

NOTICE OF MEETING



BYRON SHIRE FLOODPLAIN RISK MANAGEMENT COMMITTEE MEETING

A Byron Shire Floodplain Risk Management Committee Meeting of Byron Shire Council
will be held as follows:

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 17 June 2021
Time	2.00pm

Phillip Holloway
Director Infrastructure Services

I2021/989
Distributed 10/06/21

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)

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.

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 Byron Shire Floodplain Risk Management
Committee Meeting..... 5

4. STAFF REPORTS

Infrastructure Services

- 4.1 Council's interaction and collaboration with the Belongil Drainage Union -
update and forward strategy 12
- 4.2 Waterway Management Policies..... 24
- 4.3 Update of the Belongil Creek Flood Model 29

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 Byron Shire Floodplain Risk Management Committee Meeting

Directorate: Infrastructure Services

Report Author: Shelley Flower, Infrastructure Planning Support Officer, IS - Works

File No: I2021/939

RECOMMENDATION:

That the minutes of the Byron Shire Floodplain Risk Management Committee Meeting held on 28 January 2021 be confirmed.

Attachments:

- 1 Minutes 28/01/2021 Byron Shire Floodplain Risk Management Committee, I2021/84 , page 8 [↓](#)

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

Report

The attachment to this report provides the minutes of the Byron Shire Floodplain Risk Management Committee Meeting of 28 January 2021 .

5

Report to Council

The minutes were reported to Council on 25 February 2021.

Comments

10

In accordance with the Committee Recommendations, Council resolved the following:

**Report No. 14.3 Report of the Byron Shire Floodplain Risk Management
Committee Meeting held on 28 January 2021**

File No: I2021/191

21-001 Resolved that Council notes the minutes of the Byron Shire Floodplain Risk Management Committee Meeting held on 28 January 2021. (Richardson/Hunter)

21-002 Resolved that Council adopts the following Committee Recommendation:

**Report No. 3.1 Adoption of Minutes from Previous Byron Shire Floodplain
Risk Management Committee Meeting**

File No: I2021/35

Committee Recommendation 3.1.1

That the minutes of the Byron Shire Floodplain Risk Management Committee Meeting held on 29 October 2020 be confirmed. (Richardson/Hunter)

21-003 Resolved that Council adopts the following Committee Recommendation:

**Report No. 4.1 Incident Management System Trial Event - East Coast Low -
11 December 2020**

File No: I2021/6

Committee Recommendation 4.1.1

That Council recognise the value of testing the new Incident Management System-(IMS) in its first month of operation (East Coast Low starting on 11 December 2020) and recognise system improvements made during the event, as presented in document

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

E2021/4075.

(Richardson/Hunter)

M I N U T E S O F M E E T I N G



**BYRON SHIRE FLOODPLAIN RISK
MANAGEMENT COMMITTEE MEETING**

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 28 January 2021
Time	2.00pm

*I2021/84
Distributed 21/01/21*

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

BYRON SHIRE FLOODPLAIN RISK MANAGEMENT COMMITTEE MEETING MINUTES 28 JANU

Minutes of the Byron Shire Floodplain Risk Management Committee Meeting held on Thursday, 28 January 2021

File No: I2021/84

PRESENT:

Councillors:	Cr Lyon and Cr Richardson, Cr Hunter (2.30pm)
Staff:	Scott Moffett (Flood and Drainage Engineer) James Flockton (Infrastructure Planning Coordinator) Evan Elford (Works Manager) Shelley Flower (Minute Taker)
Invited Members:	Peter Mair (SES), Martin Rose (DPI&E), Andrew Page (Cape Byron Marine Park), Karl Allen
Community:	Duncan Dey, Matthew Lambourne, Robyn Bolden, Rebecca Brewin
Visitors:	Chad Ellis (SES), Caroline Ortel (DPI&E)

Cr Lyon (Chair) opened the meeting at 2.09pm and acknowledged that the meeting was being held on Bundjalung Country.

APOLOGIES:

Toong Chin (DPI&E)
Cr J Hackett
Steve Keefe – resigned
Phil Holloway (Director Infrastructure Services)

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 Byron Shire Floodplain Risk

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

BYRON SHIRE FLOODPLAIN RISK MANAGEMENT COMMITTEE MEETING MINUTES 28 JANU

File No: Management Committee Meeting
I2021/35

Committee Recommendation:

That the minutes of the Byron Shire Floodplain Risk Management Committee Meeting held on 29 October 2020 be confirmed.

(Richardson/Lyon)

The recommendation was put to the vote and declared carried.

Note: The minutes of the meeting held on 29 October 2020 were noted, and the Committee Recommendations adopted by Council, at the Ordinary Meeting held on 26 November 2020.

BUSINESS ARISING FROM PREVIOUS MINUTES

There was no business arising from previous minutes.

STAFF REPORTS - INFRASTRUCTURE SERVICES

Report No. 4.1 Incident Management System Trial Event - East Coast Low - 11
December 2020
File No: I2021/6

Committee Recommendation:

That Council recognise the value of testing of the new Incident Management System (IMS) in its first month of operation (East Coast Low starting on 11 December 2020) and recognise system improvements made during the event, as presented in document E2021/4075.

(Dey/Lyon)

The recommendation was put to the vote and declared carried.

There being no further business the meeting concluded at 3.55pm.

STAFF REPORTS - INFRASTRUCTURE SERVICES

Report No. 4.1 Council's interaction and collaboration with the Belongil Drainage Union - update and forward strategy

Directorate: Infrastructure Services

Report Author: Scott Moffett, Drainage & Flood Engineer, IS - Works - Infrastructure Planning
James Flockton, Infrastructure Planning Coordinator

File No: I2021/176

Summary:

The Belongil Catchment Drainage Board (BCDB) is a Private Drainage Board or Drainage Union as defined in the Water Act.

The BCDU has approximately 150 members. Byron Shire Council is a member as it owns and operates land within the BCDU boundaries, but we are not on the Board of directors.

