

WASTEWATER



WASTEWATER

OVERVIEW

Our long term goal for wastewater is 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.

Increasing demand for wastewater services is driven by population growth, environmental degradation and public health issues. Waihi Beach experiences additional seasonal demand driven by holiday-makers. Developers pay financial contributions (subdivision fees) which are used to repay the costs of building future capacity into our District's wastewater schemes.

URBAN CENTRES

- Katikati
- Maketu/Little Waihi
- Omokoroa
- Te Puke
- Waihi Beach

We have five wastewater treatment plants at Katikati, Omokoroa, Maketu/Little Waihi, Te Puke and Waihi Beach. Resource Consents for three of the wastewater treatment plants must be renewed during the ten year period of this plan and the capital works programme may be influenced by resource consent 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 (ADWF) of 220 litres per person per day in area water supply
- Design for populations of 1,000 people or more.

Based on this method with provision for our current structure plans we are near to or at capacity in all treatment plants. An increase in urban development outside our existing structure plans during the life of this plan would require expansions of the treatment plants.

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 encourage these households to connect for public health reasons. If these households were to connect to the schemes this would bring forward the timing of expansions.

Levels of service relating to 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 and no changes are anticipated in the short to medium term. There are no significant variations between the assessment of water services and this Wastewater Strategy.

MAKETU AND LITTLE WAIHI SCHEME

The construction of the Maketu/Little Waihi wastewater treatment scheme was completed in 2012. There are 534 connections to the scheme with the potential to connect vacant lots as they are developed. The scheme uses a grinder pump system to connect individual households to the treatment plant on Arawa Avenue for land-based disposal. A new onsite holding tank for the primary treatment of solids will be installed at each property, the cost of which is included in the cost of the scheme.

The scheme can be expanded through a series of modular upgrades to add capacity to connect the infill growth expected over the next 25 years and the future residential subdivision on the Te Arawa Lakes Trust land. A Memorandum of Understanding is in place between the Trust and Council that outlines their future commitments to wastewater treatment at Maketu.

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.

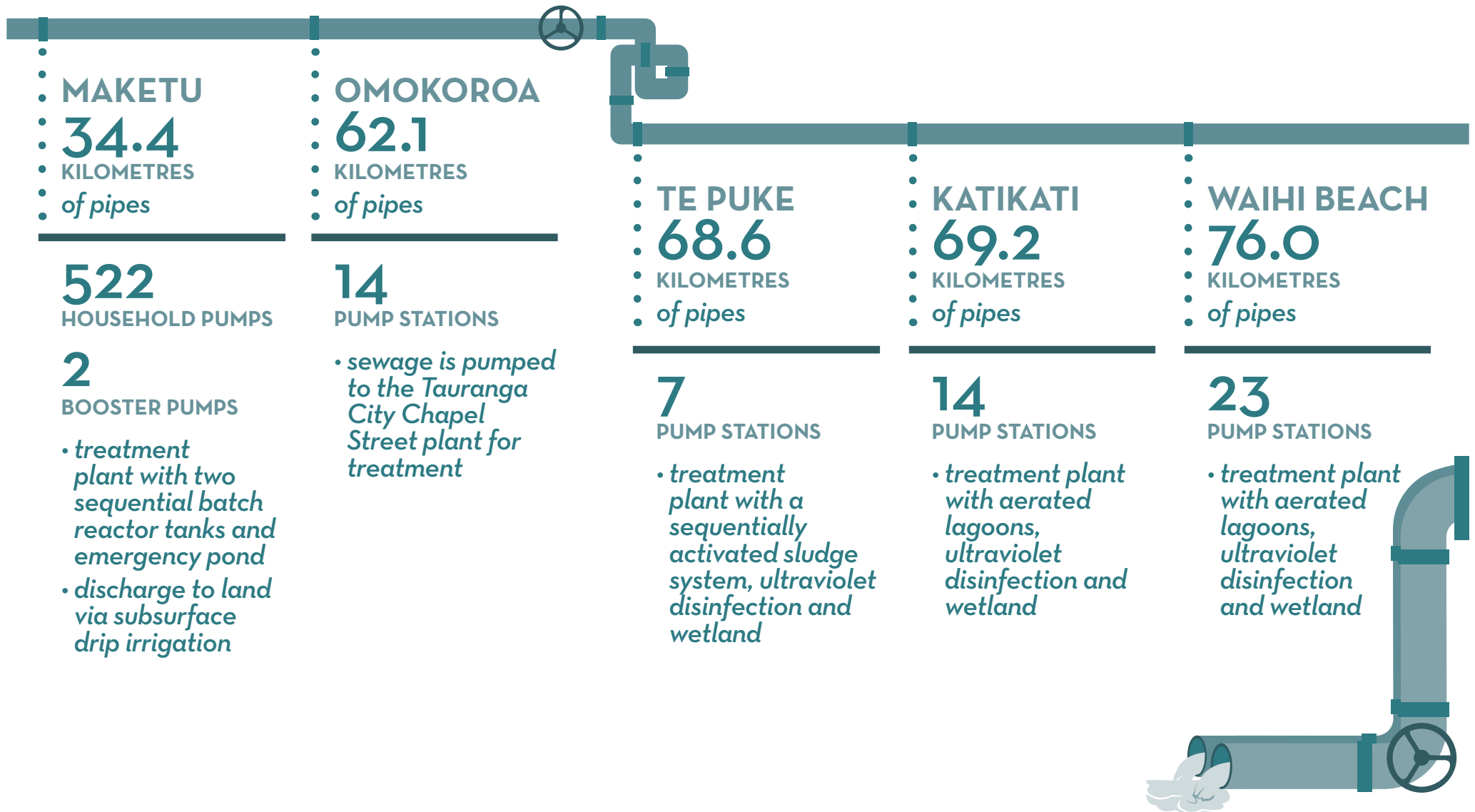
Our investigations have indicated that the communities at Kauri Point, Plummers Point and Tuapiro Point are compatible with the Regional Council's Operative Onsite Effluent Treatment Plan, as individual properties are large enough to provide sufficient areas for effective land-based treatment. At Tanners Point we have upgraded the public facilities to an advanced septic tank system. No further Council expenditure has been allocated for these coastal communities in this Long Term Plan.

