

NOTICE OF MEETING



EXTRAORDINARY WATER, WASTE AND SEWER ADVISORY COMMITTEE MEETING

An Extraordinary Water, Waste and Sewer Advisory Committee Meeting of Byron Shire Council will be held as follows:

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 20 May 2021
Time	9:00am

Phillip Holloway
Director Infrastructure Services

*12021/799
Distributed 13/05/21*

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

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Infrastructure Services

4.1 Mullumbimby Future Water Strategy 13

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Adoption of Minutes of Previous Meetings

Directorate: Infrastructure Services

5 **Report Author:** Dominika Tomanek, Executive Assistant Infrastructure Services

File No: I2021/793

10 **RECOMMENDATION:**

That the minutes of the Water, Waste and Sewer Advisory Committee Meeting held on 29 April 2021 be confirmed.

15 **Attachments:**

1 Minutes 29/04/2021 Water, Waste and Sewer Advisory Committee, I2021/651 , page 7 [↓](#)

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

Report

The attachment to this report provides the minutes of the Water, Waste and Sewer Advisory Committee Meeting of 29 April 2021 .

5

Report to Council

The minutes will be reported to Council on 27 May 2021.

10

MINUTES OF MEETING



**WATER, WASTE AND SEWER ADVISORY
COMMITTEE MEETING**

Venue Conference Room, Station Street, Mullumbimby
Date Thursday, 29 April 2021
Time 9.00am

*I2021/651
Distributed 22/04/21*

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

WATER, WASTE AND SEWER ADVISORY COMMITTEE MEETING MINUTES 29 APRIL 2021

Minutes of the Water, Waste and Sewer Advisory Committee Meeting held on Thursday, 29 April 2021

File No: I2021/651

PRESENT: Cr C Coorey, Cr M Lyon and Cr S Ndiaye

Staff: Phil Holloway (Director Infrastructure Services)

Cameron Clark (Manager Utilities)

Dean Baulch (Principal Engineer System Planning)

Jason Stanley (System Planning Officer)

Danielle Hanigan (Team Leader Resource Recovery)

Sarah Child (Education Project Officer)

Dominika Tomanek (Minute Taker)

Community: Madeleine Green, Duncan Dey, Col Draper and Ben Fawcett

Visitor: Robyn Campbell, Hydrosphere Consulting

Cr Ndiaye (Chair) opened the meeting at 9:10 am and acknowledged that the meeting was being held on Bundjalung Country.

APOLOGIES:

David Fligelman

Mary Gardner

DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

Madelaine Green declared a pecuniary/non-pecuniary interest . The nature of the interest being that she resides 1 km away from Resource Recovery Centre.

PROCEDURAL MOTION

Committee Recommendation:

That Council change the order of business to deal with Reports 4.2 and 4.6, 4.4 first on the Agenda.

(Ndiaye/Dey)

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ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1 - ATTACHMENT 1

BYRON SHIRE COUNCIL

WATER, WASTE AND SEWER ADVISORY COMMITTEE MEETING MINUTES 29 APRIL 2021

The recommendation was put to the vote and declared carried.

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Adoption of Minutes from Previous Meeting
File No: I2021/631

Committee Recommendation:

That the minutes of the Water, Waste and Sewer Advisory Committee Meeting held on 18 February 2021 be confirmed.

(Green/Coorey)

The recommendation was put to the vote and declared carried.

BUSINESS ARISING FROM PREVIOUS MINUTES

There was no business arising from previous minutes.

STAFF REPORTS - INFRASTRUCTURE SERVICES

Report No. 4.2 Mullumbimby Future Water Strategy
File No: I2021/478

Committee Recommendation:

That this matter be further discussed at an extraordinary meeting of WWSC to be held in May 2021.

(Ndiaye/Coorey)

The recommendation was put to the vote and declared carried.

Report No. 4.6 Item for discussion - HuskeeSwap
File No: I2021/617

Committee Recommendation:

That Council notes that the Committee supports initiatives to reduce single use containers.