Council and the BCDU have had a long-standing financial agreement. This was acknowledged by Council in 2017 and for the years 2004 to 2017 (13 years) the BCDB received \$100,000. These funds were largely used to develop a Management Plan (approx. \$60,000 that has now been finalised) and drain maintenance works (approx. \$20,000 to date).

The Board of directors voted unanimously to charge BSC a yearly levy of \$10,000 as per the agreement between Council and the BCDB. Council currently has an outstanding invoice for the sum of \$30,000 for 2018 to 2020 inclusive.

Council recently attended a committee meeting with the BCDB with council officers Cameron Clark, James Flockton, Scott Moffett (officer now responsible for the collaboration and communications with the BCDB) and Cr Lyon.

Prior to this meeting Council officers sought direction from the Department of Planning, Industry and Environment (DPIE), Water Group in order to help staff understand more detail about how drainage Boards work. Staff asked a number of key questions to help understand where Council should go moving forward with the Board.

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

RECOMMENDATION:

The Byron Shire Floodplain Risk Management Committee recommends:-

That Council:-

- 5 1. **Supports the current collaboration and communication with the Belongil Catchment Drainage Board (BCDB).**
2. **Nominate a sitting Councillor for representation on the Belongil Catchment Drainage Board.**
- 10 3. **Request the Belongil Catchment Drainage Board consider an urgent review of their constitution to allow a Councillor to be a member of the Board prior to the Boards next election.**
4. **Pay the outstanding fees of \$30,000 (from Sewer Fund: GL 7205.27)**
- 15 5. **Will not pay any future payments to the Belongil Catchment Drainage Board until such time that the Belongil Catchment Drainage Board undertakes appropriate land audits and produces a robust and equitable ongoing financial management plan for the Board's area.**
- 20 6. **Offers assistance to the Belongil Catchment Drainage Board with the development of a fair and equitable rating financial model, including investigating access to Council's systems to rate members on the Board's behalf.**
- 25 7. **Includes a member of the Belongil Catchment Drainage Board as a key stakeholder the Council current Coastal Management Plan for the Belongil area.**
- 30 8. **Staff actively collaborate, support and engage with Southern Cross University for further research and investigations for the Belongil catchment**
- 35 9. **Note that the Byron Shire Floodplain Risk Management Committee support staff presenting the contents of this report to Council.**

Report

The Belongil Catchment Drainage Board (BCDB) is a Private Drainage Board or Drainage Union as defined in the Water Act.

5 The BCDU has approximately 150 members. Byron Shire Council is a member as it owns and operates land within the BCDU boundaries, but we are not on the Board of directors.

10 Council and the BCDU have had a long-standing financial agreement. This was acknowledged by Council in 2017 and for the years 2004 to 2017 (13 years) the BCDB received \$100,000. These funds were largely used to develop a Management Plan (approx. \$60,000 that has now been finalised) and drain maintenance works (approx. \$20,000 to date).

The Board of directors voted unanimously to charge BSC a yearly levy of \$10,000 as per the agreement between Council and the BCDB. Council currently has an outstanding invoice for the sum of \$30,000 for 2018 to 2020 inclusive.

15 Council recently attended a committee meeting with the BCDB with council officers Cameron Clark, James Flockton, Scott Moffett (officer now responsible for the collaboration and communications with the BCDB) and Cr Lyon.

20 Prior to this meeting Council officers sought direction from the Department of Planning, Industry and Environment (DPIE), Water Group in order to help staff understand more detail about how drainage Boards work. Staff asked a number of key questions to help understand where Council should go moving forward with the Board.

Below is a summary of questions and responses received:

General statement from DPIE- Details of the Minister's functions with respect to private drainage Boards

25 Drainage unions were established under the *Drainage Act 1939*, which was later consolidated with the *Water Management Act 2000* (WM 2000).

30 The purpose of constituting drainage unions was to provide for the drainage of land on which water accumulated (either permanently or occasionally) due to the absence of sufficient natural or artificial drainage, flood prevention works, or works to mitigate the effect of tides (*Drainage Act 1939*, s 8).

The Minister has a limited role with respect to private drainage Boards

35 Private drainage Boards are independent, landholder-run corporations. Each Board is comprised of directors elected by landholders within the drainage district. Boards may levy rates to fund their operations. Each Board is responsible for fixing, assessing and levying such rates.

The only means of dissolving a private drainage Board is by a petition to the Governor from at least a third of the landholders within the drainage district.

Under the WMA 2000, the Minister has only limited functions in relation to private drainage Boards. In particular, the Minister has no oversight role and has no obligations or responsibilities to provide assistance to these Boards.

5 Governance of private drainage Boards

The provisions of the WMA 2000 relating to private drainage Boards do not provide any powers for the Minister to become involved in the day to day affairs of a Board. The majority of powers are given to the private drainage Board. A private drainage Board is a corporation under the corporate name by which it was constituted (s 200 WMA 2000)

Overview of relevant provisions of the legislation

15 The WMA 2000 provides for the appointment and election of directors (s201), the functions of private drainage Boards (s202), powers of entry (s203), extension of drainage works (s204) and the amendment of boundaries of the drainage district (s 205). It also prescribes requirements for the fixing and levying of rates (s 206).
20 Part 5 and Part 6 of the Water Management (General) Regulation 2018 (WMR) contains provisions relating to private drainage Boards, including in relation to the conduct of elections, quorum for a private drainage Board and finance.

An election of directors of a private drainage Board must be held every 3 years (cl 92(1) WMR). A person is entitled to vote in an election of directors of a private drainage Board if
25 the person is the owner of land within the drainage district of that Board (cl 61(1) WMR).

The Minister's functions with respect to private drainage Boards

The Minister's role is very limited under Part 3 of Chapter 4. The only functions the Minister has in relation to PDBs are to:

- 30 • appoint a director if any Crown lands are included in a private drainage Board's district (s201(2) WMA 2000)
- cause notice of an application for the amendment of the boundaries of the drainage district to be published in the authorised manner (s205(3) WMA 2000)
- 35 • consider any objections and recommend (or recommend modification) of an application for amendment to the boundaries (s205(5) WMA 2000)
- notify the approval of the Governor and particulars of the alteration made in the boundaries in the Gazette (s205(6) WMA 2000)
- approve the manner in which the private drainage Board publishes their accounts (s218(2) WMA 2000).

