

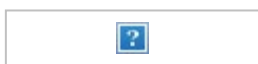
**From:** [Official Information](#)  
**To:** [REDACTED]  
**Cc:** [Official Information](#)  
**Subject:** RE: Part Response to OIA IRO-525  
**Date:** Thursday, 30 November 2023 5:08:36 pm  
**Attachments:** [Our Water Supply System Story.pdf](#)  
[Developing a Regional 30 Year Pathway for 3 Waters Investment.PDF](#)  
[Sustainable Water Supply & Demand – Situation Update and Discussion \(Attachment 3 to Company Update Report\).PDF](#)  
[Increasing demand for drinking water in Wellington and implications for summer \(Appendix 1 to Company Update Report\).PDF](#)  
[Actions to Manage Metropolitan Wellington's Water Supply and Usage Risk.PDF](#)  
[A journey back to water reliability – a focus on leaks.PDF](#)  
[Actions to Manage the Region's Water Supply.PDF](#)  
[image001.jpg](#)  
[image002.png](#)  
[image003.png](#)

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Aroha mai [REDACTED], OIA IRO-525, not OIA IRO-521.

[REDACTED]

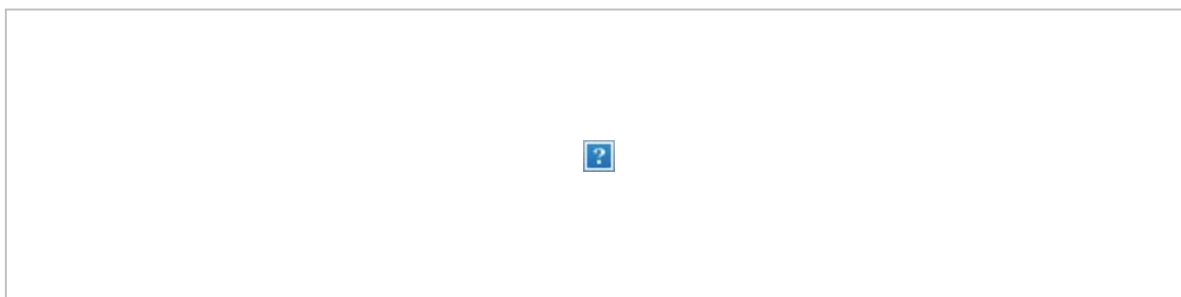
[REDACTED] (he/him)  
**Governance Coordinator - Business Services**



Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045  
Level 4, 25 Victoria Street, Petone, Lower Hutt

[www.wellingtonwater.co.nz](http://www.wellingtonwater.co.nz)



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We manage their drinking water, wastewater and stormwater services.

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**From:** Official Information <official.information@wellingtonwater.co.nz>  
**Sent:** Thursday, November 30, 2023 5:05 PM  
**To:** [REDACTED]@rnz.co.nz>  
**Cc:** Official Information <official.information@wellingtonwater.co.nz>  
**Subject:** Part Response to OIA IRO-521

Kia ora [REDACTED]

**Official information request regarding acute water shortage.**

Thank you for your request dated Thursday 9 November 2023.

You have asked for a significant amount of information and we will not be able to provide all of our correspondence with every council on this topic as this volume would unreasonably interfere with our business operations (refer to [Section 17\(f\)](#) of the Local Government Official Information and Meetings Act 1987). However, we are reviewing our files to identify relevant items that we will be able to released to you.

In the interim, as a partial response to your request, we are sharing a number of substantive items that have been shared with all councils through various means. We will respond further by Thursday 7 December 2023.

This PowerPoint <https://www.wellingtonwater.co.nz/assets/Reports-and-Publications/2023-Regional-Water-Shortage-Summit-Final-slide-pack-11-September-2023.pdf> is a comprehensive summary used as a basis for discussion at the Water Summit. Prior to the Summit we also provided background reading, as follows (all documents are attached to this email):

<b>Date</b>	<b>Paper Title</b>
25 November 2020	Water Supply System Story
13 September 2021 (Workshop)	Developing a Regional 30 Year Pathway for 3 Waters Investment
18 March 2022	Sustainable Water Supply & Demand – Situation Update and Discussion (Attachment 3 to Company Update Report)
29 July 2022	Increasing demand for drinking water in Wellington and implications for summer (Appendix 1 to Company Update Report)
30 September 2022	Actions to Manage Metropolitan Wellington's Water Supply and Usage Risk
30 November 2022 (workshop)	A journey back to water reliability – a focus on leaks
16 December 2022	Actions to Manage the Region's Water Supply

There have also been items shared at Water Committee meetings throughout the year. Please see the links to those agenda packs below (which are published online [here](#)), and the specific items concerning water supply, demand and shortage.

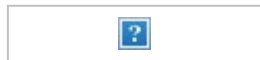
1. [17 March 2023 Water Committee Meeting](#)
  - a. Company and Governance Update (Page 34-35)
2. [9 June 2023 Water Committee Meeting](#)
  - a. APPENDIX 1: Q3 Wellington Water Regional Review (Page 52)
  - b. Water Supply and Usage Risk for the 2023/24 Summer – Metropolitan Wellington (Page 82-93)
3. [24 July 2023 Water Committee Meeting](#)
  - a. Company and Governance Update (Page 28)
    1. APPENDIX A: Water Supply and demand Risk (Page 34-57)
  - a. Water Supply and Demand Risk for the 2023/24 Summer – July Update (Page 131-137)
3. [6 October 2023 Water Committee Meeting Item](#)
  - a. Company and Governance Update (Page 32-33)
  - b. Water Supply and Demand Risk for the 2023/24 Summer – Update (Page 54-58)
  - c. 2022/23 Annual Report “Other Priorities – Sustainable Water supply and demand” (Page 81-84)

Ngā mihi nui,



 (he/him)

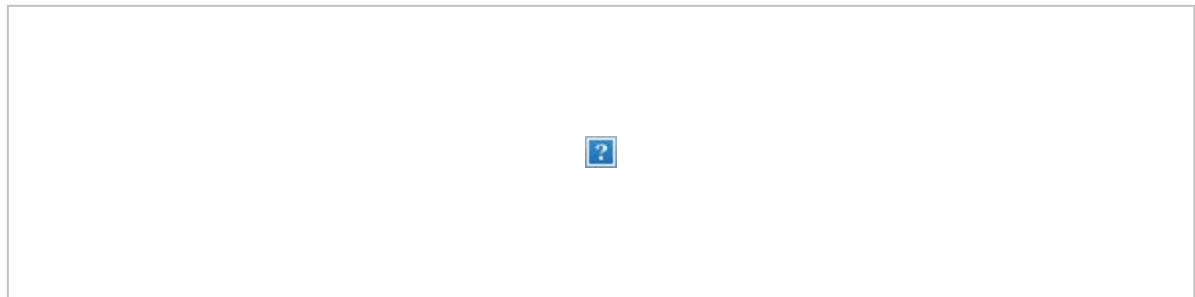
**Governance Coordinator - Business Services**



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---

**From:**   [<@rnz.co.nz>](mailto:>@rnz.co.nz)

**Sent:** Thursday, November 9, 2023 4:34 PM

**To:** Official Information <[official.information@wellingtonwater.co.nz](mailto:official.information@wellingtonwater.co.nz)>

**Subject:** OIA Request - Correspondents

You don't often get email from [nick.james@rnz.co.nz](mailto:nick.james@rnz.co.nz). [Learn why this is important](#)

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Kia ora [REDACTED] here from Radio New Zealand,

I would like to make a request for the following information under the official information act.

- All correspondents between Wellington Water and the Wellington Emergency management office this year.
- All correspondence between Wellington City Council and Wellington Water regarding the potential acute water shortage this Summer
- All correspondence between Porirua City Council and Wellington Water regarding the potential acute water shortage this Summer
- All correspondence between Upper Hutt City Council and Wellington Water regarding the potential acute water shortage this Summer
- All correspondence between Hutt City Council and Wellington Water regarding the potential acute water shortage this Summer
- All correspondence between South Wairarapa District Council and Wellington Water regarding the potential acute water shortage this Summer
- All correspondence between Greater Wellington Regional Council and Wellington Water regarding the potential acute water shortage this Summer

Please get back to me as soon as possible.

Kind regards,

[REDACTED] Journalist – Te Manu Korihi

RADIO NEW ZEALAND | LEVEL 2 | 155 THE TERRACE

PO BOX 123 | WELLINGTON | NEW ZEALAND 6140 | [www.rnz.co.nz](http://www.rnz.co.nz)

| Mobile [REDACTED]

RNZ-logo-reo



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Friday 8 December 2023

**OIA IRO-525**

Name: [REDACTED]

Email: [REDACTED]@rnz.co.nz

Kia ora [REDACTED]

**Official information request regarding acute water shortage.**

Thank you for your request dated Thursday 9 November 2023.