Sewerage systems at Ongare Point and Te Puna West currently provide inadequate treatment and the resulting discharges are adversely affecting water quality in the Tauranga Harbour. By 1 December 2015 conventional systems in these communities must be either upgraded to advanced systems, connected to a Western Bay of Plenty District Council or approved community sewage reticulation system or apply for resource consent to continue operating. On-site treatment options are limited at Ongare Point and Te Puna West and we will continue working with these communities to find acceptable and affordable wastewater treatment solutions.

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.

WHAT WE PROVIDE



WHY WE PROVIDE IT

OUR COMMUNITY OUTCOME

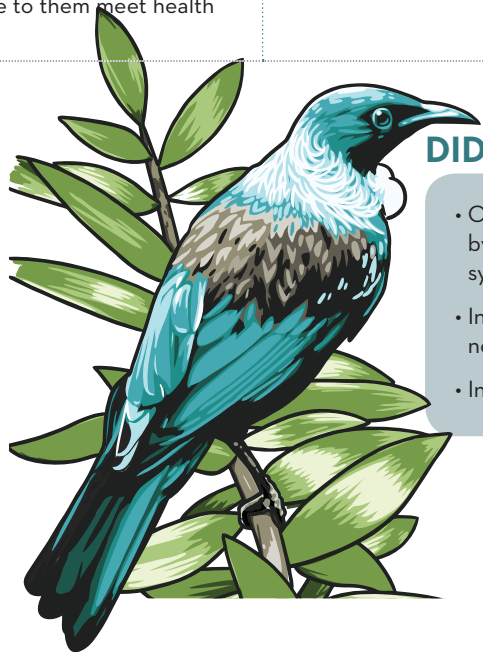
Wastewater services are well planned and maintained to ensure a clean and healthy environment.

OUR GOALS

- All areas in our District served by reticulated wastewater disposal systems meet acceptable health, safety and environmental standards.
- Assist small urban communities along the Tauranga Harbour to ensure that the wastewater disposal options available to them meet health and safety requirements.

HOW WE WILL ACHIEVE OUR COMMUNITY OUTCOME

GOAL	OUR APPROACH	OUR ROLE
All areas in our District served by reticulated wastewater disposal systems meet acceptable health, safety and environmental standards.	<ul style="list-style-type: none"> • Ensure sludge disposal meets environmental and health standards by investigating new technology to reduce sludge, alternative uses and options for sludge disposal. • Ensure that the disposal of treated effluent meets environmental and health standards and is affordable. 	<p>Lead</p> <p>Lead</p>
Assist small urban communities along the Tauranga Harbour to ensure that the wastewater disposal options available to them meet health and safety requirements.	<ul style="list-style-type: none"> • In consultation with ratepayers advocate to the Bay of Plenty Regional Council to ensure that wastewater disposal systems, other than Council-owned systems, meet acceptable health, safety and environmental standards. 	Partner/Advocate



DID YOU KNOW...