40

DPIE response to Council's questions

1. Can the Belongil Drainage Board amend their catchment area?

Yes. The WMA 2000 provides for the amendment of boundaries of the drainage district (s205) and for extension of drainage works (s204).

5 The Board will need to ensure they have met the requirements outlined in the relevant section of the WMA 2000.

2. If the catchment can be amended, is there a process to follow?

10 The Board will need to put in an application according to the process specified in section 205 of the WMA 2000:

The Water Management Act 2000

Section 205 Amendment of boundaries

- 15 (1) *The boundaries of a drainage district may from time to time, on application by the private drainage Board, be amended by the Governor.*
- (2) *Any such application must contain particulars of the lands proposed to be added to or excised from the drainage district, and that have or are capable of being increased in value or that have decreased in value respectively by reason of the operations of the private drainage Board.*
- 20 (3) *The Minister must cause notice of any such application to be published in the authorised manner.*
- (4) *The notice must—*
- (a) *give particulars of the lands proposed to be added to or excised from the drainage district, and*
- 25 (b) *appoint a time (not being earlier than 8 weeks after the date of publication of the notice) and place at which objections may be lodged.*
- (5) *After expiration of the appointed time and on consideration of any objection lodged the Minister may recommend and the Governor may approve an application with such modification, if any, as the Minister, on investigation, may recommend.*
- 30 (6) *The approval of the Governor, and particulars of the alterations made in the boundaries of the drainage district, must be notified by the Minister in the Gazette.*
- (7) *As from the date of publication of such notification, the boundaries of the drainage district are taken to be altered accordingly.*
- 35

3. Does the Belongil Drainage Board have the ability to pressure Council about issues outside of their catchment area?

40 A drainage Board is not limited in the issues which they can raise with their relevant council, but has no particular standing other than as a community member.

It is up to the Council to determine how to respond to any such pressure.

4. If the Board wanted to redesign the drainage systems in their catchment, what process should be followed?

The WMA 2000 outlines the functions of private drainage Boards in s202, which includes constructing, altering or extending drainage works in the drainage district. This could include redesigning the drainage works.

s202 Functions of private drainage Boards

(1) A private drainage Board has the following functions—

(c) to construct, alter, or extend any drainage works in accordance with any authority and consent given under this Part.

The extension of drainage works is also subject to s204. If s204 is relevant because drainage works were being extended, then a majority vote at a general meeting (with the minimum number of members) is required to authorise the extension of drainage works.

s204 Extension of drainage works

(2) A private drainage Board is to carry out such extensions of drainage works as are authorised by a majority of votes cast at a general meeting at which a quorum is present.

5. The drainage Board have prepared a Plan of Management; do all landowners in the catchment need to approve it? Do we need to approve it noting we are a landowner in the catchment?

Private drainage Boards are responsible for the preparation, review and implementation of management programs for their drainage district (s202(1)(a)).

The Board is composed of directors who are elected by the landholders within the drainage district. Clause 61 of the Water Management (General) Regulation 2018 details the persons eligible to vote.

If Council have any concerns regarding the plan of management and as a landholder within the district, it is recommended that these concerns be raised with the drainage Board.

The WMA 2000 does not indicate that such a plan of management would require approval by all landholders. This is contrasted with s204 which provides that extensions to drainage works require a majority member vote and not the approval of all.

If the plan of management includes aspects which would require a development consent there may be other approval requirements whereby council is the determining authority.

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

- 5 6. Council has an Opening Strategy for the mouth of the catchment (the mouth is outside what we believe to be the Boards catchment area) – it is an ICOLL. We are happy with the strategy and it has a happy medium of environmental awareness and draining for the Board. However, the Board would like to see it revisited. What should we do?

This is a matter for Council, not the Department. Also see the response to item 4.

- 10 7. The Board want a comprehensive and independent flood study prepared (they do not appear to trust ours) – What should we do?

This is a matter for Council, not the Department. Also see response to item 4.

- 15 8. The Board requested we change our sewer discharge points and ideally move our sewer discharge points out of the catchment. Our discharge is fully approved – What should we do?

This is a matter for Council, not the Department. We would suggest Council seek its own legal advice on this.

- 20 9. Belongil Creek is a Crown waterway. Council does not have any jurisdiction over it without licenses and in our opinion are not required to remove or manage blockages and silt under any legislation. Are we correct? Who is responsible?

25 Crown land is owned by the State and managed by a different area of the Department. Generally, if Council does not own the land, we would anticipate that they have no obligation to manage it.

30 However, we would suggest Council also follow this issue up. Enquiries can be made at: 1300 886 235

35 See: <https://www.industry.nsw.gov.au/lands/what-we-do/management>
https://www.lawsociety.com.au/sites/default/files/2019-09/LS3148_Policy_RuralIssues-factsheet_CrownLand.pdf

- 40 10. The Board requested we redesign and upgrade a culvert under our road, our opinion is the culvert is suitable for its current use – what should we do?

This is a matter for Council, not the Department.

- 45 11. Does the Drainage Board have authority to come into council operated lands which have a drainage management plan or program for i.e. industrial estate and undertake drainage maintenance? Does their right of entry legislation trump ours?

Section 203 of the WMA 2000 provides authority for the drainage Board or persons duly authorised by the Board to enter land within or outside its drainage district; however, this is only permissible for the purposes of undertaking the functions for which the Board is responsible for.

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

In exercising this right, if any damage occurs to land the drainage Board is responsible for fully compensating the landholder. The right of the drainage Board to enter land does not extinguish the right of others.

12. Costs, fees and charges. Should Council be paying for this service (as it says they can collect fees and charges. Is that from land owners? Do other Councils pay Drainage Boards?

Section 202 of the WMA 2000 provides the drainage Board the power to create a levy and collect rates. This relates to the landholders within the drainage district. Therefore, if Council is a landholder they may be liable to pay a levy. The Department cannot comment on the levies paid by members of other drainage Boards.