(Green/Dey)

The recommendation was put to the vote and declared carried

BYRON SHIRE COUNCIL

WATER, WASTE AND SEWER ADVISORY COMMITTEE MEETING MINUTES 29 APRIL 2021

Report No. 4.4 Ocean Shores transfer to Brunswick Valley STP
File No: I2021/615

Committee Recommendation:

1. That Council notes the report.
2. The Committee have a workshop on this matter in May 2021.

(Coorey/Lyon)

The recommendation was put to the vote and declared carried.

Motion: Deferral of not discussed items

Committee Recommendation:

That Council notes that the Committee's agenda in April included reports on several major issues and that reports 4.1, 4.3 and 4.5 will carry over to the next ordinary Committee meeting (in August).

(Dey/Ndiaye)

The recommendation was put to the vote and declared carried.

Report No. 4.1 DA water
File No: I2021/565

That this item to be included in the next Agenda of WWSC.

Report No. 4.3 Byron STP Condition 9 Additional Load - Quarterly Report
File No: I2021/605

That this item to be included in the next Agenda of WWSC.

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WATER, WASTE AND SEWER ADVISORY COMMITTEE MEETING MINUTES 29 APRIL 2021

Report No. 4.5 Inflow and Infiltration - April 2021 update
File No: I2021/616

That this item to be included in the next Agenda of WWSC.

Committee Recommendation:

That the committee thanks Michael Matthews for his service to both Council and the community and wish him all the best for the future.

(Ndiaye/Coorey)

There being no further business the meeting concluded at 11:05 am.

STAFF REPORTS - INFRASTRUCTURE SERVICES

Report No. 4.1 Mullumbimby Future Water Strategy

Directorate: Infrastructure Services

5 **Report Author:** Dean Baulch, Principal Engineer, Systems Planning

File No: I2021/781

Summary:

The purpose of this report is to support the continuation of discussion from 29 April 2021 meeting.

10 To provide information relating to the development of a Future Water Supply Strategy for Mullumbimby.

The key issue to be addressed is water supply security (servicing existing customers and future development over the long-term). The current demand for water in Mullumbimby is virtually equal to the current secure yield at Laverty's Gap weir and if the worst drought on record were to repeat, the current supply may not meet demand.

15 Based on the Triple Bottom Line assessment, the most favourable scenario is a permanent connection to the Rous regional supply.

20

RECOMMENDATION:

That the Committee:-

1. **Note the report.**
2. **Endorses further consideration of the recommended strategic direction to facilitate the start of detailed works.**

25

Report

Information/Background:

5 Mullumbimby’s drinking water supply is extracted from Lavery’s Gap Weir on Wilsons
 Creek where it flows by gravity through an open channel, via a mountain tunnel to the
 Mullumbimby water treatment plant (WTP) as shown on Figure 1. The channel and tunnel
 were the original raw water transfer system to the Mullumbimby Hydroelectric Power
 Station (now decommissioned). The Mullumbimby water supply currently services
 10 approximately 1,620 residential properties (3,200 people) and 270 non-residential
 properties. Approximately 13 customers along Wilsons Creek Road are connected to the
 trunk main from the WTP.