On Thursday 30 November we provided you with a partial response and advised that it would not be possible to provide you with all requested information without unreasonably interfering with our operations. On this basis, we declined part of your request in accordance with [Section 17\(f\)](#) of the Local Government Official Information and Meetings Act 1987 (the Act).

We have since undertaken a review of files to identify relevant items which we have attached in our email to you. Pursuant to [Section 7\(2\)\(a\)](#) of the Act, names and contact details have been redacted to protect individuals' privacy.

We have also withheld draft maps of critical zones, and a presentation made at a stakeholder workshop in October on water supply in accordance with [Section 7\(d\)](#) of the Act to avoid prejudice to measures protecting the health or safety of members of the public.

Please note that the latest information on the acute water shortage is contained in a briefing to the Water Committee which is publicly available here:  
[http://infocouncil.huttcity.govt.nz/Open/2023/12/WWC\\_11122023\\_AGN\\_3215\\_AT.PDF](http://infocouncil.huttcity.govt.nz/Open/2023/12/WWC_11122023_AGN_3215_AT.PDF)

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Ngā mihi,

[REDACTED]  
**Acting Group Manager, Customer Operations Group**

[REDACTED]  
**Director, Regulatory Services**

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

 /wellingtonwater

 @wgtwaternz & @wgtwateroutage

 @wellington\_water

[www.wellingtonwater.co.nz](http://www.wellingtonwater.co.nz)

**Our water, our future.**

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Wednesday, September 27, 2023 10:14 AM  
**To:** [REDACTED]  
**Subject:** FW: Wellington Water - Acute Water shortage planning - draft critical zone selection feedback - updated zones 26 Sept 23  
**Attachments:** WWL Critical Zones selection 26 Sept 23 v2.pdf

Good morning [REDACTED]

Thanks for the chat on Monday regarding the work we are doing on the Acute Water shortage response planning and our selection of critical zones.

We have been through an operational check and data review of the critical zone selection since our discussion and I wanted to make sure you have the latest information. The review has added 9 zones to the selection (total 22), this is driven by operational enablement requirements and ensuring rest homes with private hospitals are included.

Here is the latest version for sharing with [REDACTED] et al. Thoughts and feedback welcome.

We will be discussing this at the sessions with Council EOCs next week.

Regards,

[REDACTED]

[REDACTED] **Head of Risk and Assurance**



Tel 04 912 4400 Mob [REDACTED]

Private Bag 39804, Wellington Mail Centre 5045  
Level 4, 25 Victoria Street, Petone, Lower Hutt

---

**From:** [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>  
**Sent:** Thursday, September 21, 2023 10:26 AM  
**To:** [REDACTED] <[\[REDACTED\]@wremo.nz](mailto:[REDACTED]@wremo.nz)>  
**Subject:** RE: Wellington Water - Acute Water shortage planning - draft critical zone selection feedback

Hi [REDACTED]

Some more info.

**Our objectives are:** Through careful management of network we will achieve soft landing of risk into pre-chosen areas. We will identify zones that must be protected and select zones that risk will be managed to impact.

#### **Context**

Zones in our context are the water management zones – geographical areas that are supplied water from specific reservoirs or are controlled / managed using a combination of manual valve and pressure control valves (gates).

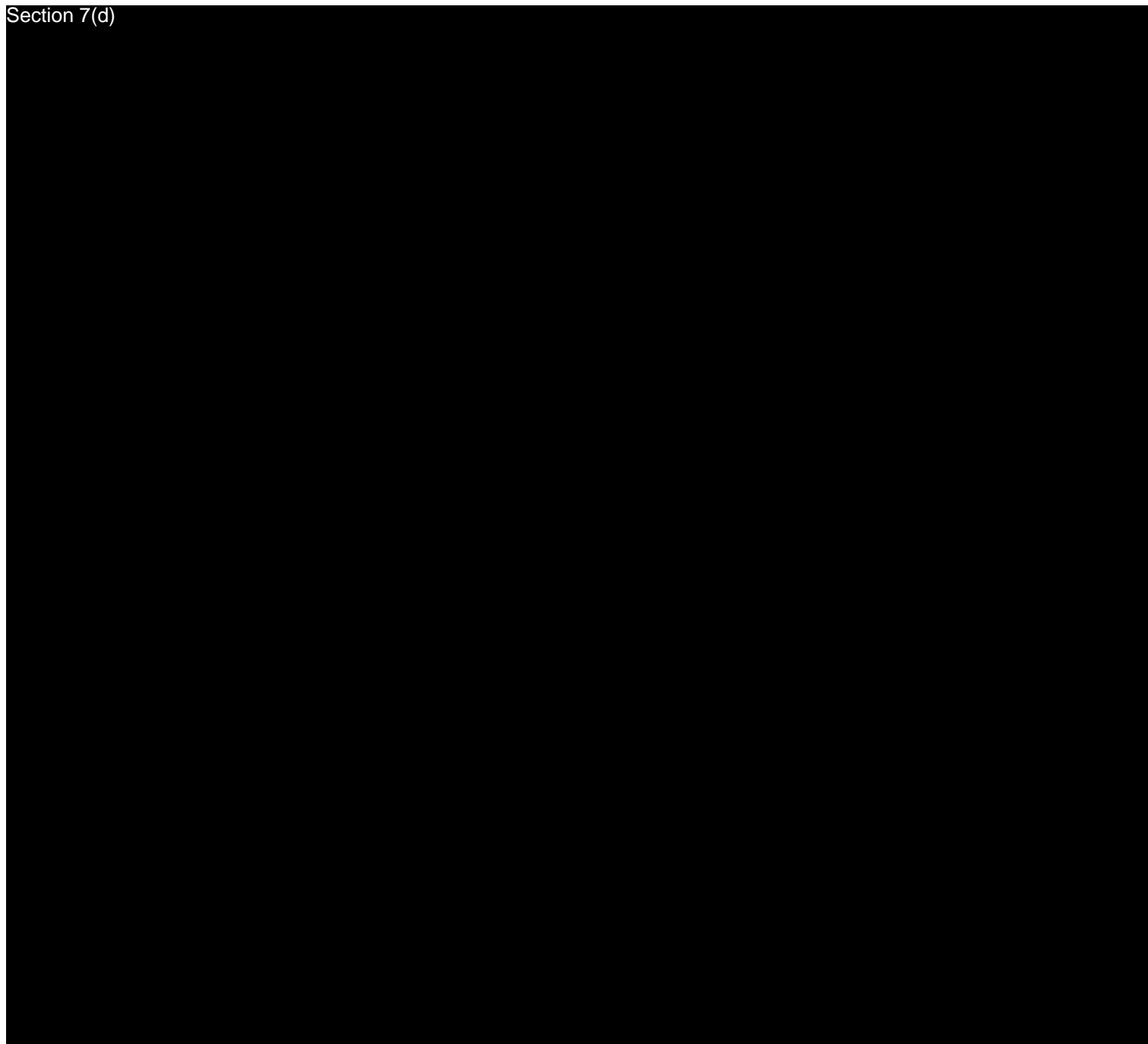
We have 162 zones across the four cities.

**Our discussion**

This (below) is what I wish to discuss with yourself and the team – the process and then sense check that we haven't missed a zone to protect.

Please note the below is still in draft and not for further dissemination.

Section 7(d)





Thx,



Head of Risk and Assurance



Tel 04 912 4400 Mob 

---

**From:**  [@wremo.nz](mailto:>@wremo.nz)>

**Sent:** Thursday, 21 September 2023 10:06 am

**To:**  [@wellingtonwater.co.nz](mailto:>@wellingtonwater.co.nz)>

**Subject:** RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

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Great – is there any more context on what you would like to cover so I can get others involved as needed?

Are critical zones actual geographic areas or is there another way to think about critical zones?

If I attend in a Group Controller capacity, would you like one or two alternate Group Controllers to put their heads to this as well?

██████████ as the Lifelines Utility Coordinator?

██████████ (he/him)

Manager – Operational Readiness & Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)

██████████  
██████████@wremo.nz

[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



2 Turnbull Street  
Wellington  
PO Box 11646, Wellington



From: ██████████@wellingtonwater.co.nz>  
Sent: Thursday, September 21, 2023 9:56 AM  
To: ██████████@wremo.nz>  
Subject: RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

Perfect thanks.

From: ██████████@wremo.nz>  
Sent: Thursday, 21 September 2023 9:27 am  
To: Erin ██████████@wellingtonwater.co.nz>  
Subject: RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

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Morning ██████████

Is 0900 – 1000 on Monday an option for you?

