

Section 3 Activities Waipara **Wastewater**



Waipara Wastewater

Council aims to ensure that wastewater treatment and disposal systems are sustainable and continue to meet environmental and health and safety standards. We will continue to encourage households to explore and implement measures that reduce wastewater volume per person.

What we provide

- Maketu: 37.8km of pipes and 527 household pumps and two booster pumps.
- · Ōmokoroa: 68.5km of pipes and 16 pump stations.
- · Te Puke: 62.4km of pipes and 8 pump stations.
- · Katikati: 64.7km of pipes and 14 pump stations.
- · Waihī Beach: 70.3km of pipes and 25 pump stations.
- · Te Puna: 129 household pumps.
- Ongare Point: 4.1km of pipes and 56 household pumps.

Why we provide this activity

Our community outcome

- · We can all enjoy a healthy and safe lifestyle.
- · Our environment is clean, green and valued.

Wastewater

Increasing demand for wastewater services is driven by population growth, environmental degradation and public health issues. Waihī Beach experiences additional seasonal demand driven by holidaymakers. Developers pay financial contributions (subdivision fees) which are used to repay the costs

of building future capacity into our District's wastewater schemes.

There is no need to increase the number of wastewater treatment plants in our District, however we will be continually upgrading the capacity of the existing plants to cope with future growth and also recognising the increased requirements of the quality of discharge to be met under the National Policy Statement (NPS).

We have five wastewater treatment plants at Katikati, Maketu/Little Waihī, Te Puke, Waihī Beach and Ongare Point and one wastewater treatment scheme in Ōmokoroa and one in Te Puna West. There are increased pressures on smaller communities to look at alternative treatment and disposal options, especially with regard to Regional Council's new discharge requirements.

By calculating residential flows we are able to measure the capacity of our existing treatment plants. The following method is used for this purpose:

- Population based on an average of 2.7 people per house or dwelling.
- Average dry weather flow of 220 litres per person per day in area water supply.

We are near to or at capacity for the Te Puke treatment plant which we are planning to upgrade by 2025. Katikati and Waihī Beach are also nearing capacity and will require upgrades in the next 10 years.

There are a number of households in each wastewater scheme that can be connected but have currently chosen not to. We have a programme to actively

Urban Centres

- Katikati
- Maketu/Little Waihī
- Ōmokoroa
- Te Puke
- Waihī Beach.

encourage these households to connect for public health reasons.

Levels of service relating to all the quality and quantity of discharges from treatment plants are prescribed by legislation and resource consent conditions. All our treatment plants comply with these service levels, to ensure ongoing compliance we are planning on upgrades to ensure sufficient capacity. We are currently undergoing a review of our water and sanitary services assessment, as the current was completed in 2008. However, there are no significant variations between the 2008 assessment of water and sanitary services and the wasterwater activity.

Ōmokoroa - The Ōmokoroa Peninsula is currently serviced with a reticulated network that discharges to a common storage chamber/pump station north of the railway line. The pump station is designed to cater for a population of 12,000 people.

The collected wastewater is discharged via a 16km pipeline to Tauranga City Council wastewater network in Bethlehem. As development takes place in Ōmokoroa, new reticulated infrastructure will feed into this existing pump station.

Te Puke - Due to growth, new consent condition requirements and the Rangiuru Business Park Council will construct a new treatment plant for Te Puke to meet demand. Council are also continuing to explore alternative methods to discharge for the Te Puke Wastewater Treatment Plant.

Katikati - The Katikati outfall which discharges treated effluent from the Katikati Wastewater Treatment Plant has had two recent failures. Early reports suggest the pipeline has less than 5 years of remaining useful life, and further failures can be expected in this time. Previous reports in 2019 suggested this pipe would not fail again before 2050. Council will be looking at renewing the pipeline or alternative options to discharge to reduce this risk. Any work will need to be considered in conjunction with the discharge consent renewal and any future treatment plant upgrades.



Septic tank effluent pump station - The success of the pressurised scheme in Maketu/Little Waihī, using a grinder pump system to connect individual households to the treatment plant, resulted in a similar scheme being built in Te Puna West in 2017.

