

Appendix D: Council profiles

The following pages provide an overview of water service delivery for each council. These overviews were initially prepopulated with information from the Entity C working draft asset management plan appendix A, the AECOM Asset Management Plans, council websites, and the Long-term Plans. Councils reviewed the prepopulated information and corrected or updated where possible*. The table below summarises the sources of information for each section.

Section	Information source	Notes
Council overview	<ul style="list-style-type: none"> Council websites, reviewed and adjusted by council staff ArcGIS, Statistics NZ WWL Stormwater Management Strategy 	
Population	<ul style="list-style-type: none"> The Wellington Regional Leadership Committee regional dashboard Census 2023 	
Projected population for 2054	<ul style="list-style-type: none"> The Wellington Regional Leadership Committee regional dashboard: WRLC Housing Data 	
Water asset information	<ul style="list-style-type: none"> AECOM Asset Management Plan V1.0 	<ul style="list-style-type: none"> Note that Kāpiti Coast District Council provided updated information from 2024 Asset Management Plan.
Water asset condition	<ul style="list-style-type: none"> AECOM Asset Management Plan V2.0 WWL Addendum supplied as part of the MVP Asset Management Plan material for the 2024-34 LTP 	<ul style="list-style-type: none"> Note that Kāpiti Coast District, Hutt City, Masterton District and Greater Wellington Regional Councils provided updated asset condition information.
Water challenges and projects	<ul style="list-style-type: none"> Largely from AECOM Asset Management Plan V1.0, some councils provided additional information out of LTPs 	<ul style="list-style-type: none"> Note that Kāpiti Coast District Council provided updated information from 2024 Asset Management Plan.
Compliance issues	<ul style="list-style-type: none"> Entity C working draft AMP council summaries were used as the base with updates provided by councils 	
Planned pipe replacement	<ul style="list-style-type: none"> All information provided by councils 2024-34 Investment Planning and Advice, Porirua City Council 	

* Note – no information was received from Carterton District Council.

Council overview

- The Horowhenua District offers a stunning natural environment on the lower west coast of the North Island. Kilometres of unspoilt beaches, forest walks and a hinterland that is rich in both Māori and European history. Bound by the Tasman Sea to the west and the bush-clad Tararua Ranges to the east, Horowhenua is blessed with superb natural assets, treasured historical heritage and a thriving cultural life, all within easy reach of New Zealand’s capital city Wellington.
- Horowhenua encompasses an area of **106,400 hectares**.
- **Major waterways** are Ōhau and Manawatū rivers, Lake Horowhenua, Koputaroa Stream, Tokomaru River, Mangahao River.



POPULATION
36,693 (Census 2023).

- Projected population of **65,589** for **2054**.



Water asset information (current state)



RETICULATION
428km of water supply pipes
351km of wastewater pipes
182km of stormwater pipes



TREATMENT ASSETS
5 water treatment plants
6 wastewater treatment plants

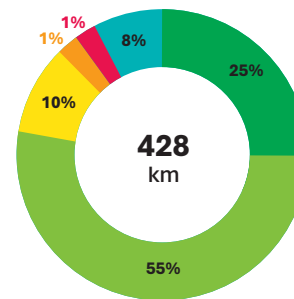


STATIONS
1 water supply
53 wastewater
19 stormwater pump stations

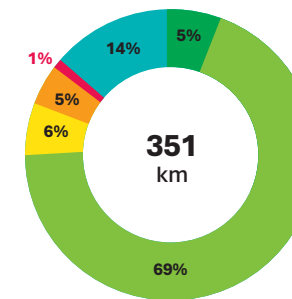


REPLACEMENT VALUE
Combined replacement value **\$635m**

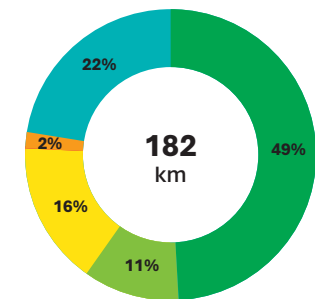
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years
3W general	<ul style="list-style-type: none"> Ageing infrastructure – treatment plants like the Levin Wastewater Treatment Plant. Resilience in managing aging infrastructure during a natural disaster. Growth predictions impact infrastructure capacity. Climate change – increased weather events and stormwater impacts on wastewater infrastructure. Data quality and reliability, including assumed condition.
Water services	<ul style="list-style-type: none"> Ageing infrastructure of water supply assets. A major challenge Council faces is securing a sustainable source of water supply for growth, specifically in Levin. There are quantity issues that need addressing to ensure Council can secure water supply to existing and future communities.
Wastewater	<ul style="list-style-type: none"> A major challenge is the increasing age of Council's wastewater assets especially within the Levin reticulation and treatment plant. Poor pipe condition is a major cause of groundwater infiltration which adds unnecessary volume to the amount of wastewater collected during wet weather events. Meeting with growth demand. Anticipated growth is leading to increased residential, commercial and industrial demand. Sludge treatment and disposal over recent years been challenging for Council including the increased cost for disposal. Resource consent process and complying with consent conditions can be expensive, particularly with increased expectations from the public and stakeholder groups.
Stormwater	<ul style="list-style-type: none"> Localised flooding and drainage issues. Stormwater quality issues especially around Lake Horowhenua (Punahau). Another challenge faced by Council is that the quality of freshwater in streams, river systems, and water catchments in general is affected by water runoff, erosion, and contaminants (whether chemical or solid waste) which can be present in stormwater.

