By consent)

That the Committee receive the report for information.

CARRIED

ADDENDUM REPORTS

CFM21.11 Committee Membership - Resignation

**HPERM Ref:
D21/338315**

Recommendation

That Council:

1. Accept the resignation of Mr Peter Foggitt from the Central Floodplain Risk Management Committee.
2. Seek clarification from Mr Ronald Carberry as to whether he intends to resign.
3. Fill the vacancy/vacancies though one of:
 - a. An Assessment Panel review of previous applications to the Committee.
 - b. A new call for Expressions of Interest.

RECOMMENDATION (Janis Natt / Zachariah Cleary)

That Council:

1. Accept the resignation of Mr Peter Foggitt from the Central Floodplain Risk Management Committee.
2. Seek clarification from Mr Ronald Carberry as to whether he intends to resign.

3. Fill the vacancy/vacancies though one of:
 - a. An Assessment Panel review of previous applications to the Committee.
 - b. A new call for Expressions of Interest.

CFM21.8 Update on Councils Flood Program**HPERM Ref:
D21/276762**

Mark Stone provided an update on the Flood Risk Management Studies and Plans and the current status of each. He advised that the previous forward Flood Program was developed approximately 20 years ago and has been mostly completed so Council have revisited those plans in consultation with John Murtagh and Nathan Pomfret from DPIE to identify priorities moving forward.

Flood investigations have been identified as a High, Medium or Low priority.

Council would welcome any feedback from the Central and Southern Floodplain Risk Management Committees on the Flood Program and associated priorities.

Recommendation (Item to be determined under delegated authority)

That the Committee receive the report for information and endorse the program set out in the report.

RESOLVED (By consent)

That the Committee receive the report for information and endorse the program set out in the report.

CARRIED

GENERAL BUSINESS

- Bill McInnes – SES – wanted to pass on thanks to those involved in the cleaning and clearing of the culverts and drains at the Kings Point Drive and Princes Highway intersection.

CFM21.12 Additional Item - Inclusion of Tsunamis and Associated Weather Events in Committees

Mr Bill McInnes – SES – addressed the meeting to request the possibility of including tsunamis and other weather related events that the SES respond to, in the Floodplain Risk Management Committees and / or the Coastal Management Program Advisory Committees.

RESOLVED (Clr White / By consent)

That:

1. Council staff investigate the inclusion of tsunamis and associated weather events into the Floodplain Risk Management Committees and/or the Coastal Management Program Advisory Committees.
2. The Central and Southern Floodplain Risk Management Committees receive a report back on this investigation.

CARRIED

There being no further business, the meeting concluded, the time being 5:06pm.

Clr Patricia White
CHAIRPERSON

CFM22.3 Update on Filling the Current Central FRMC vacancy

HPERM Ref: D22/101345

Department: Environmental Services

Approver: James Ruprai, Director - City Development

Reason for Report

To provide the Central Floodplain Risk Management Committee (FRMC) with an update on the process to fill the current FRMC vacancy and seek endorsement to appoint Mr David Reynolds to the Central FRMC.

Recommendation

That the Committee:

1. Receive this report for information; and
2. Endorse the appointment of Mr David Reynolds to the Central FRMC.

Options

1. The Committee
 - a. Receive this report for information; and
 - b. Endorse the appointment of David Reynolds to the Central FRMC.

Implications: Nil.

2. The Committee could choose to provide an alternative recommendation for consideration by Council.

Implications: Unknown.

Background

An Addendum Agenda report (CFM21.11) was prepared for the 11 August 2021 Central FRMC meeting with regard to Committee Membership. The recommendation from this report was as follows.

That Council:

1. Accept the resignation of Mr Peter Foggitt from the Central Floodplain Risk Management Committee.
2. Seek clarification from Mr Ronald Carberry as to whether he intends to resign.
3. Fill the vacancy/vacancies though one of:
 - a. An Assessment Panel review of previous applications to the Committee.
 - b. A new call for Expressions of Interest.

This recommendation was endorsed by the Central FRMC and then resolved at Council's Ordinary Meeting on 28 September 2021. The Council resolution was for the vacancy to be

filled by either an Assessment Panel review of previous applications to the Committee or a new call for Expressions of Interest.

Committee Membership

As per Council resolution, filling the vacant FRMC position was undertaken via an Assessment Panel review of previous applications to the Committee.

The previous expression of interest process was reviewed to assess membership opportunities. Mr. David Reynolds (one of the previous applicants to the expression of interest process) is recommended as the successful nominee to fill the vacant position.

It is also noted that Mr Ronald Carberry has indicated that he intends to remain a member of this Committee.