13. Who is responsible if there is an incident WHS or environmental incident. Tree removal without approvals. They are not deemed a council subcontractor so how does that work if they are on our land? Who holds this risk?

The WMA 2000 does not deal with WHS related matters or environmental incidents. Accordingly, this is not a matter for the Department. We note our understanding is that tree removal is generally a Council matter.

14. Is there any other MOU's out there between councils and drainage Boards?

DPIE does not have oversight of MOUs between councils and drainage Boards. If Council is seeking advice on this issue we suggest contacting other councils which have drainage Boards within their local government area.

15. How many drainage Boards are out there today, are they still relevant?

Yes, drainage Boards are still relevant and all details pertaining to them are described in Part 3 of the WMA 2000. Drainage Boards may only be dissolved by a petition to the Governor from at least a third of the landholders within the drainage district.

16. Do drainage Boards trump Councils drainage management programs. We understand they have powers but do they exceed ours?

We are not aware of how the powers of drainage Boards interact with Council's drainage management programs. We suggest seeking independent legal advice.

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

5 17. Can we have some clarity around the Board's and Council's powers roles and responsibilities. Noting Council is a landowner in the area we believe to be the Board's catchment.

Division 2 of the WMA 2000 details the role and responsibilities of the drainage Board. Council as a landholder may attend general meetings, vote on issues, pay a levy and participate in votes for the directors.

10 We are not aware of the interaction between Boards and Council's powers, roles and responsibilities. We suggest seeking independent legal advice.

15 18. The drainage Board are pushing Council to increase our reuse out of the catchment. We also want to increase our reuse, but can only do so much – how should we handle this?

This is a matter for Council, not the Department.

Recent BCDB meeting

20 A range of issues were discussed at the recent BCDB meeting. These are summarised below:

- SEE officers gave an overview of West Byron developments and a current status update. This was greatly appreciated by the Board.
- 25 • The BCDB requested that a member of the Board be invited to be on the current Coastal Management Plan Council committee.
- 30 • Manager of Utilities gave an update on the additional Flow Path servicing the West Byron Sewerage Treatment Plant (STP), which was greatly appreciated by the Board. Council Utilities department have committed to the following:
 - Providing water quality and discharge volumes in the online portal so it is easily available to everyone. Target date for this is end of financial year.
 - A graphic showing all flow paths, monitoring points and discharge points (Total Water Balance schematic)
 - 35 ○ Operation Manual will get reported to Council via the Water, Waste and Sewer Advisory Committee.
 - Ensure all existing ground water bores are being monitored. The BCDB has given full permissions for Council to access their private properties for operation and maintenance of the ground water bores as was allowed
 - 40 historically
 - Discuss recycled water strategy at a future meeting
- 45 • Funding of the Board was discussed. Currently, Council is the only member of the union that is levied / rated (\$10,000/calendar year). Council asked why this was the case as it appears to be unequitable. The BCDB believe that the flows from the current STP discharge are taking all the capacity of the Union drain and this prevents the drain from performing its intended purpose. Officers explained that

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

further transparency of flow data and the future operation of the additional flow will improve the understanding and capacity of Union drain operations. It was also noted that all surrounding land still receives a benefit from the Union Drain.

- 5
- It was noted that BCDB have no way of rating their members. (Post meeting discussions have highlighted that we currently rate residents on behalf of Rous Water, therefore, there appears to no reason why we could not do the same for the BCDB).
- 10
- The BCDB noted it doesn't require a formal Memorandum of Understanding (MOU) with Council, just a commitment to fund the drainage Board. Staff noted that an equitable way to levy all members was needed as well as processes and funding to ensure the BCDB area is managed fairly and appropriately.
- 15
- It was agreed that it would be valuable to have a Councillor to nominate to sit on the BCDB however, election are two years away.
- 20
- It was agreed that some specialist research involvement from the local Southern Cross University for specialist agricultural research/water balance topics would be beneficial.

In summary the meeting was productive with the BCDB unanimous in working more closely with Council for the better overall understanding and management of the BCDB area.

- 25
- It is noted that if the BCDB are to be sustainable into the future they will need a robust and equitable ongoing financial management plan that can support annual maintenance and future catchment improvements (revegetation, culvert improvements etc).

- 30
- They cannot continue to solely rely upon Council funds. This needs to be the Board's highest priority and due to the complexities in creating such a plan Council should support the Board in achieving this goal.

Key issues

Council has land within the BCDB area; we are a paying member of the BCDB. It is essential Council plays a key role on the BCDB to ensure the area is managed appropriately and ensure our funds are being spent equitably.

Options

Not applicable

Next steps

Please refer to recommendations.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	L2	CSP Strategy	L3	DP Action	L4	OP Activity
Community Objective 2: We cultivate and celebrate our diverse cultures, lifestyle and sense of community	2.2	Support access to a wide range of services and activities that contribute to the wellbeing of all members of the Byron Shire community	2.2.1	Develop and maintain collaborative relationships with government, sector and community	2.2.1.2	Participate in community planning to inform decision making, build capacity and develop a shared responsibility for actions with the community.
Community Objective 2: We cultivate and celebrate our diverse cultures, lifestyle and sense of community	2.2	Support access to a wide range of services and activities that contribute to the wellbeing of all members of the Byron Shire community	2.2.1	Develop and maintain collaborative relationships with government, sector and community	2.2.1.1	Support local interagency and regional network development to improve collaboration and inclusion

Recent Resolutions

Not applicable

5 Legal/Statutory/Policy Considerations

Drainage Act 1939, which was later consolidated with the Water Management Act 2000 (WM 2000).