Type	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> Any activities concerning Lake Horowhenua (Punahau). This is a community asset and culturally significant. An unwavering commitment has been made with iwi and stakeholders to restore the mauri of the wai.
Water services	<p>Levin</p> <ul style="list-style-type: none"> Installation of state of the art Water Demand Management system. <p>Foxton</p> <ul style="list-style-type: none"> Installation of steel reservoir (500m³) in 2018 at the Foxton Water Treatment Plant. Removal of manganese in sand filters at the Foxton Water Treatment Plant in early 2017 to supply aesthetically acceptable water to consumers. <p>Foxton Beach</p> <ul style="list-style-type: none"> Installation of green sand filters in Foxton Beach water treatment plant in 2017. <p>Tokomaru</p> <ul style="list-style-type: none"> Construction of new timber reservoir (200m³) in 2017 to increase the total storage capacity of the treated water to 677m³. <p>Other</p> <ul style="list-style-type: none"> Further improvement work on Water Demand Management in Levin, Shannon, and Foxton areas, but not Foxton Beach. Increasing water storage capacity in Levin. Finding an alternative water supply source for Levin, including a supplementary sustainable water supply. The requirements for a reticulated water supply to growing smaller settlements, such as Waitāreke Beach and Ohau, which will only be considered once a long-term water source for Levin has been secured. Strategic upgrade of the Levin Water Treatment Plant to increase capacity of the clarifiers, filters, and chemical dosing plant, increase treated water storage capacity and to improve the backwash water process and re-use. The Levin (Poads Road) Water Supply Reservoir – build a new large-scale water reservoir. Roll out the water meters project.
Wastewater	<ul style="list-style-type: none"> Levin Wastewater Treatment Plant upgrades. Plant Inlet and Headworks. This is required to increase hydraulic capacity at the head of plant, reduce grit carryover to downstream systems, prepare for future upgrades, and tie in with planned work such as the septage screening facility and new inlet line. Sludge Dewatering Plant. This is required due to lack of capacity, resiliency, and excessive operating demands. Sludge Balance Tank. The sludge balance tank has been identified as structurally unsound. Extension and re-consenting of irrigation of treated effluent.
Stormwater	<ul style="list-style-type: none"> District wide stormwater improvement works. Including: <ul style="list-style-type: none"> Foxton Drainage Resilience Project Foxton Beach Global Consenting Program Lake Horowhenua Master Plan Levin Stormwater Consents projects Makerua Drainage Scheme

Planned pipe replacement

To be confirmed

Compliance issues



DRINKING WATER STANDARDS



WASTEWATER STANDARDS

- Abatement Notice 1428 – Tokomaru Wastewater Working Party – non-compliance.
- Capacity to meet consenting conditions is limited.



STORMWATER STANDARDS

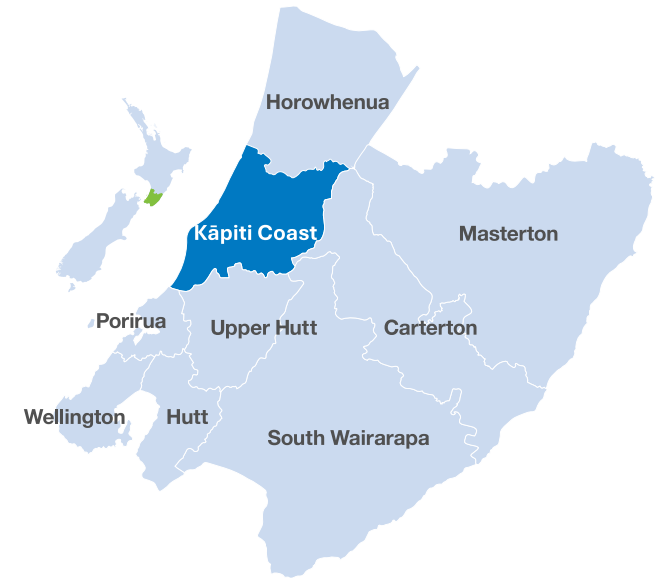
Council overview

- Kāpiti Coast District has an area of **731.52km²** of which **76.7km²** is urban and **654.8km²** is rural. It is **50kms** north of Wellington City. The population of the district is concentrated in the chain of coastal settlements along SH1: Ōtaki, Te Horo, Waikanae, Paraparaumu, Raumati Beach, Raumati South and Paekākāriki. Paraparaumu is the most populous of these towns and the commercial and administrative centre for the district.
- Kāpiti Coast encompasses an area of **731,520 hectares**.
- **4 major waterways** Waikanae, Ōtaki, Waimeha, Mangaone which all to the Tasman Sea.



POPULATION
58,744 (2024).

- Projected population of **80,924** for **2054**.



Water asset information (current state)



RETICULATION

588km of water supply pipes, including **110km** of service laterals
18 water supply service reservoir sites
354km of wastewater pipes
5 wastewater storage ponds
233km of stormwater pipes
52km of open waterways



TREATMENT ASSETS

17 water bores
2 surface water intakes
5 water treatment plants
2 wastewater treatment plants



STATIONS

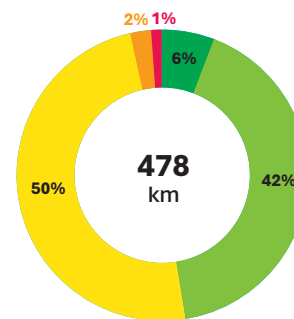
9 water supply pumping stations
153 wastewater pumping stations
18 stormwater pumping stations