- Of the 45,400 residents that live in the Western Bay of Plenty, more than 22,000 are serviced by a Council wastewater system. This represents a total of 8,500 connections to the wastewater systems.
- In 2013/14 almost 1,800 million litres of wastewater was discharged into the public wastewater network.
- In 2014 the total value of Council's wastewater assets was \$126 million.

WHAT WE ARE PLANNING TO DO

All information from 2017 - 2025 includes an adjustment for inflation.

PROJECT NUMBER	PROJECT NAME	\$'000									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
168603	Waihi Beach Wastewater Treatment Plant Renewals	25	104	106	281	114	197	82	175	129	275
168604	Waihi Beach Wastewater Treatment Plant Fixed Generator	-	-	-	-	-	-	-	-	158	-
168605	Waihi Beach Wastewater Treatment Plant Mechanical Separator for Wetlands	-	-	-	-	160	-	-	-	-	-
226001	Waihi Beach Pump Station Renewals	68	101	107	153	137	155	158	169	185	183
226025	Waihi Beach Treatment Plant Upgrade Additional Aeration Capacity	-	-	374	-	-	-	-	-	-	-
310902	Waihi Beach Asset Validation	5	5	5	6	6	6	6	6	7	7
317001	Waihi Beach Structure Plan Utilities Wastewater	-	-	-	-	541	-	-	-	-	-
319502	Waihi Beach Infiltration Investigation	-	42	32	-	-	-	-	-	-	-
331301	Waihi Beach, Otawhiwhi Wastewater Connection	-	171	476	-	-	-	-	-	-	-
336301	Waihi Beach Wastewater Treatment Plant Monitoring and Review	30	-	-	11	-	-	-	-	-	-
340501	Wastewater Modelling	80	83	-	-	34	-	-	-	-	-
225723	Katikati Wastewater Pump Station Renewals	55	66	69	87	76	77	127	101	178	185
225724	Katikati Wastewater Treatment Plant Renewals	65	78	80	123	399	212	122	107	85	44
225727	Katikati Wastewater Treatment Plant Renewals of Resource Consent	150	-	107	-	-	-	-	-	264	-
225742	Katikati Pump Station Additional Storage	-	311	-	-	-	-	-	-	-	-

PROJECT NUMBER	PROJECT NAME	\$'000									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
225743	Katikati Wastewater Infrastructure Rehabilitation	-	-	-	6	-	6	-	6	0	7
311002	Katikati Asset Validation	5	5	5	6	6	6	6	6	7	7
316701	Katikati Structure Plan - Wastewater	-	-	-	-	-	-	-	-	-	812
323402	Katikati Infiltration Investigation	40	31	-	-	-	-	-	-	40	-
331401	Katikati, Te Rereatukahia Marae Wastewater Connection	-	-	-	-	-	-	-	-	-	1,435
335001	Maketu Wastewater Treatment Plant Operations Improvements	-	62	-	166	-	-	-	-	-	-
335002	Maketu Wastewater Treatment Plant Inline Disk Filter	100	-	-	-	-	-	-	-	-	-
342101	Katikati Wastewater Network Upgrades	-	-	-	-	-	-	-	-	1,450	343
229815	Omokoroa Wastewater Pumpstation Renewals	-	-	32	33	68	184	246	281	305	277
317301	Omokoroa Structure Plan Utilities Wastewater	100	519	535	-	-	-	-	661	2,641	-
323502	Omokoroa Infiltration Investigation	-	-	-	-	-	-	49	38	-	-
331701	Te Puna West wastewater system	-	3,793	-	-	-	-	-	-	-	-
331801	Ongare Point wastewater system	-	1,772	-	-	-	-	-	-	-	-
336601	Omokoroa Manhole Repair	-	-	-	221	228	236	-	-	-	-
338601	Omokoroa Asset Validation	5	5	5	6	6	6	6	6	7	7
220102	Te Puke Wastewater Treatment Plant Fixed Generator	-	-	-	132	-	-	-	-	-	-
220103	Te Puke Wastewater Treatment Plant Sludge Thickner	-	-	-	-	-	-	-	178	-	-
220104	Te Puke Wastewater Treatment Plant Micro Screen	-	-	150	-	-	-	-	-	-	-