Regards,

██████████ (he/him)  
Manager – Operational Readiness & Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)



2 Turnbull Street  
Wellington  
PO Box 11646, Wellington

██████████  
██████████@wremo.nz

[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



---

**From:** ██████████@wellingtonwater.co.nz>  
**Sent:** Wednesday, September 20, 2023 1:15 PM  
**To:** ██████████@wremo.nz>  
**Subject:** RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

Hi ██████████

I have one thing that I would like to run past yourself and the relevant people at WREMO this week if possible.

We have gone through a process of selecting what our Critical Zones are that we are going to aim to protect.

I would like to walk you through the process and then show you the zones and get your feedback – sense check on where we have landed.

Are you available over the next two days for a chat?

Cheers,

██████████

██████████ Head of Risk and Assurance



Tel 04 912 4400 Mob ██████████

Private Bag 39804, Wellington Mail Centre 5045  
Level 4, 25 Victoria Street, Petone, Lower Hutt

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**From:** ██████████@wremo.nz>  
**Sent:** Tuesday, 19 September 2023 11:13 am

To: [redacted]@wellingtonwater.co.nz>  
Cc: [redacted]@wremo.nz>; [redacted]@wremo.nz>  
Subject: RE: Wellington Water - Acute Water shortage planning

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hi [redacted]

Apologies from me I will be on leave that week but [redacted] should be able to attend on my behalf if you land a date with the remainder of councils.

As a back up offer, we are looking to run the next Regional Interagency Planning Committee on 14 Nov which will have representation from all councils, emergency services, health and some lifelines..... so there is potential at the very least to provide an update to that group and or run a short desktop of that is of interest.

Happy to help just let me know!

Thanks,

[redacted] (he/him)  
Kaiwhakahaere Matua : Manager – Operational Readiness &  
Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)



2 Turnbull Street, Thorndon, Wellington  
6011  
PO Box 11646, Wellington 6142

[redacted]  
[redacted]@wremo.nz

[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



---

From: [redacted]@wellingtonwater.co.nz>  
Sent: Friday, September 15, 2023 11:27 AM  
To: [redacted]@porirua.govt.nz>; [redacted]@mowll.nz>; [redacted]@wremo.nz>; [redacted]@wremo.nz>; [redacted]@wremo.nz>; [redacted]@huttcity.govt.nz>; [redacted]@wcc.govt.nz>  
Duncan <[mark.duncan@wremo.nz](mailto:mark.duncan@wremo.nz)>; Geoff Swainson <[geoff.swainson@uhcc.govt.nz](mailto:geoff.swainson@uhcc.govt.nz)>; Anthony Robinson  
Cc: [redacted]@wellingtonwater.co.nz>; [redacted]@wellingtonwater.co.nz>  
Subject: Wellington Water - Acute Water shortage planning

Kia ora,

Further to our quick chat about Wellington Waters acute water shortage planning.

Wellington Water has recently undertaken a series of internal workshops to review our emergency response practices and systems in the event of an acute water shortage this summer.

#### Acute water shortage

As you may be aware, water use in the Wellington metropolitan region is increasing and at an all-time high. This is primarily due to water loss and in part to population growth.

Our latest modelling indicates that if we experience an average summer this year (e.g., without significant rainfall), it is likely the region will face an acute water shortage, despite increased efforts to address leaks.

Wellington Water is unable to mitigate the risk of an acute water shortage within current funding levels. It is likely councils will need to put in place more severe water restrictions for longer periods of time this summer or ask customers to significantly reduce their usage at short notice.

### **Emergency Response Planning**

Given the increasing risk, development of an emergency plan for an acute water shortage is an urgent priority for Wellington Water and our stakeholders.

Ideally, we would like to set up a discussion / forum in the first week of October (2<sup>nd</sup> to 6<sup>th</sup>) to discuss our planning and what an effective response involves; the roles, expectations, intelligence, and how we can support each other, what support Wellington Water are looking for.

Once we have formulated our emergency response plan, we intend to stress test internally and then with emergency responders and stakeholders before the end of the year.

Are there any preferences for timing within the week of October 2<sup>nd</sup> to 6<sup>th</sup>?

Thank you,



Head of Risk and Assurance



Tel 04 912 4400 Mob 

Private Bag 39804, Wellington Mail Centre 5045  
Level 4, 25 Victoria Street, Petone, Lower Hutt

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[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Wednesday, November 1, 2023 3:45 PM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Acute Water Shortage Emergency Response Plan Request  
**Attachments:** WWL Activation Framework - draft v4 - for discussion with WREMO 2 Nov 23.pdf

Hi team,

Please find attached the Activation Framework – this talks to the risk levels, what WWL will be doing and then leads into the conversation we are going to have around roles and responsibilities.

Talk tomorrow.

Regards,

[REDACTED]

[REDACTED] Head of Risk and Assurance



Tel 04 912 4400 Mob [REDACTED]

---

**From:** [REDACTED]@wremo.nz>  
**Sent:** Monday, 30 October 2023 11:56 am  
**To:** [REDACTED]@wellingtonwater.co.nz>  
**Cc:** [REDACTED]@hotmail.com>; [REDACTED]@wremo.nz>; [REDACTED]@wremo.nz>  
**Subject:** Acute Water Shortage Emergency Response Plan Request

**Caution: This is an external email. Please take care when clicking links or opening attachments.**

Hi [REDACTED]

I hope you had a good weekend...

Before our meeting on Thursday, can you please send us a copy of your acute water shortage emergency response plan so we can have a look at it before the meeting?

Ngā mihi,

[REDACTED]

[REDACTED] (he/him)

Kaiwhakahaere ā Rohe / Regional Manager

Wellington Region Civil Defence Emergency Management Group



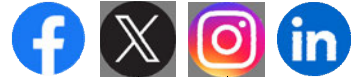
[Redacted]  
[Redacted] [@wremo.nz](mailto:[Redacted]@wremo.nz)

[wremo.nz](http://wremo.nz)

2 Turnbull Street, Thorndon, Wellington

6011

PO Box 11646, Wellington 6142



Purpose: Provide escalation levels and actions for activating the Water Shortage Response Plan.

V4: 1 November 2023

## Roles and Responsibilities

Risk Level	Drought Management Plan Actions	Water Shortage Response Plan Status	Roles and Responsibilities		
			Wellington Water	Councils	WREMO
Level 1	Routine restrictions (odds/evens watering)	Observe			
Level 2	Sprinkler & irrigation system ban	Prepare			
Level 3	Outdoor water use ban (domestic only)	Activate			
Level 4 WWL Incident	Outdoor water use ban. Reduce indoor water use.	WWL Incident			
Level 5 Regional Emergency		WWL Incident – protect critical zones			

Purpose: Provide escalation levels and actions for activating the Water Shortage Response Plan.

V4: 1 November 2023

Risk Level	Response Plan Action	Communication		Demand	Supply	Headroom	Storage	Operational Parameters	Support Information
		Who	What						
1	Observe			<=170MLD	<b>Macaskill Lake Storage</b> >=70% for Jan & Jul >=60% for Feb & Jun >=50% for Mar-May <b>Macaskill Lake Storage (predicted)</b> As above using 2% storage curve <b>Macaskill Lake Net Outflow</b> <=25MLD <b>Kaitoke River Abstraction</b> >=80MLD <b>Waiwhetū Aquifer level</b> >=2.5mAD <b>Wainuiomata</b> >=15MLD	>120%	Full		Drought Management Plan – Performance Dashboard  Supply Risk Dashboard
2	<b>Prepare</b> Response Structure on stand-by.  Weekly monitoring of parameters and information.	Stakeholders and partners	Moved levels – demand and supply situation, Dashboards	>170MLD or >190MLD (1-day ave)	<b>Macaskill Lake Storage</b> <70% for Jan & Jul <60% for Feb & Jun <50% for Mar-May <b>Macaskill Lake Storage (predicted)</b> As above using 2% storage curve <b>Macaskill Lake Net Outflow</b> >25MLD <b>Kaitoke River Abstraction</b> <80MLD <b>Waiwhetū Aquifer level</b> <2.5mAD <b>Wainuiomata</b> <15MLD	<120%	Full	<b>Pump run hours:</b> <6hrs  <b>Reservoir recovery times:</b> <6hrs	Drought Management Plan – Performance Dashboard  Supply Risk Dashboard
		Community	As per comms plan						
		Commercial customers	Prepare / conserve						
3	<b>Activate</b> Response Structure activated. Implement action plans. Daily monitoring of parameters and information. Prepare for supply augmentation.	Stakeholders and partners	Moved levels – demand and supply situation, Dashboards Activation status Actions	>190MLD (7-day ave) or >200MLD (1-day ave)	<b>Macaskill Lake Storage</b> <60% for Jan & Jul <50% for Feb & Jun <40% for Mar-May <b>Macaskill Lake Storage (predicted)</b> As above using 2% storage curve <b>Macaskill Lake Net Outflow</b> >50MLD <b>Kaitoke River Abstraction</b> <40MLD <b>Waiwhetū Aquifer level</b> <2.3mAD <b>Wainuiomata</b> <10MLD	<= 105% of demand (but then sustained above 105% after activation)	Full	<b>Pump run hours:</b> >6hrs per day  <b>Reservoir recovery times:</b> >6hrs	High night flows. High demand in a range of DMA zones.  Increase in customer complaints.
		Community	As per comms plan						
		Commercial customers	Conserve / reduce						
		High use residential zones	Conserve / reduce						
4	<b>WWL Incident</b> Response Structure activated. Protect critical zones. Augment supply.	As per Communications Action Plan	As per Communications Action Plan	>220MLD	<b>Macaskill Lake Storage</b> <30% <b>Macaskill Lake Storage (predicted)</b> As above using 2% storage curve <b>Macaskill Lake Net Outflow</b> N/A <b>Kaitoke River Abstraction</b> 0MLD <b>Waiwhetū Aquifer level</b> <2MLD <b>Wainuiomata</b> 0MLD	<=105% of demand (with Level 3 restrictions in place, or actual/predicted shortfall)	60% and can't restore in one or more reservoir. 70% in Naenae, Lindon etc.)	<b>Pump run hours:</b> >20hrs per day  <b>Reservoir recovery times:</b> >0hrs  <b>Pressure :</b> <25m <b>Major water main burst</b>	High night flows. High demand in a range of DMA zones.  Increase in customer complaints – pressure, water quality
5	<b>Regional Emergency</b> Protect critical zones	As per Communications Action Plan	As per Communications Action Plan			<100% supply shortfall	Critical reservoir Empty		High night flows. High demand in a range of DMA zones.  Increase in customer complaints – pressure, water quality.