Financial Considerations

Pay the outstanding fees of \$30,000 (from Sewer Fund: GL 7205.27)

Consultation and Engagement

Who was consulted?	How did consultation occur? e.g. email, verbal etc	Comments/Feedback
BCDB	Formal meeting and ongoing email and verbal correspondence	Working well, ongoing
DPIE	Verbal and email	Comments/feedback received and contained in this report
Phil Warner	Verbal	Historic management information of the BCDB
Phillip Holloway	Verbal and email	Ongoing updates
Southern Cross University	Verbal and Email	Ongoing support and research
Council various internal departments	Verbal, emails, workshops	West Byron STP and Coastal Management Plan

Report No. 4.2 Waterway Management Policies

Directorate: Infrastructure Services

Report Author: Scott Moffett, Drainage & Flood Engineer, IS - Works -
Infrastructure Planning

5 **File No:** I2021/533

Summary:

Operational Plan action 3.1.1.16 is for Council to commence development of waterway management policies for waterways with relevant state agencies and the Byron Shire Floodplain Risk Management Committee.

10

RECOMMENDATION:

15 **That the Byron Shire Floodplain Risk Management Committee be presented with draft waterway management policies at the next scheduled meeting.**

Report

Operational Plan action 3.1.1.16 is for Council to commence development of waterway management policies for waterways with relevant state agencies and the Byron Shire Floodplain Risk Management Committee.

- 5 The first stage of the development of this policy is to discuss with the Byron Shire Floodplain Risk Management Committee Council's responsibilities and to plan the initial scope of works.

10 Waterways in the shire can come in various forms; Crown Waterways, Waterways in private land, drainage lines in private land, drainage easements or drains under the control of a drainage board or union. As an example, Belongil Creek is a Crown waterway, as shown in figure 1. Further figure 2 provides examples of Crown waterways to the north of the shire.

Council obligation to manage waterways will be dependent upon the land status, if we own it or have control over it will be part of the determination of Council's obligations.

- 15 To help understand Crown Waterways, Council officers have held recent discussions staff from the Department of Planning, Industry and Environment (DPIE), Water Group.

DPIE Water has made the following comment:

20 Crown land is owned by the State and managed by a different area of the Department. Generally, if Council does not own the land, we would anticipate that they have no obligation to manage it.

See: <https://www.industry.nsw.gov.au/lands/what-we-do/management>

https://www.lawsociety.com.au/sites/default/files/2019-09/LS3148_Policy_RuralIssues-factsheet_CrownLand.pdf

Staff currently consider Council's obligations as follows:

- 25
- Crown Waterway = No obligations
 - Waterways in private land = No obligations
 - Drainage lines in private land = No obligations
 - Drainage easements draining Council water = Council obliged to manage (if over private land the owner is still obliged to keep the easement free of blockages.
- 30 Drains under the control of a drainage board or union = No obligations



Figure 1 - Map of Belongil Creek, Byron Bay

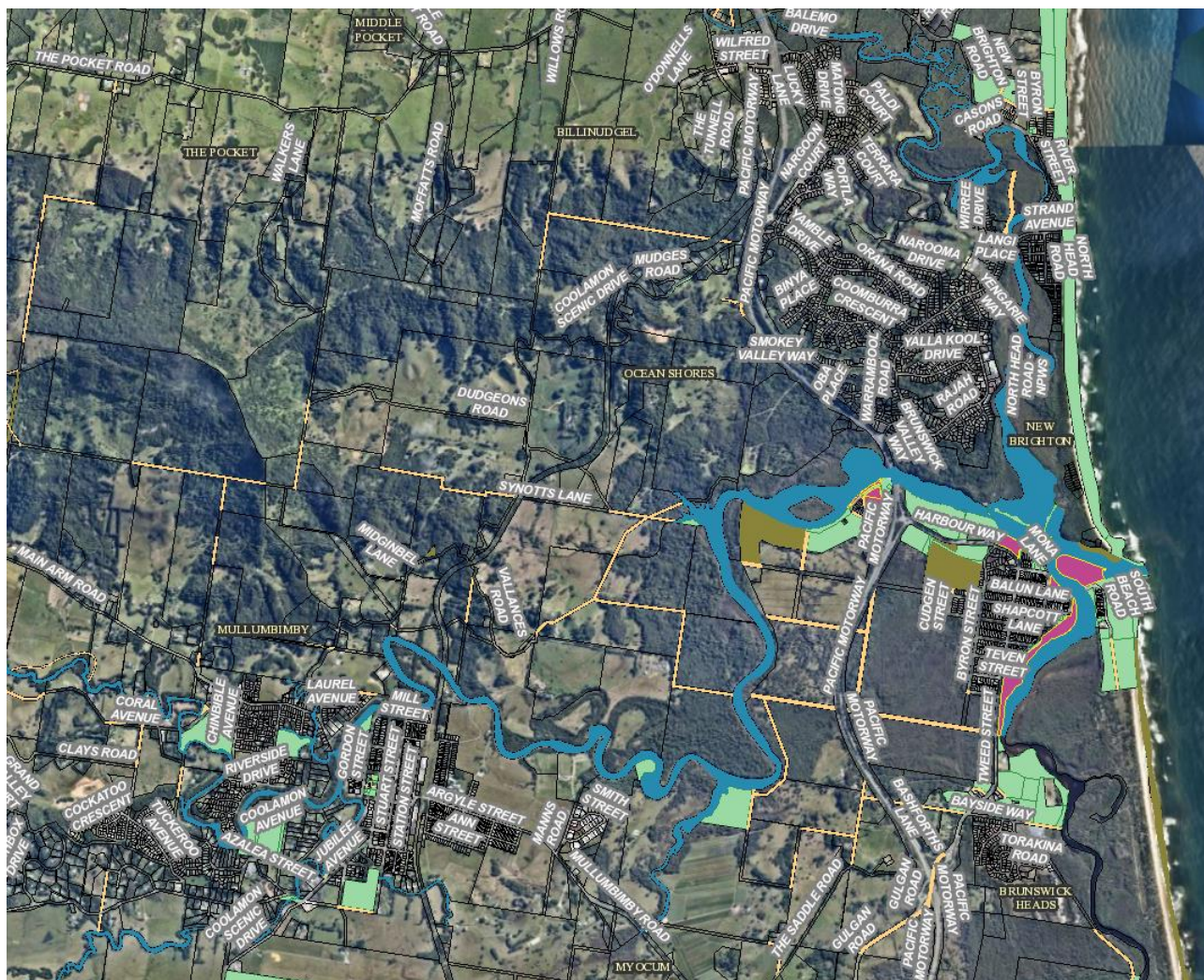


Figure 2 - Map of north Byron Shire showing Crown waterways

Key issues

5 Not applicable

Options

Not applicable

Next steps

10 The contents of this report will be discussed at the meeting and further guidance from the committee for the drafting of a policy is sort.