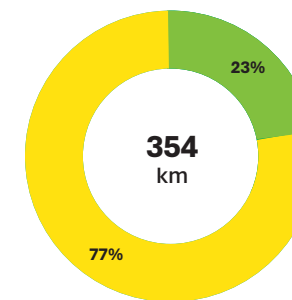
REPLACEMENT VALUE

Combined replacement value
\$1,132m

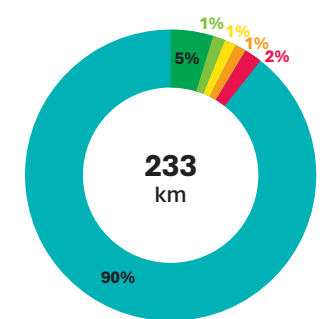
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> Meeting population growth demand - growth – capacity. Climate change impacts. Affordability of levels of service – funding. Seismic hazards. Government changes to three waters services. Regulatory changes. 	<ul style="list-style-type: none"> Developing long term solutions with Iwi partners. Water treatment plant resilience programme. Strategic water supply network and storage upgrades. Wastewater treatment plant consent renewal and treatment plant upgrades. Wastewater septage reception facility and strategic network upgrades. Prioritised stormwater network upgrades programme.
Water services	<ul style="list-style-type: none"> Extension of existing water supply network to unserved rural areas. Compliance to meet new regulatory requirements. Waitua Recommendations (Impacts on Water Allocation). 	<ul style="list-style-type: none"> Treatment plant resilience upgrades – Waikanae, Ōtaki and Hautere. Ōtaki reservoirs. Strategic Network Upgrades.
Wastewater	<ul style="list-style-type: none"> Resource consents for Paraparaumu wastewater treatment plants expired in 2022. Application for renewal of consent submitted in Dec 2021. Proposed upgrades likely to meet future consent requirements. Iwi partners' support for developing long-term, sustainable delivery. The rise of the water table. Condition data for linear network assets. Waitua Recommendations (Impacts on Wastewater discharges). 	<ul style="list-style-type: none"> Wastewater consent renewals. Proposed treatment plant upgrades both at Ōtaki and Paraparaumu. Wastewater network emergency storage pond lining completed. Inlet works upgrade, concept design complete. To develop long-term sustainable solutions with iwi partners. Septage collection facility. Strategic Network Upgrades
Stormwater	<ul style="list-style-type: none"> Flood hazards in 30% of urban properties. 50% of piped network is under capacity for a 1:10 year event. 30-40% cost increases impacting on what can be delivered. Inflow infiltration issues. Privately owned SW assets (ponds, soak pits, down pipes etc.) not maintained. Increased urbanisation (Intensification). Emergency response. Open drain/stream maintenance. Waitua recommendations. 	<ul style="list-style-type: none"> Major projects assets upgrades and renewals programme. Minor projects assets upgrades and renewals programme. IAF Ōtaki Growth Project – ANZAC Road stormwater upgrades. IAF Ōtaki Growth Project – Rangiora Road stormwater upgrades.

Planned pipe replacement

1km/year is adequate over the next 10 years for potable water

Compliance issues



DRINKING WATER STANDARDS



WASTEWATER STANDARDS

- Securing new consent for the Paraparaumu Wastewater Treatment Plant
- Increasing nitrogen levels in the discharge from the Otaki Wastewater Treatment Plant



STORMWATER STANDARDS

- Securing the renewal of the global stormwater discharge consent

Council overview

- The Porirua District covers about **175km²** and is formed around the two arms of Te Awarua-o-Porirua Harbour and the coastline. The Porirua City Centre was developed in the 1960s, and much of the residential areas were developed between the 1940s and 1960s.
- Porirua is centrally located in the Wellington Region and is connected to Kāpiti Coast and Wellington City via commuter rail, to the Hutt Valley by SH58, and to the rest of the North Island by SH1.
- Porirua encompasses an area of **175km²**, with about **61km²** being urban and **114km²** classed as urban rural.
- The city is built around Te Awarua-o-Porirua Harbour, with many waterways flowing into it. There are seven sub-catchments and over **275km** of streams in Te Awarua-o-Porirua Whaitua.



POPULATION

59,445 (Census 2023).

- Projected population of **83,000** for **2054**.



Water asset information (current state)



RETICULATION

344km of water supply mains
427km of wastewater pipes
294km of stormwater pipes



TREATMENT ASSETS

1 wastewater treatment plant
 Water is supplied via a bulk water main from treatment facilities owned by the Greater Wellington Regional Council.



STATIONS

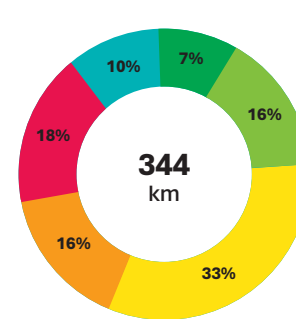
15 water supply
67 wastewater pump stations



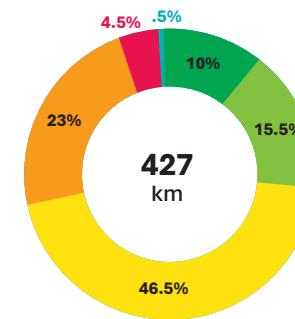
REPLACEMENT VALUE

Combined replacement value **\$906m**

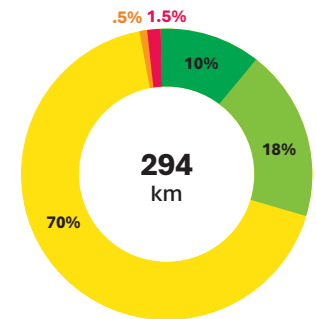
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> Significant and growing renewals backlog in water and wastewater due to age profile of pipe materials. Population growth is ahead of three waters infrastructure. 	<ul style="list-style-type: none"> For drinking water, we will continue with our plan to install residential water meters. This will help identify where our major leaks are, so they can be fixed. It will also help raise awareness around water usage. For wastewater, we will continue to support Kāinga Ora’s significant Bothamley Park project. We will also continue the Central City Storage Tank and the Know Your Pipes initiatives (where we help identify wastewater leaks – mostly on private pipes). These initiatives will lead to better sanitation and environmental outcomes, particularly for the health of our harbour. There is limited capacity for investment in stormwater. So, our approach here is to improve our modelling and identify where to invest our limited resources, to combat the more intense flooding and slips we anticipate from more intensive weather events. Projects that improve the health of Te Awarua-o-Porirua Harbour are a priority for Te Rūnanga O Toa Rangatira and Porirua City Council.
Water services	<ul style="list-style-type: none"> Water demand for Porirua City is outstripping supply due to water loss in the network and growth. Networks are not optimised in accordance with Te Mana o te Wai. The condition of our reservoirs makes them vulnerable to contamination. 	<ul style="list-style-type: none"> Universal metering (smart network). Low level (Aotea) reservoir. Whitby high-level trunk water main.
Wastewater	<ul style="list-style-type: none"> The Council is reliant on landfills accepting sludge from wastewater treatment plants. 	<ul style="list-style-type: none"> Wastewater network overflow consents. Wastewater treatment plant consent renewal. Paremata Wastewater Trunk Upgrade Stage 2. Porirua Central City wastewater storage tank.
Stormwater	<ul style="list-style-type: none"> Streams, rivers and harbours contain coliforms and other contaminants e.g. heavy metals and microplastics. 	<ul style="list-style-type: none"> Stormwater consents. Taupo Stream stormwater catchment improvements. Karehana stormwater catchment. Commit to the health of Te Awarua-o-Porirua Harbour and its catchment through investment, advocacy and regulation.