From: [Redacted]  
 To: [Redacted]  
 Cc: [Redacted]  
 Subject: [Redacted]  
 Date: Wednesday, November 1, 2023 4:57:00 PM  
 Attachments: image001.png

Hi [Redacted] et al.

Response below.

**Roles and Responsibilities**

Happy to have a conceptual chat about the strawman but I need to discuss this internally before I provide formal feedback on the table provided below.

Overarching concept for thought - as the CCO for WCC/PCC/HCC/UHCC/(SWDC) WWL operate and maintain the water supply across the TA areas of responsibility and support Councils in their lifeline utility role.

**Information Requirements – answers where I could below.**

Information Requirements – Wellington Water (WWL)	WWL Response
Where can we find further information on water sources and strategy relating to the water supply network? Link at Regional Service Plan Part 2 – Three Waters Network (path at <a href="https://www.wellingtonwater.co.nz/publication-library/advice-and-work/regional-service-plan/document/704/">https://www.wellingtonwater.co.nz/publication-library/advice-and-work/regional-service-plan/document/704/</a> ) doesn't appear to be accessible anymore	Will source and provide you with the latest version of the Regional Service Plan.
What identifies an emergency water shortage situation? What are the indicators – e.g. WWL unable to supply contracted agreement of 100L per person per day or something less – not being able to supply 20L per person per day or in areas not being able to supply any water at certain periods of the day?	Supply Demand – 0% headroom. 100L per person per day is our Drought Management Standard. There is no supply contract agreement.
How quickly will WWL be able to judge that its water supply provision is still declining?	We continuously monitor the parameters. We will know in one day of decline in any of the key risk parameters.
In the WWL Water Supply Shortage Response Plan you have identified 22 critical zones that will receive water supply even in acute water shortage. How will this be achieved? Does that mean turning off some water lines or redirecting water lines – are there some simple non technical descriptors on how this critical zone management will occur and what the impact would be to other zones?	The current objective is for the 22 zones to receive water in an acute water shortage. The ability to achieve this objective is currently being understood. We do not have certainty on whether this objective can be achieved. Currently working on the implementation strategy and the interventions that are needed.
Is WWL able to set up a fortnightly report identifying water usage levels versus supply available (levels for each Council residential area or suburb)? This might enable some warning indicators and enhance collaborative planning.	We will provide you with our Drought Management Plan – Performance dashboard and the Supply Risk Dashboard. This will provide the supply vs demand at a system level.
What triggers/indicators will determine when to activate each WWL water restriction level?	Refer Activation Framework.
Do wastewater treatment plants require some of the water supply to be able to operate?	Yes.
What impact will an acute water shortage have on toilet facilities sanitation and disposal of waste water in the region? Would schools be affected?	No water no flush. Similar to earthquake scenario.
Are there any issues caused by flushing toilets less often? For example the ratio between waste and water in the system increasing. Could we encourage homes to let toilets not be flushed for urine just keep toilet seat down and only flushed for bowel motions?	Good question.
Will encouraging people to work from home alleviate or exacerbate the water usage issue?	Not looked into at this stage. People will move where they want to.
Would it be possible to activate the CIR system to provide non-potable water?	Yes. With understanding that water sources may be as equally limited in the El Nino climate.
If people start getting creative and extract water from local streams themselves are there any by laws against this or resource consent issues that we need to inform them of?	Question for GWRC.
Are there any benefits to encouraging people to spread their water usage into low demand periods in the middle of the night or collecting and storing water between set times for identified areas. I water supply got more extreme would filling baths at set times be viable?	Better to encourage people to lower their water usage overall than spread their water usage.
Would setting up a campaign for communities to use water indoors at different times of the day assist if people were willing to follow e.g. workers use water between 0600-0800 in preparation for work and retired people and people working from home consume water after 0800? Would this have a positive impact on water consumption levels?	It's the total volume of water that is the challenge. Lowering overall consumption – conserving all the time would be better.
Most of WWLs planning is around their existing water supply zones – will these zones be part of the public messaging? Do we need to start familiarizing ourselves with the zones?	Yes.
What are the effects of people filling up storage water tanks now or in the coming months?	Do it now while we have the available supply.
How will WWL manage their supply of water to their identified 22 critical zones (identified in their response planning) – is this water redirection does it mean turning off water supply to other areas for part of a day?	Refer above.
What planning is being done now to educate the public on water conservation?	Communications campaign.
Any consideration regarding security of water supplies? During the Northland droughts (2020?) 40 000L was stolen from a school will WWL and Councils consider security of the reservoirs notably those in easy accessible urban areas.	Security is a consideration. We will look at it on a case by case basis. Not resourced to do anything more.
How much lead time is required by supermarkets etc. to increase bottled water stocks?	Question for supermarkets.
How should water conservation efforts be measured/acknowledged? Any WWL thoughts? Can WWL measurements of water consumption be used to assist in identifying areas that are conserving water?	Question for WWL Community Engagement Team. Will pass it on – or WREMO comms person can talk directly to WWL person.
What credible steps will be implemented over next 12 months to prevent an acute water shortage during summer 2024/25 and beyond?	Strategic question. Focus of the acute response is the next 6-8mths.
What parallel measures need to be implemented to mitigate increased fire risk reduced fire-fighting capabilities? What is WWL doing with FENZ on this?	Question for FENZ. We have briefed FENZ on the risk.
Should major summer events be postponed/cancelled? Does WWL know how much water is consumed by Sky Stadium at their events?	Question for Councils.
In 5 Oct WWL workshop it was advised that Cruise Ships are big consumers of water. A review of CentrePorts Cruise Ship Schedule for summer of 2023/24 identifies 108 Cruise Ships visiting Wellington between 8 Nov 23 – 15 Apr 24 of this 62 ships have a passenger capacity of 1800 or greater. How much water is consumed during a port stay? Do they totally replenish their water storage tanks or do they just take enough water to consume whilst in dock? Most ships are going to another NZ port as well – could we manage this? This will obviously need CentrePort input.	Yes it would need CentrePort input. Potential for discussion between Councils / WWL / CentrePort. The consumer in this instance is CentrePort.
What messaging is needed regarding use of 200L emergency water containers? <ul style="list-style-type: none"> <li>How to refill (drought so rainfall not suitable)</li> <li>Decanting from other containers (why?)</li> </ul>	Same messaging given when using them after an earthquake.
Do we have any desalination options?	Would be the same options available as an earthquake.
What messaging needs to go out to people who are not on town supply but within the affected locations?	These people generally know they are not on town supply and the messaging doesn't apply to them. Overriding message is conserve water – long hot summer you may not be able to get your tank topped up if you run dry.
Will acute water shortage/drought conditions cause a prolonged spike in energy demand (fuel for water distribution/water collection/boil water/air-conditioning)?	Good question for Wellington Electricity / Transpower.
What public education is required for water sterilisation/container sterilisation/storage? Does WWL have any of these PIM resources developed already available?	Same as for an earthquake - CIR has these resources.
What are the conditions for relaxing water restrictions?	Reverse the framework. When we can be confident supply is more than demand and the water is safe to drink.
What are the development plans for another water storage lake and how long will a new water storage lake take to be constructed? Acknowledge this is not a short-term mitigation solution.	Strategic question. Focus of the acute response is the next 6-8mths.
Which areas already have water meter systems in place across the WCC/HCC/UHCC/PCC areas of responsibility? Does WWL have this info or Councils? Again this will not be able to mitigate this summers issues.	Strategic question. Focus of the acute response is the next 6-8mths.
How will WWL will preserve and manage water sources if drought conditions progresses and/or prevails into late April and May?	Risk management.

