

**Section 3
Activities**

**Puna Wai / Kohinga Wai
Water Supply**



Puna Wai / Kohinga Wai Water Supply

We supply potable (drinking) water to over 16,000 properties in our District through water infrastructure operating in the Western, Central and Eastern supply zones. Our customer base includes residential, commercial, horticultural and agricultural users.

What we provide

- Water reticulation operated in three zones:
 - Western (Waihī Beach, Katikati)
 - Central (Ōmokoroa, Te Puna)
 - Eastern (Te Puke, Maketu, Pukehina Beach, Paengaroa)
- District-wide metering
- 26 booster pump stations
- 9 bore fields
- 9 water treatment plants
- 26 reservoirs and tank sites
- 915km of watermains
- 17,880 watermain fronting properties are connected to Council's water supply. .

Why we provide this activity

Our community outcome

- We can all enjoy a healthy and safe lifestyle.

Water Supply

Our way of working recognises that the knowledge of what makes a great community, sits within that community. We focus on supporting local initiatives and local action. We support local organisations to work together to deliver on their community's aspirations.

Water is sourced from nine secure bore fields across our District. The change from surface supplies, which are prone to contamination, to secure groundwater supplies has enabled us to increase production capacities to meet growing demand. It has also improved the quality and reliability of supply, particularly during adverse conditions such as drought or floods.

Having completed the transition to secure groundwater sources, Council is obliged by a number of drivers to place greater emphasis on water conservation and future growth. These include environmental sustainability, compliance requirements (including resource consent conditions), statutory frameworks and policies, and legislative responsibilities.

Key functions of this activity

Reducing water - Reducing water demand has many advantages as it lengthens the life of existing treatment, storage and reticulation infrastructure and means we can defer some capital expenditure. Water conservation also provides additional environmental benefits to the community by reducing the volumes of wastewater and protecting the water resource itself.

Studies by the Bay of Plenty Regional Council have highlighted the need to carefully manage future demand for water, especially in the eastern area of our District where forecast and existing demand may exceed the volume available for allocation. The allocation of water outside our reticulation system is the role of the Regional Council. Both councils see water conservation as an important part of ensuring the social, cultural, economic and environmental wellbeing

of our communities and we will assist and educate water consumers about this.

District wide metering - District-wide metering was completed in 2018 and assists customers in managing their usage in response to conservation initiatives and costs. Meters enable us to identify high volume users and system leaks. This is important for predicting future demand and to measure losses from the network. Water metering for all customers is an important part of our water supply activity and allows for the installation of backflow protection devices to all connections for the protection of customers in the event of a loss of pressure in the water main network. It also encourages conservative use of water as all customers pay for the water they use. Water conservation helps to ensure that sufficient water is available for all current users and provides for future generations.

Drinking water - Supplying drinking water for the purpose of domestic, commercial, industrial and livestock use is a high priority within our water management strategy. In drought or emergency situations we may require certain customer groups to reduce their usage to ensure adequate domestic supplies are available.

Non-standard connections (larger than 20mm) - Customers with non-standard connections (larger than 20mm) pay increased charges to reflect the greater demand such connections place on the network. These customers are mainly non-residential and may choose to reduce the additional charge by downsizing their connections. We will continue to work with this customer group to find the most practicable solutions to meet their water demands.

We have one uniform targeted rate for unmetered connections and one uniform volumetric charge across all three water supply zones.



How we will achieve our community outcomes

Goal	Our approach
<p>Provide potable water of an appropriate standard and quality to meet the needs of consumers within the three supply zones.</p> <p>Sustainably manage our water resource, water supply infrastructure and consumer use of water across the three supply zones.</p>	<ul style="list-style-type: none"> • Maintain water treatment plants in compliance with the New Zealand Drinking Water Standards 2022. • Maintain adequate storage and supply to meet the needs of normal domestic, commercial and industrial water use for the Western, Central and Eastern Supply zones in the event of a one-in-50 year drought, with reasonable restrictions in place. • Maintain water storage systems to ensure a minimum of 24 hours average daily demand storage in all systems. • The reticulated network is only extended when consistent with our policy on network extensions and water connections. • When considering applications for new connections give priority to households, livestock (including dairy farms) and commercial and industrial uses (where land is zoned for these purposes) rather than for general agricultural irrigation. • Water meters are used to charge according to volume for all consumers. • Appropriate funding mechanisms are used to encourage equitable and sustainable use of water. • Enable cross-boundary supply with Tauranga City subject to suitable agreements being in place.

Where the money comes from

Please refer to 'Policies, Summaries and Statements' for the Revenue and Financing Policy for the Water Supply Activity.



Photo by the_escape_artist_nz at Waihi Beach.

