











KOMITI NGĀ WAI HANGARUA WELLINGTON WATER COMMITTEE

6 December 2023

Order Paper for the meeting to be held in the Hutt City Council Chambers, 2nd Floor, 30 Laings Road, Lower Hutt on:

Monday 11 December 2023 commencing at 11:00am

The meeting will be live streamed on Hutt City Council's Facebook page.

Members of the public wishing to speak to items on the agenda are asked to contact democraticservices@huttcity.govt.nz

Membership

Mayor A Baker Porirua City Council
Mayor C Barry (Chair) Hutt City Council
Cr T Brown Wellington City Council

Mayor M Connelly South Wairarapa District Council Cr R Connelly (Deputy Chair) Greater Wellington Regional Council

Mayor W Guppy Upper Hutt City Council H Modlik Te Rūnanga O Toa Rangatira

L Rauhina-August Taranaki Whānui ki Te Upoko o Te Ika

A Rutene Ngāti Kahungunu ki Wairarapa Tamaki Nui a Rua

Treaty Settlement Trust

R Faulkner Te Rūnanga O Toa Rangatira (Alternate)

Cr C Kirk-Burnnand Greater Wellington Regional Council (Alternate)

Cr R Leggett Porirua City Council (Alternate)

Deputy Mayor M Sadler-Futter South Wairarapa District Council (Alternate)

Deputy Mayor H Swales Upper Hutt City Council (Alternate)

K Tamanui Taranaki Whānui ki Te Upoko o Te Ika (Alternate)

Cr G Tupou Hutt City Council (Alternate)

Mayor T Whanau Wellington City Council (Alternate)

N Hooper Member, Māori Standing Committee, SWDC

(Observer)

For the dates and times of Hutt City Council Meetings please visit www.huttcity.govt.nz

Wellington Water Committee Terms of Reference

Purpose

The Wellington Water Committee ("the Committee") is established to:

- Provide governance and leadership across issues which are related to the planning, delivery and management of water services to communities serviced by Wellington Water Limited;
- Provide governance oversight of Wellington Water Limited, including by exhibiting good governance practice;
- Provide a forum for the representatives of Wellington Water Limited's shareholders and mana whenua to meet, discuss and co-ordinate on relevant issues and, through their representatives, to exercise their powers; and
- Strive for consistency across all client councils so all customers receive a similar level of service.

Status

The Committee is, for the purposes of the Local Government Act 2002, a joint committee of the Lower Hutt City Council, Porirua City Council, Upper Hutt City Council, Wellington City Council, South Wairarapa District Council and the Wellington Regional Council.

Specific responsibilities

The Committee's responsibilities are:

Governance oversight responsibilities

Shareholder and mana whenua governance oversight of Wellington Water Limited and of the network infrastructure for the delivery of bulk water, water reticulation, wastewater and stormwater services in the geographical areas of Wellington Water Limited's operations, including by:

- Receiving and considering the half-yearly and annual reports of Wellington Water Limited;
- Receiving and considering such other information from Wellington Water Limited as the Committee may request on behalf of the parties to the Shareholders and Partnership Agreement and/or receive from time to time:
- Undertaking performance and other monitoring of Wellington Water Limited;
- Considering and providing recommendations to the parties to the Shareholders and Partnership Agreement on proposals from Wellington Water Limited;
- Providing co-ordinated feedback, and recommendations as needed, on any matters requested by
 Wellington Water Limited or any of the parties to the Shareholders and Partnership Agreement;
- Providing recommendations to the parties to the Shareholders and Partnership Agreement regarding regional studies which the Shareholders need to be cognisant of;
- Providing recommendations to the parties to the Shareholders and Partnership Agreement regarding water conservation;
- Agreeing the annual Letter of Expectation to Wellington Water Limited;

- Receiving, considering and providing agreed feedback and recommendations to Wellington Water Limited on its draft statement of intent;
- Receiving, considering and providing recommendations to the parties to the Shareholders and Partnership Agreement regarding Wellington Water Limited's final statement of intent.
- Agreeing when Shareholder meetings, or resolutions in lieu of Shareholder meetings, are required, without prejudice to Shareholder and Board rights to call meetings under Wellington Water Limited's constitution and:
- Seeking and interviewing candidates for Wellington Water Limited's Board as needed and recommending to the holders of Class A Shares appointments and/or removals of directors of Wellington Water Limited;
- Recommending the remuneration of directors of Wellington Water Limited;
- Monitoring the performance of the Board of Wellington Water Limited; and
- Providing recommendations to the parties to the Shareholders and Partnership Agreement regarding changes to these terms of reference, the Shareholders and Partnership Agreement and the constitution of Wellington Water Limited.

Membership

The membership of the Committee will be as specified in the Shareholders and Partnership Agreement. With the exception of the Committee Members nominated by the Mana Whenua Partners Entities, each appointee must be an elected member of the appointing Shareholder.

Chairperson

The Chairperson and Deputy Chairperson will be elected by the Committee once all Committee members have been appointed.

Quorum

Subject to the below for Committee meetings to appoint directors of Wellington Water Limited, for a meeting of the Committee to have a quorum, a majority of Committee Members, or their appointed Alternates, must be present, and the number making up the majority must include at least an equal number of Shareholder appointed Committee Members as MWPE nominated Committee Members.

Where the Committee is providing a forum for the Shareholders to meet and exercise their powers in relation to Wellington Water Limited, the requirements of Wellington Water Limited's constitution will prevail.

Clause 11.3 of the company's constitution provides that Directors shall be appointed and removed by the unanimous resolution of the Shareholders holding Class A Shares. For this matter the quorum for the Committee meeting is therefore attendance by all Committee Members (or their Alternates) for the holders of the Class A Shares.

Alternates

Each Committee Member appointed to the Committee must have an Alternate.

Other Shareholder attendee

Each Shareholder-appointed elected member Committee member will be entitled to invite an officer attendee to Committee meetings, provided however that the additional attendee will not have any voting rights on the Committee.

Decision-making

The Committee will strive to make all decisions by consensus.

In the event that a consensus on a particular matter before the Committee is not able to be reached, each Committee Member has a deliberative vote. In the situation where there is an equality of votes cast on a matter, the Chairperson does not have a casting vote and therefore the matter subject to the vote is defeated and the status quo is preserved.

Other than for those matters for which the Committee has effective decision-making capacity through these Terms of Reference, each Shareholder retains its powers to make its own decisions on matters referred to it by the Committee and on matters specified in Part 1 of Schedule 2 to the Shareholders and Partnership Agreement (for clarity, this means that only Shareholders have voting rights in relation to the matters specified in Part 1 of Schedule 2).

Secretariat services

Unless otherwise agreed from time to time by all of the elected member Committee Members, the Council for which the Chairperson is an elected member will provide secretariat services to the Committee. The Chairperson will be responsible for managing the agenda at Committee meetings.

Standing Orders

The Standing Orders of the Council providing secretariat services to the Committee will apply to Committee meetings, subject to the provisions for meeting quorum and decision making as set out in these terms of reference taking precedence.

Remuneration

Each Shareholder will be responsible for remunerating the elected member Committee Member appointed by it to the Committee, and their Alternate, for any costs associated with those persons' membership on the Committee.

The Shareholders will also be responsible for remunerating (in equal shares) the Committee Members nominated by Mana Whenua Partner Entities, and their Alternates, and appointed to the Committee by the Shareholders, for any costs associated with those persons' membership on the Committee.

Administration

Reports to be considered by the Committee may be submitted by any of the Shareholders, any of the Mana Whenua Partner Entities, or Wellington Water Limited.

Duration of the Committee

In accordance with clause 30(7) of Schedule 7 to the Local Government Act 2002, the Committee is not deemed to be discharged following each triennial election.

Appendix Common delegations by Shareholders

Governance oversight responsibilities

□ Each Shareholder will delegate to the Committee the responsibilities and powers necessary to participate in and carry out the Committee's governance oversight responsibilities.

Shareholders' responsibilities

- ☐ Each Shareholder will delegate to its appointed elected member Committee Member and, in accordance with these terms of reference, that person's Alternate, all responsibilities and powers in relation to the agreement of:
 - when Shareholder meetings, or resolutions in lieu of Shareholder meetings, are required (without prejudice to Shareholder and Board rights to call meetings under Wellington Water Limited's constitution); and
 - o the appointment, removal and remuneration of Wellington Water Limited's directors.

KOMITI NGĀ WAI HANGARUA WELLINGTON WATER COMMITTEE

Meeting to be held in the Hutt City Council Chambers, 2nd Floor, 30 Laings Road, Lower Hutt

on

Monday 11 December 2023 commencing at 11:00 am

ORDER PAPER

PUBLIC BUSINESS

1. OPENING FORMALITIES - KARAKIA TIMATANGA

Whakataka te hau ki te uru Whakataka te hau ki te tonga Kia mākinakina ki uta Kia mātaratara ki tai E hī ake ana te atakura He tio, he huka, he hau hū Tīhei mauri ora.

Cease the winds from the west
Cease the winds from the south
Let the breeze blow over the land
Let the breeze blow over the ocean
Let the red-tipped dawn come with a
sharpened air.

A touch of frost, a promise of a glorious

day.

2. APOLOGIES

3. PUBLIC COMMENT

Generally up to 30 minutes is set aside for public comment (three minutes per speaker on items appearing on the agenda). Speakers may be asked questions on the matters they raise.

4. CONFLICT OF INTEREST DECLARATIONS

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have.

5. CHAIR'S STATEMENT

A verbal statement by the Chair.

6. THREE WATERS REFORMS - LEGISLATION AND PROGRAMME UPDATE

A verbal update by the Programme Director, Water Reform – Wellington Water Councils

7. MINUTES

	Meeting minutes Komiti Ngā Wai Hangarua Wellington Water Committee Komiti Ngā Wai Hangarua, 6 October 2023	9
8.	COMPANY AFFORDABLE WATER REFORM TRANSITION REPORT	
	Report No. WWC2023/5/399 by Wellington Water Limited	22
	CHAIR'S RECOMMENDATION:	
	'That the recommendation contained in the report be endorsed."	
9.	COMPANY AND GOVERNANCE UPDATE	
	Report No. WWC2023/5/400 by Wellington Water Limited	25
	CHAIR'S RECOMMENDATION:	
	'That the recommendation contained in the report be endorsed."	
10.	REGIONAL INVESTMENT 2024-34	
	Report No. WWC2023/5/401 by Wellington Water Limited	66
	CHAIR'S RECOMMENDATION:	
	'That the recommendations contained in the report be endorsed."	
11.	ACUTE WATER SHORTAGE RISK	
	Report No. WWC2023/5/402 by Wellington Water Limited	106
	CHAIR'S RECOMMENDATION:	
	'That the recommendation contained in the report be endorsed."	
12.	BROADER THEMES IDENTIFIED IN FLUORIDATION INQUIRY	
	Report No. WWC2023/5/403 by Wellington Water Limited	130
	CHAIR'S RECOMMENDATION:	
	'That the recommendations contained in the report be endorsed."	

13. <u>INFORMATION ITEMS</u>

a) Meeting Schedule 2024

Memorandum dated 22 November 2023 by the Head of Democratic Services

138

CHAIR'S RECOMMENDATION:

'That the recommendation contained in the memorandum be endorsed."

b) Wellington Water Committee Forward Programme 2024

Memorandum dated 3 November 2023 by the Democracy Advisor 140

CHAIR'S RECOMMENDATION:

'That the recommendation contained in the memorandum be endorsed."

14. QUESTIONS

With reference to section 32 of Standing Orders, before putting a question a member shall endeavour to obtain the information. Questions shall be concise and in writing and handed to the Chair prior to the commencement of the meeting.

15. CLOSING FORMALITIES - KARAKIA WHAKAMUTUNGA

Unuhia!
Unuhia i te uru-tapu-nui
Kia wātea, kia māmā
Te ngākau, te tinana, te
wairua i te ara takatū
Koia rā e Rongo
whakairihia ake ki runga
Kia wātea, kia wātea!
Ae rā, kua wātea!
Hau, pai mārire.

Release us from the supreme sacredness of our tasks
To be clear and free
in heart, body and soul in our continuing journey
Oh Rongo, raise these words up high
so that we be cleansed and be free,
Yes indeed, we are free!
Good and peaceful

Kathryn Stannard Head of Democratic Services Hutt City Council

KOMITI NGĀ WAI HANGARUA | WELLINGTON WATER COMMITTEE

Minutes of a meeting held in the Hutt City Council Chambers on Friday 6 October 2023 commencing at 10.00am

PRESENT: Mayor A Baker (PCC)

Mayor C Barry (HCC) (Chair)

Cr T Brown (WCC)

Mayor M Connelly (SWDC)

Cr R Connelly (GWRC) (Deputy Chair)

Mayor W Guppy (UHCC)

L Rauhina-August (Taranaki Whānui ki Te Upoko o Te Ika)

(via audio visual link)

J Smeaton, (Te Rūnunga O Toa Rangatira interim

representative)

APOLOGIES: A Rutene, H Modlik, R Faulkner

IN ATTENDANCE: Deputy Mayor H Swales, (Alternate, UHCC) (via audio

visual link)

W Walker, Chief Executive, PCC

D List, Programme Director, Water Reform – Wellington Water Councils (part meeting) G Swainson, Director, Asset Management and Operations, UHCC (via audio visual link) J McKibbin, Acting Chief Executive, WWL

J Alexander, Group Manager, Network Strategy and

Planning, WWL

T Harty, Acting Group Manager, Customer

Operations, WWL

M Ford, Chief Financial Officer, WWL H Raynor, Chief Digital Officer, WWL

F Clark, Head of Strategy, WWL

P Clarke, Tumuaki Māori, Principle Māori Advisor,

WWL

P Wells, Manager, Service Planning, WWL

N Crane, Principal Advisor, Chief Executive's Office,

WWL

V MacFarlane, Manager, Communications and

Community Engagement, WWL N Leggett, Chair, WWL Board B Bayfield, Member, WWL Board

P Dougherty, Member, WWL Board (via audio visual

link)

M Puketapu, Member, WWL Board (via audio visual

link)

L Southey, Member, WWL Board (via audio visual

link)

C Parish, Head of Mayor's Office, HCC A Doornebosch, Democracy Advisor, HCC

PUBLIC BUSINESS

1. OPENING FORMALITIES - KARAKIA TIMATANGA

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Cease the winds from the south
Let the breeze blow over the land
Let the breeze blow over the ocean
Let the red-tipped dawn come with a sharpened air.
A touch of frost, a promise of a glorious day.

The Chair welcomed J Smeaton representing H Modlik as interim representative for Te Rūnunga O Toa Rangatira.

The Chair highlighted that Wellington City Council had formally appointed Cr T Brown as their member representative on the Committee. Mayor T Whanau was the alternate representative. The Chair welcomed Cr Brown to the new role.

2. <u>APOLOGIES</u>

RESOLVED: (Mayor Barry/Cr Connelly)

Minute No. WWC 23401

"That the apologies received from A Rutene, H Modlik and R Faulkner be accepted and leave of absence be granted."

3. PUBLIC COMMENT

Comments are recorded under the item to which they relate.

4. CONFLICT OF INTEREST DECLARATIONS

There were no conflict of interest declarations.

5. <u>CHAIR'S STATEMENT</u>

The Chair read his statement attached as page 7 to the minutes.

6. MINUTES

RESOLVED: (Mayor Barry/Mayor Baker)

Minute No. WWC 23402

"That the minutes of the meetings of the Komiti Ngā Wai Hangarua | Wellington Water Committee held on Monday, 24 July 2023 and Thursday, 24 August 2023 be confirmed as a true and correct record."

THREE WATERS REFORMS - LEGISLATION AND PROGRAMME UPDATE

The Programme Director, Water Reform - Wellington Water Councils provided a presentation attached as pages 8-11 to the minutes.

COMPANY AND GOVERNANCE UPDATE

Report No. WWC2023/5/133 by Wellington Water Limited

Speaking under public comment, **Cr Diane Calvert** stated that she represented the Wharangi/Onslow-Western Ward for Wellington City Council (WCC). She showed a photo of a pipe that had been removed from her residential street attached as page 12 to the minutes. She wanted to provide a view as both a councillor and a member of the public. She had been advised the work for the pipe replacement would start in May 2023. She noted this was to be followed up with stormwater pipe replacement. She highlighted the stormwater upgrade was now not going ahead due to funding shortages. She questioned why this had been removed from the work plan. She further questioned if there was a monitoring system for general water leak repairs and maintenance to manage costs for repairs.

In response to questions from members, Cr Calvert considered the capital works programme provided by Wellington Water Limited (WWL) was managed well. She noted WWL had provided good service for general repairs and maintenance. She advised WCC had commissioned a report on repairs and maintenance provided by WWL. She noted WCC then decided in May 2023 to request an independent review. She believed this review had been presented to officers in August 2023 and it had been submitted to WWL. She noted she was unable to access the report on the review and asked for the reasons for the delay.

The Board Chair and Acting Chief Executive, WWL elaborated on the report.

In response to a question from a member, the Acting Chief Executive, WWL advised there had been four health and safety incidents reported in the first quarter of 2023. He noted WWL would take learnings from the incidents going forward with the contractor panels.

In response to a question from a member, the Board Chair, WWL highlighted the Board was paying particular attention to health and safety incidents and was working with the Chief Executive on remediations.

Mayor Baker noted that due to water reforms, all council budgets were under significant pressure. She asked WWL to signal to central government that assistance was required.

Cr Connelly highlighted GWRC's concerns regarding the growth potential in the region. She emphasised the need for more housing but also pointed out the additional pressure it would put on renewal demands. She considered more granularity was required about the location of growth areas and how WWL intended to provide water services for them.

Members asked WWL staff to provide a growth update report to the Committee in mid-2024. Members noted this would follow consultation from the Wairarapa-

Wellington-Horowhenua Future Development Strategy.

Cr Connelly expressed her discomfort with the comments made in the report about the fluoride update. She said the Fluoride Inquiry had identified several other broader themes surrounding the function and culture at WWL. She foreshadowed her intention to move an additional recommendation, asking WWL to provide a report to the Committee outlining the assessment and programme of action to address the broader themes identified in the Fluoride Inquiry.

In response to questions from a member, the Head of Strategy, WWL confirmed that WWL had been participating in the Wellington Regional Leadership Committee process on the development of their Future Development Strategy. He noted this would give effect to the National Policy Statement on Urban Development to consider infrastructure needs. He said where possible, WWL had been providing information into this process from growth studies completed for shareholding councils. He advised each council had funded their growth studies to differing degrees. He said as a result there were differing understandings of what those needs were and more work was required to understand growth needs across the region.

RESOLVED: (Cr Connelly/Mayor Connelly) 23403

Minute No. WWC

"That the Committee:

- (1) receives and notes the report; and
- (2) asks that a report be presented to the next meeting of the Wellington Water Committee outlining the assessment of, and programme of action towards remedying, the broader themes identified in the June 2022 Inquiry into the Cessation of Water Fluoridation by Wellington Water. This is to cover asset management maturity, internal audit and quality assurance functions, the organisational culture of reactivity and learned helplessness, issue escalation processes, communication with councils and the public, and the proactive release of information."

WATER SUPPLY AND DEMAND RISK FOR 2023/24 SUMMER - UPDATE

Report No. WWC2023/5/134 by Wellington Water Limited

The Acting Group Manager, Customer Operations, WWL elaborated on the report.

In response to questions from members, the Acting Group Manager, Customer Operations, WWL said WWL currently had 107 pressure-reducing valves in operation to mitigate water use. He advised when water pressure was reduced WWL ensured fire flow was maintained and water pressure did not drop below agreed levels of service. He said consumers could notice a slight reduction in water pressure. He advised WWL staff would conduct an audit of the condition of the valves to ensure operational status with reduced water pressure.

RESOLVED: (Mayor Barry/Cr Connelly)

Minute No. WWC 23404

"That the Committee receives and notes the report."

10. WELLINGTON WATER LIMITED'S ANNUAL REPORT TO 30 JUNE 2023

Report No. WWC2023/5/135 by Wellington Water Limited

The Chief Financial Officer, WWL elaborated on the report.

In response to a question from a member, the Chief Financial Officer, WWL said WWL followed a customer alliance of employing 50% WWL staff and 50% contractors from Fulton Hogan for water pipe replacements. He noted approximately 20% of work was subcontracted out when required.

The Chair acknowledged the significant uplift in capital programme delivery. He highlighted the Barber Grove to Seaview wastewater pipe renewal had gone extremely well. He said he had received positive feedback from the community on the excellent communication provided to ensure as little inconvenience as possible.

RESOLVED: (Mayor Barry/Mayor Baker)

Minute No. WWC 23405

"That the Committee receives Wellington Water Limited's Annual Report to 30 June 2023."

11. <u>INFORMATION ITEM - WELLINGTON WATER COMMITTEE FORWARD PROGRAMME 2023/24</u>

Memorandum dated 27 September 2023 by the Democracy Advisor

The Chair noted the report requesting the assessment and programme of action on broader themes identified in the June 2022 Inquiry into the Cessation of Water Fluoridation by WWL would be included in the Forward Programme for the Committee meeting to be held on 8 December 2023.

RESOLVED: (Mayor Barry/Cr Connelly)

Minute No. WWC 23406

"That the Committee:

- (1) receives and notes the Forward Programme items for the Wellington Water Committee to be held on 8 December 2023; and
- (2) receives and notes the draft Forward Programme and future workshop topics for the Wellington Water Committee for 2024 attached as Appendix 1 to the memorandum."

12. EXCLUSION OF THE PUBLIC

RESOLVED: (Mayor Barry/Mayor Baker)

Minute No. WWC 23407

"That the public be excluded from the following parts of the proceedings of this meeting, namely:

13. Minutes - 24 August 2023

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the

(A)	(B)	(C)
General subject of the matter to be considered.	Reason for passing this resolution in relation to each matter.	Ground under section 48(1) for the passing of this resolution.
Minutes of the Wellington Water Committee Komiti Ngā Wai Hangarua held on 24 August 2023 Appointment of Directors to Wellington Water Board	The withholding of the information is necessary to protect the privacy of natural persons. (s7(2)(a)).	That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding exist.

There being no further business the Chair declared the meeting closed at 11.11am. The non-public part of the meeting closed at 11.13am.

Mayor C Barry CHAIR

CONFIRMED as a true and correct record Dated this 11th day of December 2023

Wellington Water Committee meeting - Friday 6 October

Chair's Statement

Kia ora koutou, before we begin, I'd like to give a brief statement.

Water Shortage Summit

We hosted a Water Shortage Summit on September 11. Over 60 mayors, councillors and mana whenua from across the metropolitan Wellington region reached near unanimous agreement that urgent action is needed to face the challenges we have with our water network. There were three recommendations from Wellington Water to tackle the issues we're facing: universal meters, pipe renewals and an additional storage lake. The overwhelming majority agreed that these recommendations get taken to each council's Long Term Plans for decision.

Water restrictions

Level 1 Water Restrictions came into effect for the whole region on Sunday 24 September. We are expecting, if we have a dry summer, that we may have to go to Level 4 restrictions – something we've never done before. Wellington Water will be launching a public campaign on water restrictions soon.

Major projects

Donald St pump station

Last Friday, Wellington Water switched on the Donald Street Wastewater Pump Station, marking a big milestone on an important project for Featherston's residents. The new pump station is more efficient, powerful and brings greater storage resilience. It'll significantly reduce wastewater overflows in the eastern part of town.

The project was delivered on time and is on track to come in under budget. The project team were able to expand the scope of the project and replaced the associated wastewater pipe that sends the wastewater on its way to the treatment facilities, without adding anything to the budget.

Te Mārua Water Treatment Plant Capacity Optimisation Project

In early September, we reached an important milestone in the Te Mārua Water Treatment Plant Capacity Optimisation Project, where crews commissioned the new CO2 tank on site. This was a big milestone in the journey to increase the plant's capacity from 80 to 120 million litres per day, which will improve our resilience against future water shortages and help prepare us for growth.

Kaitoke Pipe Bridge Project

Another great example of increasing the resilience of the region's network was seen in August with a key stage in the Kaitoke Pipe Bridge project being completed.

Following a year and half of challenging and complex construction, the 24-tonne, 52-metre-long steel arch bridge has been lifted onto its new home across Te Awa Kairangi.

The bridge will support a 1.5m diameter pipe, designed and built in Japan and the largest of its type installed in Aotearoa. This pipe will transport a significant amount of Wellington's drinking water – up to 140 million litres a day.

Leaks

Since July 1, Wellington Water has fixed 2310 leaks, including 700 in September. There are currently 2732 open confirmed leaks.