Planned pipe replacement

15km of pipe renewals are required per year for 30 years to address the current backlog



Compliance issues



DRINKING WATER STANDARDS



WASTEWATER STANDARDS

- Some overflows during storm events



STORMWATER STANDARDS

- None (some overflows during storm events)

Council overview

- Wellington is New Zealand’s centre of government and the world’s southernmost capital city. It is also the country’s cultural capital and the third most populous urban area in New Zealand. The city is situated alongside Wellington Harbour and surrounded by natural beauty, including Zealandia, an award-winning eco-attraction just minutes from the central business district.
- Wellington City encompasses an area of **44,400 hectares**.
- 9 major waterways** (Karori, Mākara, Ohariu, Opau, Oteranga, Owhiro, Kaiwharawhara, Ngauranga and Porirua Streams).



POPULATION
213,269 (2024).

- Projected population of **271,288** for **2054**.



Water asset information (current state)



RETICULATION
922kms of water supply mains
1077kms of wastewater pipes
729kms of stormwater pipes



TREATMENT ASSETS
2 wastewater treatment plants
Water is supplied via a bulk water main from treatment facilities owned by the Greater Wellington Regional Council.

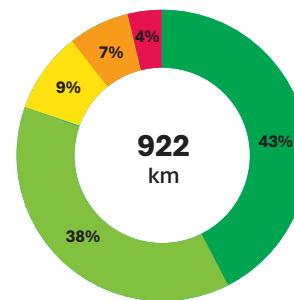


STATIONS
34 water supply stations
69 wastewater stations
2 stormwater pump stations

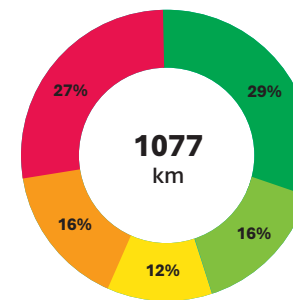


REPLACEMENT VALUE
Combined replacement value
\$7,186m

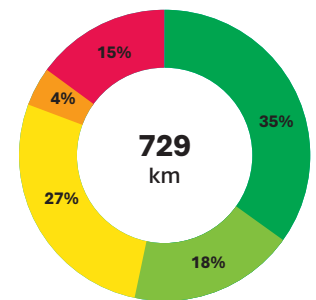
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> Significant and growing renewals backlog in water and wastewater due to age profile of pipe materials. Population growth is ahead of three waters infrastructure. 	<ul style="list-style-type: none"> Fix water infrastructure and improve health of waterways.
Water services	<ul style="list-style-type: none"> Water demand for Wellington City is outstripping supply due to water loss in the network and growth. Reservoirs condition means they are vulnerable to contamination. 	<ul style="list-style-type: none"> Seismic improvements at Wrights Hill drinking water reservoir. Critical assets reservoir water quality renewals (all 64 water reservoirs identified as very high criticality assets). Investigate and install water meters. Reactive maintenance to clear the backlog of leak repairs in Wellington before summer 2024/2025.
Wastewater	<ul style="list-style-type: none"> Moa Point condition is leading to ongoing compliance issues. 	<ul style="list-style-type: none"> Renewals of critical wastewater assets at Moa Point and Western Wastewater Treatment Plants. Remedial work on Karori effluent pipelines. Eastern Trunk Wastewater Main, stage 1 cargo area pipe. Airport wastewater interceptor contingency pipe. CBD Pump Station 01-07 rising main replacement including Taranaki Street Pump Station.
Stormwater	<ul style="list-style-type: none"> Our streams, rivers and harbours contain coliforms. Coastal stormwater outfalls experiencing sea level risk resulting in increased sedimentation and need for more frequent clearing. 	<ul style="list-style-type: none"> Prioritise investment in stormwater filtration and flood protection in conjunction with or ahead of transport infrastructure investment.



Planned pipe replacement

194kms of pipes to be replaced over the next 10 years



Compliance issues



DRINKING WATER STANDARDS



WASTEWATER STANDARDS

- Moa Point condition is leading to ongoing compliance issues.



STORMWATER STANDARDS

Council overview

- Hutt City is located approximately 15kms north-east of Wellington CBD. It is also adjacent to Wellington, Porirua, Upper Hutt and the South Wairarapa District. The city stretches from Petone in the west, Stokes Valley in the north, and down to Cape Palliser in the south.
- The floor of the Hutt Valley is the most densely populated flood plain in New Zealand and the central area of Hutt City serves as the main urban centre of the Hutt Valley.
- Hutt City encompasses an area of **37,600 hectares**.
- **3 major waterways** (Orongorongo River, Hutt River and Wainuiomata River).



POPULATION
114,006 (2024).

- Projected population of **150,237** for **2054**.