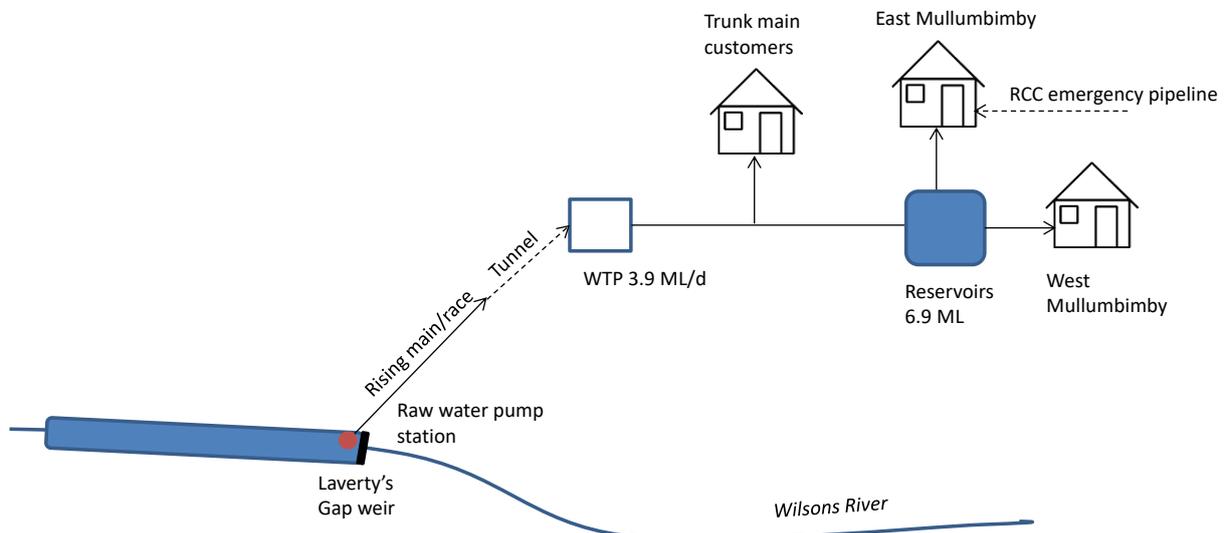


Figure 1: Mullumbimby water supply schematic diagram

15 Council engaged Hydrosphere Consulting to prepare a long-term strategy for Mullumbimby
 water supply. The key issue to be addressed is water supply security (servicing existing
 customers and future development over the long-term). The current demand for water in
 Mullumbimby is virtually equal to the current secure yield at Lavery’s Gap weir and if the
 worst drought on record were to repeat, the current supply may not meet demand. Council
 has prepared growth management strategies for urban land, rural areas and
 20 business/industrial land which include future development that will increase the demand
 for potable water.

The water supply strategy also considers the following issues:

- Asset condition and performance – the raw water channel (constructed in the
 25 1920s) has exceeded its useful life. The likelihood of failure is considered very high
 and on the basis that structural failure of the channel would cause extended
 interruption to the water supply, upgrading the raw water transfer system is a high
 priority. In addition the Mullumbimby WTP (originally constructed in 1940), requires

replacement in the next five to ten years and short-term options are required to ensure removal of pathogens.

- 5 • Drought management and emergency response – restrictions are currently introduced based on the water level and inflows in Lavery’s Gap weir. Restrictions were imposed in Mullumbimby during the droughts of 2002/03, 2006/07 and 2019/20. An emergency supply from the Rous County Council regional supply can supply water to lower elevation areas (East Mullumbimby) and was used for 30 days during summer 2019/20.
- 10 • Heritage considerations and management obligations – Lavery’s Gap weir and the channel (as part of the Mullumbimby hydro-electric power complex) are listed on the NSW State Heritage Register. In addition, the WTP has heritage significance at a local level.

15 This report assesses the security of the existing water supply system based on its secure yield and current demand. Options to increase the supply and reduce potable water demand have been identified and analysed and scenarios have been developed using combinations of the options to achieve the required secure yield in 2050. An integrated water cycle management (IWCM) approach has been used to compare options and scenarios and identify the preferred supply augmentation scenario to meet the predicted 2050 demand. Community consultation has not yet been undertaken.

20 **Secure Yield, Forecast Demand and Water Supply Security**

‘Secure yield’ is defined as the highest annual water demand that can be supplied from a water supply headworks system whilst water restrictions are not too severe, not too frequent, nor of excessive duration.

25 Mullumbimby’s demand for water is increasing with development and population growth. The dry year unrestricted demand at 2050 is predicted to be 754 ML/a (assuming water loss management activities are successful). Water security is achieved if the secure yield of a water supply is at least equal to the unrestricted dry year annual demand. The RCC emergency supply pipeline improves the water supply security although it is not intended to operate any more than an emergency supply. The supply is currently secure until 2027
30 (Figure 2). The supply deficit at 2050 (excluding the emergency supply) will be 377 ML/a.