Key matters to be covered in this update

Matters for update

- Legislation update
- Reforms programme and timeline
- Programme dashboard

Legislative process

The Government has now passed a package of legislation to give effect to water reforms.

This includes:

- The Water Services Entities Act 2022
- The Water Services Legislation Act 2023
- The Water Services Entities Amendment Act 2023

Nb. This legislation is yet to be packaged into a consolidated version.

And

The Water Services Economic Efficiency and Consumer Protection Act 2023

Wellington Water Committee — Three Waters reforms update 10 October 202

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Legislative implications

The Water Services Entities Amendment Act 2023

- Amends the principle Act
- Sets an establishment date foWai Tāmaki ki Te Hiku(Auckland / Northland) for 1 July 2024
- Requires Government to confirm the establishment dates for the other 9 entities for between 1 July 2024 and 1 July 2026
- This process includes a requirement to engage with councils and mana whenua
- Establishment dates must be confirmed through an Order in Council within 6 months of the legislation being enacted (= by February 2024)
- The preliminary recommended establishment date for Entity G Wellington region is 1 October 2024.
- This is same date as for Hawkes Bay / Tairawhiti (Entity F)

Wellington Water Committee - Three Waters reforms update 10 October 2023

Establishment requirements

Milestones required to legally form Entity G by 1 October 2024 appear challenging

Key milestones 2023

· Confirmation of Government policy direction after the election

Key milestones Q3 FY23/24

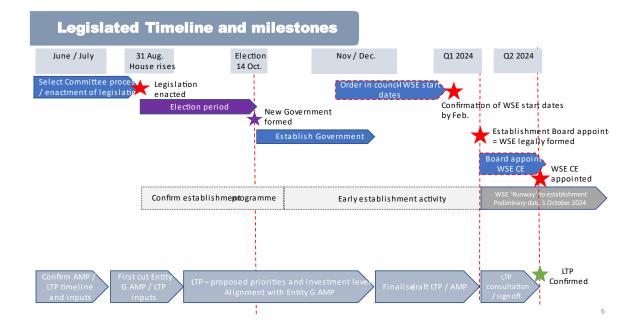
- · Order in Council to confirm go live dates
- Appoint establishment Board = legal establishment of WSE
- · Agree constitution
- Form RRG

Key milestones Q4 FY23/24

- Appoint CE
- Appoint Tier 2

Wellington Water Committee - Three Waters reforms update 10 October 2023

5



Current activity

In preparation for establishment of the WSE, a range of activity is underway, involving several parts of WWL, staff from councils and mana whenua:

- Input to the programme planning for establishment of the entity
- Debt settlement for councils and financing / funding arrangements
- Billing arrangements
- Asset identification and transfer arrangements
- · Entity AMP and alignment with council LTPs
- · Development of national standards
- IT systems and data transfer
- High level organisation design
- Staff engagement

Wellington Water Committee - Three Waters reforms update 10 October 2023

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Water reforms - WWLASC programme dashboard

Programme	Status	Commentary
Budget, costs and resources		 NTU have confirmed further council transition funding for first 6 months of FY23/24 Resourcing appears challenging for DIA
Risks		 Impacts of election – direction and timing Limited progress to confirm establishmenprogramme Unclear tasks and timeline ahead inc. key milestones Timing of reforms and ability to meet milestones to establish WSE Resourcing, including loss of key staff
Progress		 Establishment of Entity G Steering Group with NTU / CEs Formation of Regional Establishment Group in NTU for Entity G anprogramme planning
Critical activities next quarter		 Government direction Confirmed NTU programmefor Entity G and establishmentdate engagement Confirmation of funding and resource requirements LTP / AMP process and inputs

Vellington Water Committee – Three Waters reforms update 10 October 202

8





Komiti Ngā Wai Hangarua Wellington Water Committee

05 December 2023

Report no: WWC2023/5/399

Company Affordable Water Reform Transition Report

Purpose of report

 To update the Wellington Water Committee on the progress of transitionrelated work activities within Wellington Water Limited (WWL) to support our shareholding Councils as they navigate through Affordable Water Reform.

Recommendation

That the Committee receives and notes the report.

Summary

- 2. Post-election, the National Transition Unit (NTU) centre and Wellington Regional Establishment Group (REG) have completed a stocktake across the whole programme, identifying what might be useful to proceed with and what should be paused until a new Minister is appointed and greater clarity of policy direction is known.
- 3. We continue to place our people's engagement at the top of the priority list and are working hard to ensure that they feel informed and engaged during this period of uncertainty

Broader water services reform update

4. The Wellington Regional Establishment Group (REG) was formally established by the National Transition Unit (NTU) on 1 July 2023 to create a specific establishment programme plan for Entity G. Several staff from Wellington Water (WWL), including Kevin Locke, Charles Barker, and Juliet Cross, were seconded to the REG as functional leads during Q1 to support the development of this plan.

- 5. A draft, 70% complete plan was presented to council-appointed Responsible Officers in September to allow for a change and estimated resource impact assessment by councils and WWL.
- 6. The NTU has, as a result of the general election on 14 October outcome, performed a programme review to identify transition activities they will continue and temporarily pause work where appropriate while they await direction from the new Minister.
- 7. While the NTU does expect to be able to meet with the new incoming Minister by the end of November, there may not be a clear indication until early in 2024 of what the impact of a new policy direction will be.
- 8. WWL's imperatives during this period of uncertainty continue to be to look after our people, provide core services, deliver the capital programme (renewals and capex), and prepare investment advice all supported by consistency in response to change through our integrated business planning cycle.

People

- 9. We are working with our seconded staff to ensure they are supported through any changes while being redeployed back into the business.
- 10. The uncertainty created by the general election has been unsettling for some of our people. This is evidenced by only 53% of staff in Q1 indicating they understand the upcoming changes within the water sector (down from 61% in Q4).
- 11. We have increased the regularity of communication with staff, emphasising the scenario planning work completed and what WWL imperatives are during this current period of uncertainty.
- 12. Balanced against this uncertainty, it is worth noting that 67% of staff reported feeling supported by the organisation through water reform in Q1. This was an increase from the Q4 result of 62%.

Programme management

- 13. We note there is still some work required to ensure progress is made to support the legislation as it currently stands. We will continue working with the REG to understand what activities will continue until a clearer policy direction becomes available.
- 14. We continue to communicate regularly and meet with shareholding council Transition Managers (TMs). Our Head of the Transition Programme is also currently chair of the fortnightly Entity G Local Transition Team meeting.
- 15. We have recovered costs of \$330k directly from the NTU during FY23/24 for WWL staff secondments and/or participation in steering/working groups. In addition, having been deliberately conservative in the level of transition activities we engaged in during the months leading up to the election, we are showing a budget underspend for the first half of FY23/24.

Key risks

- 16. There is currently no Council Transition Tranche Two funding beyond December 2023, and our shareholding councils have not committed to funding transition activities beyond Q2 FY23/24.
- 17. To mitigate this risk, we are working closely with council TMs to understand the impact of funding decisions by the NTU on councils and to ensure WWL's transition costs are considered.
- 18. The uncertainty created by the general election outcome about the future of reform and implications for WWL is unsettling for a large number of staff.
- 19. To mitigate this risk, we will review our transition strategy to ensure it is fit for purpose in the context of voluntary participation in water reform.

Appendices

There are no appendices for this report.

Author: Wellington Water Ltd



Komiti Ngā Wai Hangarua Wellington Water Committee

05 December 2023

Report no: WWC2023/5/400

Company and Governance Update

Purpose of Report

1. To provide an overview of the Three Waters activities across the metropolitan area of Wellington and the South Wairarapa District Council.

Recommendation

That the Committee receives and notes the report.

How to read this report

- 2. There are three parts, as follows:
 - a. governance update,
 - b. Wellington Water Committee priorities; and
 - c. operational achievements and issues.

Governance update

- 3. The key Governance conversations held and actions taken by the Board of Wellington Water (Board) since the last meeting of the Wellington Water Committee (Committee) include:
 - a. discussed the performance of the company for the first quarter;
 - b. endorsed the desired funding of \$7.6 billion for the next 10 years and noted the risks of investment below this;
 - c. briefed on the acute summer risk response plan and the need to potentially take more water from Te Awa Kairangi to reduce the risk of acute water supply shortage and

- d. noted the significance of the water meter case and for the company to support willing councils to adopt these through their LTP process.
- 4. The Board Chair, on behalf of the directors, provided a letter to the Chair of the Wellington Water Committee outlining these discussions and the Board's position on the future of water. The letter is included as Appendix 2 to the Regional Investment 2024-34 report.

Summary of Quarter 1 performance

- 5. Council opex is overspent, and we are reprioritising opex to come within budget.
- 6. Capex delivery is tracking well against forecast spend. We delivered 6.6 kilometres of renewals against a target of 5 kilometres.
- 7. Engagement has continued its upward trend, and turnover is beginning to stabilise at 12% after an ongoing downward cycle over the last financial year.
- 8. Wellbeing has been a focus, celebrating Mental Health Awareness Week in September with a number of initiatives across the business.
- several severe health and safety incidents occurred that were investigated, and lessons were shared widely.
- 10. A meaningful step was taken with iwi with the signing of partnership agreements for both Taranaki Whanui and Ngāti Toa.
- 11. We delivered our stage 1 Long Term Plan (LTP) advice to councils, and we are preparing for the next iteration.
- 12. We saw a small upswing in customer satisfaction across this period despite the number of open jobs and the resolution time of these widening.
- 13. We remain non-compliant with drinking water in the metropolitan region due to the chlorine contact time for 800 customers in Lower Hutt. Taumata Arowai has indicated we will not receive an exemption.
- 14. Three of our wastewater treatment plants reverted to non-compliance in September due to capacity, mechanical and environmental factors.
- 15. The water supply risk has increased due to the lack of controls to mitigate the consequences fully.
- 16. A regional overview of our Quarter 1 performance has been included as Appendix 1.

Wellington Water Committee priorities

Ensuring a smooth transition through water reform to the new entity in 2024

17. Following the change of government, we are awaiting direction on reform from the new Minister for Local Government. We continue to place our

- people's engagement at the top of the priority list and are working hard to ensure they feel informed and engaged through this period of uncertainty.
- 18. The Regional Water Reform Report covers this in more detail, and the Wellington Water (WWL) Transition Report is provided under separate cover to this meeting.

Three Waters Investment Planning for 2024-34

- 19. We are actively involved in long term planning processes with all Councils. We have provided them with an unconstrained view of the total investment need, which equates to \$30 billion over 30 years, a recommended programme Wellington Water can deliver (the maximum deliverable programme, which is a regional total of \$7.6 billion over ten years) and a baseline programme.
- 20. Councils are signalling that, due to their own financial and debt constraints, funding is likely to fall below the recommended level, most likely at the bottom of the potential funding envelope and similar to existing levels (the minimum/baseline scenario). This will impact the company's critical risks, especially providing adequate drinking water to meet future demand and growth and the acute water shortage.
- 21. The Wellington Water Committee's workshop (held on 6 October 2023) identified priority investments that the Committee recommended be included in councils' LTPs to achieve regional outcomes. Initial indications are that the full proposed activities are unlikely to be funded.
- 22. A separate report on the status of the 2024-34 investment process and its implications for service delivery risks and regional outcomes is included in the meeting agenda. This report contains the presentation slides and outcomes from the October workshop as attachments.

Sustainable water supply and reducing consumption

- 23. Current indications are that there is a 24% chance of water shortages this summer. The separate report on the water supply and demand risk provides a complete update to the committee on our response, with the key points to note being that all councils have received briefings, and the communication and engagement campaign has commenced.
- 24. To address the longer-term risks, WWL is working with individual councils on what future investment to include as part of LTP discussions.

Regulatory performance

- 25. Our relationship with regulators remains strong.
- 26. To manage potential tension from the water supply and demand risk, we have increased the tempo of engagement with GWRC and Taumata Arowai. This has been supported with formal notifications that must be submitted to Taumata Arowai under the Water Services Act.

- 27. We are on track to meet all regulatory reporting requirements at the end of the first regulatory year of reporting.
- 28. We have informed the Ministry of Health of recent fluoride plant stoppages and received excellent support and understanding while these were resolved

Operational Achievements and Issues

People

- 29. We continue to focus on keeping our people and supplier whanau engaged and informed throughout the water reform process, including through the change of government. We have ensured two-way communication channels are open and are actively working on engagement and wellbeing activities.
- 30. Our retention and recruitment rates remain healthy. Our unplanned turnover is currently 12.5% (12 month rolling average).
- 31. We have introduced a Wellbeing Day as a day for staff to do something to enhance their wellbeing.
- 32. Several serious incidents occurred in Q1 FY23/24. These incidents were investigated and reviewed, with lessons learned shared widely across Wellington Water and our wider whānau.
- 33. While there is no clear link between the incidents, they have highlighted the high-risk nature of our work and the continuing efforts required to manage our critical risks.
- 34. In October 2023, we became aware of health and safety concerns at the Waterloo Water Treatment Plant. While we worked through improvements in PPE for the team responsible for loading fluoride at the plant and any health impacts on the operational staff, there were periods when we had to turn off the fluoride facilities.

Operational budgets

Council operating expenditure

35. At the end of October 2023, we have spent \$32.1m and are forecasting a \$1.4m overspend for the year. After making the adjustments noted below, all council forecasts now fall within available funding levels.

Wellington Water operations (management and advisory services)

- 36. At the end of Q1, we had an operating surplus due to recruitment delays and reduced non-core activities.
- 37. We decided to pass those savings back to councils through reallocation on a proportional basis to council opex costs, particularly to enable more leakage management activity.

38. Water reform transition planning and preparation activities slowed during and after the general election. However, there is still activity across the company to engage with our people, councils and the NTU.

Capex Delivery

39. At the end of October 2023, spending on the capital delivery programme was \$95.1M at a regional programme level.

Council	Total spend by the end of October 2023
Greater Wellington Regional Council	\$ 27.9m
Hutt City	\$ 20.1m
Porirua City	\$ 17.3m
South Wairarapa District	\$ 2.6m
Upper Hutt City	\$ 5.9m
Wellington City	\$ 21.3m
Total	\$ 95.1m

- 40. The expected capital delivery range for the region is \$233-328M for the year.
- 41. This year, we are providing data on kilometres of pipe constructed every quarter. To do this, we have improved how we collate this information and methodology for calculating kilometres of pipe laid. The data to the end of October 2023 is included below, split by council.

	Q1 Total	October Total	YTD Actual Total	YTD Baseline Target	Year End Forecast
HCC	2,843	824	3,667	5,149	15,811
WCC	1,629	537	2,166	1,196	3,247
PCC	1,024	341	1,365	1,344	3,295
UHCC	864	193	1,057	757	2,472
SWDC	98	-	98	17	98
GWRC	212	125	337	245	631
Total	6,670	2,020	8,690	8,708	25,554

42. The Programme Delivery team, Major Projects Team and the Network Management Group have been working closely to develop an approach to co-ordinating and managing work at the treatment plants; this will enable us to reduce the risks associated with the delivery of projects at operational plants and will enable us to grow the community of specialists working on the delivery of treatment plant projects.

- 43. This month, the Major Projects team achieved the following milestones:
 - a. a blessing was held on 23 November for the start of water flow through the new Kaitoke Arch Bridge;
 - b. new CO2 tank and the lime silo was installed at the Te Mārua water treatment plant;
 - the Main Collecting Sewer from Barber Grove to Seaview WWTP is now complete and operational and
 - d. the Omaroro Reservoir has been covered and planted. The great news is we have reached practical completion on all separable portions. We are finalising dates for the Mayor's availability in early February to allow the formal opening of the area of the town belt that has closed off for the past three years and also a fully operating reservoir.

Wastewater Treatment Plants

- 44. The latest monthly Wastewater Treatment Plant and Water Treatment Plant dashboard reports, showing regulatory compliance, are attached as Appendix 2 to the report.
- 45. Unfortunately, three metropolitan wastewater treatment plants have become non-compliant with wastewater quality in this reporting period. There are a variety of factors at play at each plant, and we are undertaking a thorough investigation across all three plants. Due to how these compliance parameters are measured with a 90 day mean, they will take some time to come back into compliance. These non-compliances have a very low public health risk.
- 46. The Moa Point Wastewater Treatment Plant is non-compliant due to a higher daily average concentration of solids in the wastewater because of ongoing mechanical issues at the sludge dewatering plant at Carey's Gully. We have recently completed some refurbishment and renewal work, and the machinery at the dewatering plant has been running reliably. Reducing the solids takes time and affects other quality measures, and plant compliance is closely monitored.
- 47. The Seaview Wastewater Plant is non-compliant due to a higher level of bacteria in the wastewater. This is partly due to recent UV plant issues and the UV system not working as efficiently as it should. We also think some non-compliant trade waste may come through the network and into the plant. We are working with Hutt City Council and Veolia to resolve both issues.
- 48. The Western Wastewater Treatment Plant is also non-compliant as a result of a higher concentration of solids in the wastewater due to maintenance work carried out to upgrade the Karori Tunnel. This work has been completed, and we already see the solids entering the plant return to their usual levels.
- 49. No change to the status of the wastewater treatment plants in the South Wairarapa. They require significant investment to return to compliance or avoid further non-compliance.

Growth update - Future Development Strategy

- 50. At its last meeting, the Wellington Water Committee requested an update on the water network implications for the growth areas identified in the region's draft Future Development Strategy (FDS).
- 51. The draft FDS describes the proposed spatial growth plan 2051 for the wider Wellington region, including Kapiti, Horowhenua, and all the Wairarapa. The population of this area is forecast to increase by around 184,000 people over this period. More than 70% of the growth is expected within the WWL shareholding council boundaries. This is expected to be predominantly brownfield development, though a reasonable amount of greenfield development (10-20% of the total) is also anticipated.
- 52. Priority for development is given (in order from the highest priority) for areas of importance to iwi along strategic public transport corridors, priority development areas, well-connected areas of existing rural towns, and connected and serviceable urban greenfield developments. This predominantly sees intensification along the major train and bus routes and potential significant greenfield development such as Porirua's Northern Growth Area.
- 53. WWL has supported the FDS process with information and advice. This advice has been based on the housing and business capacity assessments (HBAs) completed for each council, supplemented with the outputs from council-funded growth studies where these are available. We have typically only been able to provide qualitative information on the investment required to service the forecast growth, as there has not been funding to complete the engineering studies that would be required to provide sufficiently detailed information. These limitations are noted in the consultation document for the draft FDS.
- 54. In general terms, the networks do not have sufficient capacity to meet the required service levels for existing customers. The investment required is then predominantly for achieving the expected level of service, with only incremental additional cost required to service forecast growth. Without this investment, existing and new customers will experience deteriorating service performance (ie increased wastewater overflows, etc).
- 55. As outlined in the Regional Water Summit, the risk of summer water shortages and restrictions will increase in the future without investment in increased water loss reduction, universal smart water meters, and additional storage lakes. The investment needs in the bulk wastewater networks are poorly understood as the growth studies have been focussed on a more localised level.
- 56. We have also consistently advised the team preparing the draft FDS that investment requirements will be significantly impacted by councils' approach to some key elements of planning and land-use. These include the level of service expectation for flooding protection (where non-infrastructure solutions such as minimum floor levels can reduce the infrastructure requirements) and requirements for water sensitive design in property

developments (that support improved water quality outcomes and reduced water consumption without requiring large, centralised infrastructure solutions.) This approach would also support the other outcomes sought in the draft FDS, such as its 'placemaking principles'.

57. We will continue to engage with the team developing the FDS as they progress in developing the implementation plan. This will include the investment advice presented to councils during LTP discussions. Still, we recommend that the councils consider how they can work together to progress and coordinate the adoption of the planning and land-use approaches required to optimise outcomes for communities and the environment while minimising the need for large, expensive infrastructure solutions.

Growth update - growth study outcomes

- 58. The solutions identified for the Wellington CBD and Northern suburbs will likely provide limited solutions for addressing flooding. A more strategic approach is recommended, including non-asset-based solutions and developing acceptable service levels with appropriate climate change factors to protect properties from flooding and rising sea levels.
- 59. The result of the Featherston study highlighted a large amount of inflow and infiltration into the network, requiring significant remedial works using pressure wastewater systems. The high cost of implementing the pressure sewer systems was discussed with Council to highlight what was needed to support growth and manage the level of service.
- 60. These studies have identified projects that would increase network capacity and/or lift existing service levels to accommodate development based on future population projections. Projects identified in these studies have been included in council LTP advice where requested.

Environmental Water Quality update

- 61. Greater Wellington Regional Council (GWRC) have notified Plan Change 1 to their Natural Resources Plan. This change will introduce stricter standards for meeting environmental water quality targets. These standards will be enforceable under the Resource Management Act.
- 62. We are seeking resource consent on behalf of Councils for discharges of waste and stormwater where the new water quality standards will come into force.
- 63. We have identified the investment need to meet these requirements and provided advice on Councils' 2024-34 Long-Term Plan processes.
- 64. However, the Plan Change is seeking improvements at a faster rate than we had anticipated (by 2040). We are still assessing the implications of this but consider that the advice we have provided for the first three years is still

- adequate. However, investment will need to increase steeply in the outer year to meet GWRC's proposed 2040 targets.
- 65. We are working closely with your planning teams on a formal submission to the plan change. This will focus primarily on technical matters for deliverability. It will be up to individual Councils to provide submissions based on the affordability of meeting the new standards.
- 66. If Councils choose not to submit on affordability, the possibility of successful defence from enforcement should environmental requirements not be achieved would be reduced.

Wastewater network overflows

67. We are now publishing monthly data on wastewater overflows from the network on the WWL website. We use proactive comms on our social channels before and after wet weather events to drive people to this information and LAWA for public health advice.

Net Zero Carbon update

- 68. With water consumption at high levels and the demands on wastewater services also higher than in previous years, the emissions from the region's three water services will be higher than in our most recent annual inventory (2020/21). These emissions will continue to increase without any substantive investment in emissions reduction.
- 69. We continue to monitor the carbon emissions of our capital programme, look for opportunities to adopt low-carbon approaches into our operations and capital projects, and facilitate low-carbon decision-making within our business practices within available funding.
- 70. The Carbon Guidance Document has been finalised. This will guide how to carry out carbon assessments at all gateways of the capital delivery process. The launch date for the carbon guidance document is 10 November 2023.

Connecting the Wellington Water Committee to Individual Councils

- 71. The Wellington Water Committee has a major role in providing leadership to the six councils that own Wellington Water. At the Committee meeting, you are receiving and discussing material that all councils will receive via WWL's ongoing advice on operations.
- 72. As with the last four meetings, we have provided a summary report (Appendix 3) to assist with individual councils understanding of the material the Committee is working on. This will be provided to your councils to assist you in reporting to individual councils after each meeting.

Climate Change impact and considerations

73. There are no direct climate change impacts or considerations from the matters addressed in this report.

Appendices

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1 <u>₽</u>	Appendix 1: Quarterly overview Q1 July-Sept 2023	35
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3 <u>₽</u>	Appendix 3: Summary of papers	63

Author: Wellington Water Ltd

Attachment 1



Wellington Water Quarterly Overview

An overview of the work Wellington Water has delivered for its council owners in the region.

Quarter 1, 2023-24: July - September 2023

About this document

Wellington Water prepares several regular reports for our council clients, officers, regulators and other key stakeholders.

Most of these are for special purposes – financial, risk, specific projects – and go directly to the offices and officers directly concerned with that area of our work.

This document is intended for a wider audience. It provides an overview of our working environment, activity and performance, from a regional perspective.

It is prepared alongside and sometimes in advance of other reporting, so there can be slight differences in the data used in this versus detailed technical reports.

This report will be made publicly available and published on our website. Where possible, we aim to publish most of our information and advisory papers on our website: wellingtonwater.co.nz

As a regional water services provider, Wellington Water is focused on restoring balance among the needs of water, people and the environment.

We do this through applying our council owners' investment in five strategic areas:



Looking after existing assets



Enabling growth



Ensuring sustainable supply and demand



Improving water quality



Resilience to climate change

These strategic investment areas underpin our ability to deliver customer outcomes: safe drinking water, water that is safe to enter the environment, and protection from the impacts of flooding, as well as resilience to major natural events.



Regional strategy and delivery

Wellington Water's direction is towards Te Ika Rō Wai, where the needs of water, the environment and people are in balance. Te Ika Rō Wai can be understood as the fish in the water. For fish to thrive, the water they swim in needs to be pure. If we carry out our role well, and care for water at every stage as it passes from its origin as rainfall, through our environment, to theirs, then their water will return to that state. This will restore and support manaakitanga, the ability of mana whenua to provide for people and to care for the environment.

