

14 December 2023

By email

Mayor Tory Whanau, Wellington City Council Mayor Campbell Barry, Hutt City Council Mayor Anita Baker, Porirua City Council Mayor Wayne Guppy, Upper Hutt City Council

Tēna koutou katoa

Wellington Metro Area water shortages

You may recall that prior to the Wellington Water Shortage Summit in September, I wrote to you expressing Greater Wellington Regional Council's concern regarding the level of leakage in our four cities' reticulated water networks. (Attachment 1). I expressed Greater Wellington's support for an apparent willingness among our four cities to consider the introduction of universal water metering as a key tool to manage demand.

Risk to supply of drinking water this summer.

Last month Wellington Water (WWL) advised Greater Wellington that there is a serious risk to the ongoing supply of a sufficient quantity of drinking water in the Wellington metro area if we experience an average summer. (Attachment 2).

Because of the limited means to effectively reduce demand, our only real option in the event of an acute water shortage is to take water from our sources beyond the limits set out in our existing resource consents.

Greater Wellington position

Greater Wellington intends to consult with the community on development of further water storage (design, consent only) in the Long-Term Plan 2024-34. This will take several years to complete and will not resolve the shorter-term water shortage situation.

On our current trajectory, we are set to breach the conditions of our resource consent. Not only will we fall short of our duty under the law, but we will disregard our community and Whaitua Committee requests for "reasonable and efficient use" of water.

This is an untenable situation for Greater Wellington in our roles as regulator and bulk water supplier. We need to consider all options from this point, so that we protect our water sources while supplying enough safe drinking water for the residents of our four cities.

Universal water metering in upcoming LTP consultation

While we have received no formal response to my letter, Greater Wellington understands that Hutt City Council plans to consult on the subject¹, while it is to be excluded from Wellington City Council's draft LTP 24-34.² Monday's <u>agenda</u> for the Wellington Water Committee meeting noted that there is "varying support to install smart metering that provides better information to find leaks and ultimately reduce water demand."

This situation does not reflect the Water Shortage Summit agreement that we plan for all three measures to address our projected water shortage – fixing leaks, universal water metering and increasing supply. I acknowledge the fiscal constraints you face but generally it seems your councils are relegating our shared resolution behind other priorities.

Power to set Water Allocation Limits and impose Surcharges.

Mandating provision of bulk water to the four cities, the Wellington Regional Water Board Act 1972 (the **Act**) also gives Greater Wellington the power³ to set allocation limits and impose surcharges on the four city councils "for all water received by an authority more than that allocation". To enact this power, which Greater Wellington has not invoked before, we must consult with the four city councils on the allocations and the amount of the surcharge.

I will now advance a discussion with my Council regarding the water supply situation and the city councils' intentions regarding universal water metering. We will also discuss whether Greater Wellington needs to develop and set water allocation limits for constituent authorities and start applying the surcharge within the next three years (2024-2027).

To inform the discussion with my Council would you please advise me by 31 January 2024 of:

- a) Your intentions to formally consult with your community regarding universal water metering as part of developing your Long-Term Plan 24-34
- b) Your initial comments on application of the provision for Greater Wellington to set water allocation limits and impose surcharges.

I look forward to hearing from you.

Ngā mihi

Daran Ponter

Chair

CC: Chief Executives of Wellington, Hutt, Porirua and Upper Hutt City Councils; Nick Leggett, Chair, Wellington Water Board; Tonia Haskell, Chief Executive, Wellington Water

Attachment 1: "Reducing water use in our region's cities", letter from Chair Ponter to Mayors 4 Sept 2023 **Attachment 2:** "Serious risk to ongoing supply of a sufficient quantity of drinking water in Wellington region", letter from Wellington Water to Greater Wellington and Taumata Arowai 22 November 2023

¹ Hutt City Council considering option of spending \$580m on water meters, Scoop 28 November 2023