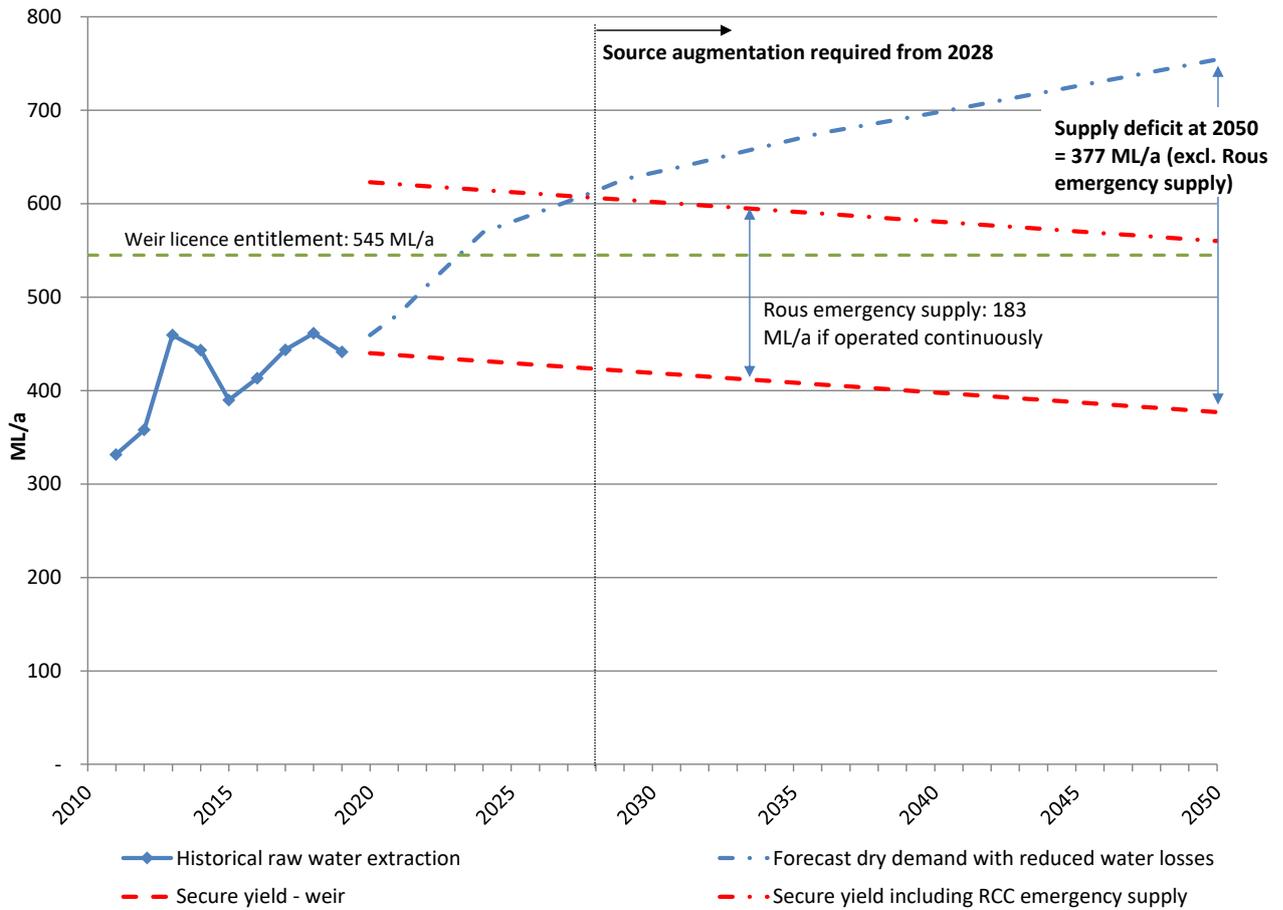


Figure 2: Comparison of forecast raw water demand, licence entitlement and secure yield

Water Supply Options and Supply Scenarios

5 A coarse screening assessment considered a range of new as well as previously identified supply options. Short listed supply-side options are:

- Option 1. Do nothing (assessed for comparison with augmentation options).
- Option 2. Raising Laverly’s Gap weir.
- Option 3. Off-stream storage.
- 10 Option 4. A: Permanent connection to the RCC bulk water supply.
B: Emergency connection to regional supply
- Option 5. Groundwater.

15 Following a detailed assessment of these options, raising Laverly’s Gap weir was not recommended for further consideration due to the minimal yield benefit, high costs and significant impacts on terrestrial biodiversity as well as downstream users and the environment.