Regards

[Redacted]

[Redacted] Head of Risk and Assurance



Tel 04 912 4400 Mob [Redacted]  
 Private Bag 39804 Wellington Mail Centre 5045  
 Level 4 25 Victoria Street Petone Lower Hutt

Wellington Water is owned by the Hutt, Poikoi, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council.  
 We manage the drinking water, wastewater and stormwater services.

From [Redacted]@hotmail.com>

Sent: Tuesday 31 October 2023 8:16 am

To: [redacted]@wellingtonwater.co.nz

Cc: [redacted]@wremo.nz

[redacted]@wremo.nz

[redacted]@wremo.nz

[redacted]@wremo.nz

[redacted]@wremo.nz

Subject: Information Requirements from WWL on Water Supply Shortage Planning

Caution: This is an external email. Please take care when clicking links or opening attachments.

H [redacted]

WREMO has asked me to do some Response Concept of Operations development which I am well advanced in and will have something to present at Thursdays meeting. As part of the CONOPS I am putting together a Responsibilities table for all stakeholders in a water supply shortage. Here is my first go at WWL – any feedback would be appreciated. I am going to table the draft responsibilities for all agencies on Thu. as a strawman for discussion.

Stakeholder	Responsibilities
WWL	<ul style="list-style-type: none"> <li>As the WCC/PCC/HCC/UHCC water supplier manage water supply across the TA areas of responsibility and provide support to Councils in managing a water supply shortage response</li> <li>Continue to manage drinking water, wastewater and storm water services in the greater Wellington region for local authority Shareholders in a time of water supply challenges</li> <li>In consultation with appropriate local Councils take necessary water network management actions to mitigate this developing acute water supply shortage</li> <li>Advise water customers of the supply shortage situation and support Councils in PIM messaging to water consumers</li> <li>Collaborate with Councils on information collection and water supply monitoring – ensure information and messaging is the same across stakeholders</li> <li>Provide Councils with adequate indicators and triggers to enable warning to activate appropriate responses to the various phases of a water supply shortage situation</li> </ul>

As I mentioned we are working through an Information Collection Plan and here are a number of questions that WREMO would request a WWL response to. I apologise for such a quantity but short responses are fine. Whilst I have tried to filter out questions for other agencies there may be one or two below that your advisors may not be able to answer which I understand but if they can identify who may better be able to respond that would also be great.

Information Requirements – Wellington Water (WWL)	WWL Response
Where can we find further information on water sources and strategy relating to the water supply network? Link at Regional Service Plan Part 2 – Three Waters Network (path at <a href="https://www.wellingtonwater.co.nz/publication-library/advise-and-work/regional-service-plan/document/704/">https://www.wellingtonwater.co.nz/publication-library/advise-and-work/regional-service-plan/document/704/</a> ) doesn't appear to be accessible anymore	
What identifies an emergency water shortage situation? What are the indicators – e.g. WWL unable to supply contracted agreement of 100L per person per day or something less – not being able to supply 20L per person per day or in areas not being able to supply any water at certain periods of the day?	
How quickly will WWL be able to judge that its water supply provision is still declining?	
In the WWL Water Supply Shortage Response Plan you have identified 22 critical zones that will receive water supply even in acute water shortage. How will this be achieved? Does that mean turning off some water lines or redirecting water lines – are there some simple non technical descriptors on how this critical zone management will occur and what the impact would be to other zones?	
Is WWL able to set up a fortnightly report identifying water usage levels versus supply available (levels for each Council residential area or suburb)? This might enable some warning indicators and enhance collaborative planning.	
What triggers/indicators will determine when to activate each WWL water restriction level?	
Do wastewater treatment plants require some of the water supply to be able to operate?	
What impact will an acute water shortage have on toilet facilities: sanitation and disposal of waste water in the region? Would schools be affected?	
Are there any issues caused by flushing toilets less often? For example the ratio between waste and water in the system increasing. Could we encourage homes to let toilets not be flushed for urine just keep toilet seat down and only flushed for bowel motions?	
Will encouraging people to work from home alleviate or exacerbate the water usage issue?	
Would it be possible to activate the CIR system to provide non-potable water?	
If people start getting creative and extract water from local streams themselves are there any by laws against this or resource consent issues that we need to inform them of?	
Are there any benefits to encouraging people to spread their water usage into low demand periods in the middle of the night or collecting and storing water between set times for identified areas. Water supply got more extreme would filling baths at set times be viable?	
Would setting up a campaign for communities to use water indoors at different times of the day assist if people were willing to follow e.g. workers use water between 0600-0800 in preparation for work and retired people and people working from home consume water after 0800? Would this have a positive impact on water consumption levels?	
Most of WWLs planning is around their existing water supply zones – will these zones be part of the public messaging? Do we need to start familiarising ourselves with the zones?	
What are the effects of people filling up storage water tanks now or in the coming months?	
How will WWL manage their supply of water to their identified 22 critical zones (identified in their response planning) – is this water redirection does it mean turning off water supply to other areas for part of a day?	
What planning is being done now to educate the public on water conservation?	
Any consideration regarding security of water supplies? During the Northland droughts (2020?) 40 000L was stolen from a school will WWL and Councils consider security of the reservoirs notably those in easy accessible urban areas.	
How much lead time is required by supermarkets etc. to increase bottled water stocks?	
How should water conservation efforts be measured/acknowledged? Any WWL thoughts? Can WWL measurements of water consumption be used to assist in identifying areas that are conserving water?	
What credible steps will be implemented over next 12 months to prevent an acute water shortage during summer 2024/25 and beyond?	
What parallel measures need to be implemented to mitigate increased fire risk reduced fire-fighting capabilities? What is WWL doing with FENZ on this?	
Should major summer events be postponed/cancelled? Does WWL know how much water is consumed by Sky Stadium at their events?	
In 5 Oct WWL workshop it was advised that Cruise Ships are big consumers of water. A review of CentrePorts Cruise Ship Schedule for summer of 2023/24 identifies 108 Cruise Ships visiting Wellington between 8 Nov 23 – 15 Apr 24 of this 62 ships have a passenger capacity of 1800 or greater. How much water is consumed during a port stay? Do they totally replenish their water storage tanks or do they just take enough water to consume whilst in dock? Most ships are going to another NZ port as well – could we manage this? This will obviously need CentrePort input.	
What messaging is needed regarding use of 200L emergency water containers? <ul style="list-style-type: none"> <li>How to refill (drought so rainfall not suitable)</li> <li>Decanting from other containers (why?)</li> </ul>	
Do we have any desalination options?	
What messaging needs to go out to people who are not on town supply but within the affected locations?	
Will acute water shortage/drought conditions cause a prolonged spike in energy demand (fuel for water distribution/water collection/boil water/air-conditioning)?	
What public education is required for water sterilisation/container sterilisation/storage? Does WWL have any of these PIM resources developed already available?	
What are the conditions for relaxing water restrictions?	
What are the development plans for another water storage lake and how long will a new water storage lake take to be constructed? Acknowledge this is not a short-term mitigation solution.	
Which areas already have water meter systems in place across the WCC/HCC/UHCC/PCC areas of responsibility? Does WWL have this info or Councils? Again this will not be able to mitigate this summers issues.	
How will WWL will preserve and manage water sources if drought conditions progresses and/or prevails into late April and May?	

Regards

[redacted]

Sent from Mail for Windows





**From:** [redacted]@wsp.com>  
**Sent:** Friday, October 6, 2023 1:44 PM  
**To:** [redacted]@nema.govt.nz; [redacted]@wremo.nz; [redacted]@mowll.nz;  
 [redacted]@wremo.nz; [redacted]@wremo.nz;  
 [redacted]@wcc.govt.nz; [redacted]@nema.govt.nz;  
**Cc:**  
**Subject:** RE: Water Supply Response Workshop - 5th Oct  
**Attachments:** Wellington Water Acute Water Shortage Risk and Response Plan Workshop WREMO Council EOCs 5 October 2023.pdf

**Caution: This is an external email. Please take care when clicking links or opening attachments.**

Kia Ora,

Thank-you to those who attended the workshop yesterday afternoon – the level of engagement was appreciated 😊

I have attached the slides [redacted] discussed in the workshop, please don't share them widely yet. Also please remember that the 22 zones are still preliminary and may be altered once the zone management planning has been completed.