The region faces big challenges in achieving this balance. These include the amount of water consumed by people and lost through leaks; and the quality of water that leaves networks and returns to the environment, in both planned and unplanned discharges.

Our role is to provide investment advice to councils to maintain and develop their assets. We also operate their networks and develop and deliver programmes of work to renew and replace the aging assets in the region. We create value for our shareholding councils by aligning this work with regional priorities, and through procurement and delivery models that individual councils could not achieve independently.

This year we are preparing advice for councils for their long-term plans. The process has been complicated by water reform, and the need to build asset management knowledge and programmes within the National Transition Unit and entity establishment teams.

Core delivery focus areas

We are focused on delivering our core services. Keeping to the core for us means:

- 1. Sufficient water supply for our communities
- 2. Safe drinking water
- Removing and treating wastewater before returning it to the environment
- 4. Stormwater risks and impact are managed

In a time where all our council owners are facing inflationary pressures and financial constraints, we are acutely aware of every dollar we are provided by councils and ratepayers. Therefore, we prioritise our work carefully to ensure that we are applying resources and people on the right things (e.g., our core services) and to the areas needed most.

Underpinning these core areas of delivery is our ongoing programme of planned maintenance and reactive responses to network outages, and our capital delivery programme which aims to replace and renew as many of the aging assets in our region as possible before they reach the end of their operational lives.

Our ability to deliver hinges on our people. We continue to take care of our people during a time of change and sector reform. This means we are committed to ensuring our people, and the people in our supplier whanau are engaged, informed and supported.



Delivery highlights for Q1

- 15,691 million litres safe drinking water delivered to Wellington metropolitan region
- 385 million litres safe drinking water delivered to South Wairarapa
- 15,759 million litres of wastewater was treated at the Wellington metropolitan treatment plants. This number is higher than the amount of water supplied. This is due to extra water entering the network through pipe and connection faults.
- **405** million litres of wastewater was treated at the South Wairarapa treatment plants. This number is higher than the amount of water supplied. This is due to extra water entering the network through pipe and connection faults.
- O habitable floors flooded. Habitable floors flooded is a measurement required by the Department of Internal Affairs. We can only report the incidents we know of not every incidence is reported to us or councils.



Supporting long-term planning for 2024-34

As the region's water services provider, we provide our council owners with investment advice on their water assets in the region. We do this through the annual planning process and the long-term planning process. Through this, Councils then make decisions on what to fund.

Activity for the 2024-2034 Long-Term Planning is underway for all our councils and we are supplying information to councils as they request it.

Our usual approach is to provide councils with investment advice based on best practice and achieving the best water outcomes for communities and the environment. We then work through a process with each of them based on their priorities and what they can afford. This includes advice on the risks and consequences of not investing.

Next steps for Long-Term Plan advice

Having provided initial advice in the first two stages of a four-stage process with our councils, we are now at the tail end of stage three. Stage three 3 is focused on determining what councils' individual programmes will look like based on the direction and feedback we've been provided. This has been a challenging process as we need to trim our recommended (Stage Two) programme to fit the available funding that has been indicated to us. Through this process we will also be documenting consequences and risks of under investment for clarity and transparency.

While we finalise our schedule of projects for preferred investment programmes and prepare our documentation, we ask for patience as we work through compiling this information across all six councils.

As we move into the final stage (Stage Four) of the process, we will be aiming to provide more detailed advice on a draft programme for each council, support the development of council consultation material, and provide evidence and advice for audit processes. The key to success at this stage is to ensure that we deliver the best possible outcome with the resources we have. As such, we will work with our councils to understand:

- Affordability levels to ensure an accurate and achievable programme
- · Dates and inputs that each council requires for finance teams, advice preparation, key meetings, and council votes
- · Confirmation of audit requirements and expectations, audit dates, and contact information for audit liaison within councils

We'd like to thank our councils for their ongoing support as we work through this process over the next quarter.



Our water, our future.

Providing a sufficient supply of drinking water

Ours and our councils' ability to provide a sustainable supply of drinking water remains at risk. Water use across the cities in metropolitan Wellington is at an all-time high. The network is old with increasing leaks (around 45% leaks regionally), people are using a lot of water, and population growth is adding to the issue.

This guarter we continued to monitor and raise this risk with our councils. When looking at the water supply risk we have two situations we are trying to manage at the same time: the immediate risk of not having enough water this summer and the long-term challenges of ensuring there is sufficient water for future years.

Immediate risk this summer

This summer we are predicting that if we see an average summer (no significant rainfall) then our councils will have to put in place tighter water restrictions for longer periods of time to avoid the risk of an acute water shortage (e.g. asking people to significantly reduce their indoor water use).

We are unable to materially reduce this risk this summer within our current level of funding and resources and the constraints of the aging network. We are doing all we can to optimise our activities and have put in place four key workstreams to respond to this summer (see diagram on the right) but this work won't help us to avoid a water shortage risk. Instead, this is about preparing for the potential of an acute water shortage and doing what we can to reduce the impact on the public as much as possible.

Long-term challenges

Significant investment and decisions are needed now by our councils to avoid carrying the ongoing risk of water shortages in future years. In September the Water Committee called a regional Water Shortage Summit with all councils to agree a regional direction on next steps to tackle the long-term challenges we are facing around a sustainable supply of water for future years. Three key actions were recommended by Wellington Water at the Summit:

- 1. Continued increased investment into finding and fixing leaks, managing water loss and replacing old infrastructure
- 2. Investment in smart meters across the metropolitan Wellington region
- 3. Build another storage lake

The majority of attendees at the Summit agreed for these actions to be considered in councils' LTP process.





WATER LOSS MANAGEMENT

- · Finding and fixing the most significant leaks
- · Pressure management
- · Fast track capex work Implement metro water loss reduction plan actions

WHAT WE NEED FROM WATER **COMMITTEE & COUNCILS**

- Some councils have reduced. their opex in this area due to budget constraints
- More opex would allow us to further reduce water loss
- · Continue to share our comms on your channels re leaks



MONITORING & ADVICE ON

- · We're actively monitoring demand, weather, and capacity during summer
- We'll provide advice to councils if a move up or down levels in water restrictions is needed

WHAT WE NEED FROM WATER **COMMITTEE & COUNCILS**

- · Be ready to implement tighter water restrictions - this may be at short notice
- · Lead the comms with us on restrictions. Continue to share our comms on your channels

- · A move to level 4 water restrictions would trigger a regional emergency response
- · We are developing an emergency response plan now
- We'll operationalise this with councils WRFMO and other agencies to ensure we're prepared

 If we hit level 4 be ready to call a regional state of emergency and lead an emergency response with WREMO and Wellington



Our water, our future.

Providing safe and fluoridated drinking water

Drinking water compliance

We have continued to provide the region with safe drinking water this quarter, however the water at the Waterloo Water Treatment plant remains non-compliant with the new chlorine rules that were introduced by Taumata Arowai late last year. This impacts up to 800 Lower Hutt households.

Meeting the new rules would require us to either increase the chlorine concentration at the plant (this could result in a significant change to the taste of the water or cause skin irritation) or significant investment from councils for network upgrades to increase contact time between the chlorine and the water.

In the meantime, the water remains safe to drink and we are awaiting a decision from Taumata Arowai on our and our councils' request for an exemption, which we expect to receive soon.

As previously reported, all water treatment plants in South Wairarapa remain noncompliant and significant investment is needed to bring these plants into compliance.



Operator monitoring the raw water sampling at the Waterloo Water Treatment Plant

Fluoridating the drinking water

We continue to focus on the importance of providing fluoridated water to the metropolitan Wellington region. The Waterloo, Wainuiomata and Te Mārua Water Treatment Plants have all been reliably meeting the Ministry of Health's (MoH) reccommended fluoride levels (0.7-1.0ppm, 95% of the time) this quarter.

The only Water Treatment Plant that hasn't met MoH's guidelines this quarter is Gear Island where we have achieved between 80%-92% of the recommended flouride levels. This is due to ongoing and unforseen issues with commissioning of the new fluoride facility and further equipment upgrades being needed.

At the very end of this quarter, we identified some health and safety concerns at the Waterloo Water Treatment Plant associated with loading the fluoride powder into the fluoride facility. As a result of this we turned off the fluoride facility at Waterloo while we worked to ensure the health and safety of our people. These issues have now been resolved, though this will impact our ability to meet the MoH recommended levels for Q2.

Throughout the quarter we continued to notify the public via our website and our social media channels every time there was a fluoride outage. This included occurrences where a fluoride facility was turned off for 4 consecutive days or more, where we implemented our usual escalation process to councils, our Board, the Water Committee and the regulator.



Removing and treating wastewater

The Moa Point, Western, and Seaview Wastewater Treatment Plants became non-compliant at times during the quarter. This is due to capacity, mechanical, and environmental factors.

Moa Point Wastewater Treatment Plant

At Moa Point we are seeing higher daily average concentration of solids in the wastewater. This is as a result of ongoing mechanical issues at the sludge dewatering plant at Carey's Gully. There are also issues with the inlet pumping station but work to repair this is underway.

Western Wastewater Treatment Plant

For the Western Wastewater Treatment Plant there has been unusually high levels of solids coming into the plant due to maintenance work carried out to upgrade the Karori Tunnel. However, this work has now been completed and we are already seeing the level of solids coming into the plant has returned to the usual levels.

Seaview Wastewater Treatment Plant

The Seaview Plant became non-compliant in September due to a higher level of bacteria in the wastewater. This is in part due to the UV system not working as efficiently as it should. We're stepping up the maintenance and frequency of the cleaning of UV equipment. Non-compliant trade waste coming into the plant is suspected to also be a factor and we are working with Hutt City Council to investigate.

Porirua Wastewater Treatment Plant

The Porirua Plant was compliant this quarter but in September there was one unconsented discharge of wastewater that had been fully treated but had not gone through the final UV treatment. This was caused by an afterhours power outage which shut the UV equipment off.

South Wairarapa Wastewater Treatment Plants

All South Wairarapa wastewater treatment plants continue to deal with significant performance issues. They all require significant investment to return to full compliance or to avoid further instances of non-compliance.

Compliance status for the region's wastewater treatment plants – Q1

Wastewater Plant	Jul	Aug	Sep	-
Moa Pt				-
Western				
Seaview				Compliant
Porirua				Compliant but with
Featherston				noted issue
Greytown				compliant
Lake Ferry				-
Martinborough				-

Increasing transparency around network overflows

As part of our commitment to transparency, we have started publishing information about <u>wastewater overflows from the network during heavy rainfall on our website</u>. This will be updated monthly and reflects network overflows recorded at selected, monitored sites acros the metropolitan region. It is not representative of all network overflows during heavy rainfa but we are working on providing the public with a more accurate picture of this.



Our water, our future.

Managing stormwater risks and impacts

Monitoring and management of the stormwater network

The increasing impacts of climate change continue to be seen around the country with the far North experiencing more flooding and heavy rainfall recently as a result of cyclone Lola. This is a growing reminder for us in our region that we too are vulnerable to the impacts of climate change and that we need to be vigilant to ensure we are resilient.

Wellington Water has a proactive programme of monitoring the stormwater system throughout the year, particularly in advance of heavy rainfall. We monitor the weather patterns and if a storm is forecasted, we send crews to inspect stormwater culverts, inlets and outlets as well as any known flooding hotspots ahead of any weather event to reduce the number of blockages in the network that could cause surface flooding.

Annually across the region we inspect: 991 inlets, outlets, and flap gates; 815 known flooding hotspots; and 26 culverts.

Network discharges programme – global consents for stormwater discharges and wet weather wastewater overflows

The proposed approach to longer-term planning to reduce pollution from the stormwater and wastewater networks has been getting a positive response from community representatives. We've been discussing the approach set out in the global resource consent applications, which cover the Hutt Valley, Porirua and Wellington) at a series of meetings with representatives of residents' associations and stream groups (e.g. Friends of Waiwhetū Stream). Those attending have an interest in local waterways so are supportive of actions and investment that will reduce contamination.

The next step is setting up an interim community engagement group to provide input into pilot strategic reduction plans.



A Wellington Water crew clearing the stormwater culvert near James Street, Plimmerton



Wellington Water's Angela Penfold outlines the consent framework at a meeting in Wellington



Delivery of the region's capital works programme

We continued to make good progress in our Capital Works Programme this quarter.

At the end of September 2023, spend on the capital delivery programme was \$68m at a regional programme level. This is an increase of \$12m or 21% on the same period last financial year. The expected capital delivery range for the region is \$233-328m for the year, and we are forecasting \$267m.

We have made a commitment to the Water Committee to track and report on the kilometres of pipe we have laid on a quarterly basis. To do this, we have improved the way we are collating this information and methodology for calculating kilometres of pipe laid. For Q1 we have laid 6.6 kilometres of pipe across the region against a quarterly target of 5 kilometers.

We also applied this new methodology to last year's results, and we are pleased that this shows a better result for last year of around 29 kilometres of pipe laid.

KMs of pipe for this year

quarter FY 23/24 - Q1				
Council	Total Metres - Mains and service	Metres of main pipes	Laterals or service pipes(Meters laid minus mains)	
GWRC	212	212	0	
HCC	3226.29	2165.49	1060.8	
PCC	622	527	95	
SWDC	98	98	0	
UHCC	863.77	347.7	516.07	
WCC	1584	1315	269	
Total	6606.06	4665.19	1940.87	

FY 23/24 - Q1			
Water Type	Total Metres - Mains and service	Metres of main pipes	Laterals or service pipes(Meters laid minus mains)
Water	3792.5	3080.8	711.7
Stormwater	39	39	0
Wastewater	2774.56	1545.39	1229.17
Total	6606.06	4665.19	1940.87

Delivery across the Capital Works Programme for the quarter has included the completion of the construction and commissioning of the wastewater pipe for Barber Grove and the installation of the pre-fabricated Network Arch Bridge at Kaitoke (Flume Bridge replacement).

Below is a photo of the Kaitoke Network Arch Bridge being lifted into place





Operational network maintenance

Finding and fixing leaks

We continue with our programme of work to find and fix the most significant leaks (those losing the most water and that have the most impact to public supply and/or safety) across the region. But due to an aging network we are seeing an increasing number of leaks and a growing backlog of work. Simply put, there are more leaks out there than we can fix within current resources. Hence, we continue to prioritise the most significant leaks first to make best use of the resources we have available. Here's how we're doing:



3,082 leaks fixed this financial year (from 1 July 2023)



3,593 confirmed open leaks jobs (as at 6 November 2023)



Proactively surveyed 926km of the network for leaks since 1 July 2023

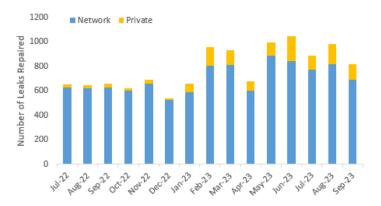


8,042 leaks fixed last financial year

We continue to update the public and our councils on our programme to find and fix leaks on a weekly basis. You can find this information on our website.

Public and private leaks repaired across the region

Overall, regionally we have seen an increase in the number of leaks (public network and private) that have been found and fixed, however some of our councils have reduced their opex in this area due to budget constraints and we are starting to see a drop in leak repairs i the quarter as a result.



Customer satisfaction scores

Every month we survey a sample of customers who have had contact with us and ask them to rate the service they have received. Our target is to achieve a minimum 70% customer satisfaction rating of satisfied or higher. This quarter we achieved an average rating of 65%, which is up 5% from the previous quarter. Although not welcome, a lower customer satisfaction score is not unexpected with the increasing number of leaks and growing backlog of work we are dealing with across the region.



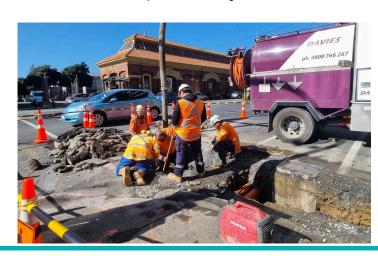
Ready to respond when needed

A core service we provide to our councils is the ability to respond to unexpected outages as they occur on the network. When dealing with an aging network where many assets are near or past the end of their operational lives, we are continuing to see a high frequency of service interruptions, whether it's through leaks, bursts or other unplanned events. The value of our model is that we have crews ready to respond to these events when they occur, including the resources to communicate and engage with those in the community that are impacted by these events.

This quarter we mobilised our crews to respond to a total of 82 significant network outages across the region, on behalf of our councils.

Customhouse Quay drinking water outage

A significant outage of note this quarter is when a drinking water pipe burst in central Wellington City meaning many residents and business were without water for over 12 hours on 14 September. This caused significant disruption and at one point two lanes of Customhouse Quay was closed to allow crews to undertake the repair. Our crews worked around the clock to fix the pipe and we deployed water tankers to the area, as well as increased our communication and engagement with locals to ensure that everyone was aware of the outage and our response to fix the issue. Our call centre staff were also ready to respond to the increase in calls from customers, particularly ones from business owners who were concerned about the impact of the outage on their business.



Crews busy repairing the burst water pipe on Customhouse Quay. Photo: RNZ/Krystal Gibbens

Our response



Up to 3 crews on rotation, working throughout the repair



Around 75 customer enquiries received and a **team of 4 dedicated** to carrying out proactive calls to businesses in the affected area



Team of 5 on the ground door knocking and providing affected businesses with information and support



10 social media updates over a 12-hour period, which reached over 23,000 people



7 media enquires were responded to, resulting in coverage on all the main media outlets



Our water, our future.

Te Mana o te Wai

Our journey to restoring Te Mana me Te Mauri o te Wai

Te Mana me Te Mauri o te Wai are concepts that promote good outcomes for the mana and mauri of water from our work. We continue to further our work with our councils to ensure we are achieving these important outcomes in the region.

This quarter we celebrated the completion of the Duck Creek Wastewater Pump Station Upgrade in Porirua. The project involved installing underground storage tanks and connecting pipes that will significantly reduce the risk of wastewater overflows into nearby waterways, especially after heavy rain, helping restore water quality in Duck Creek and Te Awarua-o-Porirua.

We also made good progress on our work on the Donald Street Pump Station in Featherston, where crews are installing a new wastewater pump station which will increase capacity and efficiency in removing wastewater away from the eastern part of Featherston. This will also help reduce the number of wastewater overflows into the environment. Part of the project also includes a wastewater storage facility, which will give us a place to store wastewater if the pump station stops working or during a major event such as an earthquake.



The Duck Creek Project Team at the site of the completed upgrade of the Wastewater Pump Station



Donald St Pump Station in Featherston



Our water, our future.

Looking after our people

Staff engagement

Our engagement scores continue to remain steady, despite the uncertainty with water reform. Our employee engagement score continues to rise from 58% for the last financial year to 66% in Q1 (up 8%).

We also ask our people how supported and informed they are feeling about reforms. 67% of staff feel supported by the organisation through water reform but only 53% feel they understand water reform, which is unsurprising given the uncertainty associated with the general election.

Recruitment

The organisation has grown over the last 12 months, with an additional 46 Wellington Water staff. This is a 16% increase.

We are continuing to recruit for experienced and qualified people for crucial roles on the frontline, which remains a highly competitive market. This quarter we have been preparing a targeted recruitment drive for these roles.

Staff turnover continues to be steady at around 12%.

Health and Safety

Unfortunately this quarter we had five significant health and safety incidents. The most serious involved a worker being crushed by an excavator. These incidents were investigated and reviewed, with lessons learned shared widely across Wellington Water and our wider whānau.

While there is no clear link between the incidents, they have highlighted the highrisk nature of the work we do, and the continuing efforts required to manage our critical risks.

Mental health and wellbeing

Our wellbeing efforts have ramped up, with several initiatives occurring during Mental Health Awareness Week which were well received across the organisation. An effort was made to ensure our front-line operational workers were heavily involved in these.



Celebrating our people

Monday Mahi

Monday Mahi is a weekly social media post we share on Linkedln, Facebook, Instagram, and Twitter/X. It highlights and celebrates people across the business and their mahi. For our customers, it puts a human face to the work we do and helps us build trust and connection.

Occasionally, we use it to highlight project or parts of the business—i.e. leading up to the Water Summit, we focused on people working in Water Loss and Drinking Water, particularly CAPEX projects.











Monday Mahi posts celebrating our people in October/November 2023, featuring from left to right: Kerry Holtham—Trade Waste Technical Advisor, Alistair Forsyth—Manager Service Delivery and Maintenance (South), Chrissy Seabourne—Senior Developer (GIS), Ropeti Taito, Customer Informations and Resolutions Lead, Alicia Wilcock—Graduate Engineer.



Wellington Metropolitan Water Treatment Plants – October 2023

Water Treatment plants	Comments	Safe drinking water	Fluoride
Vaterloo*	Taumata Arowai's new Assurance Rules commenced on the 15 th Nov. An exemption has been sought to meet new bacterial compliance criteria. This issue does not affect drinking water safety. Taumata Arowai are currently reviewing the Metropolitan Water Safety Plan. Waterloo achieved 48.8% compliance with the MoH's recommended fluoridation levels due to planned and reactive maintenance		
Vainuiomata	Taumata Arowai's new Assurance Rules commenced on the 15 th Nov. Taumata Arowai are currently reviewing the Metropolitan Water Safety Plan. Wainuiomata achieved 89.9% compliance with the MoH's recommended fluoridation levels due to planned and reactive maintenance		
e Marua	Taumata Arowai's new Assurance Rules commenced on the 15 th Nov. Taumata Arowai are currently reviewing the Metropolitan Water Safety Plan. Te Marua achieved 68% compliance with the MoH's recommended fluoridation levels due to planned and reactive maintenance		
Gear Island	Taumata Arowai's new Assurance Rules commenced on the 15 th Nov. Taumata Arowai are currently reviewing the Metropolitan Water Safety Plan. Gear Island achieved 88.1% compliance with the MoH's recommended fluoridation levels due the ongoing		



*Due to changes in the assurance rules, the capability of the existing Waterloo treatment plant facilities, and the layout of the network, a significant treatment plant upgrade and/or additional networ infrastructure is required to achieve compliance with the rule as written. Taumata Arowai have been requested to consider granting dispensation in this instance.

Supply and long-term drought resilience - October 2023

Supply risk	Comments	Risk level
Short term supply	The storage lakes are full and river sources at healthy levels. The Wellington Region moved to Level 1 restrictions on the 24th September. Wellington Water is currently planning for a possible acute water shortage if demand continues to increase over summer	
Long term supply (drought resilience)	Increased leakage and the impacts of climate change will likely lead to severe water restrictions in the years to come e.g. Level 4, which would mean asking people to reduce indoor use.	



iant but requiring ork/ compliant with essary regulatory rements

Compliant - we are meeting the necessary

regulatory requirements

South Wairarapa Water Treatment Plants – October 2023

Water Treatment plants	Comments	Safe drinking water	Fluoride		Compliar more wor
Waiohine	The Waiohine WTP is currently non-compliant with Taumata Arowai's new rules due to insufficient treatment to meet the source water risk. Taumata Arowai are currently reviewing the Featherston Drinking Water Safety Plan		Currently not yet mandated by the MoH		Not cor necess require
Memorial Park	The Memorial Park WTP is currently non-compliant with Taumata Arowai's new rules due to insufficient treatment to meet the source water risk.		Currently not yet mandated by the MoH	-	
Martinborough	The Martinborough WTP is currently non-compliant with Taumata Arowai's new rules due to insufficient treatment to meet the source water risk.		Currently not yet mandated by the MoH	-	
Pirinoa	Pirinoa is compliant against new bacterial and protozoal Rules. However further work is required to meet process assurance rules e.g. development of standard operating procedures		Currently not yet mandated by the MoH	_	

Supply and long-term drought resilience October 2023

Supply risk	Comments	Risk level
Short term supply	River sources are currently at healthy levels. Consequently, the South Wairarapa region is at Level 1 water restrictions.	
Long term supply (drought resilience)	Increased leakage and the impacts of climate change will likely lead to severe water restrictions in the years to come e.g. Level 4, which would mean asking people to reduce indoor use.	



Moa Point Wastewater Treatment Plant performance

Update - October 2023



Current status: Non-compliant

Commentary:

The plant remains non-compliant for suspended solids (90-day, 90th percentile limit) since 20 September. The plants current trends project it to be compliant by the end of November.

Discharges:

No unconsented discharges in October.

Please Explain letters:

Explanations were provided to GWRC for the two short outfall discharges in late September and for the plants' non-compliance with effluent quality.

Odour:

No odour complaints in October.

Items of significance:

Inlet Pump Station (IPS)

The first phase physical works to replace the IPS pipework are nearing completion. The projected completion date is now the end on November due to recent spells of poor weather. This work will improve pumping capacity at the IPS to reduce the risk of untreated wastewater discharges via the short outfall during high inflows.