The drafting of a draft policy statement will also be discussed with the committee.

Staff will hold further discussions with relevant state agencies and Council's legal team.

Staff will then develop and draft policy document for further discussion with the committee at the next meeting.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	L2	CSP Strategy	L3	DP Action	L4	OP Activity
Community Objective 3: We protect and enhance our natural environment	3.1	Partner to protect and enhance our biodiversity, ecosystems and ecology	3.1.1	Protect and enhance our natural environment and biodiversity	3.1.1.16	Commence development of waterway management policies for waterways with relevant state agencies and the Byron Shire Floodplain Risk Management Committee

5 Recent Resolutions

Not applicable

Legal/Statutory/Policy Considerations

Not applicable

Financial Considerations

10 Not applicable

Consultation and Engagement

Not applicable

Report No. 4.3 Update of the Belongil Creek Flood Model

Directorate: Infrastructure Services

Report Author: Scott Moffett, Drainage & Flood Engineer, IS - Works - Infrastructure Planning

5 **File No:** I2021/856

Summary:

10 The Belongil Creek hydraulic model was originally developed by SMEC for the Belongil Creek Flood Study (2009) using TUFLOW. The model was based on a digital elevation model (DEM) of terrain captured from aerial photogrammetry that was available at the time.

During the subsequent floodplain risk management study, BMT reviewed and revised the model, however, revisions did not include an update to the underlying model terrain. The revised model was adopted by Council in 2015 and, to date, has been used as the basis for development assessments in the catchment.

15 Given the ongoing works and operations within the Belongil Creek Catchment the Belongil Creek Flood Study is now due to be updated and a timely opportunity has presented itself to Council as detailed below.

20

RECOMMENDATION:

That the Committee supports the following:

1. **The proposal of Council partnering with BMT (and their Client) to update the Belongil Creek Flood Study if at a 2 to 1 funding ratio, private to Council.**
- 25 2. **The Belongil Creek Flood Study Update being run through Council's Floodplain Management Committee.**
- 30 3. **Council allocating \$30,000 in the 2021/22 Operational Budget under Emergency Services to fund the Belongil Creek Flood Study Update.**
4. **Council entering into a contract to commence the Belongil Creek Flood Study Update, prior to budget adoption, under the agreement that Council will not be invoiced its share of the costs until the last third of the project is underway.**

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.3

Attachments:

- 1 Belongil Creek Hydraulic Model Update-BMT-Proposal, E2021/65073 , page 34 [↓](#)

5

Report

The Belongil Creek hydraulic model was originally developed by SMEC for the Belongil Creek Flood Study (2009) using TUFLOW. The model was based on a digital elevation model (DEM) of terrain captured from aerial photogrammetry that was available at the time.

During the subsequent floodplain risk management study, BMT reviewed and revised the model, however, revisions did not include an update to the underlying model terrain. The revised model was adopted by Council in 2015 and, to date, has been used as the basis for development assessments in the catchment.

BMT have been working with the owners of a large land holding in Byron Bay (Denis and John Cornell through their company Hammock Investments Pty Ltd), located between the North Coast Railway, Kendall Street, Ewingsdale Road and Belongil Creek for several years.

This project is aiming to realise a long-held ambition of the landowners to achieve a high-quality 'Byron compatible' development on their land. While some of their land has development potential, much of it is designated as 'flood way' (and other environmental values) in Council's planning studies, which imposes some development restrictions.

The owners realise that much of the land is not developable and would like to retain the majority of the land in its natural form, or even an enhanced environmental condition. However, to achieve a realistic development outcome more developable land is required.

The site is currently proposed as an Investigation area in Council's Residential Study. This study is currently with the State Government awaiting peer review. However initial responses regarding this land is a preference to delay any decision on this land until after Council has completed the Coastal Hazard Study that is currently underway as part of the CMP process. This is expected to be complete in early 2022.

Flooding is also a concern at the site and staff have been engaging in discussion with BMT regarding the planning proposal for the development with regard to flood risk. Given the sensitive nature of flooding in the area it would be ideal to use an updated flood model for this assessment with the results forming part of the Planning Proposal for rezoning.

Typically, Council would fund the updating of a broad scale catchment flood model, with support from State Government, at a time that suites Council's funding availability. BMT have recently advised staff a willingness from the land-owners to in-principle contribute towards a flood model update, and they have agreed for BMT to draft a potential technical scope for the model update, this is provided as Attachment 1 (E2021/65073). A motivation of this scope is to finalise the definition of flood levels and development constraints across the site while the Coastal Hazard Study is completed.

A broad scale catchment flood model update project would need to be run through Council's Floodplain Management Committee with involvement of DPIE to ensure due process has been applied, culminating in the study seeking adoption by Council. The involvement of the Floodplain Management Committee and DPIE in this process will have

BYRON SHIRE COUNCIL

STAFF REPORTS - INFRASTRUCTURE SERVICES

4.3

consequences on timelines and the review process but will ultimately pave the way for model adoption.

Key issues

- 5 Consideration will be given at the contractual agreement stage of the project inception that by entering a jointly funded study that Council are not in any way bound to the study nor outcomes of the study.

Options

Not applicable

Next steps

- 10 Council and the Committee begin project inception discussions with BMT.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	L2	CSP Strategy	L3	DP Action	L4	OP Activity
Community Objective 1: We have infrastructure, transport and services which meet our expectations	1.1	Provide a road network which is safe, accessible and maintained to an acceptable level of service	1.1.6	Provide stormwater infrastructure to manage flood mitigation, social and environmental outcomes	1.1.6.1	Review 10 year stormwater levy program

Recent Resolutions

- 15 Not applicable

Legal/Statutory/Policy Considerations

Not applicable

Financial Considerations

The project requires \$30 000 from Council. This has been created in the 2021/22 FY under GL 3045.13 pending Council approval in June 2020.