What are we planning to do

Project ID	Name	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
243619	Water - Western Reticulation Capital Improvements	150,000	748,165	326,325	873,613	2,630,138	2,186,307	1,292,760	405,405	230,125	422,730
243622	Water - Western Katikati Structure Plan	261,901	-	401,379	-	-	-	-	-	-	-
243623	Waihi Beach Structure Plan - Water	-	-	33,377	-	-	-	43,659	-	-	-
243624	Water - Western Bulk Flow Meters	-	-	85,875	88,125	60,200	-	100,800	-	-	-
243625	Water - Western TMP Plants Renewals and Improvements	1,925,000	708,025	-	-	-	113,344	44,100	-	26,300	26,840
252603	Athenree & Wharawhara WTP Fluoridation	1,753,000	-	-	-	-	-	-	-	-	-
287203	Additional Reservoir Capacity Project	-	-	-	587,500	-	-	-	-	-	-
337201	Water - Western Reticulation Modelling	-	-	5,725	9,232	89,189	9,680	17,838	10,112	105,439	10,544
340801	Western Water - Reservoirs, Pumps & Controls Renewals	135,000	139,375	125,950	32,900	132,440	34,496	138,600	-	144,650	134,200
345201	Western Supply Zone - Additional Water Source	-	-	171,750	-	722,400	1,232,000	-	-	-	-
LTP25/34-16	Western UV Treatment All Plants	2,007,000	1,776,195	-	-	-	-	-	-	-	-
243307	Water - Ōmokoroa Structure Plan	2,023,269	1,217,608	-	-	-	-	-	-	-	1,888,909
243310	Water - Central Reticulation Improvements	745,000	1,683,650	1,625,900	1,621,500	1,984,192	1,171,632	790,020	1,208,236	621,995	440,176
243320	Water - Central Additional Bore	-	-	1,259,500	-	-	-	-	643,500	657,500	2,013,000
243335	Water - Central Additional Reservoir	1,600,000	4,136,650	-	235,000	-	-	25,200	-	-	-
243338	Water - Central source and storage improvements	37,000	383,560	369,835	213,850	157,724	-	-	-	-	-
243340	Water - Central WTP Renewals and Improvements	832,000	362,375	-	-	90,300	61,600	119,700	70,785	13,150	60,390
319001	District Wide Water Metering CSZ	-	-	59,139	63,791	-	-	-	-	-	-
340601	Water - Central Modelling	-	66,900	22,900	3,357	32,432	3,520	11,538	3,677	38,341	3,834
361101	Drinking Water Compliance	780,000	-	-	-	-	-	-	-	-	-
LTP25/34-22	Central - WTPs UV Treatment All Plants	-	-	1,030,500	-	-	-	-	-	-	-
243002	Water - Eastern Reticulation Improvements	1,612,000	1,722,430	2,482,360	2,229,798	2,054,626	2,532,499	2,248,848	1,564,992	1,597,725	1,062,864
243029	Water - Eastern Treatment Plant Renewals and Improvements	668,850	377,818	34,350	105,750	36,120	110,880	37,800	115,830	39,450	120,780
243031	ESZ - Reservoir Imps	280,000	479,450	294,265	258,500	252,840	65,296	107,100	8,391,240	111,775	114,070
243034	Water - Muttons Treatment Plant - Renewal	-	575,898	-	-	-	-	-	-	-	-
287112	Water - Eastern Alternative Supply	500,000	1,784,000	1,717,500	-	-	-	-	-	-	-
287113	ESZ Bulk Flow Meters	75,000	83,625	85,875	88,125	96,320	98,560	63,000	-	-	-
287118	Water - Eastern Structure Plan Implementation	-	367,783	-	-	-	-	-	-	-	-
340701	Water - Eastern Reticulation Modelling	-	22,300	-	17,814	11,180	41,797	11,700	11,951	46,796	12,462
350027	Water - Eastern Rangioru Business Park new pipeline	-	-	-	-	3,612,000	3,696,000	3,780,000	-	-	-
LTP25/34-23	Eastern - WTPs UV Treatment All Plants	450,000	501,750	-	-	-	-	-	-	-	-
LTP25/34-45	Water - Eastern Supply New Water Source (no.2 Road)	200,000	55,750	1,087,750	1,292,500	-	-	-	-	-	-
243636	Water - Western Water Demand Management	25,000	61,325	62,975	29,375	-	30,800	-	32,175	-	33,550
243640	Western Water Consents and Compliance Renewals	50,000	55,750	125,950	47,000	48,160	49,280	-	77,220	-	-
310601	Water - Western Asset Validation	30,000	33,450	34,350	35,250	36,120	36,960	37,800	38,610	39,450	40,260

Project ID	Name	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
243333	Water - Central Water Demand Management	40,000	49,060	28,625	29,375	30,100	-	-	-	-	-
243341	Central Water Consents and Compliance Renewals	51,650	57,590	47,311	-	55,968	-	-	-	-	-
310701	Water - Central Asset Validation	10,330	23,036	11,828	24,276	12,437	25,453	13,016	-	-	-
243033	Eastern Water Consents and Compliance Renewals	51,650	57,590	-	30,344	-	-	-	-	-	-
287117	Water - Eastern Demand Management	50,000	55,750	57,250	-	60,200	-	94,500	160,875	26,300	26,840
310801	Water - Eastern Asset Validation	10,000	22,300	11,450	23,500	12,040	24,640	12,600	12,870	26,300	13,420