Effluent Compliance

Investigation into effluent non-compliance continues along with development of an action plan to bring the plant back into compliance as quickly as possible.

Porirua Wastewater Treatment Plant performance

Update - October 2023



Current status: Compliant but with noted issue

Commentary:

The plant is compliant for effluent quality consent limits.

Discharges

There was one unplanned discharge in October, originally reported as unconsented.

Please explain letter issued:

GWRC requested an explanation for the discharge that occurred on 2 October. The sumo pump for the screenings press machine blocked causing a small overflow, which entered the common UV channel for disinfection. Sampling showed no adverse effects on the environment. A response was provided to GWRC within the required timeframe.

Odour:

Four unverified odour complaints for October were received in November

Items of significance:

UV Performance Issues:

An investigation into faults in the new UV treatment unit outlet penstock ruled out mechanical failure. The project team continue to implement process modifications to fine tune the system's operation. To date this has proven successful during high flows. The system will continue to be monitored while these changes are being implemented.

Odour Control:

The Weather Station at Pikarere Farm and the interim odour control measures are in place and fully commissioned, meeting the consent deadline of 12 October.

Appendix 2: Wastewater treatment plant and water treatment plant dashboard

Western Wastewater Treatment Plant performance

Update - October 2023



Current status: Non-compliant

Commentary:

The plant remains non-compliant for Biochemical Oxygen Demand (BOD) since 15 September (Geomean limit). The plants current trends project compliance by mid-November.

Please Explain letter:

GWRC requested an explanation for the plants' noncompliance with effluent quality. A response was provided to GWRC within the required timeframe.

Discharges:

No discharges in October.

Items of significance:

Outfall Repair:

The completion date for the main outfall pipeline has been delayed with work currently on hold due to a dispute with a nearby landowner. Discussions continue with the landowner and a resolution is expected soon.

Karori Tunnel Project:

The nearby Tunnel project has now been completed. This will improve upstream control of flow into the plant and increase resilience in the local network. It will also reduce the likelihood of discharges into the Karori stream during wet weather events.

Seaview Wastewater Treatment Plant performance

Update - October 2023



Current status: Non-compliant

Commentary:

The plant remains non-compliant for faecal coliforms (90-day, 80th percentile limit) since 30 September.

Discharges:

The plant had one consented discharge to the Waiwhetu Stream on 25 October due to high flows during a wet weather event, discharging fully treated effluent.

Odour complaints:

The plant received two odour complaints in October.

Items of significance:

Biofilter remedial works

Physical works to remove and replace the media will commence 14 November. Testing of current media was required for landfill disposal assurance and these test results came back within the landfill parameters. The project scope includes remedial works to the pipework located below the media. The project is expected to take 2-3 months to complete however the biofilters performance is expected to improve significantly as the works progress.

Seaview Wastewater Treatment Plant performance – Odour Treatment

Period - October 2023

What has been completed:

The planned odour survey and odour control system assessment report has been completed with several recommendations made.

A project brief for the renewal of the odour control system of the site has also been completed, incorporating the recommended actions from the investigation reports. The project is in response to the Abatement Notice that was issued by GWRC in April. The project has been assigned to Wellington Water's Major Projects Team to manage.

What is currently in progress:

WWL's Major Projects Team have assigned the project via the consultant panel. Project planning is underway.

Greytown Wastewater Treatment Plant performance

Period - Oct 2023



Current status: Compliant, but with the risks identified below

Commentary:

Earlier in the year, Greater Wellington Regional Council issued letters requesting explanations of non-compliance. Wellington Water is implementing the required corrective actions where possible within the plant and resource constraints.

Major investment is required, and current funding levels do not meet this requirement.

Wellington Water is undertaking a programme of work to better manage the treated effluent discharge rates in relation to the stream flow rate.

A compliance upgrade project is currently underway however the scope of that does not currently allow for growth.

Items of significance:

Current plant design and processes are inadequate resulting in a risk of non-compliance.

WWL working through options to optimise discharge to land during the coming irrigation season, to avoid where possible a discharge to Papawai Stream during low flow (informed by ecological assessments).

A new inlet flowmeter has been installed.

Irrigation season kick-off meeting with the glider club & graze Improved irrigation conditions have been agreed.

WWL has commissioned the consent-required 'Stage 1B Efficacy Report' for submission to GWRC by 1 January 2024.

Featherston Wastewater Treatment Plant performance

Period - Oct 2023



Current status: Compliant, but with the risks mentioned below

Commentary:

Major investment is required to achieve a new consent.

Renewal of the consent is being managed as a major project, and we are operating on an extension of the old consent.

The consent approval process currently underway will better inform the required capacity of the WWTP to cater or growth in Featherston beyond 2032.

Items of significance:

Annual Compliance Report received from GWRC with 'Good' Grading (3 out of 4 stars).

Plant continues to require ongoing management of resources focused on effluent quality to achieve compliance with consent requirements.

New major pump station in the network commissioned.

UV isolation valve installed, to avoid a nondisinfected discharge in the event of power failure.

New fencing is being installed.

Lake Ferry Wastewater Treatment Plant performance

Period - Oct 2023



Current status: Compliant, but with the risks identified below

Commentary:

GWRC have certified the submitted operations and management plan.

Further investment is required to achieve this management plan.

Project has been initiated to renew the resource consent by 2025.

Decisions around growth and development of additional treatment & disposal capacity will coincide with the resource consent renewal process.

Items of significance:

Source of current high Inflow and Infiltration is still not funded for investigation.

Lack of WWL compatible remote monitoring and control requires ongoing resources for operational management of this remote plant. A project is underway for installing new comms/control system.

Continued complaints from residents located below the disposal field of overland flow paths impacting property and slips.

Leaks on disposal field have been reported.

Operations and Management Plan approved by GWRC.

Martinborough Wastewater Treatment Plant performance

Period - Oct 2023



Current status: non-compliant

Commentary:

In August 2023, a "To Do Abatement Notice" was issued for Martinborough. This Notice replaces the Abatement Notice issued in 2022, although the WWTP still remains non-compliant.

WWL and SWDC are working together to address the items raised in the new Notice, as part of the compliance upgrade project underway.

Major investment is required, and current funding levels do not meet this requirement.

It is expected that decisions around additional treatment & disposal capacity will be discussed, once the Martinborough Growth Study (underway) is completed.

Items of significance:

Current plant design is insufficient to avoid non-compliance. Effluent discharge rate and quality to both land and river continues to exceed current consent limits.

WWL is setting up for the commencement of the irrigation season, firstly undertaking pre-season soil assessments.

A new pond inlet flowmeter has been installed.

Company and Governance Update

Appendix 3: Summary for councillors of papers to the Wellington Water Committee meeting, Monday 11 December 2023

Purpose

- 1. This appendix to the Company and Governance Update provides a summary of the content of the meeting's papers.
- 2. It is intended to support Committee members reporting back to their fellow councillors, and councillors to engage in the work of the Committee.
- 3. The present meeting is the fifth in the 2023 calendar year. The next meeting is scheduled for March 2024.

Overview of papers

- 4. Wellington Water items presented to the Committee this meeting are:
 - a. Company and Governance Update
 - b. Transition Update
 - c. Regional Investment 2024-34
 - d. Acute Summer Response
 - e. Action on broader themes identified in the June 2022 Fluoridation inquiry

Wellington Water Company and Governance Update

- 5. This paper covers: key governance conversations and actions; Water Committee priorities; and Operational achievements and Issues since the last meeting.
- 6. The Company and Governance Update also provides a brief comment on each of the Water Committee's current priorities. These are to ensure a smooth transition though water reform, three waters investment planning for the period 2024-34, sustainable water supply, and regulatory performance. These are largely covered by separate papers provided to the meeting and summarised below.
- 7. **Regulatory performance:** Relationships with regulators are strong, and the company is working closely with them on the response to the acute water shortage risk. As usual, treatment plant dashboards (for drinking and wastewater) are attached to the report.
- 8. **People:** the paper notes our continuing focus on keeping our people and our supplier whanau safe, engaged and informed.
- 9. **Budgets:** we are forecasting an overspend on council opex, however this will be offset by savings achieved in the management fee overheads. Capex spending is on track.
- 10. Capital delivery: We are now able to report on kilometres of pipes renewed each quarter. In Q1 this was 6.6km, against a target of 5km. There have been some significant milestones in major projects including completion of the Main Collecting Sewer from Barber Grove to Seaview WWTP and installation of the replacement Kaitoke pipe bridge.
- 11. **Treatment plants:** The report notes that three of the metropolitan wastewater treatment plants have become non-compliant for wastewater quality and gives reasons for this.

Company and Governance Update

- 12. **Growth:** the paper provides an update on the water network implications for the growth areas identified in the region's draft Future Development Strategy (FDS), and touches on the outcomes of growth studies undertaken for Wellington CBD, Northern suburbs and Featherston. These studies have identified projects that would increase network capacity and/or lift existing levels of service to accommodate development based on future population projections. Projects identified in these studies have been included in council LTP advice where requested.
- 13. Environmental Water Quality: we are seeking resource consent on behalf of Councils for discharges of waste and stormwater under the stricter environmental standards in Plan Change 1 to GWRC's Natural Resources Plan. The Plan Change is seeking improvements at a faster rate than we had anticipated (by 2040) and we are working with councils on a submission regarding deliverability.
- 14. We are now publishing monthly data on wastewater overflows from the network on the WWL website.
- 15. **Carbon:** the Carbon Guidance Document has been finalised. This will provide guidance on how to carry out carbon assessments at all gateways of the capital delivery process.

Transition Update

- 16. The paper provides an update on the progress of transition related work activities within Wellington Water Limited (WWL) in support of our shareholding Councils as they navigate through Affordable Water Reform.
- 17. It recognises the uncertainty created by the change of Government and the impact this has on WWL staff. Managing this impact on our people is the key task of the transition programme at this time.
- 18. The National Transition Unit and Wellington Regional Establishment Group are refocusing their efforts on work that will have lasting benefits regardless of the future of reform. This is resulting in a reduction in transition activities within WWL.

Regional Investment 2024-34

- 19. The paper provides an update on the work WWL is doing with councils to set investment levels in 2024/34 long-term plans, and acknowledges that councils, due to their own financial and debt constraints, are unlikely to be able to invest to the levels needed to meet the needs of the region.
- 20. The unconstrained view of the total investment need equates to \$30 billion over 30 years. WWL is recommending a maximum deliverable programme which is a regional total of \$7.6 billion over ten years.
- 21. We acknowledge the tight fiscal environment, and that Councils are still in the process of making funding decisions for their draft LTPs. It is likely Councils will fund close to the baseline programme (\$2.8 billion over ten years).
- 22. This will impact on the region's critical risks especially the provision of adequate drinking water to meet future demand and growth and the acute water shortage.

Acute Summer Response

- 23. The paper provides an update on the planning to control the risk of an acute regional shortage over the summer of 2023/24.
- 24. Modelling has been done on the likelihood and consequences of the acute water shortage risk.

Company and Governance Update

- 25. Risk mitigation activities include work on pressure management innovations and enabling the Wainuiomata WTP to continue to operate at lower flows.
- 26. Despite all mitigating efforts, the risk of water shortage remains high. WWL is working with regulators to prepare authorisations should this summer require WWL to take water beyond the limits allowed by the current resource consents.
- 27. WWL is also working closely on this with councils and with key stakeholders including Wellington Region Emergency Management Office, Mana Whenua, councils, Taumata Arowai and Regional Public Health.

Action on broader themes identified in the June 2022 Fluoridation inquiry

- 28. The paper notes that the WWL has completed the recommendations of the inquiry and that it was closed in December 2022. It provides an overview of how the company has acted on the findings of the Fluoridation Inquiry that went wider than operational issues.
- 29. The paper provides assurance that WWL has made improvements to how issues are raised internally and shared externally; improved our level of asset management maturity; strengthen internal audit and assurance functions; and instigated more regular and proactive public reporting of fluoride levels and other markers of our performance.

Komiti Ngā Wai Hangarua Wellington Water Committee

05 December 2023

Report no: WWC2023/5/401

Regional Investment 2024-34

Purpose of Report

- The purpose of this report is to seek a regional position statement (Regional Investment Statement) setting out the investment direction required to be funded by councils if regionally agreed three waters outcomes are to be achieved.
- 2. The report also provides the Wellington Water Committee (the Committee) with an early signal on the regional implications of funding inconsistent with this direction and below Wellington Water's recommended investment in 2024-34 Long Term Plans.

Recommendations

That the Committee:

- (1) endorses the position statement (Regional Investment Statement) attached as Appendix 1 to the report, which sets out the agreed Regional Strategic Priorities, the risks of constrained and uncoordinated investment and the recommended shareholder investment to make progress towards achieving the regional outcomes for both operational and capital expenditure;
- (2) notes that endorsing the Regional Investment Statement fulfils the Committee's regional leadership function whilst respecting that individual councils will make their own decisions in their own context;
- (3) notes that Councils are signalling that Wellington Water's recommended programme, which totals \$7.6 billion over the next ten years (the maximum deliverable) for the 2024-34 period, will be unaffordable because of fiscal constraints and concerns about the impact on ratepayers;
- (4) notes that investment below the recommended levels and inconsistent with the Regional Investment Statement will exacerbate the critical risks faced by the region and create new risks at a local and system level; and
- (5) notes the Wellington Water Board received on 9 November 2023 an assessment of the likely impacts and consequences of funding below the recommended programme and closer to the LTP baseline. WWL has provided an abridged version of the Board report to the Committee.

Background

- 3. The Committee provides regional leadership and a forum for discussion on issues related to the planning, delivery, and management of water services to the communities serviced by Wellington Water.
- 4. The Committee has asked Wellington Water to take a regional approach to investment, guided by five strategic priorities: looking after existing infrastructure, supporting a growing population, sustainable water supply and demand, improving environmental water quality, and achieving net zero carbon emissions and building resilience. These investment priorities informed Wellington Water's investment advice for the shareholders' 2021-31 Long-term Plans (LTPs) and are also being applied to 2024-34 LTPs. The Committee has also requested that the principles of Te Mana o Te Wai be applied.
- 5. Wellington Water's role for shareholding councils is to provide advice on investment levels to deliver expected levels of services for three waters. Councils own the assets and determine the levels of funding on an individual basis.
- Wellington Water's role for the Committee is to provide a strategic view of the region and report on performance, risk, and other matters of regional significance.
- 7. Using a staged process, Wellington Water provides investment recommendations to each council, clearly stating what the council will achieve for the funding and what risks will exist.
- 8. The unconstrained investment required to deliver against all the region's strategic priorities is estimated to be \$30 billion over 30 years. Wellington Water has also provided a recommended programme based on the maximum that can be delivered (the maximum deliverable) of \$7.6 billion regionally over 10 years.
- Wellington Water's approach to delivering investment advice for the shareholder council's 2024-34 LTP processes has been endorsed by the Wellington Water Board.

Direction of regional investment workshop

- 10. The Committee held an Investment Planning workshop on 6 October 2023 with a view to collectively addressing the regional three waters challenges at a system level. This workshop presentation is included as Appendix 1 to the report.
- 11. The aim was to 'To develop a definitive Wellington Water Committee recommendation or position statement that WWL can incorporate into investment advice for individual councils.

- 12. The direction from the workshop was an endorsement of the proposed scope for the investment. The draft position statement is attached to the report as Appendix 2. It sets out the regional strategic priorities, the risks of constrained and uncoordinated investment and the recommended shareholder investment for regional outcomes.
- 13. Endorsing the Regional Investment Statement fulfils the Committee's regional leadership function. It will flow down into Wellington Water's asset management approach and framework. It also supports the advice Wellington Water provides to councils and helps councils understand their role in investing to achieve regional outcomes.
- 14. The position statement also provides a clear direction for investment in three waters services as leaders determine the region's future provision and operating model.
- 15. Endorsement from the Wellington Water Committee respects that each council makes its own decisions within its own context, with knowledge of the risks of these decisions.

Constraints and early signals of likely funding from councils

- 16. All councils are impacted by fiscal constraints, with future potential debt capacity being low, increases in costs of borrowing and general cost increases. The councils are concerned about the impact on ratepayers and council credit ratings.
- 17. Several, if not all, shareholder councils have publicly expressed these concerns, and some have been specific that they cannot provide and sustain three waters services into the future.
- 18. The uncertainty of Water Reform adds to the complexity and uncertainty of future delivery models and funding mechanisms.
- 19. Whilst acknowledging that Councils are still in the process of making funding decisions for their draft LTPs, it is likely Councils will fund closer to the baseline programme (\$2.8 billion over 10 years) rather than the recommended programme (\$7.6 billion over 10 years).

Implications

- 20. The position statement sets out the risks of constrained and uncoordinated investment for each strategic priority.
- 21. Funding lower than the Wellington Water recommended programme will result in an under-investment across all the strategic priorities, and a coordinated approach will not be achieved. In the baseline programme funding, it is likely that opex and capex funding will largely be consumed by 'Looking after Existing Infrastructure', with some towards 'Sustainable Water Supply and Demand'.
- 22. This means there is very little investment in the remaining strategic priorities.

23. Using the position statement, a high level assessment of the likely funding for the LTPs 2024-34 for each strategic priority and the impact for each strategic priority is provided below:

Regional Strategic Priority	Funding indications for the 2024-34 LTPs	Likely risks emerging from constrained and uncoordinated investment
Looking after existing infrastructure Collective effort enables efficiencies. Renewals support the achievement of all other priorities (e.g. leak reduction).	Constrained capital budgets are focused on completing major projects in flight, limiting the quantity of renewals that can be undertaken. Constrained opex budgets will limit planned and reactive maintenance levels, along with ongoing investment in asset condition assessment.	Renewal backlogs will increase. Risks of asset failure and service interruption continue and increase. Customer service will further reduce with leaks taking longer to be fixed or not being fixed. Increased likelihood of noncompliance with standards and consents.
Sustainable water supply and demand The shared system requires collective investment in supply and demand to achieve sustainable financial and environmental outcomes.	Constrained funding for leak detection and repair (see above). Varying support to install smart metering that provides better information to find leaks and ultimately reduce water demand. Investigations on new storage lakes are likely to be started.	Ongoing elevated risk of supply shortages. Ever-increasing cost of supply as more expensive options are required.
Supporting growth Growth is being considered regionally but requires local investment	Growth studies have indicated that billions of dollars are required, predominantly to address existing shortfalls. Constrained capital budgets mean that investment will likely be focussed on limited areas. Funding is prioritised to support projects delivered by others, such as Kainga Ora and through the IAF.	Capacity is already exceeded across parts of the network. This will result in it becoming more difficult to obtain permission to connect to the network where there are capacity constraints. Investment cannot keep pace with growth, resulting in. levels of service for all customers continuing to decline due to increasing demand on the existing network.
Improving environmental water quality We all benefit from healthy harbours and rivers.	Funding to support existing consents has been prioritised, mostly related to WWTPs. Limited funding for the Global Stormwater and wastewater network overflow consents to focus on planning to meet the targets (modelling and catchment plans) and noting that the consent targets have not yet been agreed upon.	Over time, the degradation of urban waters continues. Public expectations and consent requirements were not met.

Achieving net zero emissions Shared climate impacts and shared emission sources	Only very limited funding to understand the investment required to reduce carbon emissions.	Emissions continue to rise, and there is no roadmap to emission reduction.
	Low-carbon energy sources are being investigated as part of the Seaview sludge dryer renewal project.	
Resilient to natural hazards Flood risk is a local issue that can have regional consequences. The region's critical infrastructure remains exposed to seismic and climate risks.	Very limited funding. Existing earthquake resilience projects are to be completed, and flooding interventions are limited.	Risk of significant flood impacts increases with climate change. Services remain vulnerable to seismic and climate risks.

- 24. At its meeting on 9 November 2023, the Wellington Water Board received an assessment of the impact if councils decide to fund programmes below the Wellington Water recommended programmes and close to the baseline programme. The paper is attached as Appendix 3 to the report. (Note: permission has been sought from each council to provide the Wellington Water recommended funding and baseline programme).
- 25. The Board were informed that the regional approach to investment and 'the delivery of the five strategic priorities is under severe stress' in the context of increasing regulatory standards and community expectations. Seeing how Wellington Water can affect Te Mana o Te Wai in these circumstances is very challenging.
- 26. Of particular concern will be the ability of the company to supply water to communities in the coming summers and that the cost of addressing the issue will increase the longer investment is deferred.
- 27. Other risks the company, and therefore the region, will need to manage are shown in the attached Board paper.
- 28. Following the meeting, the Board Chair wrote to the Committee Chair, setting out the Board's concerns. This letter is included as Appendix 4.

Impact on Te Mana o Te Wai

29. Alongside the provision of 2024-34 LTP recommendations, Wellington Water has been building relationships with Rangitāne ki Wairarapa, Ngāti Kahungunu ki Wairarapa, Taranaki Whānui and Ngāti Toa Rangatira to understand how best to embed Te Mana o Te Wai.

- 30. The clear message from each iwi is that removing wastewater from waterways is a priority. This issue will be addressed through the Improving Environmental Water Quality strategic priority, where relatively low investment is being signalled. While the incoming Government has signalled some changes to policy settings in this area, the long-term aspirations of iwi and the wider community for improvements in this area are unlikely to change.
- 31. Conversations with iwi mana whenua are ongoing. Wellington Water will be clear about the respective roles between Wellington Water as the asset manager and shareholder councils as the asset owner. Wellington Water will continue to be open about what we can achieve with the funding we receive.

Next steps

- 32. Wellington Water will:
 - continue to support shareholder councils with their funding decisions by providing prioritisation advice and optimising draft programmes,
 - b. provide further updates to the Committee on the implications of council funding decisions,
 - c. continue to engage with iwi Mana Whenua partners.

Climate Change impact and considerations

33. There are no direct climate change impacts or considerations from the matters addressed in this report.

Appendices

No.	Title	Page
1 <u>↓</u>	Appendix 1: WCC workshop 2024-34 investment planning	72
2 <u>↓</u>	Appendix 2: Regional investment statement 2024-34	90
3 <u>₽</u>	Appendix 3: Investment advice 2024-34 update	92
4 <u>↓</u>	Appendix 4: Letter from Board Chair to Water Committee Chair	103

Author:	Wellington	Water	Limited



2024/34 Investment Planning Workshop

Wellington Water Committee 6 October 2023



Our water, our future.

Workshop purpose

Collectively addressing regional three waters challenges

- Each council makes its own investment decisions, within its own context
- But that context needs to include regional three waters requirements
- Councils need to understand their role in investing to achieve regional outcomes

"To develop a definitive Wellington Water Committee recommendation or position statement that WWL can incorporate into investment advice for individual councils"



The Committee's expectations

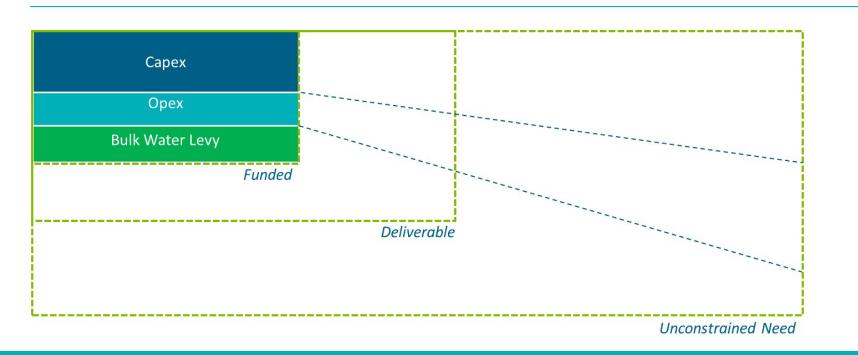
Your 2024/34 investment planning requirements

- Investment aligned to regional strategic priorities
- Mana whenua priorities are considered
- Regional capacity and capability is increased
- Impacts of funding levels and allocations are understood
- Council inputs coordinated to achieve regional outcomes
- Councils supported to achieve alignment with NTU & REG
- KRA scenario for water supply incorporated into LTP advice



Councils have two key decisions

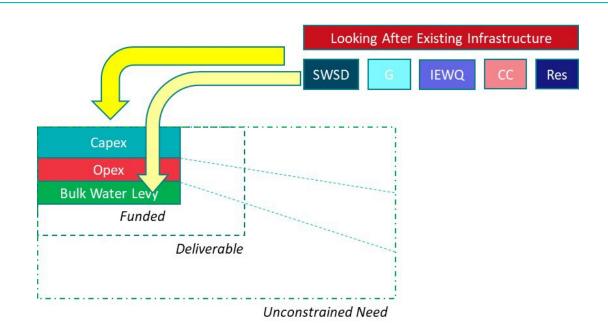
#1 The size of the pie... (i.e. total investment level)...