Consultation and Engagement

Who was consulted?	How did consultation occur? e.g. email, verbal etc.	Comments/Feedback
Phillip Holloway, Evan Elford	Verbal	Supported if funding is likely to be adopted by Council (i.e. it can be funded within the operational budget) and appropriate contract conditions are in place.
Council Executive Team	Formal Executive Team report	Supported



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Our Ref: : L.B23632.004.docx

18 February 2021

General Manager
Byron Shire Council
PO Box 219
Mullumbimby NSW 2482

Attention: Mark Arnold

Dear Mark

RE: UPDATE OF THE BELONGIL CREEK HYDRAULIC MODEL

Context

BMT have been working with the owners of a large land holding in Byron Bay (Denis and John Cornell through their company Hammock Investments Pty Ltd), located between the North Coast Railway, Kendall Street, Ewingsdale Road and Belongil Creek for several years.

This project is aiming to realise a long-held ambition of the landowners to achieve a high-quality 'Byron compatible' development on their land. While some of their land has development potential, much of it is designated as 'flood way' (and other environmental values) in Council's planning studies, which imposes some development restrictions. The owners realise that much of the land is not developable and would like to retain the majority of the land in its natural form, or even an enhanced environmental condition. However, to achieve a realistic development outcome more land is required. Council has agreed to engage in a Planning Proposal for the development of the site which will establish a planning pathway for development of the land and ultimately facilitate rezoning of the land by Council. Ideally, assessments forming the Planning Proposal will be finalised by September 2021, but it is recognised that this timeline is not fixed and can be extended if required.

The potential to upgrade the Belongil set of flood models was raised by Council as BMT were commencing a flooding assessment for the site to improve development outcomes. BMT agree with the need to upgrade the flood models and have participated in subsequent discussions and meetings with Council and the landowners separately, to outline a pathway under which this may occur. The possibility of a joint flood investigation funded by the landowners and Council was raised by Council. The landowners do not seek to influence outcomes, they simply wish to complete a definitive assessment using the latest tools (if possible) to fully understand development opportunities and constraints on their land and to enable them to 'move on' after many decades of deliberation.

Key considerations to progress the model upgrade study include: the scope of model upgrades, project funding and project timelines. This letter focusses on the technical scope of the model upgrade. Other key considerations will need to be resolved by Council and the landowner to establish a mutually agreeable pathway forward. The study will be overseen by a flood risk management committee, which will include representatives from the local community and DPIE and will enable formal adoption of the updated flood model and flood levels.

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Technical Considerations

The Belongil Creek hydraulic model was originally developed by SMEC for the Belongil Creek Flood Study (2009) using TUFLOW. The model was based on a digital elevation model (DEM) of terrain captured from aerial photogrammetry that was available at the time. During the subsequent floodplain risk management study, BMT reviewed and revised the model. Model revisions did not include an update to the underlying model terrain. The revised model was adopted by Council in 2015, and, to date, has been used as the basis for development assessments in the catchment.

Over the last few years, BMT has been involved in assessing several proposed developments in the catchment. Through this work, additional topographic data has been collected. This data includes:

- A 1m resolution DEM based on LiDAR survey captured in 2010 (collected by LPI); and
- Surveys of drains in the regional wetland surrounding Union Drain (collected by BMT/AWC as part of a project for Council that assessed an alternative outflow arrangement for the Byron STP).

BMT updated the adopted model by including the 2010 LiDAR and refining the grid resolution to 5 m during a detailed, local catchment, flood assessment for a proposed development near Ewingsdale Road. Results from the updated model showed a significant reduction in flood levels, with peak 1% AEP flood levels typically 200mm lower in the regional wetland compared to the adopted model. This reduction has been attributed to differences between the photogrammetry and LiDAR terrain elevations. It is suspected that the LiDAR data has captured the ground levels more accurately, and that the photogrammetry data is more representative of the vegetation canopy elevation. This demonstrates how sensitive the model is to adopted ground levels. Improvements to the underlying software used to simulate floods (TUFLOW) will also improve the efficiency, utility and accuracy of the model (discussed in more detail in the next section).

Proposed Scope of Work

It is proposed that the following updates are made:

- Data collection tasks include:
 - Council to collate the most contemporary LiDAR survey data available (if other than the LPI 2010 dataset available on ELVIS);
 - Council to provide other topographic or survey data that may be suitable for use, such as existing site surveys for West Byron lands, Ewingsdale Road, Byron Bay Bypass, Byron CBD, Butler Street drain, etc. Accessing these data will be a key consideration and a discussion point in the inception meeting;
 - Council to provide as-built surveys for key infrastructure such as Ewingsdale Road roundabouts, Cavanbah centre, Byron Bay Bypass and other selected developments. Final confirmation of key infrastructure to be included in the model will be required before commencing the development of the design event flood models;
 - Council to provide key hydraulic structure data (excluding urban stormwater pipe data) as may be available from as-built drawings or from surveys that Council are willing to collect as part of the study;
 - Council to provide downstream boundary assumptions (ocean levels during floods). Our fee does not include the undertaking of a joint probability analysis, but such an analysis can be undertaken as a fee variation if deemed necessary – to be discussed at the inception meeting; and