A new wastewater scheme was constructed for Ongare Point in 2018. This is a Septic Tank Effluent Pump System. It includes onsite holding tanks for the primary treatment of solids on each property, which will be owned and maintained by Council. The scheme allows for a smaller scale, more affordable treatment system and can be expanded through a series of modular upgrades to add capacity to connect the infill growth expected over the next 25 years.

Small coastal communities - For areas of our District where a reticulated wastewater scheme is unavailable, wastewater must be managed onsite. The Bay of Plenty Regional Council is responsible for the consenting and management of onsite schemes.

We will continue to work with the Regional Council and our small coastal communities to investigate options for sustainable onsite wastewater treatment.

Our investigations have indicated that the communities at Kauri Point, Plummers Point and Tuapiro Point are compatible with the Regional Council's operative Onsite Effluent Treatment Plan (OSET), as individual properties are large enough to provide sufficient area for effective landbased treatment.

At Tanners Point properties are within a maintenance zone in the OSET plan. This means properties within the zone are required to undertake more frequent maintenance on their tanks and provide feedback to the Regional Council. No further Council expenditure has been allocated for these coastal communities in this Long Term Plan. However, should Regional rules change, Council may be required to investigate options further with these communities.

Rural communities - For rural areas of our District where reticulated schemes are unavailable, the Bay of Plenty Regional Council is responsible for the consenting and management of onsite wastewater schemes.

How we will achieve our community outcomes

Goal Our approach Ensure sludge disposal meets environmental and health standards by investigating new All areas in our District served by Council's technology to reduce sludge, alternative uses and options for sludge disposal. reticulated wastewater disposal systems meet acceptable health, safety and Ensure that the disposal of treated effluent meets environmental and health standards and is environmental standards. affordable. In consultation with ratepayers advocate to the Bay of Plenty Regional Council to ensure that Assist small urban communities along wastewater disposal systems, other than Council-owned systems, meet acceptable health, the Tauranga Harbour to ensure that the safety and environmental standards. wastewater disposal options available to them meet health and safety requirements.

Wastewater connections

30 June 2023							
System	Number of connections						
Katikati wastewater	2,292						
Maketu/Little Waihī wastewater stage 1	600						
Ōmokoroa wastewater	2,465						
Te Puke wastewater	2,501						
Waihī Beach wastewater	2,134						
Total	10,195						