How we will track progress

What we do	How we track progress	Result	Target																
		2023	2025	2026	2027	2028-30	2031-34												
Provide potable water of an appropriate standard and quality to meet the needs of consumers within the three supply zones. Sustainably manage our water resource, water supply infrastructure and consumer use of water across the three supply zones. We will provide good quality potable water to service growth within the three supply zones.	Ability of reservoirs to provide a minimum of 24-hour daily demand.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
	Percentage of year where reservoirs are maintained at a minimum of 50% full for 80% of the time, in accordance with Ministry of Health requirements.	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
We will monitor sustainable delivery and effectively manage the risks associated with the quality and quantity of the public water supply.	Compliance with the Drinking Water Quality Assurance Rules: Bacterial compliance (B), Protozoal compliance (P) and Microbiological monitoring (M). (*Compliant Y=Yes and N=No)	Distribution Zones (Yes or No)	New measure	B	P	M	B	P	M	B	P	M	B	P	M	B	P	M	
		Athenree	N	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Katikati	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Ōmokoroa Minden	N	N	Y	N	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Pongakawa	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Te Puke	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	The percentage of real water loss from Council's networked reticulation system. To be monitored through the water metering system.	21.6%	<22%	<22%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	<20%	
The average consumption of drinking water per day per resident within Council's district.	206 litres	<220 litres	<200 litres	<200 litres	<200 litres	<200 litres	<200 litres	<200 litres	<200 litres	<200 litres	<200 litres	<200 litres	<190 litres	<190 litres	<190 litres	<190 litres	<180 litres	<180 litres	

How we will track progress

What we do	How we track progress		Result	Target				
			2023	2025	2026	2027	2028-30	2031-34
We will respond to customers issues with the water supply.	Where Council attends a callout in response to a fault or unplanned interruption to its networked reticulation system, the following median response times are measured: Attendance for callouts: from the time Council receives notification to the time service personnel reach the site:	Urgent callouts	57 mins	<60 mins	<60 mins	<60 mins	<60 mins	<60 mins
		Non-urgent callouts	24 hours 18 mins	<24 hours	<24 hours	<24 hours	<24 hours	<24 hours
	Resolution of callouts from the time Council receives notification to the time service personnel confirm resolution of the fault or interruption.	Urgent callouts	3 hours 17 mins	<5 hours	<5 hours	<5 hours	<5 hours	<5 hours
		Non-urgent callouts	32 hours 13 mins	<28 hours	<28 hours	<28 hours	<28 hours	<28 hours
	Total number of complaints received by Council about any of the following:	8.1	<30	<30	<30	<30	<30	<30
	<ul style="list-style-type: none"> • Drinking water clarity • Drinking water taste • Drinking water odour • Drinking water pressure or flow • Continuity of supply and • Council's response to any of these issues. Expressed per 1,000 connections to Council's networked reticulation system.							

Significant effects of providing this activity

Wellbeing	Positive	Negative	How are we addressing these effects
 <p>Social</p>	<ul style="list-style-type: none"> Provides for a safe and convenient drinking water supply for residential properties' everyday needs. Provides water for a range of recreation and leisure activities, e.g. swimming pools. Provides the operational basis for the sewerage network. 	<ul style="list-style-type: none"> Increasing the amount of water taken for public supply from groundwater bores means less groundwater is available for landowners wanting to develop private bores for irrigation. 	<ul style="list-style-type: none"> These effects are monitored and controlled by the Bay of Plenty Regional Council through resource consents required to extract and use water.
 <p>Cultural</p>	<ul style="list-style-type: none"> Good quality water is available to residents which improves health and wellbeing. 	<ul style="list-style-type: none"> Water abstraction from streams and rivers can have an adverse effect on the mauri of the water body. 	<ul style="list-style-type: none"> Continuing to better identify the cultural significance of water catchments through resource consent conditions.
 <p>Environmental</p>	<ul style="list-style-type: none"> Treated water returned to the environment. 	<ul style="list-style-type: none"> Water extraction from rivers and streams has the potential for negative impacts on ecological values as habitats for native species of plants and animals. 	<ul style="list-style-type: none"> We are continuing to monitor and reduce water losses from the public supply system to reduce the amount of water we need to take.
 <p>Economic</p>	<ul style="list-style-type: none"> Provides a reliable water supply for commercial and industrial users. Provides a reliable water supply for agriculture and horticulture. 	<ul style="list-style-type: none"> Some people may find it difficult to pay for the water they use and will have to reduce their use. Businesses using large volumes of water may decide against locating in our District due to water costs. 	<ul style="list-style-type: none"> We are continuing to install water meters for all customers in our District. We are making consumers aware of their water use by charging for water by volume used.