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STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

Four supply scenarios have been developed from combinations of the options that achieve the required secure yield over the long-term (754 ML/a, an increase of 377 ML/a at 2050). All scenarios include the following common components in the short-term:

- 5 • Continued use of the weir supply and WTP in the short term: the existing supply from Laverty's Gap weir and the existing WTP will continue to operate and supply treated water to Mullumbimby in the interim until a long-term solution is implemented and operational.
- 10 • WTP short-term upgrades: required to ensure microbially safe water is delivered to residents. Short-term upgrades are recommended regardless of the water supply augmentation scenario adopted. These are estimated to cost \$380,000 (plus BSC labour) over the next 5 years.
- 15 • Continued operation of the RCC emergency supply pipeline: The emergency supply pipeline currently connects the Mullumbimby reticulation network to the RCC regional supply with up to 0.5 ML/d distributed the low-lying areas of the town during emergency drought situations. This pipeline should be extended so that an emergency supply is available for all customers.
- 20 • Increase in the licence extraction limit: Consultation with DPIE to secure an increase in the weir licence extraction limit which may be required from 2023 depending on the reliance on the supply from the weir (refer Figure 2).
- 25 • Review and update of the drought management plan based on the performance of the supply and drought management regime during the recent drought.
- Urban effluent reuse opportunities: Continued identification and implementation of urban effluent reuse opportunities to reduce future demand and the yield deficit.
- Implementation of the demand management measures in the Regional Demand Management Plan (including rainwater tank rebates, the Sustainable Water Partner Program, smart metering and community engagement and education) and Council's water loss reduction measures.
- 30 • Continued investigation of the long-term impacts of climate change on the secure yield of the weir supply.
- Rehabilitation of the raw water channel to preserve heritage. The heritage requirements are being identified in a separate study.

The potentially feasible water supply augmentation scenarios are:

- 35 • **Scenario S1:** Base case: Improvements to the existing raw water transfer system, a new WTP and full emergency connection to the regional supply. This scenario would provide secure yield until 2025. Beyond 2025, restrictions may become more frequent and/or more severe.

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4.1

- 5 • **Scenario S2:** Off-stream storage: Improvements to the existing raw water transfer system, full emergency connection to the regional supply, construction of a 200 ML off-stream storage and new WTP. High stream flows (excluding an allowance for environmental flows) would be transferred to fill the off-stream storage. Water from the storage will be treated at the new WTP and transferred to the township.
- 10 • **Scenario S3:** Permanent connection to RCC regional supply: In this scenario, Mullumbimby would form part of the RCC regional supply network with bulk treated water transferred to the Azalea Street reservoirs. The weir supply and Mullumbimby WTP would become redundant but may be retained by RCC to supplement the regional supply.
- 15 • **Scenario S4:** Supplementary groundwater: Improvements to the existing raw water transfer system, a new WTP, full emergency connection to the regional supply, construction of new bores to the south-west of Mullumbimby with raw water transferred either to the weir or a new groundwater WTP for treatment and distribution to the township.

The preferred option to upgrade the raw water transfer system from the weir (for S1, S2 and S4) is a new pumped pressure pipeline following an alternative alignment that is independent of the channel. The channel would be retained and operate in combination with the new main.

- 20 The four scenarios have been compared using a triple-bottom-line (TBL) assessment which assesses each scenario based on environmental, social and economic criteria. Based on the TBL assessment, the most favourable scenario is S3: Permanent connection to RCC regional supply (Figure 3). This scenario would have minimal environmental impact and the security of supply is only limited by the security of the RCC regional supply. The net present value of this scenario is similar to S1: Base Case and S4: Groundwater and significantly less than S2: Off-stream storage. There are significant cost savings in avoiding the need to replace the Mullumbimby WTP and upgrade the weir supply.
- 25