CFM22.4 St Georges Basin Floodplain Risk Management Study and Plan Update

HPERM Ref: D22/87436

Department: Environmental Services

Approver: James Ruprai, Director - City Development

Reason for Report

To provide the Central Floodplain Risk Management Committee (FRMC) with an update on the draft St Georges Basin Flood Study (completed as part of the St Georges Basin Floodplain Risk Management Study & Plan Update) and seek endorsement from the FRMC to commence public exhibition and community consultation of the Draft Flood Study report.

Recommendation (Item to be determined under delegated authority)

The Committee:

1. Receive the draft St Georges Basin Flood Study report for information; and
2. Endorse the commencement of public exhibition and community engagement for the Draft Flood Study.

Options

1. That the Committee:
 - a. Receive the draft St Georges Basin Flood Study report for information; and
 - b. Endorse the commencement of public exhibition and community engagement of the Draft Flood Study report.

Implications: Nil.

2. The Committee could choose to provide an alternative recommendation for consideration by Council.

Implications: This option could delay the progress of the project, result in additional project costs and/or prevent the completion of a Flood Study and Floodplain Risk Management Study & Plan within the project timeframe.

Background

The study area comprises St Georges Basin itself, the estuary area, Sussex Inlet and upstream residential areas along the tributary creeks. The entire catchment covers an area of approximately 358 square kilometres with approximately 10% of the catchment area covered by the Basin itself. The catchment area of the Basin contains several creeks including Pats Creek, Home Creek, Wandandian Creek, Tomerong / Cockrow Creek, Cow Creek, Tullarwalla Creek and Worrowing Creek. The Basin connects to the ocean through the Sussex Inlet Channel and there are no recorded periods of closure of the Basin's entrance.

The objective of this study is to improve understanding of flood behaviour and impacts, and better inform management of flood risk in the study area in consideration of the available information. The study will also provide a sound technical basis for any further studies.

The previous Floodplain Risk Management Study and Plan (FRMS&P) for St Georges Basin was completed in 2013. A review was recommended as per the NSW Floodplain Development Manual. It is noted that the Australian Rainfall and Runoff (ARR) Guidelines were updated in 2019 and this resulted in a number of changes to input parameters for design event flood modelling, such as the Bureau of Meteorology (BoM) design rainfall depths and ARR rainfall losses and design temporal patterns, in addition to significant advancements in computing power and modelling techniques. Hence, the St Georges Basin FRMS&P update will produce updated contemporary flood investigations which utilise industry best practice guidelines.

The study outputs will inform decision making for investing in the floodplain, managing flood risk through prevention, preparedness, response and recovery activities, and informing and educating the community on flood risk and response to floods.

Funding was approved by NSW Department of Planning and Environment (DPE) for this study in October 2017 and Cardno was engaged to prepare the St Georges Basin FRMS&P in June 2018.

Current Status of the Project

The draft St Georges Basin Flood Study report has been completed by Cardno. A link will be provided to the draft St Georges Basin Flood Study report with the FRMC meeting agenda. A Summary Report has also been prepared for the public exhibition and community consultation phase and a link to this report will also be provided with the FRMC meeting agenda.

Cardno will provide a presentation to the Central FRMC on the St Georges Basin Flood Study development and outcomes.

The draft St Georges Basin Flood Study report has been reviewed by Council Flood Engineers and the NSW Department of Planning and Environment (DPE). The draft Flood Study report has been provided to the NSW State Emergency Service (SES) for review. The draft St Georges Basin Flood Study report has been updated based on feedback from Council, DPE and the SES.

An independent expert peer review of the flood model development and outcomes was completed by WMAwater. The hydrologic and hydraulic models have been updated as required to the satisfaction of the peer reviewer.

The next step in the project programme is community engagement for the Draft Flood Study report.

A preliminary list of potential mitigation measures to be considered in the FRMS&P is currently being prepared. The feasibility of these measures, along with preliminary environmental and aboriginal heritage due diligence will be completed for all potential options prior to further assessment in the FRMS&P. Council welcomes any suggestions from the FRMC on potential mitigation measures to be considered in the upcoming FRMSP phase.

It is also noted that Council has received a final extension to the DPE funding term completion date for this project. The project funding term completion date is 21 November 2022. It is expected that the St Georges Basin Flood Study and Floodplain Risk Management Study & Plan Update should be completed by this DPE funding term completion date.

Several tasks that would normally form part of a FRMS&P, such as a flood damages assessment, have been completed as part of the current draft Flood Study. This will reduce the scope of work included in the FRMS&P.

Community Engagement

The first round of community consultation was undertaken between November 2018 and February 2019. A project website was published by Council to inform the community about this project. The website has been developed to provide the community with detailed information about the study and gather information. The website will be updated during the duration of the project to provide relevant information at each stage of the study.

Council is seeking endorsement from the Central FRMC to undertake community exhibition of the draft St Georges Basin Flood Study and seek input about any mitigation measures to be considered in the FRMS&P. The four-week community exhibition phase is expected to commence in late April 2022 (pending endorsement from the FRMC). The following forms of community engagement are proposed.