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- Council to collect flood mark data for two historic events for model calibration. The adopted events will be confirmed with the committee at the inception meeting. Floods in May 2016 and March 2017 are two candidates, and some data has already been collected for these events through other studies undertaken by BMT for Council. It may be prudent to seek additional flood mark data from the community before embarking on model calibration. It is assumed that Council will manage the collection and survey of additional flood marks.
- Proposed hydrologic modelling updates include:
 - Changing software from XP-RAFTS to either WBNM or URBS (The vendor of XP-RAFTS no longer support this software);
 - Refine the resolution of sub-catchment boundaries (i.e. use smaller sub-catchment areas) to facilitate future development assessments;
 - Review the hydrologic model and update the design storms to Australian Rainfall and Runoff (ARR 2019) guidelines;
 - Undertake a rainfall frequency analysis for up to four rainfall gauges in the catchment;
 - Compare intensity-duration-frequency curves between ARR 2019, ARR 1987 and the rainfall frequency analysis at the selected rainfall gauges; and
 - Compare flows from the modelling to that estimated by the ARR 2019 regional flood frequency estimation model.
 - It has been assumed that there are no suitable gauges for undertaking a flood frequency analysis due to the tidal influence on gauge levels.
- Proposed hydraulic model updates include:
 - Utilise the latest version of TUFLOW's fixed grid solver. This includes the HPC solver (which reduces simulation times), the QPC solver (which enables a finer spatial resolution to be used where needed) and the SGS solver (which can improve model accuracy when there are narrow drains and channels);
 - A revision of the spatial resolution of the model. The current resolution is 10m, and this may be reduced where needed to improve the model resolution surrounding narrow flow areas, such as drains or in the river channel, or in areas where future developments are likely to be investigated;
 - Removing 1D channels from the model (provided a small enough spatial resolution is utilised);
 - Update the model terrain data to utilise the most contemporary LiDAR data available and other survey data identified from the data collection tasks;
 - Council to confirm what development has been built since the LiDAR survey or will be built soon and should be included in the model. It is assumed that Council will provide ground elevation models of new or approved development;
 - Update the model to include an upgraded Ewingsdale Road scenario, if available. The model will be set up with a scenario to run the existing road or the upgraded road case. The road upgrade will be based on the latest design information available at the time of the model update.
 - Up to two calibration events will be simulated in versions of the hydraulic model that estimate the development footprint at the time of the historic flood. We have allowed for up to five model revisions to improve the calibration. BMT may seek a fee variation if further improvements are requested by Council.

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- Note that our proposed scope excludes inclusion of trunk and street drainage that is additional to that already in the current model. Additional trunk drainage can be added to the model at a later date, in a separate project, if required.
 - Some flow crosses between the Simpson Creek and Belongil Creek catchment along the coastal dunes. It is assumed that these cross-catchment flows are negligible for the purposes of this study.
- Proposed flood simulations include:
 - Calibrate the model to one or two events, to be confirmed by the committee at the inception meeting. Candidate floods include May 2016 and March 2017. The choice of events may be dependent on availability and suitability of data to assist in the calibration;
 - Simulate eight event magnitudes using ARR 2019 (39%, 18%, 10%, 5%, 2%, 1%, 0.05% AEP and PMF); and
 - Simulate the 2050 and 2100 climate for the 1% AEP change scenarios including rainfall increase and increase in sea level rises (as adopted by Council).
- Proposed reporting and mapping are as follows:
 - A technical memo outlining the calibration results to be submitted to Council before the Calibration committee meeting.
 - Provision of a single draft report after completing the design flood event modelling in PDF format for review by Council and the committee. We have allowed for one round of collated feedback in our fee. Collation of responses is important to weed out duplicates and frivolous comments.
 - Provision of a single final report in PDF format, in which we will include our responses to any comments received from Council and committee on the draft report.
 - Provide updated maps that depict the flood risk management layers: Floodway, Flood Storage and Flood Fringe; and
 - Mapping of flood levels, depth, velocities, velocity depth and hazard (i.e. ZAEM) for a range of events. This data is more easily managed and viewed in digital format using a GIS and will be provided as such to Council. Flood mapping requirements for the reporting will be discussed with Council, as it is anticipated that maps may not be required for all events and metrics.
- The three proposed meetings and review stages include (to be hosted and chaired by Council):
 - Inception meeting for introductions and to discuss the project scope, including which events to adopt for calibration, the approach for the catchment/ocean joint probability and whether any additional survey is needed.
 - Model calibration meeting to present the model calibration results; and
 - Design event modelling meeting to present the final model results.
- Provision of all model input and model results in GIS format to Council.

Funding

The land-owners willingness to contribute has been established in-principle, and they have agreed for BMT to draft a potential technical scope for the model update (this letter), with a motivation to finalise the definition of flood levels and development constraints across the site.

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Process and Timing

On Council's advice, we understand that this project would be run through Council's Floodplain Management Committee with involvement of DPIE to ensure due process has been applied. The involvement of the Floodplain Management Committee and DPIE will have consequences on timelines and the review process but will ultimately pave the way for model adoption.

BMT have proven experience and capacity to update the Belongil Creek Flood Study. We expect that the technical model updates could be completed in over several months following either the provision of all required data or following contract signing (whichever is later). The full study timeline could take longer due to the need to secure funding (determined by Council internally), arrange meetings and to receive reviews and acceptance at the review stages.

Fee

It is understood that DPIE funds all flood studies in NSW to the ratio of 2 to 1. As such it is not in Council's interests to fund a study to more than this ratio whether supported by private interest or State Government. As a guideline for budgeting purposes only, BMT estimates that the scope of work to update the Belongil Creek Flood Model/Study to best practice including coverage of key catchment developments is approximately \$90,000 excluding GST. A breakdown of the costs is found in Table-1.

This would provide a fee of around \$60,000 for private funding and \$30,000 for Council. It is our understanding that Council can direct procure this project through existing panels for this amount.

Table-1 Approximate Cost for the Scope of Works

Item	Approximate Cost (ex GST)
Data collation and review	\$7,500
Hydrologic modelling	\$22,000
Hydraulic modelling	\$31,000
Data Processing and Reporting	\$12,000
Preparation for and attendance at three meetings	\$10,000
Handover to Council	\$2,500
Project Management	\$5,000
Total	\$90,000

Council can engage BMT through the local government procurement panel (current) subject to Council's own internal procurement practice. Please note that these panels are being reassessed currently and BMT are expected to remain on the panel (submission provided for assessment). Regardless of the form of procurement, BMT will require confirmation of the contractual conditions that the project is intended to be completed under.

Please contact the undersigned on 0447 172 123 if you have any questions.

Yours Faithfully
BMT



Damion Cavanagh
Principal

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