The main notes and actions I captured from the workshop are listed below:

#	
[redacted] / WWL	Is it possible to bring the external testing of the response plan forward at all?
[redacted] / WWL	Share the GIS layers of the preliminary critical zone selection and the critical customer/s located in each zone. Determine if it's possible to add in zone population also.
[redacted] / WWL	Consider adding the on-call group controller to the drought management group meetings.
All	Work to determine the response structure in a regional emergency situation.
All	Consider the economic impact on the region for a Level 4 and/or 5 water shortage.
[redacted]	How far advanced are we with our CIR planning?
[redacted] / WWL	Does a water shortage affect the wastewater network, if so, how?
All	Can we use examples from Australia, England, Northland or Tairāwhiti to how they communicated their water shortages and how the community responded?
[redacted]	Share the communications plan with the EOCs.
All	Who are the 'spokespeople' and/or Champions around this summer water shortage risk?
[redacted]	Contact [redacted] regarding the communication's around the potential water shortage risk this summer. Including; how we communicate with public regarding water storage over summer, comms around water tanks. Councils to discuss with suppliers.
All	Consider a regional meeting with First responders, Health, Lifelines etc
[redacted]	Advise who the contact person will be to join the response plan project team.
[redacted]	Share the PowerPoint slides discussed with the attendees.

Ngā mihi,

[redacted]



[Redacted]  
Project Manager

L9 Majestic Centre, 100 Willis St, Wellington 6011, New Zealand  
PO Box 12 003, Thorndon, Wellington 6144, New Zealand

[Redacted] [Redacted] [@wsp.com](mailto:[Redacted]@wsp.com)

-----Original Appointment-----

**From:** [Redacted]@wellingtonwater.co.nz>  
**Sent:** Wednesday, September 27, 2023 1:39 PM  
**To:** [Redacted]@nema.govt.nz; [Redacted]@wremo.nz;  
[Redacted]@mowll.nz; [Redacted]@wremo.nz; [Redacted]y@wremo.nz; [Redacted]  
[Redacted]@wcc.govt.nz; [Redacted]@nema.govt.nz  
**Cc:** [Redacted]  
**Subject:** FW: Water Supply Response  
**When:** Thursday, 5 October 2023 1:00 PM-5:00 PM (UTC+12:00) Auckland, Wellington.  
**Where:** Microsoft Teams Meeting; Meeting Room – Seaview (40 Max)

Council EOCs / WREMO

-----Original Appointment-----

**From:** [Redacted]@wellingtonwater.co.nz>  
**Sent:** Thursday, 21 September 2023 11:12 am  
**To:** [Redacted]@nema.govt.nz; [Redacted]@wremo.nz; [Redacted]@mowll.nz;  
[Redacted]@wremo.nz; [Redacted]@wremo.nz; [Redacted];  
[Redacted]@wcc.govt.nz; [Redacted]@nema.govt.nz  
**Cc:** [Redacted]  
**Subject:** Water Supply Response  
**When:** Thursday, 5 October 2023 1:00 pm-5:00 pm (UTC+12:00) Auckland, Wellington.  
**Where:** Microsoft Teams Meeting; Meeting Room – Seaview (40 Max)

---

## Microsoft Teams meeting

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[REDACTED]

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**From:** [REDACTED]  
**Sent:** Friday, August 18, 2023 9:20 AM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Water Supply Shortage Response Plan Workshops

Hi [REDACTED]

Thanks for joining us on our journey 😊

Our current plan is to engage with stakeholders individually on key aspects and then build to a multi-agency session sometime in Sept and continuing right through to an external scenario testing exercise in December.

I look forward to working with the team. Any sessions you can join is appreciated.

Regards,

[REDACTED]

[REDACTED] Head of Risk and Assurance



Tel 04 912 4400 Mob [REDACTED]

Private Bag 39804, Wellington Mail Centre 5045  
Level 4, 25 Victoria Street, Petone, Lower Hutt

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

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**From:** [REDACTED]@wremo.nz>  
**Sent:** Thursday, 17 August 2023 3:36 pm  
**To:** [REDACTED]@wellingtonwater.co.nz>  
**Cc:** [REDACTED]@wremo.nz>; [REDACTED]@wremo.nz>; [REDACTED]@wremo.nz>; [REDACTED]@wremo.nz>; [REDACTED]@wremo.nz>  
**Subject:** Water Supply Shortage Response Plan Workshops

**Caution:** This is an external email. Please take care when clicking links or opening attachments.

Hi [REDACTED]

I just wanted to thank you for providing us with the opportunity to support your response planning.

We are really keen to stay connected and contribute to this and between [REDACTED] and myself we will endeavour to attend - but I just wanted to let you know we are unlikely to be able to make all of the workshops occurring over the next few weeks.

I am wondering if you have a multiagency/council session in mind maybe later in Sep or whether you are looking for council participation at each of the workshops over the coming weeks?

Hope all is well!

Regards,

---

██████████ (he/him)

Kaiwhakahaere Matua : Manager – Operational Readiness & Response/Group Controller

Wellington Region Emergency Management Office (WREMO)



2 Turnbull Street, Thorndon, Wellington  
6011

PO Box 11646, Wellington 6142

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[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Tuesday, October 3, 2023 6:39 PM  
**To:** [REDACTED]  
**Subject:** RE: Wellington Water - Acute Water shortage planning - draft critical zone selection feedback - updated zones 26 Sept 23

Hi [REDACTED]

Happy to provide insights always a good chat.

I look forward to [REDACTED] thoughts.

Yes the Lifelines Framework was a lodestar for us as we put ours together, I am glad that there is good alignment.

Not sure on reaching out to the supermarkets, that may be something that we do collectively.

The more minds and resource that can be thrown at this challenge the better, in my view. There is certainly a gap in terms of what this looks like from a regional perspective. Happy for whomever to work alongside our team and embed as much as practically possible.

Regards,

[REDACTED]

[REDACTED] Head of Risk and Assurance



Tel 04 912 4400 Mob [REDACTED]

---

**From:** [REDACTED]@wremo.nz>  
**Sent:** Wednesday, 27 September 2023 5:00 pm  
**To:** [REDACTED]@wellingtonwater.co.nz>  
**Subject:** RE: Wellington Water - Acute Water shortage planning - draft critical zone selection feedback - updated zones 26 Sept 23

**Caution:** This is an external email. Please take care when clicking links or opening attachments.

Hi [REDACTED]

Thanks for the insights Monday! I have had a brief chat with [REDACTED] and will send the attached on to get his thoughts.

Interestingly the attached prioritisation framework you may have come across matches what you have pulled together quite nicely which is great. The main areas that have got me thinking at this point is supermarkets/food supply chain and sanitation. Do you have good points of contacts to reach out to the supermarkets on this?

Lastly, I wanted to let you know we are considering contracting an experienced planner to focus on this issue for us over the next 3 – 4 months..... do you have a view on this? How would you feel about someone taking a more

focused look at this with a CDEM/worst case scenario hat on ideally embedded as much as practically possible with your project/planning team?

Regards,

██████████ (he/him)

Manager – Operational Readiness & Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)



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[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



---

**From:** ██████████ [@wellingtonwater.co.nz](mailto:██████████@wellingtonwater.co.nz)

**Sent:** Wednesday, September 27, 2023 10:14 AM

**To:** ██████████ [@wremo.nz](mailto:██████████@wremo.nz)

**Subject:** FW: Wellington Water - Acute Water shortage planning - draft critical zone selection feedback - updated zones 26 Sept 23

Good morning ██████████

Thanks for the chat on Monday regarding the work we are doing on the Acute Water shortage response planning and our selection of critical zones.

We have been through an operational check and data review of the critical zone selection since our discussion and I wanted to make sure you have the latest information. The review has added 9 zones to the selection (total 22), this is driven by operational enablement requirements and ensuring rest homes with private hospitals are included.

Here is the latest version for sharing with ██████████ et al. Thoughts and feedback welcome.

We will be discussing this at the sessions with Council EOCs next week.

Regards,

██████████

██████████ Head of Risk and Assurance



Tel 04 912 4400 Mob ██████████

---

**From:** [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>  
**Sent:** Thursday, September 21, 2023 10:26 AM  
**To:** [REDACTED] <[\[REDACTED\]@wremo.nz](mailto:[REDACTED]@wremo.nz)>  
**Subject:** RE: Wellington Water - Acute Water shortage planning - draft critical zone selection feedback

Hi [REDACTED]

Some more info.

**Our objectives are:** Through careful management of network we will achieve soft landing of risk into pre-chosen areas. We will identify zones that must be protected and select zones that risk will be managed to impact.