Councils have two key decisions

#2 ...and the flavour of the pie (i.e. how the investment is allocated)





The process is complex, and may change again

There are lots of parties and different approaches

Planning Years	1 – 2 (2024/25 – 2025/26)	3 - 10 (2026/27 – 2033/34)				
Document	LTP	("Initial") Entity AMP				
		Draft	Final			
Consults with	Ratepayers	Councils ComCom	ComCom Councils? Mana Whenua?			
Engages with	NTU then REG	Mana Whenua Regional Council	Regional Council?			
Decision by	Councils (separately and independently)	NTU Board	Entity Board			



Agreed regional strategic priorities



Looking after existing infrastructure



Sustainable water supply & demand



Supporting growth



Improving environmental water quality



Achieving net zero emissions



Resilient to natural hazards



Looking after existing infrastructure



A significant increase is needed to restore reliability and resilience

The regional story:

Collective effort supports all priorities and enables efficiencies

- Pipe renewals backlog cleared in 30 years
- Treatment plants managed for effective, resilient performance
- Sufficient opex to deliver expected levels of service
- Ongoing investment in condition assessment



Sustainable water supply and demand 📇



Remember our three key long-term outcomes: Keep, Reduce, Add

The regional story:

The shared system requires collective investment in supply and demand to achieve sustainable financial and environmental outcomes



Keep the water in the pipes



Reduce water demand through water metering



Add more supply – new storage lakes so we have sufficient supply in the summer and complete the existing project to optimise Te $M\bar{a}$ rua capacity



Supporting growth ***

Capacity is already exceeded across the networks

The regional story:

Growth is being considered regionally, but requires local investment

- Growth studies identify billions of investment needed, primarily to address existing shortfalls
- Much of the existing funding is external (IAF, etc.)
- Regional direction being set in the Future Development Strategy (FDS)
- Investment needs not fully understood, especially for bulk networks



Improving environmental water quality



Commencing investment to meet raised expectations

The regional story:

We all benefit from healthy harbours and rivers

- Te Mana o te Wai provides (and requires) a holistic, multi-generational perspective
- Natural Resources Plan change (for all Whaitua) and resource consents for discharges are setting new regulatory expectations
- There is a gap between aspirations, expectations, and ability to pay
- Will require prioritisation, i.e. which catchments come first?
- Significant investment is needed (\$bn) but can't invest without planning



Achieving net zero emissions



Taking the first steps on the emissions reduction roadmap

The regional story:

Shared climate impacts, and shared emission sources

- Emissions are increasing with increasing demand
- There is a clear roadmap for achieving reductions
- Investigations (opex) are needed to turn the roadmap into investments



Resilient to natural hazards



Climate risks are increasing, and the seismic risk remains

The regional story:

Flood risk is a local issue that can have regional consequences. The region's critical infrastructure remains exposed to seismic and climate risks

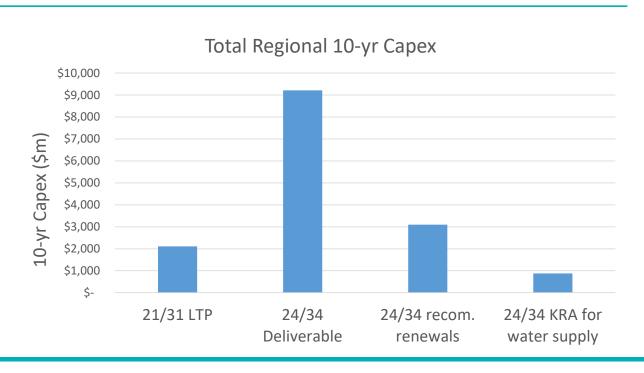
- Levels of flood protection are highly variable across the region
- Important seismic investment completed but other elements not funded
- Investment (opex) needed to understand climate risks to critical assets and systems*
- Review seismic resilience strategy to understand residual risks (opex)



Investing in the 'right' things

There are limits to what the region can fund so prioritisation is needed

- WWL's delivery capacity has grown as funding has increased, and can continue to sustainably grow if that funding commitment increases
- Majority of funds for early years is already committed
- Opex also needs to increase to reflect rising costs and new requirements





Attachment 1

"To develop a definitive Wellington Water Committee recommendation or position statement that WWL can incorporate into investment advice for individual councils"

The Proposal:

That the WWC agree a 1-2 page position statement setting out the investment direction that is required to be funded by councils if regionally-agreed three waters outcomes are to be achieved

- An outline of the proposed scope has been prepared (next slide)
- Proposed scope reflects agreed regional priorities and direction and the anticipated funding and capacity scenario
- The position statement would acknowledge specific differences (e.g. South Wairarapa vs. metros)

Some possible questions for you to consider:

- Do you think this investment will get the services to where they need to be in 10 years' time (acknowledging constraints)?
- Are there particular investments that need to be highlighted or prioritised?
- Is there anything missing?



Proposed scope for investment

Strategic priority	WWC's regional investment direction
Looking after existing infrastructure	Lift investment in pipe renewals to address the backlog within 30 years. Investment in treatment plant renewals in line with WWL recommendations. Sufficient opex to achieve required levels of service and meet customer expectations, including ongoing commitment to condition assessment
Sustainable water supply and demand	Investment consistent with Keep, Reduce, and Add outcomes i.e. capex for water meters[R] (TAs) & lakes[A] (GWRC). Opex uplift for water loss management[K](TAs).
Growth	Any investment should be consistent with the direction in the FDS Complete bulk network strategic studies and remaining local growth studies (opex)
Improving environmental water quality	Commence development of investment plans and engineering design for priority catchments for WWNO and GSWC
Reducing carbon emissions	Progress investigations towards final design for regional biosolids (TAs) and renewable generation (GWRC). Commence WWTP emissions monitoring.
Increasing resilience to natural hazards	Climate risk assessments (done together with bulk network growth studies) Review of 80-30-80 seismic resilience strategy (GWRC)



Letter of Expectations for 2024/25

The Letter of Expectations is due in December

- One of the tasks of the Wellington Water Committee is to agree the Letter of Expectations for WWL for the next financial year.
- This is due in December, to inform the development of the next Statement of Intent.
- Due to uncertainties around reform ahead of the General Election, it is too soon to begin drafting the content for this at this meeting.
- The Chair (supported by the Committee Secretariat and Wellington Water) will engage with members in advance of the next Committee meeting on 8 December.
- The outcomes of today's workshop on regional priorities will feed into that work.



Attachment 2

Wellington Water Committee: Recommendations to Shareholders on 2024/34 regional investment priorities

The Wellington Water Committee (Committee) provides regional leadership and a forum for discussion on issues related to the planning, delivery, and management of water services to communities serviced by Wellington Water. Our responsibilities include providing coordinated recommendations to the parties to the Shareholders and Partnership Agreement on these issues.

The Committee has set regional strategic investment priorities for the three waters services. These investment priorities informed Wellington Water's investment advice for Shareholders' 2021/31 Long Term Plans (LTPs) and are also now being applied to their advice for the 2024/34 investment period.

The Committee is seeking that shareholders' inputs to 2024/34 investment plans are coordinated to ensure regional three waters services, capability and capacity are enhanced over this investment period. The region shares the outcomes and benefits of the three waters services in numerous ways:

- Residents and ratepayers share in the economic, cultural, social, and health benefits of the services as they live, work, and play across the region;
- Ratepayers share the ownership of some key assets and services, such as treatment plants; and
- Reducing the impacts of the services on shared waterbodies, including Te Whanganui-a-Tara, Te Awarua o Porirua, and Te Awa Kairangi.

Having considered the investment needs and the nature, scale, and urgency of the regional impacts, the Committee recommends that Shareholders include the following investment in their 2024/34 LTPs. Achieving the desired outcomes requires the Shareholders to act together. Uncoordinated investment will result in adverse outcomes for our communities and reduce the efficiency and effectiveness of the funding provided.

Regional Strategic Priority		Risks of uncoordinated Re		Recommended shareholder investment for regional outcomes*			
Region	al Story	investment					
	Looking after existing infrastructure Collective effort supports all priorities and enables efficiencies. Renewals support the achievement of all other priorities (e.g. leak reduction).	Reduced services for customers. Increased likelihood of non- compliance with standards and consents.	Capex Opex	Lift investment in pipe renewals to remove backlog within 30 yrs. Investment in treatment plant assets to WWL recommendations. Sufficient opex to achieve required levels of service and meet customer expectations, including an ongoing commitment to condition assessment			
	Sustainable water supply and demand The shared system requires collective investment in supply and demand to achieve sustainable financial and environmental outcomes	Ongoing elevated risk of supply shortages. Ever-increasing cost of supply as more expensive options are required.	Opex Capex	Keep the water in the pipes: increase water loss management. Reduce the demand for water: Universal water meters. Add more storage: Pākuratahi storage lakes (GWRC).			
	Supporting growth Growth is being considered regionally, but requires local investment	Investment not able to keep pace with growth.	Capex Opex	Ensure any investment is consistent with FDS Complete bulk network strategic studies and remaining local growth studies			
CD.	Improving environmental water quality We all benefit from healthy harbours and rivers	Degradation of urban waters continues. Public expectations and consent requirements not met.	Opex	Commence development of investment plans and engineering design for priority catchments for Global Stormwater Consent and Wastewater Network Overflow Consent.			
\bigcirc	Achieving net zero emissions Shared climate impacts, and shared emission sources	Emissions continue to rise.	Opex	Progress investigations towards final design for regional biosolids (TAs) and renewable generation (GWRC). Commence wastewater treatment emissions monitoring (TAs).			
	Resilient to natural hazards Flood risk is a local issue that can have regional consequences. The region's critical infrastructure remains exposed to seismic and climate risks.	Risk of significant flood impacts increases with climate change. Services remain vulnerable to seismic and climate risks.	Opex	Climate risk assessments (done together with bulk network growth studies) Review of 80-30-80 seismic resilience strategy (GWRC)			

^{*} Note that Shareholders will also have potential investments for all strategic investment priorities that are required to support local outcomes.



BOARD PAPER: Investment Advice 2024-34 Update

Current Risk Appetite:

Agenda no: 3.1. Risk Category: GM Responsible: Stakeholder

081-02 Paper no: For: Endorse

Meeting: 9 November 2023

Consulted:

Julie Alexander GM NSP

Mark Ford GM BS

Charles Barker DRS

Paul Clarke Tumuaki Māori

Purpose

- The purpose of this paper is to update the Board on the investment advice being provided to councils to support their 2024-34 Long-Term Plans (LTP), give an indication of the likely funding councils will provide for three waters and highlight the implications of the likely investment levels for 2024/25 onwards.
- The Board is asked to endorse the principles of by which Wellington Water has engaged with councils to support their LTPs.

Recommendations

- It is recommended that the Board:
 - Note Wellington Water is at the second stage of our four-stage process for providing investment advice for our councils' 2024-34 LTPs, where we present investment options within a funding envelope and the associated risk profiles.
 - Note councils are signalling that, due to their own financial and debt constraints, funding is likely to fall below the recommended level, most likely at the bottom of the potential funding envelope and similar to existing levels (the minimum/baseline scenario).

- **Note** the impact on the company's critical risks if councils ultimately provide the level of funding being signalled especially the provision of adequate drinking water to meet future demand and growth and the acute water shortage.
- **4. Endorse** the principles applied to the delivery of Long-Term Planning advice and the proposed approach for providing the final (stage three) investment advice to councils.

Attachments

- 4. There are three attachments:
 - Attachment A: The staged approach to providing investment advice
 - Attachment B: Stage 2 investment options presented to councils for capex and opex THIS APPENDIX HAS BEEN ABRIDGED TO REMOVE SPECIFIC COUNCIL REFERENCES
 - Attachment C: Early signals from each council on likely funding direction THIS APPENDIX HAS BEEN REMOVED

Summary

- 5. Wellington Water's role is to provide investment advice to councils, and work is underway to support councils with Long-Term Plans (LTPs) to establish funding levels for the 204-34 period. This is being undertaken through a four-stage process (set in Attachment A).
- 6. We have applied the following principles to the delivery of investment advice to councils:
 - a) Taking a regional approach, guided by five strategic priorities and the principles of Te Mana o Te Wai (as requested by the Wellington Water Committee),
 - b) Provide an unconstrained view of the total investment need, a recommended programme Wellington Water can deliver (the maximum deliverable programme) and a baseline programme,

- c) Be clear on the risks of not investing at each stage of the process,
- d) Use data and evidence to support the auditing of LTPs,
- e) Work with councils in a constructive manner, with awareness of their affordability constraints, and
- f) Continue to endeavour to engage with mana whenua iwi to determine their priorities for investment in a way that works for each.
- 7. The unconstrained investment need for the region is estimated to be in the order of \$30 billion capital funding (capex) over 30 years, and the maximum deliverable programme for the next 10 years is around \$7.6 billion. It is likely that councils will fund closer to the baseline programme of \$2.8 billion, due to affordability constraints. Operational funding (opex) is also constrained.
- 8. The likely levels of funding will exacerbate the company's critical risks and create new risks. Of particular concern is the ability of the company to supply water to communities in the coming summers and that the cost of addressing this will increase the longer investment is deferred, impacting Te Mana o Te Wai and wider environment.
- 9. The next stage in our advisory process (stage three) is to deliver a programme to each council based on what each council can afford, broken into three categories of capital activity:
 - a) the programme of critical activity that fits within the councils' budgets,
 - b) the critical activity which is un-funded but which Wellington Water recommends should be funded as a priority if further funding were provided, and
 - c) the other activity that Wellington Water considers is required and would plan to deliver if full funding to the maximum deliverability threshold was provided.

Background

- 10. The Wellington Water Committee has asked Wellington Water to take a regional approach to investment, guided by five strategic priorities: looking after existing infrastructure; supporting a growing population; sustainable water supply and demand; improving environmental water quality; and achieving net zero carbon emissions and building resilience. Our advice is also being guided by the principles of Te Mana o te Wai.
- 11. There are significant investment challenges facing the region's water infrastructure which are increasing the amount of work required to deliver on the strategic priorities. There is a history of underinvestment in renewals, water loss issues, regulatory standards are increasing, and the region has a growing population.
- 12. Councils own the water assets and are responsible for the investment in water services. Every three years, councils are required to undertake the LTP process, identifying proposed activity and investment over a 10-year period. LTPs for 2024-34 are being drafted and will be in effect from 1 July 2024.
- 13. Wellington Water's role is to provide investment advice to support councils' LTP funding decision making in a manner that reflects the strategic priorities for water the region. Councils consider the advice of Wellington Water for capital expenditure (capex) and operational expenditure (opex) and make all final funding decisions and accept the resultant risk.
- 14. The Water Services Entities Amendment Bill requires that LTPs will include three waters information for the first one to two years of the plans, with government deciding on investment in three waters from year three onward (through Entity G for the Wellington Water councils). On-going alignment and coordination between all parties on information requirements and timing is key to ensuring Wellington Water can support these processes effectively.
- 15. Councils LTP processes will be audited so Wellington Water needs to give the councils confidence in the investment advice provided. A paper 'Activities underway to support auditing of councils LTP documents' is being considered at the Audit and Risk Committee on 9 November, which sets this process out.

Developing investment advice

- 16. Councils will receive their advice in four stages, set out in Appendix A The staged approach to providing investment advice. The approach taken aligns with council's own processes around decision-making. Councils are preparing their draft LTPs, which will be released for public consultation in March/April 2024.
- 17. A considerable amount of work has been undertaken to obtain a clearer understanding of the investment need for the region. Modelling and asset management planning show that the unconstrained investment need for the region is in the order of \$30 billion over the next 30 years. This level of investment is unsustainable for councils to fund and unachievable for Wellington Water to deliver on, under current settings.
- 18. Wellington Water has considered a level of capital investment that we believe could be delivered over the 2024-34 period if funding were made available the "maximum deliverable investment level". For each council we have derived a maximum deliverable programme over 10 years based on a 30% year on year uplift. This is the basis of our recommended programme for each council and equates to a regional total of \$7.6 billion over 10 years.
- 19. We have met with all iwi groups (Rangitāne ki Wairarapa, Ngāti Kahungunu ki Wairarapa, Taranaki Whānui and Ngāti Toa Rangatira). One message is clear that removing wastewater from rivers is a priority.

Investment signals from councils

- 20. We are at stage two (see appendix A) of the process. All six councils are facing fiscal constraints with future potential debt capacity being low, exacerbated by increases in the cost of borrowing and general cost increases. Councils are also cognisant of the financial pressure that is passed on to ratepayers because of council spending. For these reasons, it has been indicated that the level of funding that is affordable for councils will be less than what we will be able to deliver.
- 21. Early indications signalled by councils is that an affordable funding level for three waters will fall close to current LTP funding levels what we are calling the councils' "baseline" scenarios. At \$2.8 billion over the 2024-34 period, this baseline level is significantly below what Wellington Water recommends the councils should invest in three waters (\$7.6 billion) but is above the 2021-31 agreed investment of \$1.9 billion.

- 22. Appendix B highlights the difference in investment levels between the maximum deliverable and the baseline for the first two years and as a 10-year programme. It also provides indicative operational expenditure.
- 23. The direction of our advice to councils has been that councils should focus on:
 - a) increasing investment in renewals to address backlogs over a 30-year period and reduce them to a long-term sustainable level,
 - b) having regional alignment to address the critical water supply risk, with coordinated investments in storage, metering and leak repairs, and
 - c) ensuring investment to meet increasing regulatory requirements.
- 24. On this basis, it is expected that capex funding will again be largely consumed by renewals and sustainable water supply in the first instance, then investment in wastewater plant and network with remaining limited funding available for growth projects, environmental water quality including stormwater, and carbon reduction.
- 25. The recommendations for opex are that councils fund our recommended FY 2023/24 budgets as a baseline for FY 2024/25, noting that some councils did not fund our recommended budgets for this year because of affordability issues. Our opex advice includes a lift for leak management and repair activities. Early signals from councils are that opex will continue to be very constrained and the baseline level recommended by Wellington Water will not be achieved. Appendix C provides further detail for each council.

Implications and risks of the 2024-34 investment advice signals

26. The councils' funding decisions falling below the Wellington Water recommended maximum deliverable level exacerbate the company's critical risks and create new risks.

Critical Risk	Commentary
AC476	The controls for this risk rely upon a regional approach and investment to be made for leak management activities (Opex),
Inadequate water supplies	the implementation of water meters and funding the construction of Pakuratahi storage lakes (Capex). Opex is likely to be
to meet future demand	constrained, not all councils are likely to commit to water meters. Investment in the investigations for the Pakuratahi Lakes
and growth	are likely to be funded, but construction not yet committed.

	Without these controls, the ability to supply adequate water to meet future growth and demand is more challenging, and the cost of doing so will become greater to achieve.
AC475 Acute water shortage	Of significant concern is the ability to manage acute water shortages for on-going summers given the likely insufficient response to addressing the longer-term water supply issues and the opex constraints outlined below.
AC421 Operational funding	Reductions from the recommended levels affect the ability to operate and maintain the network, and to provide water services effectively to customers. Activities likely to be impacted include investigations, leak detection, condition assessment, planned maintenance and reactive maintenance, including leak repairs.
AC230 Unplanned critical asset failure	Operational funding is required to ensure a continued and growing planned programme of condition assessments of all assets, including critical assets, as well as to complete investigations and studies necessary to plan for capex investments to address critical asset failure risks.
AC457 Treatment of wastewater	The risk that proposed investment levels are insufficient to address known asset failure risks, or improvements required to meet consent compliance activities. wastewater treatment plant operations continue to operate outside of consents, causing regulatory action to escalate.
AC456 Leadership, people, culture and behaviours	The inability to deliver the best possible water services and key outcomes for the region, coupled with the uncertainty of water reform, could be a de-motivating factor for many of our people impacting engagement and retention. Leaders will need to address this challenge.

- 27. The company's risk profile will need to be reassessed once councils have made their funding decisions with other risks potentially emerging such as:
 - a) Supporting strategic priorities there will be limited funding available to support the region to grow, improve the health of the harbour and waterways (through the implementation of network discharge consents), improve resilience and reduce carbon emissions,
 - b) Regional contractor resource We have been encouraging our supplier whanau to grow capex delivery capacity and capability by 30% year on year. There is a risk that consultants and contractors will favour work in other locations and sectors, eroding the capacity for delivery in water programmes. The company critical risk AC422 Delivery of the capital programme into the future, will need to be adjusted, and
 - c) Relationships with mana whenua iwi whilst we recognise the importance of Te Mana o Te Wai and aim to work with mana whenua iwi to understand how best to embed it, the likely funding constraints to deliver the improvements necessary, particularly to address wastewater

issues, could strain these relationships. Work is underway to be clear on the respective roles between us and councils to try to manage this, and to be open and honest about what we can achieve with the funding we receive.

- 28. Despite our efforts to influence councils individually and through the Wellington Water Committee, these early investment signals indicate that both the regional approach to investment and the delivery of five strategic priorities are under severe stress, in a context of increasing regulatory standards and community expectations. It is very challenging to see how we can give effect to Te Mana o Te Wai in these circumstances.
- 29. Of particular concern will be the ability of the company to supply water to communities in the coming summers, and that the cost of addressing the issue will increase the longer investment is deferred. It is in the interests of the community for the region to be supplied with sufficient water at the lowest cost, least impact on Te Mana o te Wai and the wider environment, and lowest carbon emissions.

Stage 3 Investment Advice 2024-34 being provided to councils

- 30. The final (Stage 3) advice is a programme based on a funding level that is affordable for councils. Councils will determine their affordable investment levels, with our support.
- 31. The Stage 3 advice includes recording how this advice compares to the recommended investment and the resulting risks to the councils.
- 32. At the end of Stage 3, councils will receive a final draft 2024-34 LTP programme broken into three categories of capital activity:
 - a) the programme of critical activity that fits within the councils' budgets,
 - b) the critical activity which is un-funded but which Wellington Water recommends should be funded as a priority if further funding were provided, and
 - c) the other activity that Wellington Water considers is required and would plan to deliver if full funding to the maximum deliverability threshold was provided.

- 33. We will recommend that opex will largely be focussed on the critical spend areas of Monitoring, Operations and Treatment Plants. Any reductions in budget will be mostly in the areas of investigations, planned maintenance and reactive maintenance, and would reduce the level of service provided, potentially including leak reduction activities.
- 34. The key risks with the final draft capex and opex programmes that the councils can fund to will be articulated to the councils and given the shortfall in funding will be confronting to some councils and strain relationships.

Recommendations

- 35. It is recommended that the Board:
 - Note Wellington Water is at the second stage of our four-stage process for providing investment advice for our councils' 2024-34 LTPs, where we present investment options within a funding envelope and the associated risk profiles.
 Note councils are signalling that, due to their own financial and debt constraints, funding is likely to fall below the recommended level, most likely at the bottom of the potential funding envelope and similar to existing levels (the minimum/baseline scenario).
 Note the impact on the company's critical risks if councils ultimately provide the level of funding being signalled especially the provision of adequate drinking water to meet future demand and growth and the acute water shortage.
 Endorse the principles applied to the delivery of Long-Term Planning advice and the proposed approach for providing the final (stage three) investment advice to councils.

Therande

Approved by: Julie Alexander Group Manager Network Strategy & Planning

.....

Recommended by: Tonia Haskell, Chief Executive

Appendix A - the staged approach to providing investment advice

The councils 2024-34 investment advice is being developed in a staged approach:

Provide information on the investment requirements for council's water assets. Understand how the councils want to see the regional
priorities addressed in their 2024-34 LTPs and established prioritisation frameworks internally to determine the priority of projects. This
stage has been completed.
Develop an indicative Wellington Water recommended programme based on the maximum level of investment Wellington Water can
deliver over the 2024-34 period (the maximum deliverable programme) and confirm affordable investment levels with councils. This
stage has been completed for all councils except for Porirua City Council who have received stage 2 advice, but it has not yet been
presented to Council.
Develop a programme based on a funding level that is affordable for council and determine the risks and opportunities regarding the
level of investment and consequence of how not investing impacts the strategic priorities. this is an iterative process until a final draft
capex programme is determined.
This stage is underway concurrently with stage 2.
Develop the Asset Management Plan and supporting material for Council's LTP consultations to a level of detail that will satisfy audit
requirements and will also highlight any risks the councils will carry at the budget level they adopt. This is expected to get underway in
late November.