Water asset information (current state)



RETICULATION

711km of water supply mains
680km of wastewater pipes
454km of stormwater pipes



TREATMENT ASSETS

13 water supply stations
48 wastewater stations
12 stormwater pump stations



STATIONS

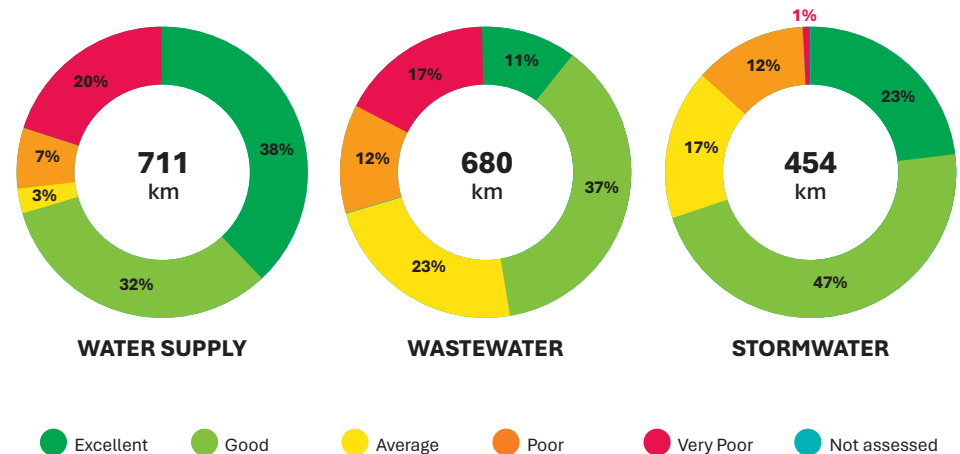
1 wastewater treatment plant
5 stormwater detention dams
Water is supplied via a bulk water main from treatment facilities owned by the Greater Wellington Regional Council.



REPLACEMENT VALUE

Combined replacement value **\$6-7b**

Water asset condition (current state)



Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<p>In summary, despite the increasing investment Council has and will make in water network renewal, current water storage constraints as well as capacity constraints in the regional water infrastructure workforce will impact the level of increased system and network capacity that can be achieved in the short to medium term. In combination with the need for Council to operate with fiscal prudence, this means there are two potentially unavoidable future risks:</p> <ul style="list-style-type: none"> The likelihood of ongoing and potentially increasing water shortages across the Wellington Region. Council will be unable to provide infrastructure support in all areas of housing development or renew ageing water infrastructure on a lifecycle basis in Te Awa Kairangi ki Tai. <p>Our greatest water infrastructure challenge is a rapidly ageing water network. Council's strategic approach to investing in water infrastructure, namely:</p> <ul style="list-style-type: none"> Keeping the water in the pipes by investing in finding and fixing leaks, managing water loss, and replacing ageing infrastructure. Minimising the future cost of water infrastructure by exploring ways of reducing the demand for water and influencing water use behaviour. Building additional water storage capacity. 	<ol style="list-style-type: none"> Address ageing water infrastructure: <ul style="list-style-type: none"> Three waters network renewals. Seaview Wastewater Treatment Plant renewals. Petone Stormwater improvements. Petone Collecting Sewer renewal. Meeting growth demand <ul style="list-style-type: none"> Eastern Hills Reservoir and outlet main. Implementing universal smart meters. Building network resilience <ul style="list-style-type: none"> Black creek stormwater improvements.
Water services	<ul style="list-style-type: none"> Water supply reliability over summer is at risk and a new water supply is needed. Reservoirs condition means they are vulnerable to contamination. Water demand for Hutt City is outstripping supply due to water loss in the network and growth. Current 10-year LTP investment is well short of what is required to renew ageing parts of the network (estimated that only 50% of what is required). 109kms of galvanized water pipe that is failing and requires urgent replacement along with significant amount of AC pipe that is failing earlier than expected. 	<ul style="list-style-type: none"> Approximately 60km of pipe renewal has been planned for the next 10 years in the LTP. New water reservoir on Eastern Hills planned to meet growth and improve resilience.
Wastewater	<ul style="list-style-type: none"> Current 10-year LTP investment is well short of what is required to renew ageing parts of the network (estimated that only 10% of what is required). Main outfall pipe working at around 50% capacity needs renewing or upgrading with no budget provision for physical works expected to be around \$700m. Erosion occurring on the Hutt River potentially undermining 825mm bulk wastewater pipeline adjacent Taita rock. Sludge dryer at Seaview WWTP is nearing end of life. The redundancy of Seaview WWTP is inadequate for major maintenance while ensuring compliance can be met. 	<ul style="list-style-type: none"> Investment of over \$200m is earmarked for renewing much of the working plant and equipment at the Seaview Wastewater Treatment Plant over the next 1-5 years. The sludge dryer is the most significant of these expected to cost \$85m.
Stormwater	<ul style="list-style-type: none"> Streams, rivers and harbours contain coliforms. Coastal stormwater outfalls experiencing sea level rise resulting in increased sedimentation and need for more frequent clearing. Growth Study notes that approximately \$800m of investment is required to upgrade stormwater across the City to meet growth and achieve target standards. This is not currently funded. 	<ul style="list-style-type: none"> Approximately 10km of pipe renewal has been planned for the next 10 years in the LTP.



Planned pipe replacement

Renew approximately **175kms** of pipe network over the next 10 years



Compliance issues



DRINKING WATER STANDARDS

The Waterloo Water Treatment Plant is non-compliant with bacterial compliance rules around chlorine contact time,

which affects around 700 households. While this issue does not affect drinking water safety, work is currently underway to achieve compliance by reconfiguring the network.



WASTEWATER STANDARDS

The Seaview Wastewater Treatment Plant has had recent issues

with a failure to comply with both water effluent and air quality consent requirements, largely due to ageing plant and equipment. A major capital renewals programme over the next three years has been included in the LTP to overcome these issues.