² Council rejects water meters" Dominion Post 23 November 2023

³³ S38(2); S87, Wellington Regional Water Board Act 1972



4 September 2023

File Ref: EXTREL-893300156-5667

Mayor Anita Baker Porirua City Council Mayor Tory Whanau Wellington City

Council

Mayor Campbell Barry Hutt City Council

Mayor Wayne Guppy

Upper Hutt City

Council

BY EMAIL

Tēna koutou katoa

Reducing water use in our region's cities

My councillors and I are looking forward to the Water Shortage Summit in just over a week's time, and I would like to thank you Mayor Campbell for convening this opportunity to meet.

Like you, Greater Wellington is extremely concerned about the state of water leakages in the four cities of our region. We understand that the current rate of water loss through our reticulated network is in the order of 55% of potable water coming from our Te Marua, Wainuiomata and Waterloo treatment plants. This is an extraordinary and unsustainable level of water loss.

For many years, the cities of the Wellington region have discussed the options to address this issue and we appreciate the resourcing provided to Wellington Water to fix leaks and bring back stability and resilience to our water supply network. Now though, we need to up our game and bring all our resources to focus on this issue, so that water demand returns to manageable levels.

I understand that informal conversations between yourselves and Wellington Water now indicate a willingness to include residential water metering as a key tool to manage the growing water demand. GW wholly supports this direction. We are aware of other jurisdictions' experiences in introducing water meters and the benefits delivered as a result. We believe that the time has come for all the cities of the Wellington region to make that change as well.

GW is also working with Wellington Water to plan for our long-term needs, keeping in mind our growing population. As you will be aware we purchased land at Pakuratahi some years ago for the purposes of new storage lakes.

This new development however will have significant impacts – both financially on our ratepayers and environmentally through large scale construction. We will continue planning based on the



assumption that our four cities are committed to the introduction of residential water metering and resolving the significant leaks in the reticulated water network.

For us it is fundamental that water treated for consumption safely reaches our residents. We are very conscious of the obligations that come with Te Mana o te Wai, which include not being wasteful of this precious resource.

This view is consistent with the recommendations of Te Whanganui a Tara Whaitua Implementation Programme that "Territorial Authorities and the relevant three waters agency implement universal residential metering to identify water wastage, reduce demand and enable more effective network management". In Te Mahere Wai, Te Kāhui Taiao noted that municipal water supply is depleting Te Awa Kairangi, Wainuiomata and Ōrongorongo, and that to remedy this impact on te nui o te wai (water abundance), work was required to reduce takes and increase flows.

Working together, water metering, water storage and education to achieve consistent water use savings will complement our collective investment in pipe renewals and in other key assets to help provide for the needs of today's population and those of our future citizens.

At this point I also want to signal that GW will be advocating through the Wellington Regional Leadership Committee's Future Development Strategy for **sustainable** growth with the right kind of urban development in the right parts of our region. We need to pull all available levers to minimise the impacts of development on our environment and carbon emissions. We also need to prioritise funds and construction capacity for investment in renewal of existing infrastructure that will support more homes within existing urban areas.

We look forward to seeing you next week at the Water Shortage Summit, and to us reaching resolution on our pathway to a more resilient water future.

Yours sincerely

Ham Fools

Daran Ponter

Chair

CC:

Greater Wellington Long-term Plan Committee Members Mana whenua iwi Chairs, Chief Executives Mayors of Kāpiti Coast, Masterton, Carterton, and South Wairarapa District Councils Chair of Wellington Regional Leadership Committee



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

¹ Water Services Act 2021, s 21.

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@wgtnwaternz & @wgtnwateroutage



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. 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.
- 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.
 - b. 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,
- 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.
 - c. 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	N/A	Where headroom is	Level 4 water
exceeds 210ML/d		between 5% and 0%	restrictions
		(below safe	
		headroom)	

- 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 power⁵¹ 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 activity⁵² 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.