Appendix B – Stage 2 investment options presented to councils for capex and opex

THIS APPENDIX HAS BEEN ABRIDGED TO REMOVE SPECIFIC COUNCIL REFERENCES

	Year One – 2024/25			Year 2 – 2025/26			2024-34 Total Investment		
	WWL CAPEX Deliverability	CAPEX Baseline (21-31 LTP with adjustments)	Орех	WWL CAPEX Deliverability	CAPEX Baseline (21-31 LTP with adjustments)	Орех	WWL CAPEX Deliverability	CAPEX Baseline (21-31 LTP with adjustments)	Орех
TOTAL	\$402.1M	\$280.9M	\$165.8M	\$513.9M	\$254.3M	\$169.5M	\$7.6B	\$2.8B	\$1.8B



17th November 2023

His Worship the Mayor Campbell Barry Mayor of Lower Hutt Chair, Wellington Water Committee **Hutt City Council LOWER HUTT**

Tena koe Mayor Barry,

Re: Investment advice 2024-34 from Wellington Water to shareholder councils

The board of Wellington Water is keen to signal to the Wellington Water Committee the high-level advice that is currently being delivered to your respective councils by our team. As you are aware this is ten-year, long-term plan funding advice for your 3-Water assets.

It is important that as a board we signal to the Water Committee, on a regional basis, the overall picture and the considerable risks as we see them. Our role is to give you unbridled information about the investment levels the company requires to reduce the chance of significant asset failure, and environmental damage as well as ensure the region has an adequate supply of drinking water over the short, medium and long term.

The region's exposure on its 3-water infrastructural assets is well canvassed. The board is resolute that elected members as decision makers register that the advice from Wellington Water will be that a \$7.6 billion total investment provision should be made by the region for the decade ahead. This compares with the \$1.9 billion that councils decided to invest in their last long-term plan period of 2021-31.. The \$7.6 billion investment level is deliverable, working on the basis of a 30% year on year uplift of works - that is building the capacity of the regional workforce to deliver on the program over time. Wellington Water has demonstrated this level of uplift is possible, as evidenced by the growth in our capital project from \$60 million to over \$250 million over the last five years.

The advice to councils from Wellington Water is that the regional focus should be as follows:

- 1. increasing investment in renewals to address backlogs over a 30-year period and reduce them to a long-term sustainable level,
- 2. having regional alignment to address the critical water supply risk, with coordinated investments in storage, metering and leak repairs, and
- ensuring investment to meet increasing regulatory requirements.

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@wellington_water

ww.wellingtonwater.co.nz

Wellington Water is concerned that significant under funding of the water assets will compound our critical risks and create new ones for the region. Currently the critical risks identified are as follows:

- 1. Inadequate water supplies to meet future demand and growth
- 2. Acute water shortage a well canvassed risk for this summer and the ones following
- 3. Operational funding activities such as ongoing ability to carry out leak detection, condition assessment of assets, planned and reactive maintenance.
- 4. Unplanned critical asset failure
- 5. Treatment of wastewater risk that investment levels are too low to address known failure risks or improvements required to meet consent compliance activities
- 6. People Under-resourcing of our work can be de-motivating to a workforce looking for greater certainty. Concern about ongoing engagement and staff retention.
- 7. Supply of project design and contractors could be compromised if investment flatlines and market confidence in the Wellington Water pipeline is lost

Once ten-year funding is confirmed by councils next year, the board will re-assess them and update these risks and communicate them to the Wellington Water Committee.

Wellington Water has met with all iwi mana whenua groups, Rangitāne ki Wairarapa, Ngāti Kahungunu ki Wairarapa, Taranaki Whānui and Ngāti Toa Rangatira. The message is universally clear from them, that removing wastewater from waterways is a priority.

Wellington Water is currently at stage 3 of a 4-stage process of advising to council officers for long-term plan asset funding consideration. Everyone involved with the company recognises the significant financial pressures councils are under at this time, particularly the unsustainable funding environment that you collectively face. We respect that every council will make its individual decision about investment and the company will support those decisions and carry that work out on your behalf.

This letter is a high-level signal to councils from your Wellington Water Board that major additional investment is needed in the region. Wellington Water released advice last week that it could be as much as a billion dollars a year for the next thirty years. Continued deferral will ultimately endanger public health, increase wastage of precious water, continue considerable environmental and catchment impacts, inhibit or even stop housing growth and ultimately reduce levels of service for communities.

Our strong advice is that adequate funding over the next ten years needs to be signaled in long term plans so that important work can begin to ensure the above risks are not realised. The board recognises the difficult balancing act that councils are facing due to unprecedented cost pressures across all areas of your operations. Further, we understand that those funding demands risk compromising community affordability.

I am happy to discuss the above with yourself and the committee at any time.

Nga mihi,

Nick Leggett

Chair, Wellington Water Ltd

Komiti Ngā Wai Hangarua Wellington Water Committee

05 December 2023

Report no: WWC2023/5/402

Acute water shortage risk

Purpose of Report

1. This report provides the Wellington Water Committee with an update on the planning to control the risk of an acute regional shortage over the summer of 2023/24.

Recommendation

That the Committee receives and notes the report.

Background

- 2. At the 24 July 2023 and 6 October 2023 Wellington Water Committee meetings, the Committee was updated on the programme addressing the summer 2023/24 water demand risk, which included a three-pronged approach to this short-term risk:
 - water loss management continue with our work to the extent available with Council budgets,
 - manage and monitor water use in the lead-up to and through summer, implement water restrictions, and
 - be prepared for acute water shortages.
- 3. The Committee was briefed that Wellington Water has aligned itself with these three workstreams with teams and a governance structure, but that water loss and reduction activities will have a very limited impact.
- 4. The planning is now focussed on customers and stakeholders understanding the risk and engaging in water use management.

Implementing the Plans

5. Appendix 1 provides an update across the Acute Water Shortage Risk Programme for November 2023.

- 6. Water Loss Management remains constrained by available Council budgets, and open leaks are increasing. The reactive connection renewal program is showing water savings of only 0.56 ML/day to date, and the target of 30 renewals per week is not being met. As water loss is the key causal factor of regional water shortage risk, the underlying cause of the risk continues to worsen.
- 7. The Drought Management Group has been activated and their recommendation that all the Wellington Region move to Level 1 restrictions has been authorised and implemented by councils. They are now monitoring the triggers that would indicate a move to Level 2 is required.
- 8. Communication and engagement activities that occurred in October were:
 - the summer media and communication campaign has commenced,
 - all councils have been briefed on the Acute Water Shortage Programme (depending on the council preference, this was officers and/or councillors),
 - Taumata Arowai and GWRC (Regulator) have been briefed on the programme and formally notified of the risk of a regional water shortage and
 - Iwi have received briefs on the programme and the potential impact on catchments.
- 9. Response planning has continued with significant clarity achieved in modelling the likelihood and consequences of the acute water shortage risk (see Appendix 2). It is now possible to assess:
 - the probability of an acute water shortage occurring after the implementation of the water shortage programme (this includes Levels 3 and 4) is 24%, and
 - the highest likelihood of a shortage is in the first two weeks of February.
- 10. Impact Modelling if the shortage does occur, modelling has been completed that identifies reservoirs in the network that are at the greatest risk of loss of supply

Risk mitigation activities

- 11. Wainuiomata Water Treatment Plant has successfully been trialled to operate at lower volumes than normal. This allows the plant to operate safely within its consented take of water for longer into the summer period making a substantial contribution to the summer supply.
- 12. Pressure management innovations and zone management plans continue to be developed but are likely only to have an impact in the 2024/25 summer period. At the root the risk is caused by the very high level of water loss in the network, and significant funding will be required to control the risk.

The role of Taumata Arowai and GWRC

- 13. As the modelling confirms that Wellington Water's ability to maintain sufficient quantity of drinking water remains at risk despite all mitigating efforts, the option in that scenario is to take water beyond the limits allowed by the current resource consents in order to maintain supply and reduce the impact of the anticipated shortage.
- 14. Accordingly, we have formally notified TA and GWRC (see Appendix 3) requesting that TA and GWRC "exercise their powers under any enactment to assist WWL to continue to provide a sufficient quantity of drinking water."
- 15. In the notification, WWL requests that should such a scenario occur:
 - GWRC uses its power to issue a direction to further restrict the use of
 water by all consumers and, where possible, to apportion water by
 diverting it to critical infrastructure or regions in need in order to assist
 WWL to continue to provide sufficient quantity of drinking water.
 - TA uses its power to declare a drinking water emergency and to use its special power to direct GWRC and WWL to take immediate action of taking water beyond the minimum flows in breach of the conditions of the resource consent, and to exempt that activity and exempt WWL from its duties.

Appendices

No.	Title	Page
1 <u>₽</u>	Appendix 1: Acute water shortage risk programme update	109
2 <u>₹</u>	Appendix 2: Acute water shortage risk forecast	110
3 <u>₽</u>	Appendix 3: Formal notification to Taumata Arowai and GWRC	112
4 <u>↓</u>	Appendix 4: Our plan for this summer's acute water shortage	129

Author: Wellington Water Ltd

Acute Water Supply & Demand Report - 15 Nov 23







Water Restriction Risk Forecast



Projected Summer risk





Drought Management

How we





Water Loss Management





Comms & Engagement





Response Management





Commentary

- Overall water usage is tracking slightly below projected demand for this
- Available supply is above average for this time of year.
- An acute issue occurs when the black line crosses the purple line.
- Acute issues may or may not occur given the variability of water usage and supply. The risk increases when the blue line crosses the red line.
- Acute water issues are likely in the area shaded yellow.

High Level Risks

Metro average daily demand steady over the past fortnight at 173MLD. Supply headroom and lake storage is healthy. NDD non-residential demand management investigation to support level 3/4 restrictions has commenced. Lead for nonresidential demand management engagement has yet to be determined

Leak repair rates remain constrained by available Council budgets and open leaks are increasing. The reactive connection renewal program is showing water savings of 0.56 ML/day to date but are significantly behind the target of 30 renewals per week. Pressure Management projects in Brooklyn, Johnsonville and Melrose yet to be commissioned

The summer communication campaign commenced with the implementation of water restriction level 1, alternate day sprinklers, on the first day of daylight sayings.

Augmentation of supply strategy progressing. The operational picture is complex, & we are working at pace to understand it, where we can within time & operational constraints. Strategy to protect critical zones – development of implementation progressing - Upper Hutt testing plan progressing with the intent to complete testing before end of Dec. 2023 - potential remains that the strategy may not be effective.

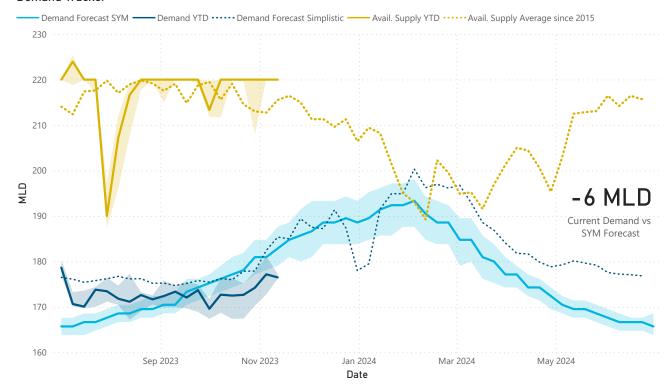
Attachment 2



Acute Water Shortage Risk Forecast

How are demand and available supply tracking so far?

Demand Tracker



Lines represent median, shaded areas represents 25th and 75th percentile.

- Current demand slightly below Sustainable Yield Model (SYM) forecast.
- Simplistic forecast roughly aligned to SYM forecast, but produces a higher demand forecast for February.
- SYM forecast has more up to date data (last few months demand has been lower than expected), and a vaster climate dataset to sample from, providing a more robust model.
- Current **supply** levels are high.
- The simplistic forecast assumes a heavy drop in supply throughout end of Jan / start of February.
- Simplistic forecast was based off data from 2015 onwards not a big sample and is significantly affected by a few years of dry events. SYM draws from a much wider range of climate years to provide a more robust forecast.
- SYM does not currently output an available supply variable, so it is not directly comparable to the other forecast. However, it is deduced from the shortfall forecast that the SYM has a more positive outlook on supply.



Acute Water Shortage Risk Forecast

What are the chances of headroom deficit this summer?

The Sustainable Yield Model developed by WWL in partnership with NIWA provides a robust simulation engine for the water network.

This can be used to produce forecasts for the upcoming summer based on variability around climate. The model has as key inputs climate data since 1890 and current levels of demand as of start of October 2023. The presented model outputs do not incorporate NIWA's 3-month climate forecast, but preliminary modelling concludes that this has a small impact on this risk assessment.

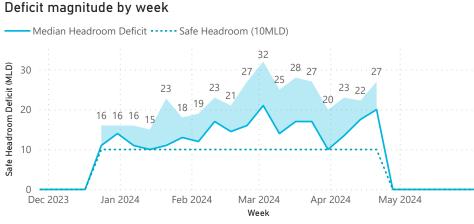
24%

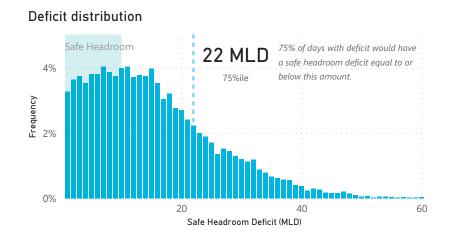
Chance of Safe Headroom Deficit

Headroom deficit is defined as a headroom of less than 5% (~10MLD). Operating the network below this safety headroom is unsafe as any unplanned event on the day could trip demand over supply.

If we face a summer with safe headroom deficit...

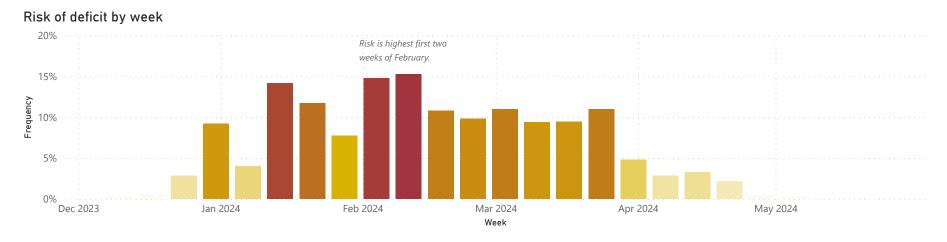
What is the scale of deficit?



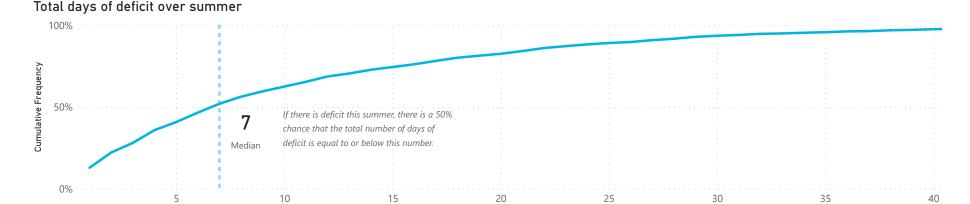


Line is median, shaded area is 75th percentile.

When is risk the highest?



How many total days of deficit?

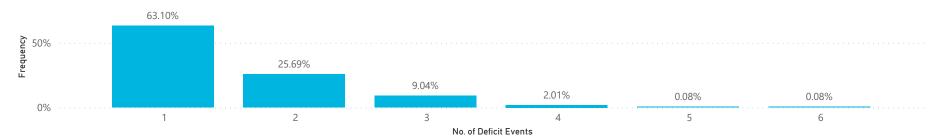


No. of Days of Deficit

Spread over how many deficit events?

A deficit event is defined as a day of deficit at least a week after the last one has ocurred.

No. of deficit events over summer



Acute water shortage risk Page 111



22 November 2023

Greater Wellington Regional Council Cuba Street WELLINGTON

Attention: Shaun Andrewartha

Taumata Arowai **Brandon Street** WELLINGTON

Attention: Steven Taylor

By Email: shaun.andrewartha@gw.govt.nz By Email: steve.taylor@taumataarowai.govt.nz

Re: Serious risk to ongoing supply of a sufficient quantity of drinking water in Wellington region

Dear Shaun and Steven

The purpose of this letter is to formally notify the two relevant regulating entities, Taumata Arowai ("TA") and Greater Wellington Regional Council ("GWRC") to the serious risk to the ongoing supply of a sufficient quantity of drinking water in the Wellington metropolitan area if it experiences an average summer. The probability that this serious risk occurs increases each year.

Wellington Water Limited ("WWL") has already signalled this serious risk to its governing bodies, the Wellington Water Board and the Wellington Water Committee (which have representatives from all of the relevant local authorities), its regulators, TA and GWRC, the National Emergency Management Agency ("NEMA"), Fire and Emergency New Zealand ("FENZ"), the Wellington Region Emergency Management Office ("WREMO") and the New Zealand public.

WWL is not seeking to deflect any of its statutory responsibilities. However, the serious risk outlined in this letter places WWL into an irreconcilable position in respect of its statutory duties.

WWL asks to work collaboratively with the regulators, TA and GWRC in planning how to respond to this serious risk. Clarity is sought on the regulatory pathway for WWL, by setting out any regulatory consequences.

Also, WWL formally asks both regulators, TA and GWRC, as well as the local authorities, to use the statutory powers to assist WWL to continue to provide a sufficient quantity of drinking water (as set out below).

WWL's duties under the Water Services Act 2021

1. Under the Water Services Act 2021 ("WSA"), WWL has a duty to supply safe drinking water¹ and a duty to provide sufficient quantity of drinking water². "Sufficient quantity of drinking water" means the quantity of water that is sufficient to support the ordinary drinking water needs of consumers at the point of supply.³

For the latest news and updates, follow us on our social channels:







¹ Water Services Act 2021, s 21.

² Water Services Act 2021, s 25.

³ Water Services Act 2021, s 25(2).

WWL's duties under the Local Government Act 2002

- 2. WWL also has a duty to continue to provide water services and maintain its capacity to meet its obligations⁴ under the Local Government Act 2002 ("LGA").
- 3. There is also a duty to not restrict the water supply unless section 193 LGA applies⁵ (where a person commits an offence or fails to comply with a bylaw in relation to water supply), and to not stop the water supply unless section 25 of WSA applies⁶ (where a drinking water supplier restricts supply because of risks to public health).

WWL's duties under the Resource Management Act 1991

- 4. WWL has duties under the Resource Management Act ("RMA") as the operator. GWRC has duties, both as the consent holder and the asset owner, as well as the consent authority.
- 5. GWRC is the consent holder of several resource consents that allows WWL (on behalf of GWRC) to take water from multiple water sources for municipal bulk water supply for the Wellington Region. Each of these resource consents are subject to conditions that protect the water sources from overuse, such as a retention of a minimum flow. These consents, the water sources and retention conditions are listed below:
 - a. WGN000199 [36617] Hutt River Cease all abstraction from the Hutt River at the Kaitoke Weir when flow upstream of the weir drops to 600 litres per second.⁷
 - b. WGN000200 [20540] Orongorongo River Cease all abstraction in the Orongorongo River, Big Huia Creek, Little Huia Creek and Telephone Creek when the flow at the Truss Bridge drops to 100 litres per second.⁸
 - c. WGN000201 [20552] Wainuiomata River Cease all abstraction in the Wainuiomata River when the flow at Manuka Track drops to 100 litres per second.⁹
 - d. WGN000201 [20558] George Creek Cease all abstraction in the Wainuiomata River when the flow at Manuka Track drops to 100 litres per second. 10
 - e. WGN970036 [33820] Waiwhetu Artesian Aquifer, Bloomfield Tce and Mahoe St-Ensure the combined take from the Waterloo and Gear Island Water Treatment Plants is limited to ensure that the 24 hour mean groundwater level at McEwen Park water level monitoring station, or any other official GWRC water level

⁴ Local Government Act 2002, s 130(2).

⁵ Local Government Act 2002, s 130(3)(d)(i).

⁶ Local Government Act 2002, s 130(3)(d)(ii).

⁷ Resource Consent WGN000199 [36617], Condition 8.

⁸ Resource Consent WGN000200 [20540], Condition 8.

⁹ Resource Consent WGN000201 [20552], Condition 8.

¹⁰ Resource Consent WGN000201 [20558], Condition 8.

monitoring station in the Petone and Seaview areas, does not fall below +2.0m relative to mean sea level. 11

- f. WGN970036 [33821] Waiwhetu Artesian Aquifer, bores at Gear Island Water Treatment Plant Ensure the combined take from the Waterloo and Gear Island Water Treatment Plants is limited to ensure that the 24 hour mean groundwater level at McEwen Park water level monitoring station, or any other official GWRC water level monitoring station in the Petone and Seaview areas, does not fall below +2.0m relative to mean sea level.¹²
- 6. Both GWRC and WWL have a duty to act in compliance with the conditions of the resource consents, and to not take water to the extent that it reduces the flow beyond the minimums stated in the conditions of the resource consent.
- 7. WWL is placed in an irreconcilable position when the demand for water exceeds the supply, and it is not able to provide sufficient quantity of water (and which may cause the drinking water to be unsafe), unless it takes more water than the minimum flows allow for under the conditions of the existing resource consents.

WWL Duties under Civil Defence Emergency Management Act 2002

- 8. As a lifeline utility, WWL holds duties under the Civil Defence Emergency Management Act 2002 ("CDEMA"). It has a duty to ensure that it is able to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency. 13 It also has a duty to make available to the Director of Civil Defence Emergency Management in writing, its plan for functioning during and after an emergency. 14
- 9. An "emergency" means a situation that is the result of any happening, whether natural or otherwise including without limitation any... failure of or disruption to an emergency service or a lifeline utility, and may cause loss of life or injury or illness or distress or in any way endangers the safety of the public, and cannot be dealt with by emergency services or otherwise requires a significant and co-ordinated response.¹⁵
- 10. "Emergency Services" is defined as meaning the New Zealand Police, FENZ, TA and providers of health and disability services. 16

¹¹ Resource Consent WGN970036 [33820], Additional Condition 9.

¹² Resource Consent WGN970036 [33821], Additional Condition 9.

¹³ Civil Defence Emergency Management Act 2002, s 60(a).

¹⁴ Civil Defence Emergency Management Act 2002, s 60(b).

¹⁵ Civil Defence Emergency Management Act 2002, s 4.

¹⁶ Civil Defence Emergency Management Act 2002, s 4.

Formal notification that sufficient quantity of drinking water is at imminent risk

- 11. The WSA sets out duties WWL must fulfil where its ability to maintain a sufficient quantity of drinking water is or may be at imminent risk. ¹⁷ In order to fulfil these obligations, please accept this letter as formal notification that sufficient quantity of drinking water is at imminent risk. ¹⁸
- 12. As a drinking water supplier, WWL considers that our ability to maintain sufficient quantity of drinking water in accordance with section 25 is or may be at imminent risk. Accordingly, WWL, by way of this letter, is:
 - a. Notifying TA, FENZ, and the local authorities in the area where the water is supplied (through the Wellington Water Committee) of "the circumstances giving rise to the risk" 19, and
 - b. Requesting that TA and the local authorities (including GWRC) "exercise their powers under any enactment (for example, by making a bylaw to restrict the use of water for other than essential purposes) to assist the supplier to continue to provide a sufficient quantity of drinking water."²⁰

Circumstances giving rise to the risk of insufficient quantity of drinking water

- 13. The circumstances giving rise to the risk of an insufficient quantity of drinking water are set out below:
 - a. Water use in the Wellington metropolitan region is at an all-time high.
 - Leakage has increased sharply since 2015, which has caused demand to increase at three times the rate expected from median growth projections, resulting in a 40ML/d increase in demand since 2015.
 - c. For the 2022/23 financial year (1 July 2022 to 30 June 2023, WWL estimate that the Wellington metropolitan area leaked 44% of its drinking water. Leakage is the primary cause of the elevated supply risk, with around 34% of the leaks from the public network and around 10% from private properties. New leaks continue to arise at a higher rate than WWL is currently able to fix. Work continues by WWL to repair as many leaks on the public system as possible within the available budgets set by our council-owners, and the resources available to WWL. Despite continued efforts to address leaks, this ongoing work will not achieve the level of repairs required to stem the increasing risk of insufficient quantity of drinking water. (Due to budgetary constraints, WWL now must focus on fixing the leaks with the highest volume of water.)

¹⁷ Water Services Act 2021, s 26.

¹⁸ Water Services Act 2021, s 26(1)(a).

¹⁹ Water Services Act 2021, s 26(1)(a).

²⁰ Water Services Act 2021, s 26(1)(b).