STORMWATER STANDARDS

Council overview

- Upper Hutt enjoys the character of a small city, while having the second largest land area of a city council in New Zealand. Easy access to an expansive natural environment featuring Te Awa Kairangi/Hutt River, regional parks and hills surrounding the city is part of our identity.
- Upper Hutt is a family-oriented city, with spacious suburban housing development occupying around 3.24% of the land area, encompassed by treasured open spaces. Traditionally a commuter city with over half of the people working outside the city, the local economy is growing and diversifying including new commercial developments and niche industry hubs.
- Upper Hutt encompasses an area of **54,000 hectares**
- **5 major waterways** The Whakatikei, Akatārawa, Pākuratahi and Mangaroa rivers feed Te Awa Kairangi/Hutt River, which flows into Te Whanganui-a-tara Wellington Harbour.



POPULATION

48,240 (2024).

- Projected population of **64,238** for **2054**.

Water asset information (current state)



RETICULATION

281km of water supply mains
226km of wastewater pipes
155km of stormwater pipes



STATIONS

9 water supply pipes
17 wastewater pipes
7 stormwater pump stations



TREATMENT ASSETS

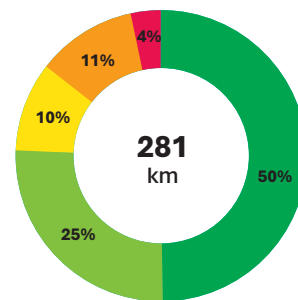
- All wastewater is collected and treated via the Hutt Valley joint venture system.
- Water is supplied via a bulk water main from treatment facilities owned by the Greater Wellington Regional Council



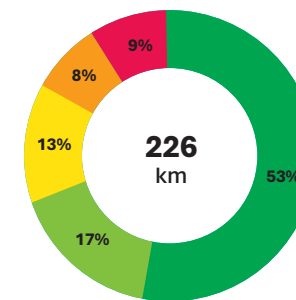
REPLACEMENT VALUE

Combined replacement value
\$1.464b ORC (30 June 2024)

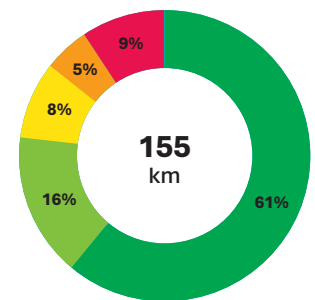
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

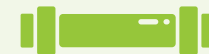
Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> Significant and growing renewals backlog in drinking water and wastewater. New environmental quality standards require very high investment to achieve wastewater and stormwater consent compliance. Population growth is ahead of three waters infrastructure provision. Major investment is needed, especially in the wastewater network to enable growth to occur. 	<p>Critical assets: 7 pump stations</p> <ul style="list-style-type: none"> Our pipes are critical assets in the three waters network – approximately 661,700 metres of which around 40% (by length) need replacing in the next 30 years to keep the network operating. Due to the size, type and age of pipes, the wastewater pipe network renewals are the most critical focus area.
Water services	<ul style="list-style-type: none"> Water demand and use is outstripping supply due to water loss in the network and growth. As a bulk water purchaser, Council is a cost and service taker with limited influence over these aspects. 	<p>Critical assets: All 16 reservoirs have been identified as high criticality assets and based on condition some require a level of short-term remedial works.</p> <ul style="list-style-type: none"> All planned water reservoir upgrades and renewals. New storage to address level of service deficits and to enable growth. Pipe renewals.
Wastewater	<ul style="list-style-type: none"> Major shared assets need upgrades, including sludge dryer at Seaview WWTP nearing end of life. Network infiltration and inflows. Wet weather overflows. 	<p>Critical assets: 2km wastewater pipes</p> <ul style="list-style-type: none"> Wastewater network overflow consents and subsequent improvements. Hutt Valley shared asset projects including bulk sewer interceptor improvements (at Petone) and Seaview WWTP and outfall upgrade. Pipe renewals
Stormwater	<ul style="list-style-type: none"> Contamination and overflows into waterways. 	<p>Critical assets: 24km stormwater</p> <ul style="list-style-type: none"> The Pinehaven Stream Improvements Project. Global stormwater consents and subsequent improvements.



Planned pipe replacement

To be confirmed



Compliance issues



DRINKING WATER STANDARDS



WASTEWATER STANDARDS



STORMWATER STANDARDS

Council overview

- The South Wairarapa District is situated at the southernmost corner of the North Island and has an area of approximately 248,455 hectares (2,484km²). In the south, the district boundary follows the coastline from the western end of Palliser Bay in Cook Strait to Honeycomb Rock, east of Martinborough. The western boundary follows the main divide of the Remutaka and Tararua Ranges to Mount Hector, from which the boundary runs south-east across the Wairarapa Plains to the coast. The district includes the towns of Featherston, Greytown and Martinborough, which are the main population centres.
- The South Wairarapa District encompasses an area of **248,455 hectares**
- **4 major waterways** (Ruamāhanga, Huangarua, Tauwharenīkau, and Waiohine Rivers) and Wairarapa Moana which has been handed back to iwi under a settlement agreement and is Ramsar protected.



POPULATION

11,811 (Census 2023).

- Projected population of **16,606** for **2054**.