Where the money comes from

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



What are we planning to do

Project ID	Name	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
168603	Waihī Beach Wastewater Treatment	_	-	68,700	246,750	514,151	125,664	135,450	141,570	98,625	124,135
168604	Waihī Beach WWTP Fixed Generator	-	-	-	-	373,120	-	-	-	-	-
168605	Waihī Beach WWTP Mechanical Seperator for Wetlands	-	-	801,500	_	-	-	-	-	-	-
226001	Wastewater - Waihī Beach Treatment Pump Station Renewal	-	138,260	226,710	227,950	235,081	188,373	240,030	228,121	194,291	178,822
226025	Waihī Beach Treatment Plant Upgrade	500,000	4,222,732	8,892,986	-	-	-	-	-	-	-
226031	Waihī Beach WWTP screw press	-	689,237	-	-	-	-	-	-	-	-
226032	Wastewater - Waihī Beach Network infrastructure renewals/Rehab	-	-	-	-	-	55,440	56,700	57,915	59,175	60,390
317001	Waihī Beach Structure Plan Utilities WW	-	122,650	622,508	40,068	-	-	-	-	-	-
340501	Wastewater - District Wide Reticulation Modelling	-	11,150	-	11,750	-	-	-	-	-	-
348702	Wastewater SCADA	-	55,750	-	11,750	-	12,320	-	12,870	-	13,420
225723	Wastewater - Katikati Pump Station	-	79,165	76,715	118,675	121,604	273,381	204,246	280,566	338,586	108,568
225724	Wastewater - Katikati Treatment Plant Emergency Storage	680,000	-	-	-	12,762	-	-	-	-	-
225743	Wastewater - Katikati Infrastructure Improvements	-	18,955	19,465	31,725	20,468	20,944	21,420	21,879	22,355	22,814
225744	Katikati WWTP Upgrades	4,798,000	340,075	397,315	-	-	-	-	-	-	-
225745	Wastewater - Katikati Treatment Plant fixed generator	-	278,750	-	-	-	-	-	-	-	-
225746	Wastewater - Katikati Grit/stone interceptor chamber prior to Wills Rd Pump Stn	31,550	367,950	-	-	-	-	-	-	-	-
316701	Katikati Structure Plan Utilities WW	-	-	148,850	1,549,238	-	-	-	-	-	-
342101	Katikati Wastewater Network Upgrades	-	-	-	-	-	379,210	574,560	1,760,616	-	-
LTP25/34-18	Katikati Ocean Outfall or Alternative Discharge	300,000	557,500	1,145,000	23,500,000	24,080,000	18,480,000	-	-	-	-
229815	Wastewater - Ōmokoroa Pumpstation Renewals	-	14,495	111,065	88,125	168,560	18,480	37,800	38,610	78,900	80,520
317301	Ōmokoroa Structure Plan - Wastewater	3,003,272	1,564,648	-	-	-	-	-	-	-	5,882,609
319803	Wastewater - Te Puna scheme renewals	-	-	-	-	18,060	-	-	-	20,576	-
336601	Wastewater - Ōmokoroa Manhole Repair	-	-	114,500	117,500	120,400	-	-	-	-	-
343901	Wastewater - Ōmokoroa reduce infiltration	120,000	105,925	-	17,625	18,060	123,200	-	257,400	-	-
225615	Wastewater - Te Puke Wastewater Pump Station Renewals and Access	30,000	137,145	153,430	208,563	92,106	243,936	185,850	230,373	110,460	114,070
225632	Te Puke Wastewater Treatment Plant Upgrade	8,667,946	29,138,295	30,603,560	9,190,913	-	-	-	-	-	-
295703	Wastewater - Te Puke Structure Plan	150,000	957,477	277,446	411,250	-	74,659	268,758	296,872	-	268,400
323603	Wastewater - Te Puke Infiltration Rehabilitation	-	-	-	117,500	-	-	-	-	-	-
344001	Te Puke Wastewater Treatment Plant Rock Filter	-	-	171,750	-	-	-	-	-	-	-
344101	Te Puke Wastewater Treatment Plant - wetlands decommissioning	-	-	171,750	-	-	-	-	-	-	-
353501	Wastewater - Te Puke Infrastructure Rehabilitation	100,000	111,500	85,875	88,125	-	-	-	-	-	-
353502	Wastewater - Te Puke Network Upgrades	-	-	-	117,500	1,324,400	67,760	504,000	128,700	131,500	134,200

Project ID	Name	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
295803	Wastewater - Maketu Treatment Plant renewals	-	11,150	-	-	-	12,320	-	19,305	19,725	33,550
344301	Maketu Wastewater Pump Station Renewals	300,000	334,500	343,500	352,500	361,200	369,600	302,400	310,167	322,175	356,972
LTP25/34-51	Wastewater - Maketu Treatment Plant Additional Funding	350,000	947,750	-	-	-	-	-	-	-	-
353601	Wastewater - Ongare WW Scheme Renewals	-	-	-	-	-	-	18,900	-	19,725	1,342
310902	Wastewater - Waihī Beach Asset Validation	10,000	11,150	11,450	11,750	12,040	12,320	12,600	12,870	13,150	13,420
319502	Waihī Beach Infiltration Investigation and Remedial Work	-	-	-	-	-	-	-	-	65,750	-
336301	Waihī Beach WWTP M- QMRA review	44,000	-	-	-	-	-	-	-	52,600	-
311002	Wastewater - Katikati Asset Validation	6,846	12,711	13,053	13,395	13,726	14,045	14,364	14,672	14,991	15,299
323402	Katikati Infiltration Investigation	50,000	55,750	57,250	58,750	-	61,600	-	-	65,750	-
323502	Ōmokoroa Infiltration Investigation	40,000	33,450	-	-	-	-	-	-	-	-
338601	Wastewater - Ōmokoroa Asset Validation	10,000	11,150	11,450	11,750	12,040	12,320	12,600	12,870	13,150	13,420
311102	Wastewater - Te Puke Asset Validation	10,000	11,150	11,450	11,750	12,040	12,320	12,600	12,870	13,150	13,420
323602	Wastewater - Te Puke Infiltration investigations	-	-	34,350	35,250	-	-	-	-	-	-
335006	Wastewater - Maketu asset assessment	-	-	-	-	6,020	6,160	6,300	6,435	6,575	6,710