**Context**

Zones in our context are the water management zones – geographical areas that are supplied water from specific reservoirs or are controlled / managed using a combination of manual valve and pressure control valves (gates).

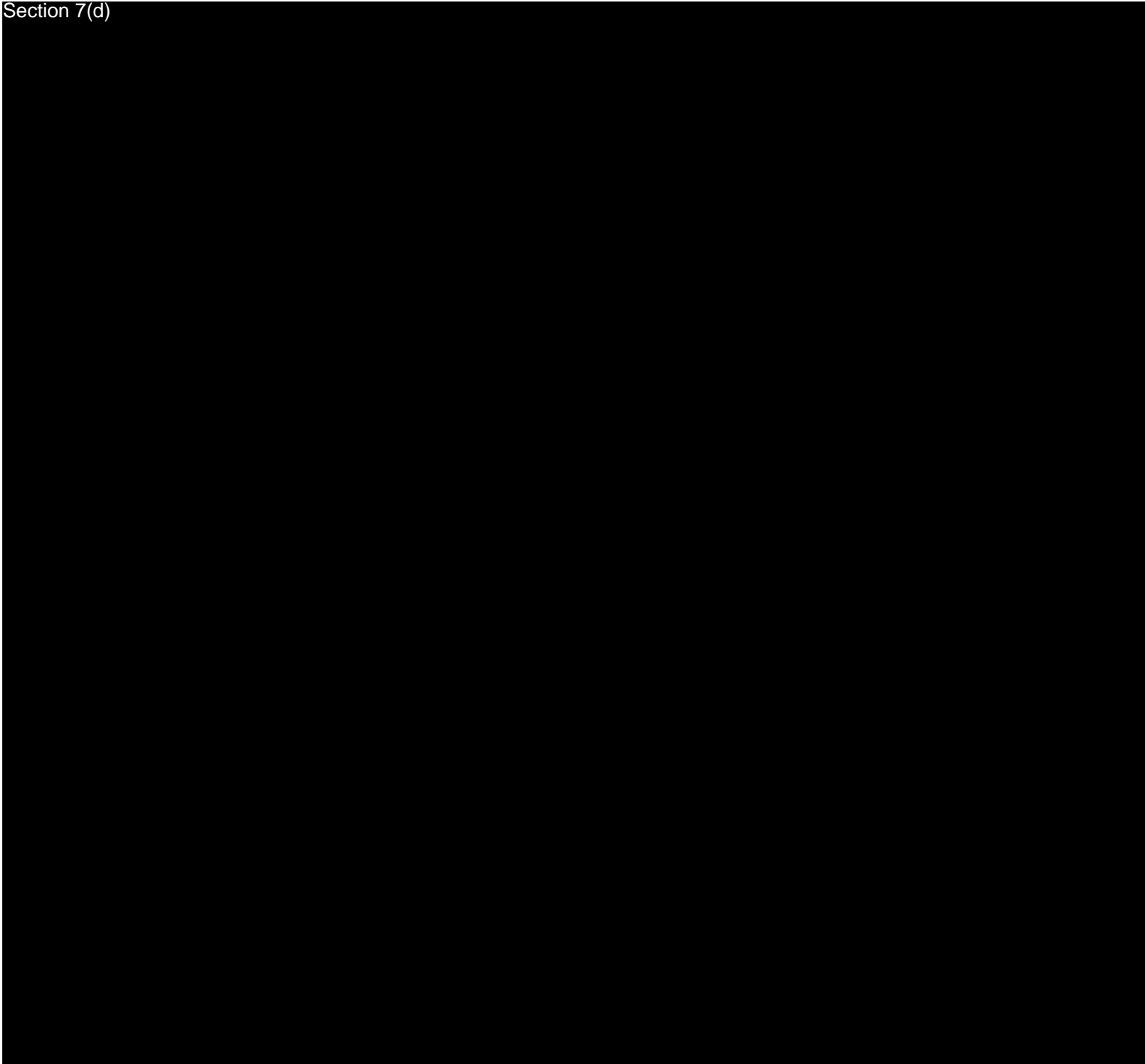
We have 162 zones across the four cities.

**Our discussion**

This (below) is what I wish to discuss with yourself and the team – the process and then sense check that we haven't missed a zone to protect.

Please note the below is still in draft and not for further dissemination.







█

█

█ Head of Risk and Assurance



Tel 04 912 4400 Mob █

---

From: █@wremo.nz>

Sent: Thursday, 21 September 2023 10:06 am

To: █@wellingtonwater.co.nz>

Subject: RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

Caution: This is an external email. Please take care when clicking links or opening attachments.

Great – is there any more context on what you would like to cover so I can get others involved as needed?

Are critical zones actual geographic areas or is there another way to think about critical zones?

If I attend in a Group Controller capacity, would you like one or two alternate Group Controllers to put their heads to this as well?

██████████ as the Lifelines Utility Coordinator?

Regards,

██████████ (he/him)

Manager – Operational Readiness & Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)

██████████  
██████████@wremo.nz

[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



2 Turnbull Street  
Wellington  
PO Box 11646, Wellington



From: ██████████@wellingtonwater.co.nz>  
Sent: Thursday, September 21, 2023 9:56 AM  
To: ██████████@wremo.nz>  
Subject: RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

Perfect thanks.

From: ██████████@wremo.nz>  
Sent: Thursday, 21 September 2023 9:27 am  
To: ██████████@wellingtonwater.co.nz>  
Subject: RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

Caution: This is an external email. Please take care when clicking links or opening attachments.

Morning ██████████

Is 0900 – 1000 on Monday an option for you?

Regards,

██████████ (he/him)

Manager – Operational Readiness & Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)



2 Turnbull Street  
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PO Box 11646, Wellington

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[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



---

**From:** ██████████@wellingtonwater.co.nz>

**Sent:** Wednesday, September 20, 2023 1:15 PM

**To:** ██████████@wremo.nz>

**Subject:** RE: Wellington Water - Acute Water shortage planning - critical zone selection feedback

Hi ██████████

I have one thing that I would like to run past yourself and the relevant people at WREMO this week if possible.

We have gone through a process of selecting what our Critical Zones are that we are going to aim to protect.

I would like to walk you through the process and then show you the zones and get your feedback – sense check on where we have landed.

Are you available over the next two days for a chat?

Cheers,

██████████

██████████ Head of Risk and Assurance



Tel 04 912 4400 Mob ██████████

Private Bag 39804, Wellington Mail Centre 5045  
Level 4, 25 Victoria Street, Petone, Lower Hutt

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---

**From:** ██████████@wremo.nz>

**Sent:** Tuesday, 19 September 2023 11:13 am

To: [redacted]@wellingtonwater.co.nz>  
Cc: [redacted]@wremo.nz>; [redacted]@wremo.nz>  
Subject: RE: Wellington Water - Acute Water shortage planning

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hi [redacted]

Apologies from me I will be on leave that week but [redacted] should be able to attend on my behalf if you land a date with the remainder of councils.

As a back up offer, we are looking to run the next Regional Interagency Planning Committee on 14 Nov which will have representation from all councils, emergency services, health and some lifelines..... so there is potential at the very least to provide an update to that group and or run a short desktop of that is of interest.

Happy to help just let me know!

Thanks,

[redacted] (he/him)

Kaiwhakahaere Matua : Manager – Operational Readiness & Response/Group Controller  
Wellington Region Emergency Management Office (WREMO)



2 Turnbull Street, Thorndon, Wellington  
6011  
PO Box 11646, Wellington 6142

[redacted]@wremo.nz

[wremo.nz](http://wremo.nz) | [getprepared.nz](http://getprepared.nz)



From: [redacted]@wellingtonwater.co.nz>  
Sent: Friday, September 15, 2023 11:27 AM  
To: [redacted]@porirua.govt.nz>; [redacted]@mowll.nz>; [redacted]@wremo.nz>; [redacted]@wremo.nz>; [redacted]@wremo.nz>; [redacted]@wremo.nz>; [redacted]@uhcc.govt.nz>; [redacted]@huttcity.govt.nz>; [redacted]@wcc.govt.nz>  
Cc: [redacted]@wellingtonwater.co.nz>; [redacted]@wellingtonwater.co.nz>  
Subject: Wellington Water - Acute Water shortage planning

Kia ora,

Further to our quick chat about Wellington Waters acute water shortage planning.

Wellington Water has recently undertaken a series of internal workshops to review our emergency response practices and systems in the event of an acute water shortage this summer.

#### Acute water shortage

As you may be aware, water use in the Wellington metropolitan region is increasing and at an all-time high. This is primarily due to water loss and in part to population growth.

Our latest modelling indicates that if we experience an average summer this year (e.g., without significant rainfall), it is likely the region will face an acute water shortage, despite increased efforts to address leaks.