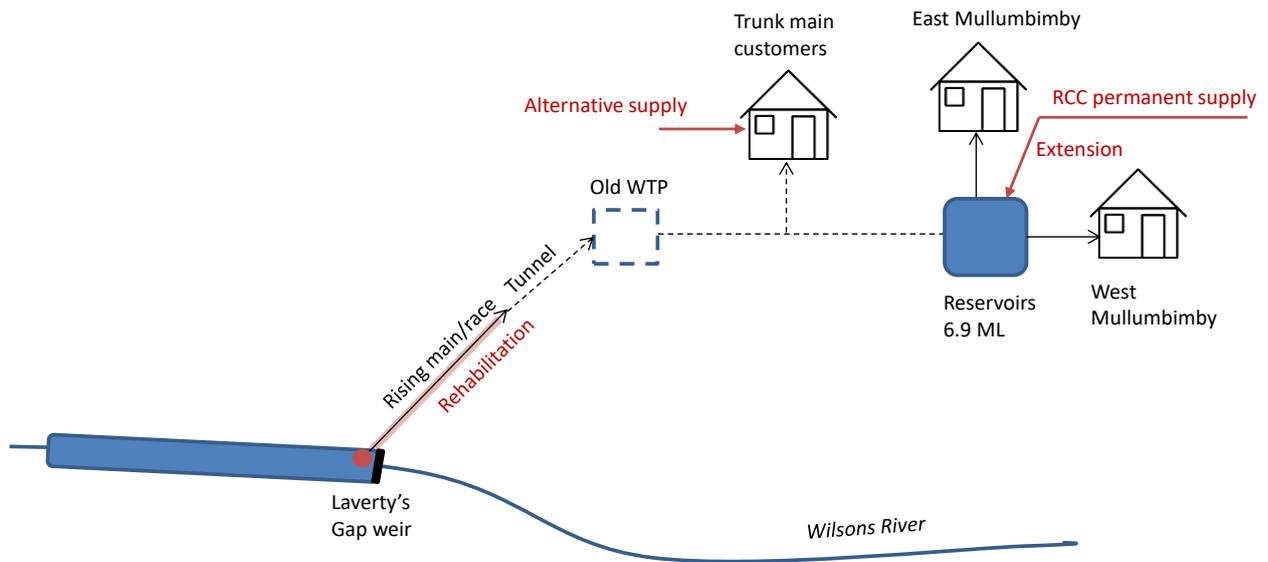


Figure 3: Preferred scenario S3: Permanent connection to RCC regional supply

Implementation Plan

5 The following actions are required to progress the implementation of the preferred scenario:

- Construction of extension to emergency pipeline.
 - Consultation with the community.
 - Consultation with Rous County Council.
- 10 • Consultation with state government agencies (e.g. NRAR, DPI – Fisheries).

Other actions being conducted in parallel are:

- Statement of heritage impact.
 - Urban water metabolism project (review and update of recycled water management strategy).
- 15 • Short-term upgrades to the WTP.

Risk:

A number of risk ratings are likely to increase if an adequate water supply for the future is not secured, these relate to the Strategic Risk Register and the following references:

- 1. Asset and Infrastructure Management
- 2. Essential Services
- 5. Urban Planning

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STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

Consultation:

Who was consulted?	How did consultation occur? e.g. email, verbal etc	Comments/Feedback
Council Executive Team	ET Report and Presentation	Executive Team was updated on progress March 2021
SEE Key Planners	Meeting/Verbal	To be updated on progress after ET informed.

Communicate to: Utilities Team to continue formal communication with SEE Planners (Residential Strategy) and Executive Team.

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	1.5	Provide continuous urban water and sewerage services within the Shire	1.5.3	Ensure Water Supply is maintained in accordance with NSW Health guidelines	1.5.3.2	Implement recommendations from Mullumbimby water supply security investigations and upgrade

5 Financial Considerations

Current budget and planned budgets from 30 year Capital works plan shown as follows:

Year	WATER FUND - CAPITAL WORKS PROGRAM AND FUNDING	Budget
2020/2021	Mullum water supply security investigations and upgrade	\$235,200
2020/2021	Mullumbimby WTP - Renewals	\$50,000
2021/22	Mullum water supply security upgrade	\$2,000,000
2021/22	Mullumbimby WTP - Renewals	\$15,000
2022/23	Mullumbimby WTP - Renewals	\$589,800
2025/26	Mullumbimby WTP - Renewals	\$35,500
2026/27	Mullumbimby WTP - Renewals	\$74,000
2026/27	Mullum water supply security upgrade	\$2,449,000
TOTAL		\$5,448,500

Based on the Triple Bottom Line assessment, the most favourable scenario is: S3: Permanent connection to RCC regional supply. There are significant cost savings in avoiding the need to replace the Mullumbimby WTP and upgrade the weir supply.