How we will track progress

What we do	How we track progress		Result	Result Target					
		2023	2025	2026	2027	2028-30	2031-34		
All areas in our District served	Percentage compliance with resource consents for each wastewater scheme:	Katikati	98%	>90%	>90%	>90%	>93%	>95%	
by Council's reticulated wastewater disposal systems		Maketu/Little Waihī	89%	>94%	>96%	>96%	>98%	>99%	
meet acceptable health, safety and environmental		Te Puke	100%	>90%	>90%	>90%	>93%	>95%	
standards.		Waihī Beach	100%	>97%	>97%	>97%	>97%	>98%	
		Ongare Point	100%	>95%	>95%	>95%	>95%	>95%	
Maintain wastewater systems and have capacity to meet demand.	The number of dry weather sewage overflows from Council's sewerage system, expressed per 1000 sewerage connections to that sewerage system. Note: only applies when 1mm of rain has fallen in a 24hour period.		1.45	<2	<2	<2	<2	<2	
	Compliance with resource consents for discharge from the sewerage systems received by Council in relation to those resource consents measured by the number of:	Abatement notices	0	0	0	0	0	0	
		Infringement notices	0	0	0	0	0	0	
		Enforecement notices	0	0	0	0	0	0	
		Convictions	0	0	0	0	0	0	
Provide wastewater services that meet customer need.	Where Council attends to sewage overflows resulting from a blockage or other fault in the Councils sewerage system, the following median response times	Attendance time: From the time Council receives notification to the time that service personnel reach the site.	56 minutes	<60 minutes	<60 minutes	<60 minutes	<60 minutes	<60 minutes	
	measured:	Resolution time: From the time Council receives notification to the time that service personnel confirm resolution of the blockage or other fault.	3 hours 12 minutes	<5 hours	<5 hours	<5 hours	<5 hours	<5 hours	
	The total number of complaints received by Council about any of the following: Sewerage odour Sewerage system faults Sewerage system blockages Council's response to issues with sewerage system. Expressed per 100 connections to the Council's sewerage system.		51.8	<40	<40	<40	<40	<40	

Significant effects of providing this activity

Wellbeing	Positive	Negative	How are we addressing these effects			
Social	 Wastewater treatment schemes provide a safe disposal method for urban areas where smaller section sizes are unsuitable for onsite treatment. Wastewater treatment schemes decrease the risk of infection in the urban environment as there is no requirement for septic tanks. 	 The costs of providing, operating and maintaining the schemes is high due to energy requirements. Unless properly maintained there can be problems with foul odour. Creates an ongoing need for the disposal of sewage sludge. 	 We will continue to encourage households to reduce the amount of wastewater they produce, for example through re-use of grey water for garden irrigation. We will continue to investigate alternatives for the sustainable disposal of sewage sludge. 			
Cultural	 Respects cultural sensitivity around receiving environments. Receiving environments are improved. 	Receiving waters may be adversely affected if wastewater is not properly treated and, where overflows occur, could adversely affect health through consumption of contaminated shellfish and other kaimoana.	Council has opted for a land-based disposal approach with the Maketu/Little Waihī wastewater scheme.			
Environmental	Having wastewater treatment plants reduces the amount of untreated effluent entering the environment.	 Ecosystems in the receiving environments may be adversely affected by spills or overflows of untreated sewage; smell and noises from the wastewater treatment plants and pumping stations may create nuisance or impact public health and the operation and maintenance of our assets. The operation and maintenance of our assets include the production of greenhouse gases through energy use, wastewater treatment processes and biosolids. 	 We continue to monitor treated effluent to ensure it meets the conditions of resource consents. Wetlands are used for effluent treatment to promote their retention and development as they are a rare ecosystem in the region. Environmental damage during the construction of new works is mitigated through resource consent conditions. 			
Economic	 Allows for better use of the available developable land. Provides infrastructure to enable business development in the community. A wastewater system that is working well and meeting its levels of service, will increase property values and ensure our towns are good places for people to 'live, work, learn and play'. 	 Restricted capacity can result in constraints on development potential and business capacity. The cost of the investment in infrastructure. Significant costs and time to implement system upgrades and overflow reduction improvement. 	We will continue to monitor our wastewater systems to ensure they are working well and meeting levels of service.			