- Media release to inform the community of the community engagement period.
- Mail out to property owners within the study area, which comprise flood prone land and/or may experience flood isolation or flood evacuation difficulties. This will notify the property owner of the public exhibition period and provide a link to the project Get Involved webpage.
- Get Involved webpage. The Get Involved webpage will include a link to a pre-recorded presentation on the Flood Study development and outcomes, links to the Summary and Full draft Flood Study reports, the ability to ask questions (response provided by Council, DPE or the consultant as appropriate) and an online questionnaire to seek feedback from the community on the draft Flood Study and mitigation measures to be considered in the FRMS&P.
- Council is liaising with the SES to provide some flood education information on the Get Involved webpage during the community engagement period. This will include important links to the SES website, a Community Flood Safe brochure that has been specifically developed for the St Georges Basin floodplain and other flood safety information. This will help the community prepare for flood events, understand BoM flood warning services, stay informed during a flood event and ultimately improve the communities flood resilience and reduce their reliance on emergency services.

Drop-in sessions are not planned to be completed for the upcoming community engagement period. A pre-recorded presentation is expected to reach a wider audience as this allows property owners and residents to watch and view the information on the Get Involved webpage in their own time. The Get Involved webpage will permit the community to review, ask questions, provide feedback and statements about the Flood Study.

The ongoing COVID-19 situation also presents a number of challenges with regard to physical drop in sessions for the community.

Financial Implications

The St Georges Basin FRMS&P is 2/3 funded by DPE and 1/3 funded by Council. This funding has been approved under the NSW State Government 'Floodplain Management Program' on a 2:1 basis. Council's matching 1/3 contribution comes from the existing general Floodplain Management Program budget.

Any potential delays to the community engagement period could, however, prevent the project being completed prior to the end of the DPE funding term completion date and this could result in increased project costs for Council.

Policy Implications

The outcomes from the St Georges Basin Flood Study and Floodplain Risk Management Study & Plan Update will inform Council's Policy for Flood Planning Levels for the St Georges Basin Floodplain when this is reviewed this year.

All flood information completed in the St Georges Basin Flood Study and FRMS&P will be provided to the SES and then can be used to update the Shoalhaven Flood Emergency Sub Plan and other operational procedures accordingly as required.

CFM22.5 General Update on Flood Projects

HPERM Ref: D22/87945

Department: Environmental Services

Approver: James Ruprai, Director - City Development

Reason for Report

To provide the Central Floodplain Risk Management Committee (FRMC) with an update on various flood related projects in the Central FRMC region.

Recommendation (Item to be determined under delegated authority)

The Committee receive the General Update on Flood Projects report for information.

Options

1. The Committee receive the General Update on Flood Projects report for information.
Implications: Nil.
2. The Committee could choose to provide an alternative recommendation for consideration by Council.
Implications: Unknown.

Grant Funding

The 2022-23 NSW Department of Planning and Environment (DPE) Floodplain Management Program Grants round is now open and closes on 7 April 2022. Council will be applying for DPE grant funding for a number of projects across the Shoalhaven LGA.

Council has applied for grant funding through the Federal Government Preparing Australian Communities Local Stream Program. This program provides funding for projects that improve the resilience of communities associated with large-scale natural hazards. This program pays 100% of eligible project expenditure for non-infrastructure projects. The following flood investigations are included in the Shoalhaven Flood Preparation and Emergency Response for Community Resilience grant application:

- Lower Shoalhaven River & St Georges Basin Catchment Flood Evacuation Capability Assessment and Planning – Focusing on Greenwell Point, Orient Point and parts of Culburra Beach, Sussex Inlet and rural properties within the floodplains.
- Scoping study for an Intermittently Closed and Open Lakes and Lagoons (ICOLLs).
- Catchment Flash Flood Warning Network – Covering Lake Conjola, Burrill Lake and Lake Tabourie.
- Clyde River Flood Study and Floodplain Risk Management Study & Plan.
- Willinga Lake Flood Study and Floodplain Risk Management Study & Plan.
- Floodplain Project Officer – Temporary full time for three years.

It is understood that successful projects will be announced in the first half of 2022.

St Georges Basin Flood Forecast Model

Council has engaged a consultant to develop a flood forecast model using the WaterRIDE software for the St Georges Basin (and Lower Shoalhaven River) floodplain. This model will include all the design event results for the full range of events modelled in the Flood Study (20% AEP to PMF) and allow a surface to be interpolated from the library of flood layers based on a predicted or actual flood level at the Island Point Road water level gauge. This software allows roads and floor levels to be included, so when a surface is interpolated based on a predicted flood level, Council would have access to flood depth, level, hazard, which roads would be inundated, which floors would be inundated and potentially other information to assist with flood intelligence and evacuation.

This model will assist Council Flood Engineers to provide flood intelligence during St Georges Basin flood events. The models will be provided to the SES.