Water asset information (current state)



RETICULATION

118km of water supply mains
75km of wastewater pipes
15km of stormwater pipes



TREATMENT ASSETS

4 water treatment plants
4 wastewater treatment plants



STATIONS

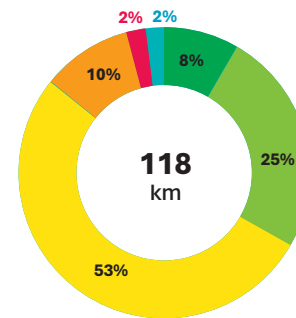
11 wastewater pump stations



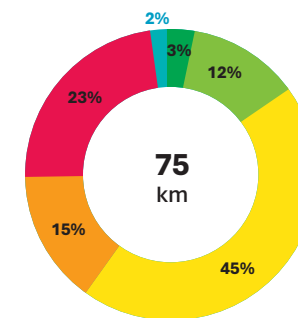
REPLACEMENT VALUE

Combined replacement value **\$133m**

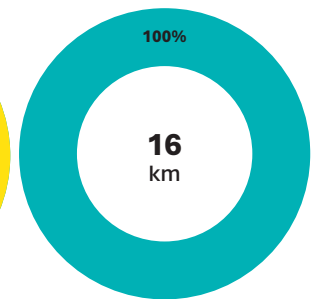
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

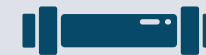
● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> An ageing network results in asset failure and requires an increase in renewal. Population growth is ahead of three waters infrastructure. Emissions from three waters are not reducing. 	
Water services	<ul style="list-style-type: none"> There is a lack of redundancy in critical systems (source, treatment, network) to provide safe drinking water in accordance with the Water Services Act. Featherston / Greytown / Martinborough water system resiliency is compromised due to poor condition of assets. Boar Bush Gulley Road and Boar Bush reservoir and inlet/outline pipe scour damage. 	<ul style="list-style-type: none"> Featherston security of supply – single compromised pipeline (Tauherenikau). Featherston Waiohine WTP Stage 3 upgrades. Martinborough Water Treatment Plant – New water source upgrade.
Wastewater	<ul style="list-style-type: none"> Inability to comply with resource consents. Condition and resiliency of the Martinborough / Featherston wastewater networks is deteriorating. Featherston wastewater network has very high inflow of groundwater. No new wastewater connections are available in Martinborough or Greytown. 	<ul style="list-style-type: none"> Martinborough WWTP compliance upgrade programme. Featherston WWTP – Major plant upgrade - Stage 2. Greytown WWTP stage 2 of land disposal programme upgrades. Featherston pipe renewals – rising main.
Stormwater	<ul style="list-style-type: none"> Streams and rivers contain coliforms. Flooding. 	<ul style="list-style-type: none"> Stage 1 global stormwater consents. Stormwater flood modelling. Infiltration and Inflow modelling and investigations, particularly Featherston.



Planned pipe replacement
To be confirmed



Compliance issues



DRINKING WATER STANDARDS



WASTEWATER STANDARDS



STORMWATER STANDARDS

Water service delivery overview – Masterton District Council



Council overview

- Masterton District has an area of **2,295km²**. It is located between the Tararua Range to the west and the Pacific Ocean to the east. The main urban area is Masterton located on the Wairarapa valley between the Ruamāhanga, Waipoua and Waingawa Rivers.
- Masterton encompasses an area of **229,500 hectares**
- **5 major waterways** Waipoua, Waingawa, Tauweru all flow into the Ruamāhanga that flows down the valley to the south coast. The Whareama is the largest of the rivers flowing from the eastern hill country to the east coast.



POPULATION
29,894 (2024)

- Projected population of **42,984** for **2054**



Water asset information (current state)



RETICULATION

218km water supply pipes
214km wastewater pipes
55km stormwater pipes



TREATMENT ASSETS

2 water treatment plants (1 is a small plant supplying 20 properties in Tinui)
4 wastewater treatment plants (Homebush, Riversdale, Castlepoint, Tinui)
Localised stormwater assets (Masterton, Riversdale, Castlepoint)
3 rock weirs at Waipoua river



STATIONS

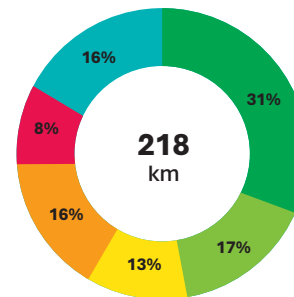
1 water supply boost pump station
13 wastewater pump stations



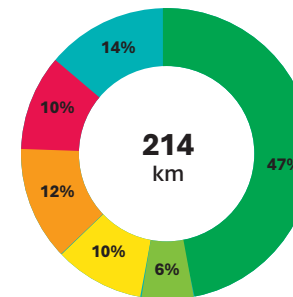
REPLACEMENT VALUE

Combined replacement value **\$390m**

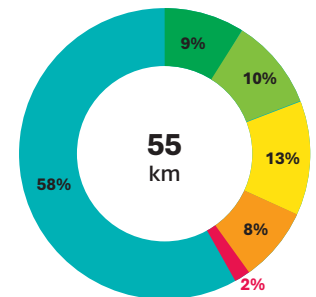
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
 ● Average
 ● Poor
 ● Very Poor
 ● Not assessed

Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> Meeting population growth demand. Resource consent renewals. Climate change impacts. Affordability of levels of service. 	
Water services	<ul style="list-style-type: none"> Raw water storage dam construction. Trunk main renewals. Meet compliance with new regulatory requirements. Improve supply pressure in some suburbs. Increase treated water storage. Transition to charging by metered usage. 	<ul style="list-style-type: none"> Water storage dam (raw water) and additional reservoir. Water Trunk Main replacement. Reticulation renewal programme.
Wastewater	<ul style="list-style-type: none"> Understanding current state. Resource consents for Masterton Wastewater Treatment Plant expire in 2034. Upgrades will need to meet new consent requirements as per NPS Freshwater – which are uncertain. Network capacity, ingress and infiltration reduction. 	<ul style="list-style-type: none"> Sewer reticulation renewals (ingress and infiltration reduction). Homebush land-based irrigation system upgrade.
Stormwater	<ul style="list-style-type: none"> Areas of flooding across the district. History of extreme weather events. Consideration of increasing design standards to meet climate change challenges. 	<ul style="list-style-type: none"> Enhanced operations and maintenance for stormwater to prevent localised flooding.

Planned pipe replacement

Stormwater 6km in 10 years (0.6km/year) (new and renewals)

Note – there is very low confidence in the long term spend profile and needs relating to stormwater.