Comments and Questions from Committee Members

5 It generally makes sense that the permanent connection to the Rous regional supply will be more economic than the alternatives put forward (including those not short-listed). The consolidation of potable water production, and the minimal additional infrastructure required to tap into it, makes environmental and economic sense at this very small scale. Interconnection of water supply systems in SEQ (between the Gold Coast, Brisbane and the Sunshine Coast) gave by far the best “bang for buck” in terms of system resilience of all the emergency bulk water supply works undertaken during the millennium drought.
10 (David Fligelman)

Rous's recent regional strategy had massive feedback towards diversifying sources, reducing demand, and minimising ecological footprints. We should be writing that community input into our own local strategy.

15 Does the costing of urban re-use options recognise the benefit (cost offset) of reducing sewage discharge to the Brunswick River? If so, please show us the numbers.

That Council:

20 1. Firm up the management options including by recognising the environmental impacts of each option, inclusive of impacts of Rous's own options (for options that use Rous water);

Consider demand management options such as the following;

(a) An existing water user sharing an 'entitlement' / allocation with a future water user if both agree to fit and use rainwater tanks (minimum 10k Litres); and

(b) New villages that are off-grid (including for water, sewer and electricity);

25 Aim to produce a draft strategy to go to a Strategic Planning Workshop with a view to putting the strategy on public exhibition;

2. Why does the Off-stream Storage option require extension of the Rous supply to all customers? Or alternatively, how big a storage is required for Mullumbimby to remain independent of the Rous supply?

30 3. This crosses over into the groundwater option, which could provide the diversity that brings resilience.

4. Please quantify system leakages between weir and the WTP.

35 This could be done through analysis of draw-down for pumped and gravity extraction from the off-take pond, on sequential days of each over a low or steady rainfall period for example.

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STAFF REPORTS - INFRASTRUCTURE SERVICES

4.1

Please bring the expansion info, such as where is new urban housing proposed that will access the water supply system (Duncan Dey).

Scenario S1

- 5 a. Why is a new alignment of the pumped main from the weir to the existing WTP considered necessary? This would be more expensive than following the existing channel and tunnel.
- b. What are the particular difficulties with maintaining the existing WTP to achieve present, and future, quality standards?
- 10 c. Is Council assuming that expenditure of \$764,300 over 6 years, on Mullum WTP renewals (\$380,000 + BSC labour, if I understand correctly), as shown under Financial Considerations, is necessary whatever strategy/scenario is adopted?
- 15 d. Am I correct in understanding that the 'full emergency connection to the regional supply' would cost \$2 million, as in the table on page 44, shown for 2021/22?
- e. What does the 'Mullum water supply security upgrade' item shown for \$2.449 million in 2026/27 include?

Scenario S2:

- 20 f. What is the estimated capital cost of a new 200ML off-stream storage reservoir?
- g. What is the estimated capital cost of a new WTP, located between the new storage and the Azalea St reservoir.

Scenario S3:

- 25 h. What is the best estimated annual cost, to Council, of water supplied by RCC to meet full demand as in Fig 2, say in 2028 (610ML/a) and 2050 (760ML/a)? How does this compare with Council's estimate of the current annual cost (per 100ML/a) of treated water supplied by Laverty's Gap to Mullum?
- 30 i. If this scenario is adopted, and the Laverty's Gap weir, transfer system and WTP are transferred to RCC ownership, would the value of these assets be reflected in a reduction of the cost of water supplied to Mullum?

Scenario S4:

- 35 j. What is Council's best estimated cost of groundwater bore(s) to supply, say, 100ML/a?

Demand management, including wastewater reuse:

- k. What percentage reduction in annual demand is built in to the demand forecasts shown in Figure 2, between 2025 and 2050? (Ben Fawcett).