- d. WWL is in the process of assessing whether changes to water pressure are possible, as reductions in pressure within the network is known to reduce the number of new leaks that occur and is likely to reduce the loss from existing leaks, as well as reducing normal consumption-based demand. Changes to pressure, however, have potential safety and supply implications, particularly in respect of firefighting (see below). The time taken to implement pressure changes, combined with the current repairs and maintenance being undertaken by WWL, are not likely to be adequate to address the imminent risk of insufficient quantity of drinking water this summer.
- e. In addition, the network is aged, and its deteriorating infrastructure contributes to operational risks and costs over the long term. Population growth will place upward pressure on demand over the long term. Peak demand and base demand have increased over time, with base demand increasing sharply since June 2022.
- f. Changes to the climate increases the risk each year of not being able to supply a sufficient quantity of drinking water to the Wellington metropolitan region. In the last two years, this risk has not come to fruition because there was unusually high rainfall in the peak summer months because of ex-tropical cyclones Dovi and Gabriel. This year NIWA are predicting El Niño conditions for summer (possibly less rain, more dry days).

Impact on the supply of safe drinking water

- 14. As warm and dry summer conditions develop, there is an increase in demand and a gradual decline in Water Treatment Plant production capacity (due to river water sources declining). The buffer between production capacity and demand is referred to as the supply headroom ("headroom"). To ensure the network can operate safely, a 20% headroom, or greater, is maintained.
- 15. If that is not achievable, a minimum headroom of 5% is required to operate the network safely. However, to operate a water network below 20% headroom makes the network vulnerable to anything that impacts the system, like sudden sustained high demand or loss of supply capacity (for example from an unplanned outage from equipment failure at a water treatment plant or pump station reducing supply capacity, or a major pipe burst or having to put out a large fire drawing large amounts of water).
- 16. Operating the network at 5% or less headroom therefore makes the network highly vulnerable and significantly increases the risk of not being able to provide sufficient water to meet demand which puts the system at imminent risk of insufficient quantity of drinking water.
- 17. If the risk of an insufficient quantity of drinking water materialises, the public is likely to experience a decrease in water pressure or loss of water starting, initially in the higher parts of the network and then spreading more widely, depending on the level and duration of shortfall.
- 18. A loss of water pressure in the network can compromise drinking water safety by allowing untreated or contaminated water to flow into the network from private properties and from groundwater. If there is an insufficient quantity of drinking water, then the following may occur:

- a. There is a risk of backflow, which may compromise the quality of the drinking water, potentially making the water unsafe to drink due to either microbiological or chemical contamination of the network,
- b. If water is unsafe to drink, then either a boil water notice or do not drink notice may be issued to affected areas (suburbs, cities, or region wide) depending of the nature of the contamination,
- c. In order to safely lift such advisory notices, storage reservoirs may need to be cleaned and disinfected, and the network flushed with water prior to resuming normal supply conditions. In an extreme case this could take weeks to achieve if there is insufficient supply capacity available,
- 19. Given the nature and condition of the existing infrastructure, it is not possible for WWL to have confidence in being able to prioritise uses (i.e. more sensitive uses such as hospitals or rest homes) or areas (where there is a high concentration of sensitive uses) by simply limiting, turning off or diverting supply.

Modelling of likelihood and consequences of the risk occurring

- 20. WWL has forecast the likelihood of the safe headroom (5%) being exceeded in the Wellington metropolitan area this upcoming summer, the point at which the system at imminent risk of insufficient quantity of drinking water ("Acute Water Shortage Risk Forecast", dated 13 November 2023" attached). This modelling shows:
 - a. there is a 24% chance of the safe headroom deficit (<5%) being exceeded.
- 21. WWL engaged Stantec to complete modelling of scenarios which may occur as a consequence of the risk occurring that there will be an insufficient quantity of drinking water ("Water Supply Shortage Bulk Network Modelling Scenario Assessment Report", dated 15 November 2023" attached). This modelling consists of 12 water shortage scenarios that shows a pattern of failure across the reservoirs:
 - a. Consistently the Haywards Reservoir, which supports all of Porirua and Tawa/Johnsonville, was the first to deplete in each scenario. Once the Haywards Reservoir depletes, the other reservoirs in Porirua follow soon after.
 - b. In Wellington City, the Carmichael Reservoir will always fail first, followed sometime later by the Macalister Reservoir. The Omāroro Reservoir is able to support all demand normally supported by the three reservoirs, but under this it drains quickly, often within a day or two of the Carmichael Reservoir.
 - c. The Lower Hutt reservoirs are expected to withstand the full 7 days in all modelled scenarios, although under 210 ML/d demand, the Naenae Reservoir drains to around 20% full after 7 days.
 - d. In Wainuiomata, the Gawler Reservoir depletes relatively quickly. The Konini Reservoir is able to support the area alone, although under high-demand scenarios the No.2 Pump Station capacity is a constraint and the system is unable to meet demand, typically modelled as occurring later in the week.

Options for reducing the risk of insufficient quantity of drinking water.

- 22. There are several options that WWL has been exploring and progressing, which either implemented separately or in combination, may reduce the risk of an insufficient quantity of drinking water in the Wellington metropolitan area:
 - a. Reduce demand for water by imposing water restrictions (attached) supported by conservation messaging. (It is noted that this approach relies on an appropriate response from the community, and as such the effectiveness of this approach is uncertain and is complicated by the significant leakage currently being experienced. It therefore may not fully address the risk of insufficient quantity of drinking water.)
 - b. Prioritise the limited amount of water available to parts of the network that supply critical customers (such as hospitals, medical centres, emergency services, etc). (It is noted that his approach relies on the nature and condition of the existing infrastructure and the effectiveness of this approach is uncertain. It therefore cannot be relied upon to mitigate the risk of insufficient quantity of drinking water.)
 - c. Upgrade the Te Marua Water Treatment Plant (currently in progress) that will enable an increase in capacity from early 2025.
- 23. Modelling suggests that, even after implementing watering restrictions, the imminent risk of insufficient quantity of drinking water remains. When this occurs, the key risk mitigation option to address insufficient quantity of drinking water is to
 - a. take water beyond the limits set out in the conditions of the existing resource consents in order to maintain the safe headroom and reduce the impact of operating below this level (set out further below in this letter are the ways this additional take of water may be able to be lawfully authorised.)
- 24. WWL intends to prepare an application for a variation to the existing resource consents to enable a greater take of water than currently allowed under the conditions of the existing resource consents for water take, if required and as a last resort to avoid an acute water shortage event.
- 25. However, given the potential environmental effects of the additional water takes, any application for variation is likely to be publicly notifiable, which does not provide the speed or agility to respond to such a fluid and time-critical situation as this summer. In addition, WWL is not yet in a position to provide the extensive expert evidence required to support an application. Also, it is unknown how much the increased take will need to be and when it will need to take place because water levels and flow rates are inherently unpredictable.
- 26. Therefore, while WWL is preparing its application for a variation to the existing resource consents to enable a greater take of water, it is not currently in a position to lodge the application in time to address the risk of insufficient quantity of drinking water occurring this summer.

- 27. To address the risk of insufficient quantity of drinking water in the long term (i.e. beyond this summer, and potentially next summer), consent options are being actively explored by WWL. This includes increasing supply and the nature of takes on a long-term basis, as well as the ongoing infrastructure response outlined below in terms of reducing demand by fixing leaks.
- 28. There are also some longer-term strategic interventions that WWL has identified, which will also reduce the risk of an insufficient quantity of drinking water, which are:
 - a. Keep water in the pipes by increasing investment in water loss management.
 - b. Reduce consumption through universal residential water metering and demand management.
 - Add additional raw water storage through construction of additional storage lakes for Te Marua water treatment plant.
- 29. These longer-term strategic interventions are expected to take 5-10 years to implement and are currently not funded. However, they have been included in our investment advice to councils to consider for funding from 2024.
- 30. The full extent of these long-term solutions are not addressed in detail in this letter, as the immediate focus is to consider a solution for the risk of insufficient quantity of drinking water that is looming this summer, but are being addressed through our Long Term Plan investment recommendations for the local and regional councils

Key Risk Indicators for determining levels of water restrictions

31. There are some key risk indicators that are considered by the drought management group to guide what response is necessary to address to risk. If either a key risk indicator for demand or supply occurs together with other significant factors, then water restrictions will be put in place for the Wellington metropolitan area. General guidance of the supply and demand indicators for the restriction levels is as follows:

Demand (1 day average)	Demand (7-day average)	Supply (Headroom)	Response
N/A	Where demand exceeds 170ML/d	Where headroom is at 20%	Level 1 water restrictions
Where demand exceeds 190ML/d	Where demand exceeds 170ML/d	Where headroom is between 19% and 10%	Level 2 water restrictions
Where demand exceeds 200ML/d	Where demand exceeds 190ML/d	Where headroom is between 9% and 5%	Level 3 water restrictions

	Where demand exceeds 210ML/d	N/A	Where headroom is between 5% and 0% (below safe headroom)	Level 4 water restrictions
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- 32. Since 1 October 2023, the highest 1-day average demand has been 187ML/d, and as at 13 November 2023, the highest 7-day average has been 179 ML/d.
- 33. Ongoing demand that exceeds the capacity of the system without the provision of additional supply (i.e., taking water beyond the conditions of the existing resource consents), would create an imminent risk to public health, as well as potential regulatory breaches by WWL of its duties under the WSA, and potentially lead to enforcement action by TA. However, to take water beyond the levels set out in the conditions of the existing resource consents may potentially lead to enforcement action taken by GWRC for breaching the conditions of the resource consent.
- 34. This reflects the legislative tension currently facing WWL. Either option could result in adverse environmental effects and significant compliance action taken by GWRC and/or TA as regulators for those breaches, or potentially civil action being taken by those water users affected if there is an insufficient quantity of drinking water.

Territorial Authorities duties under LGA

- 35. GWRC has duties under the LGA as the territorial authority:
 - a. If GWRC are made aware of concerns about the access that a community (Wellington metropolitan area) has to drinking water services, it must conduct an assessment of drinking water services.²¹
 - b. GWRC must notify TA about any drinking suppliers (WWL) that are or appear to be failing to meet the supplier's statutory obligations or are at risk of doing so, and any other matters of concern including potential risks to communities (Wellington metropolitan area) that relate to any absence or deficiency in a drinking water service.²²
 - c. If GWRC's or TA's assessment of a drinking water supply is that the supplier (WWL) is facing a "significant problem or potential problem"²³ with any of its drinking

²¹ Local Government Act 2002, s 125(3)(b).

²² Local Government Act 2002, s 126(2)(b)(i).

²³ Local Government Act 2002, s 127(3)(a).

water services, and GWRC has notified TA of those concerns,²⁴ or TA requires GWRC to take action,²⁵ then GWRC must:²⁶

- Work collaboratively with the supplier (WWL), consumers and TA to identify²⁷ an immediate solution,²⁸ a temporary solution,²⁹ and/or a longterm permanent solution to the problem,³⁰ and
- ii. Ensure drinking water is provided to the affected consumers, on a temporary or permanent basis if the supplier is unable to continue to provide a service that meets the statutory requirements,³¹ and an alternative solution is not readily available, or cannot be agreed by the parties involved within the time frame determined by TA.³²
- 36. A "significant problem or potential problem" includes where there is a serious risk to public health relating to the drinking water services provided by a drinking water supplier.³³
- 37. In writing this letter, WWL is formally making GWRC aware of concerns about the access that the Wellington metropolitan community may have to drinking water services. It asks GWRC to notify TA of the concern that WWL may face a significant problem or potential problem with its drinking water supply this summer. WWL is seeking to work collaboratively with GWRC and TA to identify a temporary solution and a long-term permanent solution to this problem.

WWL requests TA and the Local Authorities (including GWRC) exercise their powers under enactments

38. Accordingly, WWL requests that TA use its powers under the WSA, and WWL requests that GWRC use its powers under the RMA and that GWRC and other local authorities use their powers under the LGA to assist WWL to continue to provide sufficient quantity of drinking water.

²⁴ Local Government Act 2002, s 127(1)(a).

²⁵ Local Government Act 2002, s 127(1)(b).

²⁶ Local Government Act 2002, s 127(2).

²⁷ Local Government Act 2002, s 127(2)(a).

²⁸ Local Government Act 2002, s 127(2)(a)(i).

²⁹ Local Government Act 2002, s 127(2)(a)(ii).

³⁰ Local Government Act 2002, s 127(2)(a)(iii).

³¹ Local Government Act 2002, s 127(2)(b)(i).

³² Local Government Act 2002, s 127(2)(b)(ii).

³³ Local Government Act 2002, s 127(3).

TA Powers under the WSA

- 39. In accordance with the WSA,³⁴ where TA believes there is a "serious risk to public health", it has the power to declare a drinking water emergency. A "serious risk to public health" means a serious risk to public health relating to either the drinking water supplied to consumers or the ongoing supply of a sufficient quantity of drinking water in a geographical area.³⁵
- 40. If a drinking water emergency is declared, then TA may exercise its special powers, which are powers to:³⁶
 - a. Take immediate action, or direct any person to take immediate action, that TA believes, on reasonable grounds, will prevent, reduce, or eliminate the serious risk to public health,
 - b. Direct any person to stop, or prohibit any person from starting, anything that TA believes, on reasonable grounds, is a cause of, or contributes to, the serious risk to public health,
 - c. Requisition any property in order to prevent, reduce, or eliminate the serious risk to public health,
 - d. Destroy any property or any other thing in order to prevent, reduce, or eliminate the serious risk to public health,
 - e. Require all persons within a specified area to use an alternative drinking water supply,
 - f. Do emergency work, or direct a territorial authority to do emergency work, to ensure that an alternative supply of drinking water is available to affected persons,
 - g. Direct a territorial authority to supply drinking water to affected persons (whether in the district of that territorial authority or in the district of another territorial authority),
 - h. Direct a drinking water supplier to make arrangements to ensure that an alternative drinking water supply is available to affected consumers (for example, by water carrier),
 - i. Direct the closure of any public place, or any part of a public place,
 - j. Direct the cancellation of any public event, function, or gathering at any place,

³⁴ Water Services Act 2021, s 59.

³⁵ Water Services Act 2021, s 59(2).

³⁶ Water Services Act 2021, s 62(2).

- k. Take any other action that TA believes is reasonably necessary to prevent, reduce, or eliminate the serious risk to public health.
- 41. If an action resulting from the use special powers is an activity that breaches the provisions of Part 3 of the RMA, then TA may, in consultation with the relevant consent authority (GWRC), exempt the action taken from those provisions.³⁷
- 42. In addition, if a drinking water emergency declaration is in force, TA can exempt WWL from complying with its duties under the WSA, such as the duty to supply sufficient quantity of water and to supply safe drinking water.³⁸
- 43. WWL appreciates that these legislative powers will not be used lightly. WWL would like to work with TA to understand when the potential application of these powers will be used. In particular, its powers to grant exemptions from WWL complying with its duties under the WSA, and an exemption from the requirements of Part 3 of the RMA in order to enable WWL to continue to supply a sufficient quantity of drinking water to the Wellington metropolitan area.

Local Authorities Powers under the LGA

44. Local Authorities³⁹ have powers under the LGA and the Bylaws Act 1910 to pass bylaws. This includes making bylaws to restrict the use of water for other than essential purposes.

GWRC Powers under the RMA

- 45. In accordance with the RMA, ⁴⁰ where GWRC, as the regional council, considers that at any time there is a "serious temporary shortage of water in its region or any part of its region"⁴¹, it has the power to issue a direction for the taking, use and damming or diversion of water is to be apportioned, restricted or suspended to the extent and in the manner set out in the direction.⁴² The direction may relate to any specified water, to water in any specified area or to water in a specified water body.⁴³
- 46. GWRC also has the power to take preventive or remedial action under the RMA,⁴⁴ as the consent authority for the resource consents for water takes from the water sources. This power applies where any natural and physical resource for which a consent authority has jurisdiction under the RMA (e.g the Hutt River) is, in the opinion of the authority affected by or likely to be affected by any sudden event causing or likely to cause loss of life, injury or serious damage to property, then the provisions of 9, 12, 13, 14 and 15 shall not apply to

³⁷ Water Services Act 2022, ss 65-67.

³⁸ Water Services Act 2022, s 63.

³⁹ Local Government Act 2002, s 5.

⁴⁰ Resource Management Act 1991, s 329.

⁴¹ Resource Management Act 1991, s 329(1).

⁴² Resource Management Act 1991, s 329(1)(a).

⁴³ Resource Management Act 1991, s 329(2).

⁴⁴ Resource Management Act 1991, s 330.

any activity undertaken by that authority to remove the cause of, or mitigate any actual or likely adverse effect of, the emergency. In other words, the GWRC has the power to take water beyond the minimum flow conditions of the existing resource consent, where the natural resource (being the rivers and the aquafer) is likely to be affected by a sudden event (being dry weather or asset failure) that is likely to cause loss of life or injury, particularly to vulnerable people reliant on the water network (e.g. hospitals, medical centres, rest homes, hospice, early childhood centres, schools, prisons etc).

WWL's powers

- 47. Similarly to GWRC, WWL, as the lifeline utility⁴⁵, also has the power to take preventive or remedial action under the RMA.⁴⁶ This power applies where any service or system that a lifeline utility operates is, in the opinion of the lifeline utility operator affected by or likely to be affected by any sudden event causing or likely to cause loss of life, injury or serious damage to property, then the provisions of 9, 12, 13, 14 and 15 shall not apply to any activity undertaken by that lifeline utility to remove the cause of, or mitigate any actual or likely adverse effect of, the emergency.
- 48. In other words, WWL also has the power to take water, beyond the minimum flow conditions of the existing resource consent, where the service WWL operates (being water services) is likely to be affected by a sudden event (being dry weather or asset failure) that is likely to cause loss of life or injury, particularly to vulnerable people reliant on the water network (e.g. hospitals, medical centres, rest homes, hospice, early childhood centres, schools, prisons etc).

Level 3 water restrictions

- 49. In WWL's view, at the point in time when a region enters level 3 water restrictions, that indicates there is an imminent risk of a "serious temporary shortage of water" in that region (in accordance with section 329 of the RMA).
- 50. Accordingly, WWL requests that, if and when the Wellington metropolitan area is placed into level 3 water restrictions, GWRC uses its power to issue a direction to restrict the use of water by commercial consumers,⁴⁷ in order to assist WWL to continue to provide sufficient quantity of drinking water.
- 51. In addition, WWL requests that, if and when the Wellington metropolitan area is placed into level 3 water restrictions, the local authorities use their powers to make bylaws to restrict the use of water by commercial consumers, in order to assist WWL to continue to provide sufficient quantity of drinking water.

⁴⁵ Resource Management 1991, s 330(1)(ca).

⁴⁶ Resource Management Act 1991, s 330.

⁴⁷ Resource Management Act 1991, s 329.

Level 4 water restrictions

- 52. In WWL's view, at the point in time when a region enters level 4 water restrictions that indicates there is a "serious risk to the ongoing supply of sufficient quantity of drinking water in a geographical area" (in accordance with the WSA), and that there is a sudden event, being the dry weather or asset failure is likely to cause loss of life or injury (in accordance with section 330 of the RMA).
- 53. Accordingly, WWL requests that, if and when the Wellington metropolitan area is placed into level 4 water restrictions, GWRC uses its power to issue a direction to further restrict the use of water by all consumers and, where possible, to apportion water by diverting it to critical infrastructure or regions in need, in order to assist WWL to continue to provide sufficient quantity of drinking water.⁴⁸
- 54. In addition to the above, WWL requests that, if and when the Wellington metropolitan area is placed into level 4 water restrictions, the local authorities use their powers to make a bylaw to restrict the use of water for other than essential purposes, ⁴⁹ in order to assist WWL to continue to provide a sufficient quantity of drinking water.
- 55. In addition to the above, WWL requests that, if and when the Wellington metropolitan area is placed into level 4 water restrictions, TA uses its power to declare a drinking water emergency, 50 and to use its special power 51 to direct any person to take immediate action that TA believes on reasonable grounds will prevent, reduce or eliminate the serious risk to public health, being to direct GWRC and WWL to take the immediate action of taking water beyond the minimum flows in breach of the conditions of the existing resource consents, and to exempt that activity 52 and exempt WWL from its duties under the WSA. 53
- 56. If TA is not prepared to declare a drinking water emergency or use its special powers or either of its exemption powers in this manner, then WWL requests that, GWRC uses its power under section 330 of the RMA to take preventative or remedial action by taking water beyond the minimum flow conditions of the existing resource consents.

WWL potential reliance on section 330 RMA

57. If TA is not prepared to use its powers or grant any exemptions under the WSA, and GWRC is not prepared to use its emergency powers under the RMA to fulfil its duties under the LGA, then WWL considers that in order to comply with its duties under the WSA and LGA, it will have no choice but to use its power under section 330 of the RMA to take preventative

⁴⁸ Resource Management Act 1991, s 329.

⁴⁹ Water Services Act 2022, s 26(1)(b).

⁵⁰ Water Services Act 2022, s 59.

⁵¹ Water Services Act 2022, s 62(2).

⁵² Water Services Act 2022, s 65.

⁵³ Water Services Act 2022, s 63(1).

- or remedial action by taking water beyond the minimum flow conditions of the existing resource consents.
- 58. This is not something that WWL wishes to resort to and will only do so if there are no other options available to it within the scope of its functions, powers and duties, and the applicable legislative frameworks.
- 59. WWL acknowledges that reliance on section 330 of the RMA has some novel and potentially challenging issues. Historically, section 330 of the RMA has been relied on by those who have taken action in the face, or in response to, environmental events (eg. storm damage) to lessen the impact of an environmental effect caused by natural processes. Here, the primary event is the dry weather or asset failure, however environmental effects will be caused if WWL does not act to maintain sufficient quantity of drinking water and immediate preventative measures are required to address the effects on human health and wellbeing arising from an insufficient quantity of drinking water and its potential to become unsafe to drink.
- 60. WWL, by taking water in contravention with the conditions of the existing resource consents, would be breaching the RMA by taking action to prevent or mitigate that effect. It is acknowledged that the environmental effects are driven in part by less water in the pipes (i.e. due to increased demand), but it is also as a result of insufficient supply (due to dry weather or asset failure), coupled with the limitations to water takes as conditions on existing resource consents.
- 61. This novel situation creates uncertainty as to whether GWRC would accept WWL's applicability of section 330 in this situation. Further, due to the requirements of section 330A, which requires WWL to notify GWRC within 7 days of the activity, and resource consent being retrospectively sought within 20 days of that notification if the adverse effects are continuing, WWL will be challenged to comply with those timeframes. These challenges include those listed earlier in this letter as well as the need for an effects assessments and certainty as to the requirements of the take (including volume and duration) and the environment within which that take occurs (ie flow rates and water levels).
- 62. If GWRC does not accept WWL's applicability of section 330 of the RMA in this situation, or WWL is unable to comply with the requirements of 330A of the RMA, then there is a potential for GWRC to take enforcement action against WWL, including prosecution.
- 63. However, if the risk of an insufficient quantity of drinking water occurs and WWL does not take additional water beyond the conditions of the existing resource consents, WWL will default in its duties to supply quality and quantity of water regulated by TA under the WSA (unless TA grants an exemption), which may result in enforcement action, including criminal prosecution.

Powers under the Civil Defence Emergency Management Act 2002

- 64. In accordance with the Civil Defence Emergency Management Act 2002 ("CDEMA"), a state of local emergency can be declared in an area any time an emergency has occurred or may occur within the area.⁵⁴
- 65. When a state of local emergency is declared, one of the functions of the Civil Defence Emergency Management Group is to respond to and manage the adverse effects of emergencies in its area,⁵⁵ and they have all the powers that are reasonably necessary or expedient to enable it to perform its functions.⁵⁶

Local State of Emergency

- 66. In WWL's view, at the point where demand for drinking water exceeds the network's ability to supply drinking water, , that indicates there is a failure of or disruption to and a lifeline utility, that may cause loss of life or injury or illness or in some way endanger the safety of the public, and cannot be dealt with by emergency services or otherwise requires a significant and co-ordinated response.⁵⁷
- 67. Accordingly, at the point where demand for drinking water exceeds the network's ability to supply drinking water, WWL intends to request the Director of Civil Defence Emergency Management to declare a local state of emergency. In anticipation of that, WWL intends to work with the National Emergency Management Agency ("NEMA") and Wellington Region Emergency Management Office ("WREMO") to develop an emergency management plan for an acute water shortage in the Wellington metropolitan area, which can be activated should this emergency occur.
- 68. In addition, WWL may not be in the position, as the lifeline utility, to fulfil its duty⁵⁸ of functioning to the fullest possible extent, even at a reduced level.