The expenditure required is expected to be significantly higher than reflected in LTP.

Work is under way at present to attempt to quantify this but it will take some time.

Water 24km in 10 years (2.4km/year)

Wastewater 20km to 30km in 10 years (2km to 3km/year)



Compliance issues



DRINKING WATER STANDARDS

Treatment plant monitoring regime in place.



WASTEWATER STANDARDS

Significant compliance requirements relating to wastewater treatment, land disposal and discharge to river (Homebush).



STORMWATER STANDARDS

Global stormwater consent. Compliance with to be determined.

Council overview

The region makes up the southern reaches of the North Island comprising the Kāpiti Coast, Porirua-Tawa, Wairarapa South, Te Awa Kairangi ki Uta/Upper Hutt, Te Awa Kairangi ki Tai/Lower Hutt, and Pōneke/Wellington councils. Its northern boundary extends from north of Ōtaki on the west coast across to north of Castlepoint on the east coast. The nonurban environment comprises approximately 80% of the region, with 320km of rivers and waterways, and a coastal marine area of 7,867km². Wellington is the most populated city, however over 50% of our regional population lives outside of the capital in cities and smaller towns.

The Greater Wellington Regional Council (GWRC) drinking water network supplies water to four surrounding cities: Lower Hutt, Porirua, Upper Hutt and Wellington. The water provided by GWRC goes to reservoirs owned by each city. From there, city council infrastructure conveys the drinking water from the reservoirs to local residents and businesses.

- Wellington Region encompasses 811,100ha. 16,000ha are managed as Water Collection Areas.
- 5 regional catchment areas, known as Whaitua: Kāpiti Coast, Te Awarua-o-Porirua, Te Whanganui a Tara, Ruamāhanga, and Eastern Wairarapa.



POPULATION
549,841 (2024).

- Projected population of **724,906** for **2054**.



Water asset information (current state)



RETICULATION

187km of water supply pipes
3 water supply reservoirs and tanks (total volume of 40 million litres)



TREATMENT ASSETS

15 water supply pump stations



STATIONS

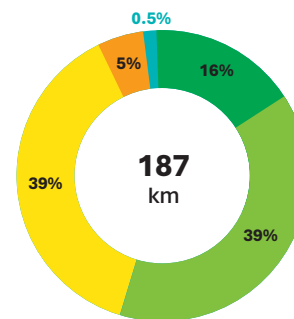
4 water treatment plants



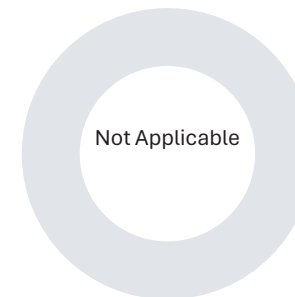
REPLACEMENT VALUE

Combined replacement value @ 2021
\$1,300m

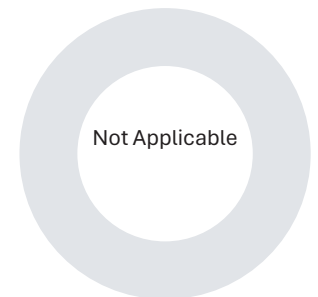
Water asset condition (current state)



WATER SUPPLY



WASTEWATER



STORMWATER

● Excellent
 ● Good
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 ● Poor
 ● Very Poor
 ● Not assessed

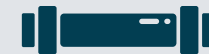
Water challenges and projects

Type	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years
3W general	<ul style="list-style-type: none"> An ageing network results in asset failure and requires an increase in renewal. Population growth is ahead of water infrastructure. Water demand for the metropolitan councils is outstripping supply due to water loss in the network. Current demand is highlighting that GWRC may not be able to meet its duty of care obligations as an asset owner under the Water Services Act in the long term. Waterloo Treatment Plant is subject to liquefaction in the event of high ground shaking. 	
Water services	<ul style="list-style-type: none"> Current demand is placing the existing assets at risk due to lack of headroom to allow major assets to be taken off-line, compromising the resilience of the bulk water supply. Maintenance and replacement of bulk water meters, treatment plant clarifiers and reservoirs are examples of the issues. Seismic resilience of the bulk water assets does not meet the required earthquake resiliency standard for ensuring provision of safe drinking water following a significant earthquake event. The system is not yet able to reliably meet regulatory requirements for fluoride due to lack of redundant systems and asset reliability. Waste stream at Wainuiomata Water Treatment Plant lacks redundancy and capacity. A failure of the plant, prior to completion of Wash Plant Capacity and Quality Upgrade in 2031/32, would impact the performance of the Water Treatment Plant and would eventually cause failure of provision of water. 	<ul style="list-style-type: none"> Kaitoke main on Silverstream Bridge. Te Marua WTP Capacity optimisation. Kaitoke Flume Bridge. New Gear Island and Waterloo Wells – Part 2+3. Water Storage Lakes (Te Marua Water Treatment Plant Scheme Expansion Stage 1 (Pakuratahi Lakes 1 and 2) – Pre-construction). Regional Fluoridation Improvement Stage 2. Relocation of Te Marua/Ngauranga pipeline. Wainuiomata Water Treatment Plant – Washplant Capacity and Quality Upgrade. Wellington Metro Water Treatment Plant Planned Renewals (Continuous programme). Water Supply Pump Station Renewals.
Wastewater	Not Applicable.	Not Applicable.
Stormwater	Not Applicable.	Not Applicable.



Planned pipe replacement

30kms of pipes being replaced (based on 40% of 180kms needed to be replaced in the next 30 years)



Compliance issues



DRINKING WATER STANDARDS

Currently, water supplied from the Waterloo Treatment Plant is not compliant for up to 800 Lower Hutt households.



WASTEWATER STANDARDS

Not Applicable.



STORMWATER STANDARDS

Not Applicable.