Wellington Water is unable to mitigate the risk of an acute water shortage within current funding levels. It is likely councils will need to put in place more severe water restrictions for longer periods of time this summer or ask customers to significantly reduce their usage at short notice.

### **Emergency Response Planning**

Given the increasing risk, development of an emergency plan for an acute water shortage is an urgent priority for Wellington Water and our stakeholders.

Ideally, we would like to set up a discussion / forum in the first week of October (2<sup>nd</sup> to 6<sup>th</sup>) to discuss our planning and what an effective response involves; the roles, expectations, intelligence, and how we can support each other, what support Wellington Water are looking for.

Once we have formulated our emergency response plan, we intend to stress test internally and then with emergency responders and stakeholders before the end of the year.

Are there any preferences for timing within the week of October 2<sup>nd</sup> to 6<sup>th</sup>?

Thank you,



Head of Risk and Assurance



Tel 04 912 4400 Mob 

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**From:**

**To:**

**Cc:**

**Subject:** Water Supply Shortage Response Plan - Start-up workshop - CONFIRMED - INFORMATION ABOUT THE WORKSHOP INCLUDED

**Attachments:** [Miro How to Sign up.pdf](#)

---

Hi all,

This is a workshop to kick-off the project to continue our development of the Water Supply Shortage Response Plan.

This will be a completely on-line session.

Context

Demand for water in the Wellington metropolitan region is at an all-time high. This is primarily due to water loss and in part to population growth.

Current estimates show that the Wellington region is losing over 40 per cent of drinking water supplied due to leaks, both on the public network and on private properties. This is a result of aging infrastructure, historical underinvestment, and a backlog of renewals and repairs.

Water consumption is another significant factor. We tend to use more water on days when it does not rain, and in summer when river flows are at their lowest. This is indicative of increasing water usage from households and businesses placing further stress on resources. In addition, climate change and more frequent dry spells and intense rain events are affecting our ability to treat water.

In the past year, the risk of an acute water shortage has heightened even though Wellington Water is undertaking short-term and immediate interventions to reduce the amount of water loss through leaks on the public and private networks.

Our latest water loss modelling indicates that if we experience an average summer this year (e.g., without significant rainfall), it is likely the region will face an acute water shortage, and we will be unable to mitigate the risk of water shortage within current funding levels.

\* As a result, more severe water restrictions are likely to be required this year and there is a significant risk that we may have a water supply shortage.

\* It is likely councils will need to put in place more severe water restrictions for longer periods of time this summer or ask customers to significantly reduce their usage at short notice.

\* If a water shortage occurs and lasts for several or more days, sections of the network may depressurise as reservoir levels drop, resulting in a risk of contamination in the network, which would mean councils would have to issue boil water notices to keep the public safe

Water Supply Shortage Response Plan

In response to the significant risk we may have a water supply shortage we are re-activating the development of a plan should we find ourselves with not enough supply or a major low of supply. We are calling this the Water Supply Shortage Response Plan.

The start-up workshop will cover:

- \* What we are doing (project overview)
- \* Our approach
- \* Review of the principles by which we are developing and will be using the plan
- \* Discussing the future workshops and attendees

ConnectWater are supporting us as we develop the plan.

Collaboration tool

We are using Miro to collaborate as the plan is developed.

The Miro board will also provide a record of what was agreed. It also includes a space for good ideas that are outside scope (parking lot). So if you have ideas that doesn't fit into the workshop agenda, or have ideas for future workshops, add them to the parking lot.

The Miro Board will be accessible to add comments after the workshop (and for the entire project so you can see the work unfold) if you have a good idea later, and for people who couldn't make it on the day.

Before the workshop can you all Sign-up to Miro (instructions above) ,so your comments can be attributed to you. Please get in touch with [REDACTED]@wsp.com <mailto:[REDACTED]@wsp.com> if you are having trouble. We have also found it easiest if you use a mouse, rather than a trackpad, to move around Miro.

We will provide the link to the Miro board separately.

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#### Microsoft Teams meeting

Join on your computer, mobile app or room device

Click here to join the meeting <[https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_ZTVmNjRkMmMtOWFhZC00YzYyLTg5OWMtZTBkYTYzZWl4MmFi%40thread.v2/0?context=%7b%22Tid%22%3a%227ada94a2-255d-414e-a98b-a7ef6453451a%22%2c%22Oid%22%3a%22bf3799c6-957f-45b9-9dbb-1420641c63fc%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZTVmNjRkMmMtOWFhZC00YzYyLTg5OWMtZTBkYTYzZWl4MmFi%40thread.v2/0?context=%7b%22Tid%22%3a%227ada94a2-255d-414e-a98b-a7ef6453451a%22%2c%22Oid%22%3a%22bf3799c6-957f-45b9-9dbb-1420641c63fc%22%7d)>

Meeting ID: [REDACTED]  
Passcode: [REDACTED]

Download Teams <<https://www.microsoft.com/en-us/microsoft-teams/download-app>> | Join on the web <<https://www.microsoft.com/microsoft-teams/join-a-meeting>>

Or call in (audio only)

[REDACTED] New Zealand, Wellington

Phone Conference ID: [REDACTED]

Find a local number <<https://dialin.teams.microsoft.com/c2c4d1ce-a1ee-4169-ae41-e12aaf99957d?id=577119676>> | Reset PIN <<https://dialin.teams.microsoft.com/usp/pstnconferencing>>

Learn More <<https://aka.ms/JoinTeamsMeeting>> | Meeting options <[https://teams.microsoft.com/meetingOptions/?organizerId=bf3799c6-957f-45b9-9dbb-1420641c63fc&tenantId=7ada94a2-255d-414e-a98b-a7ef6453451a&threadId=19\\_meeting\\_ZTVmNjRkMmMtOWFhZC00YzYyLTg5OWMtZTBkYTYzZWl4MmFi@thread.v2&messageId=0&language=en-US](https://teams.microsoft.com/meetingOptions/?organizerId=bf3799c6-957f-45b9-9dbb-1420641c63fc&tenantId=7ada94a2-255d-414e-a98b-a7ef6453451a&threadId=19_meeting_ZTVmNjRkMmMtOWFhZC00YzYyLTg5OWMtZTBkYTYzZWl4MmFi@thread.v2&messageId=0&language=en-US)>

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miro

### Sign in



or use your email to sign in:

Work email

Password

[I forgot my password](#)

**Sign in**

[Sign in with Single Sign On](#)



Click sign up

miro

### Sign up for free today

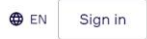
We recommend using your **work email** — it keeps work and life separate.

Work email

**Continue →**

Collaborate with your team within minutes

or sign up with:



Add Your Work Email

miro

### Welcome to Miro

To start, what's your name?

Name

**Continue →**



Add Your Name



miro

EN Sign in

## Welcome to Miro

Now, set your password:

Password 8+ characters

I agree to Miro [Terms](#) and [Privacy Policy](#).

Continue →

← Create a Password

miro

## Check your email

We've sent you a six-digit confirmation code to [redacted]. Please enter it below to confirm your email address.

Enter 6-digit code

[Send code again](#) or find more information in [Help Center](#).

← Check your Email for a six-digit code (check your Junk folder)

miro

Question 3/7

## Tell us about your team

What's your team name?

Water

What kind of work do you do?

Engineering / Development

Have you ever used Miro before?

No, it's my first time

Yes, a couple of times

Yes, quite often

Continue →

← If required, add in some more details about your organisation

Ⓞ This would help us to set up Miro to match your goals.





Using the Link provided, sign in to the whiteboard for this workshop

The screenshot shows a Miro whiteboard titled "MAPPING". The main content is divided into two columns. The left column is titled "HOLDER MAPPING" and contains a section "Who are I and what do I do?" with a list of stakeholders and their roles. Below this is a "Business/operational outcomes" section, followed by "What's next?" and "PARKING LOT" and "AGREED ACTIONS" sections. The right column is titled "Understand how each stakeholder can help the team, how involved they should be and who to contact when things come up." and features a circular diagram. Below the circular diagram is a 2x2 matrix with four quadrants: "HIGH INFLUENCE" (top-left, orange), "HIGH INTEREST" (top-right, purple), "LOW INTEREST" (bottom-left, green), and "LOW INFLUENCE" (bottom-right, blue). At the bottom of the whiteboard, there is a "Remote best practices" section with a list of tips. The whiteboard interface includes a toolbar on the left with various drawing tools and a top toolbar with navigation and sharing options. The bottom right corner shows a zoom level of 31%.

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Friday, September 15, 2023 11:26 AM  
**To:** [REDACTED]@mowll.nz; [REDACTED]  
[REDACTED]@uhcc.govt.nz; [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Wellington Water - Acute Water shortage planning

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Thank you,

[REDACTED]

[REDACTED] Head of Risk and Assurance



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