Possible impact on firefighting

69. If demand for drinking water exceeds supply for several days depleting the storage reservoirs, the reduced pressure in the network may impact on FENZ ability to suppress or extinguish a fire, which may place FENZ in the position of not being able to fulfil its duty of functioning to the fullest possible extent, even at a reduced level. It may also cause a failure of or disruption to an emergency service (being firefighting), that may cause loss of life or injury or illness or in some way endanger the safety of the public.

⁵⁴ Civil Defence Emergency Management Act 2002, s 68.

⁵⁵ Civil Defence Emergency Management Act 2002, s 17.

⁵⁶ Civil Defence Emergency Management Act 2002, s 17.

⁵⁷ Civil Defence Emergency Management Act 2002, s 4.

⁵⁸ Civil Defence Emergency Management Act 2002, s 60.

70. WWL has alerted FENZ to this issue and will continue to work with FENZ in preparing an emergency management plan for if these scenarios occur.

Next steps

- 71. While it may be premature to provide formal notification at this point in time, WWL has decided to pre-emptively warn its regulators by formally notifying both TA and GWRC of the serious risk to the ongoing supply of a sufficient quantity of drinking water as early as possible to provide ample time to work collaboratively on planning for this serious risk, should it eventuate this summer.
- 72. Similarly, WWL intends to work closely with NEMA, WREMO and FENZ to develop an emergency management plan related to this risk, and will forward to those organisations a copy of this letter and its attachments.
- 73. In respect of FENZ, in disclosing a copy of this letter, will fulfil WWL's obligation to notify FENZ of the serious risk that there may be an insufficient quantity of drinking water this summer, which may affect the quality of the drinking water.
- 74. A copy of this letter has also been sent the Wellington Water Board and the Wellington Water Committee, as the governing bodies of WWL and in respect of the Wellington Water Committee, to fulfil WWL's requirement to notify the affected local authorities of the serious risk that there may be an insufficient quantity of drinking water this summer, which may affect the quality of the drinking water.
- 75. We will also disclose a copy of this letter to our insurers and will keep them up to date as this issue progresses.

Yours sincerely

Charles Barker

Director of Regulatory Services

Copied to: Wellington Water Board

Wellington Water Committee

FENZ NEMA WREMO

WWL Insurance Provider

Attachment 1: "Water Supply Shortage – Bulk Network Modelling Scenario Assessment Report", dated 13 November 2023.

Attachment 2: "Acute Water Shortage Risk Forecast", dated 15 November 2023.

Attachment 3: Levels of Water Restrictions, dated 17 November 2023.

Our plan for this summer's acute water shortage

Available water supply buffer

Our region's drinking water supply system has a finite capacity. We can only treat and supply a certain amount of safe drinking water on any given day. This includes a "buffer" that allows for varying levels in daily water usage, unplanned outages, or planned maintenance work. The increase in leaks in the network means the available 'buffer' is becoming increasingly tight, particularly over the summer when supply is lower. The percentages in the grey boxes below indicate the buffer available at each level of water restrictions. As the buffer reduces, the risk of not having enough safe water for our communities increases. The risk of the water not being safe also increases due to the pressure in the network getting too low, allowing contaminants to enter the system. This would pose a risk to public health and result in boil water notices.

20%

available buffer

WATER
RESTRICTIONS
LEVEL
2

ACTIONS NEEDED FROM THE PUBLIC

- No irrigation or sprinklers
- Water your garden by hand only at any time so long as it's not unattended

ACTIONS WELLINGTON WATER & COUNCILS WILL TAKE

- Proactively engage with and remind residents to use less water
- Monitor supply and manage the network as efficiently as possible
- Continue to find and fix as many leaks within current funding
- Warn regulators & essential services of the risk of a Level 4 Water Restriction - Drinking Water Emergency

76%

10% available buffer

WATER
RESTRICTIONS
LEVEL
3

ACTIONS NEEDED FROM THE PUBLIC

- Stop all outdoor water use.
- Consider using less water indoors
- Business can continue as normal but encouraged to be pragmatic and responsible

ACTIONS WELLINGTON WATER & COUNCILS WILL TAKE

- Increase communications and engagement to ask public to use less water
- Liaise with councils re enforcement activities
- Monitor supply and manage the network as efficiently as possible
- Continue to find and fix as many leaks within current funding
- Liaise with regulators & emergency management agencies to start preparing for the risk of a Level 4 Water Restriction
- Prepare Taumata Arowai to declare a Drinking Water Emergency

5% available buffer

WATER
RESTRICTIONS
LEVEL
4

ACTIONS NEEDED FROM THE PUBLIC

- Significantly reduce indoor water use by up to 50% to ensure there is enough water for everyone
- Stop all outdoor water use.
- Business to also significantly reduce water use

ACTIONS WELLINGTON WATER & COUNCILS WILL TAKE

- Stand up a Wellington Water emergency management team
- Significantly ramp up communications and engagement with the public to ask everyone to significantly use less water
- Continue to find and fix as many leaks within current funding
- Request that Taumata Arowai declare a Drinking Water Emergency
- Begin to take additional water from source as authorised by regulator to maintain a 5% water supply buffer

REGIONAL STATE OF EMERGENCY

0% available buffer

ACTIONS NEEDED FROM THE PUBLIC

- Be aware that some areas or suburbs may be out of water
- If water is still on in your local area continue to significantly reduce use
- Check on your neighbours, friends and whanau
- Follow updates and instructions from your local authorities

ACTIONS WELLINGTON WATER & COUNCILS WILL TAKE

- Request WREMO to declare a regional state of emergency
- Emergency management communications e.g. hourly media stand ups and public updates
- Continue to take authorised additional water from sources
- Support WREMO to respond to the regional state of emergency
- Continue to find and fix as many leaks within current funding

About this plan

This plan has been developed based on the principles of saf drinking water and Te Mana o te Wai.

Our initial objective was to avoid the full impacts of level through agile management of the region's water network an to move the water quickly to where it is needed. This was not feasible given the poor condition of network.

Next we looked at taking a more cautious approach to achieve a soft landing of level in pre-chosen areas well away from critical customers. This option would've only required taking a small amount of additional water from our sources. Again this was not feasible given the condition o the network.

Our final approach (this plan) ensures the region can maintain the provision of safe drinking water in the event of Level 4 but the public need to significantly reduce their waters. To achieve this, we have rely on additional water from our sources which will be above our consent conditions as reflected in the Level 4 actions in this plan.

24%

Chance of level of restrictions and risk occurring this

This could occur if a critical asset failed while in level 4



Komiti Ngā Wai Hangarua Wellington Water Committee

05 December 2023

Report no: WWC2023/5/403

Broader Themes Identified in Fluoridation Inquiry

Purpose of Report

- This report responds to a request from the Wellington Water Committee on 6
 October 2023 that "a report be presented to the next meeting of the
 Wellington Water Committee outlining the assessment of, and programme
 of action towards remedying, the broader themes identified in the June 2022
 Inquiry into the Cessation of Water Fluoridation by Wellington Water.
- 2. This covers asset management maturity, internal audit and quality assurance functions, the organisational culture of reactivity and learned helplessness, issue escalation processes, communication with councils and the public, and the proactive release of information."

Recommendations

That the Committee:

- (1) receives and notes the report; and
- (2) accepts it as evidence that Wellington Water has demonstrated that the broader themes from the Inquiry into the Cessation of Water Fluoridation have been adopted and implemented into other areas of the organisation's culture and operations to the degree achievable within funding constraints.

Background

- 3. At the Board meeting on 29 June 2022, the Wellington Water Board (the Board) accepted the findings and the five recommendations of the Martin Jenkins independent inquiry commissioned by the Board titled 'Inquiry into the Cessation of Water Fluoridation by Wellington Water' (Fluoride Inquiry) dated 21 June 2022.
- 4. Wellington Water Limited (WWL) undertook an implementation programme to achieve the recommendations.

- 5. At the Board meeting on 16 November 2022, the Board received the close-out report and agreed to wind up the Fluoride sub-committee on the basis that the Board was satisfied all matters have been addressed, and the Fluoride Inquiry be closed.
- 6. On 8 July 2022, at a closed workshop, we provided the Wellington Water Committee with an update, an overview of the inquiry findings and our approach to meeting the recommendations.
- 7. At the Wellington Water Committee meeting on 29 July 2022, the Wellington Water Committee was provided with an update on our progress in implementing the Fluoride Inquiry recommendations and a more detailed implementation plan.
- 8. At the Wellington Water Committee meeting on 16 December 2022, the Wellington Water Committee was advised that the Board was satisfied all matters had been addressed and the Fluoride Inquiry was closed.

Organisational Culture

- 9. The Martin Jenkins independent inquiry identified an organisational culture of reactivity and "learned helplessness" related to the operation and maintenance of the fluoridation equipment and the outcome of sufficient and consistent fluoridation levels for dental health benefits. The inquiry also identified a culture of "safety rather than effectiveness was dominant," resulting in fluoridation not being treated as a priority outcome for the organisation. One of the outcomes being prioritised was providing safe drinking water, which was consistently delivered without exception.
- 10. The inquiry also found "organisational challenges to raising and addressing issues" when it came to our ability to fluoridate the water effectively. Since the inquiry, we have worked to improve our culture around issues escalating to senior leaders along with clear escalation processes, particularly around issues relating to fluoride, providing sufficient and safe drinking water and wastewater.
- 11. Since the inquiry was closed, there are regular examples of proactivity from the treatment team involved in delivering safe and fluoridated water. In the financial year 22/23, \$3.5M of renewals were completed at the treatment plants alone. The following are examples of proactive activities to improve the delivery of safe and fluoridated water this year:
 - clarifier maintenance at the Te Mārua Treatment Plant to ensure reliable operation of the treatment plant and uninterrupted peak summer flows,
 - chemical dosing systems renewals at Wainuiomata and Gear Island,
 - centrifuge renewal at the Wainuiomata Plant,
 - renewals of instrumentation and control equipment at all plants,
 - filter media remediation at the Wainuiomata Water Treatment Plant.
 - electrical switchboard and variable speed drive renewals and

- gearbox and critical valve and actuator renewals.
- 12. Across the wider company, the Acute Water Shortage risk is an example of where it is evident that the company has learned from the fluoride inquiry. The risk has been escalated within the company and across to our client councils and the Water Committee. Within the company, actions are being taken to optimise outputs and minimise potential impacts from the risk materialising.

Our level of asset management maturity

- 13. As required by the review, we have been implementing a pragmatic plan of improvements to the asset management system within the funding provided by shareholding councils and the Government's stimulus funding and reform transition support.
- 14. An important context is that our ability to achieve a fully integrated and coordinated asset management approach is constrained by two key factors: our operating model (particularly the separation of asset owner and asset operator roles) and the legacy IT systems we are working with.
- 15. Our operating model means that fundamental asset management decisions, such as how much funding is available and how it is allocated, remain with the asset owner. There is no obligation to ensure that revenue and investment are aligned with the levels of service that customers are expecting.
- 16. We inherited historical challenges with asset data completeness and quality from our shareholder councils. This has impacted the ability to maintain and operate assets. Asset information is spread across a number of legacy systems, including InfoAsset, Maximo and TechOne. Of these, both Maximo and TechOne are controlled by external organisations.
- 17. Within these constraints, we have worked to adopt a consistent, strategy-based, good practice approach to asset management based on the ISO 55000 standard. This has required integrating practices, processes, systems, and data and growing the capability and capacity of the asset management function across the company to the best of our capability and capacity.
- 18. We have built a structured data and system architecture supporting business processes. The effort to build, maintain and develop this is significant, and we continue to be limited by the amount of funding available to invest in improvements at both the system level and the underlying asset data. The outcome is that the asset information is incomplete, does not integrate across systems, and often requires the manual manipulation of information for reports.
- 19. Examples of where we have improved data quality include improving the accuracy of the attributes of all 400,000 pipe assets, bringing 1000 missing pump station assets into the system, and digitising over 8000 physical-only records.

- 20. Along with improved data, there have been significant improvements in practice and knowledge, including the Very High Criticality Assets programme of condition assessment, intervention guides and desktop assessments. This has been possible with the support of stimulus funding during 2021 and 2022. However, this funding is no longer available. The programme in place for asset condition assessment is smaller than is optimal for the size, scale and age of the assets being managed by Wellington Water. The Committee has previously been advised that this investment needs to be \$10M per annum compared with a budget of \$3.6M for 2023/2024.
- 21. For the large GWRC water treatment assets, we are underway with a further programme of condition assessments. This programme received additional funding this year which has provided the ability to lift the understanding of these assets and the likely programme of interventions that are required in the future.
- 22. Lastly, the improved data provides a stronger evidence base for the investment advice we have provided to councils, particularly around risks and the impact of decisions. This can be seen in the 2022/2023 Annual Planning Advice we provided councils last year and again this year as we support work through the 2024-2034 Long-Term Planning.
- 23. Reform had put further investment in this space on hold to avoid regretful investment.
- 24. In lieu of the new technology environment that reform was intended to deliver, significant investment would now be required to provide the complete and integrated 'systems of record' needed to support effective and efficient end-to-end asset management and produce detailed reporting on activity and associated costs.

Internal Audit and Assurance

- 25. The company's assurance function has been strengthened by creating a Head of Water Compliance and a water auditor. These positions have empowered internal regulatory pressure within WWL that is improving the rigour of compliance evidence within the company. What is provided is reported to governance and externally (NZ Audit, etc.).
- 26. The Director of Regulatory Services has a mandate to act independently to give the CE assurance of any significant non-compliance and, if necessary, raise issues with the Board directly.
- 27. These roles have also significantly raised the level of scrutiny on reporting and performance through the sourcing of expert independent auditors who can scrutinise all data that underpins water compliance reporting. The result has been a supportive relationship between the Regulatory System Directorate and the operational groups where issues since fluoride have been quickly raised. Examples include the non-compliant Waterloo WTP chlorine contact time and notification and correction of non-compliances to Taumata Arowai.

Being transparent and accountable around our performance in supplying fluoridated drinking water

- 28. A key lesson from the fluoride issue and inquiry was the need to increase the transparency and accessibility of information around Wellington Water's performance in delivering fluoridated drinking water to the public.
- 29. Increased transparency allows our council owners, stakeholders, and the public to hold us to account easily. It shows that we continue to prioritise the importance of effectively adding fluoride to the drinking water.
- 30. We have implemented three main mechanisms to maintain transparency and accountability: public notifications, escalation of significant fluoride outages or issues, regular reporting of average fluoride levels from each plant, and our performance.

Public notifications

31. Public notifications are issued on our website and social media channels every time a fluoride facility is turned off and on. We have a separate section on our website dedicated to notifications of fluoride outages to make it easy for viewers to navigate, and members of the public can subscribe to fluoride alerts on our website, which means they will receive an alert every time a fluoride outage has been published.

Escalation of significant fluoride outages and/or issues

- 32. We have a clear escalation process to let council CEs, the Wellington Water Committee, our Board, and the regulator know if a fluoride outage is intended to last for more than five consecutive days. If we cannot supply fluoridated water for five consecutive days or more, then this will impact our ability to meet the Ministry of Health's fluoride standards, which are in place to achieve oral health benefits. Hence, an escalation is appropriate.
- 33. This process was agreed upon by councils and mayors when it was first implemented. It has clear owners in the business (including key SLT members and the CE) and accountabilities, and we have successfully activated it several times over the past 12-18 months since the inquiry.
- 34. A copy of this process has been attached as Appendix 1 to the report.

Regular monthly reporting on performance

35. We regularly publish the average monthly levels of fluoride we add to the drinking water at each water treatment plant in the metropolitan region. This includes commentary on when we are not meeting the Ministry of Health levels of effective fluoridation and the reason why. Our monthly reporting can be viewed on our website - https://www.wellingtonwater.co.nz/resources/topic/drinking-water/whats-in-your-water/monitoring-fluoride-levels-at-water-treatment-plants/

Applying what we learned to other areas

- 36. The lessons learned from fluoride have also been applied to other areas of our operations, such as wastewater. We have implemented public notifications for wastewater discharge every time a wastewater treatment plant discharges partially treated or untreated wastewater into the environment. This has been in place for over a year now.
- 37. We issue monthly compliance reports for our wastewater operations, which are provided to our councils, the Wellington Water Committee and our Board. These reports are also made publicly available on our website on each of the dedicated web pages we have created for each plant https://www.wellingtonwater.co.nz/resources/topic/wastewater/wastewater-treatment-plants/
- 38. Recently, we have also started to publish monthly information about wastewater overflows from the network on our website, and work is underway to build on this so we can provide the public with a comprehensive picture of the environmental impact of the wastewater network https://www.wellingtonwater.co.nz/resources/topic/wastewater/network-overflow-reporting/
- 39. In late June 2022, while a clarifier (which separates bacteria from wastewater) was being repaired at the Moa Point Wastewater Treatment Plant, we proactively communicated to our councils, the public, and the media that there would be more frequent discharges of partially treated, diluted wastewater from the treatment plant during the winter months. This resulted from reduced capacity at the plant while the clarifier was being repaired. We had worked with our regulators GWRC throughout the clarifier repair, and they were well briefed on the environmental impact this work would have and why. While we had no regulatory obligation to notify the public (in addition to notifying interested parties) of the increased discharges, we chose to anyway, as the fluoride issue taught us the importance of increased transparency and recognising the importance and value that the public and our stakeholder place on events of this nature. In short, instead of taking a purely technical and regulatory approach to this issue, we used learnings from fluoride and did the right thing to ensure full transparency. A copy of the media release on this is available on our website - https://www.wellingtonwater.co.nz/about-us/news-and-media/newsand-media-2/moa-point-waste-water-treatment-plant-repairs-may-resultin/
- 40. Another example can be seen in our engagement with our councils, the Wellington Water Committee and the public around the water supply risk this year and in the long-term. We raised the increased risk of a water shortage the region faced early on and escalated this to our board, the Wellington Water Committee, and our councils. We have been transparent about what this could mean to the public and what work we do to respond to this summer's risk. We have also been honest about our inability to mitigate the risk this summer materially. This is a key shift in behaviour for us as an organisation, where previously, we may not have been as strong in our position for fear of criticism around our performance.

41. We recognise that proactively communicating this information brings our performance as the region's water services provider under scrutiny. However, we welcome that scrutiny, and it is the right thing to do to increase the transparency around our operations and ensure key issues are being escalated when they arise.

Climate Change Impact and Considerations

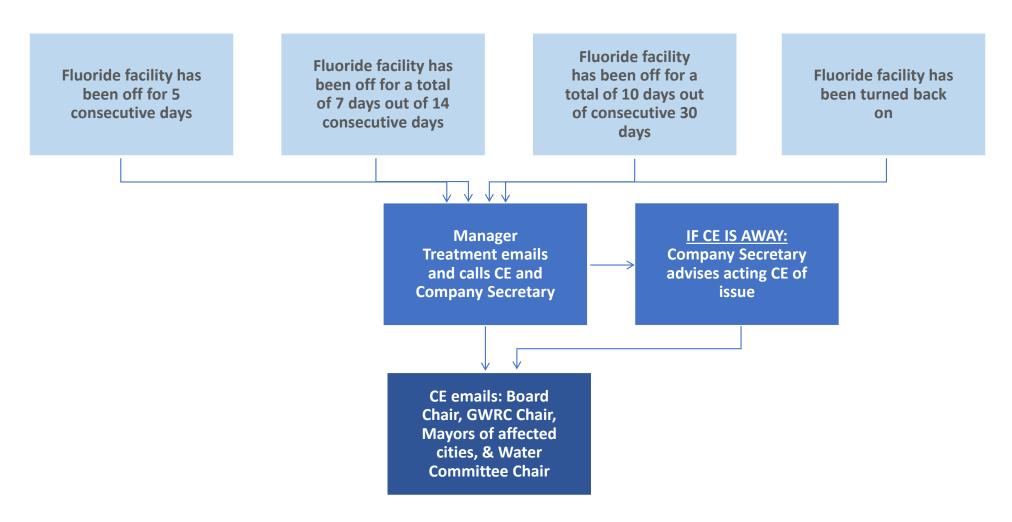
42. There are no direct climate change impacts or considerations from the matters addressed in this report.

Appendices

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1 <u>U</u>	Appendix 1: Broader themes stakeholder notification process for fluoride	137

Author: Wellington Water Ltd

Process for stakeholder notification of fluoridation operations



Our Reference



TO: Chair and Members

Komiti Ngā Wai Hangarua | Wellington Water Committee

FROM: Kathryn Stannard

DATE: 22 November 2023

SUBJECT: MEETING SCHEDULE 2024

Purpose of Memorandum

1. For the Wellington Water Committee (the Committee) to adopt its meeting schedule for 2024.

Recommendation

That the Committee agrees to the meeting schedule for the Wellington Water Committee for 2023 as follows:

- Friday, 15 March 2024 commencing at 10.00am followed by a workshop at Hutt City Council Chambers; Hutt City Council, 30 Laings Road, Lower Hutt;
- Friday, 24 May 2024 commencing at 10.00am followed by a workshop at Hutt City Council Chambers, Hutt City Council, 30 Laings Road, Lower Hutt;
- Friday, 26 July 2024 commencing at 10.00am followed by a workshop at Hutt City Council Chambers, Hutt City Council, 30 Laings Road, Lower Hutt; and
- Friday, 27 September 2024 commencing at 10.00am followed by a workshop at Hutt City Council Chambers, Hutt City Council, 30 Laings Road, Lower Hutt.

Proposed meeting arrangements for 2024

- 2. Officers have contacted members to arrange appropriate dates for the Committee to meet in 2023.
- 3. It is envisaged that the Committee will meet on four occasions in 2024 with additional meetings arranged as required.
- 4. Workshops have also been scheduled to follow the Committee meetings.

Communication

5. In accordance with legislation, public notice of each formal meeting will be given at the appropriate time. A copy of the Order Paper for each meeting will be made available for public inspection at the principal office of each shareholding local authority.

Appendices

There are no appendices for this Memorandum.

Author: Kathryn Stannard Head of Democratic Services

Approved By: Kate Glanville Senior Democracy Advisor

Our Reference



TO: Chair and Members

Komiti Ngā Wai Hangarua | Wellington Water Committee

FROM: Kathryn Stannard

DATE: 03 November 2023

SUBJECT: WELLINGTON WATER COMMITTEE FORWARD

PROGRAMME 2024

Recommendation

That the Committee receives and notes the draft Forward Programme and future workshop topics for the Wellington Water Committee for 2024 attached as Appendix 1 to the memorandum.

Purpose of Memorandum

1. To provide the Wellington Water Committee (the committee) with a Forward Programme of work and workshops planned for the committee for 2024.

Background

- 2. The Terms of Reference for the committee require the committee to provide governance and leadership across issues relating to the planning, delivery and management of water services to communities serviced by Wellington Water Limited (WWL).
- 3. The Forward Programme provides a planning tool for members, officers and WWL staff to coordinate programmes of work.
- 4. The draft Forward Programme for 2024 is attached as Appendix 1 to the memorandum.

Forward Programme

5. The Forward Programme is a working document and is subject to change regularly. Any changes to the Forward Programme made by officers and WWL staff will be made in consultation with the Chair.

Appendices

No.	Title	Page
1 <u>↓</u>	Draft Wellington Water Committee Forward Programme 2024	141

Author: Kathryn Stannard, Head of Democratic Services **Approved by** Kate Glanville, Senior Democracy Advisor

Draft Wellington Water Committee Forward Programme 2024

15 March tbc	24 May tbc	26 July tbc	27 September tbc
Location tbc	Location tbc	Location tbc	Location tbc
Wellington Water Committee Chairperson's Statement Appointment/Extension of WWL Directors 3 Waters Reform – Legislation and Programme Update WWC Forward Programme Wellington Water Company and Governance	Wellington Water Committee Chairperson's Statement Waters Reform – Legislation and Programme Update WWC Forward Programme Wellington Water Company and Governance Update (and Quarter 3	Wellington Water Committee Chairperson's Statement Waters Reform – Legislation and Programme Update WWC Forward Programme Wellington Water Company and Governance Update	Wellington Water Committee Chairperson's Statement Waters Reform – Legislation and Programme Update Wellington Water Company and Governance Update Transition Programme
 Update Long Term Plan Council Investment Update Transition Programme Update Receive Draft Statement of Performance) Transition Programme Update Water Supply Risk Winding up the Comp 	 Transition Programme Update Water Supply Risk 	 Transition Programme Update Receive Final Statement of Intent Water Supply Risk 	 Update Water Supply Risk Receive Annual Report to 30 June 2024 Winding up the Company (impact of election outcome)
Workshop	Workshop	Workshop	Workshop
Global Consents	Growth	Placeholder	Placeholder

Pending: Review of WWL Director's Fees