PROJECT NUMBER	PROJECT NAME	\$'000									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
220105	Te Puke Wastewater Treatment Plant Inlet Grit Trap	-	-	160	-	-	-	-	-	-	-
220106	Te Puke Wastewater Treatment Plant Effluent Monitoring Equipment	-	-	-	-	-	-	-	127	-	-
220107	Te Puke Wastewater Treatment Plant Screen	-	-	-	-	-	-	-	-	-	220
225615	Te Puke Wastewater Pump Station Renewals	73	77	53	72	68	88	98	38	85	111
225619	Te Puke Wastewater Treatment Plant Renewals	213	326	176	81	66	283	75	66	-	110
225620	Te Puke Wastewater Treatment Plant Renewals of Resource Consent	80	-	-	-	-	-	-	-	-	-
225632	Te Puke Wastewater Treatment Plant Upgrade	-	282	-	-	-	-	514	-	-	-
225633	Te Puke Wastewater Pipe Renewls	-	-	-	61	-	-	-	-	-	-
295702	Te Puke Structure Plan Area 3 Phase 2	-	-	-	-	353	-	-	-	-	-
31102	Te Puke Asset Validation	5	5	5	6	6	6	6	6	7	7
323602	Te Puke Infiltration Investigation	-	-	-	-	46	35	-	-	-	-

MAJOR PROJECTS PLANNED FOR 2015 - 2025

- Building community schemes for Ongare Point and Te Puna West in 2016 and 2017.
- Wastewater treatment plant renewals at Te Puke, Katikati and Waihi Beach.
- Wastewater pump station renewals at Te Puke, Katikati and Waihi Beach.
- Te Rereatukahia Marae wastewater connection.

All information from 2017 - 2025 includes an adjustment for inflation.

HOW OUR PLANS HAVE CHANGED

The timing and costs of some of our projects have been updated since we adopted our 2012 - 2022 Long Term Plan (LTP).

To see how our plans have changed click [here](#) for the complete list of the projects/programmes that have been revised or alternatively visit our website www.westernbay.govt.nz.

SYSTEM	30 JUNE 2014			
	NUMBER OF CONNECTIONS	PROPERTIES PAYING AVAILABILITY, BUT NOT CONNECTED (INCLUDES VACANT SECTIONS)	TOTAL PROPERTIES ELIGIBLE TO CONNECT	TOTAL CAPACITY (POPULATION EQUIVALENTS)
Katikati wastewater	1,825	394	2,219	4,600
Maketu/Little Waihi wastewater stage 1	477	73	550	3,000
Omokoroa wastewater	1,003	201	1,204	12,000
Te Puke wastewater	2,637	83	2,720	9,000
Waihi Beach wastewater	2,506	233	2,739	21,000
TOTAL	8,448	984	9,432	49,600

HOW WE WILL TRACK PROGRESS TOWARDS OUR GOALS

OUTCOME

Wastewater services are well planned and maintained to ensure a clean and healthy environment

The Local Government Act 2002 Amendment Act 2014 addressed the need for standard performance measures for local authorities. In line with legislation the Secretary for Local Government has developed performance measures for the identified activities, which includes drinking water. These mandatory measures have been integrated into Council's performance framework and are shown in italics.

GOAL	WE'LL KNOW WE'RE MEETING OUR GOAL IF	ACTUAL	TARGET				
		2014	2016	2017	2018	2019 - 21	2021 - 25
<p>All areas in our District served by Council's reticulated wastewater disposal systems meet acceptable health, safety and environmental standards.</p> <p>Assist small urban communities along the Tauranga Harbour to ensure that the wastewater disposal options available to them meet health and safety requirements.</p>	<p>Percentage compliance with Resource Consents for each wastewater scheme:</p> <ul style="list-style-type: none"> • Katikati • Maketu/Little Waihi • Te Duke • Waihi Beach <p>Level of resident satisfaction with Councils reticulated wastewater disposal system as monitored by the Annual Residents' Survey, those residents who are 'very satisfied' and 'satisfied'.</p>						
		76%	≥93%	≥94%	≥95%	≥96%	≥97%
		82%	≥92%	≥94%	≥96%	≥98%	≥99%
		97%	≥97%	≥97%	≥97%	≥97%	≥97%
		96%	≥97%	≥97%	≥97%	≥97%	≥98%
		94%	≥95%	≥95%	≥95%	≥95%	≥95%

HOW WE WILL TRACK PROGRESS - LEVELS OF SERVICE

WHAT WE PROVIDE	WE'LL KNOW WE'RE MEETING THE SERVICE IF	ACTUAL	TARGET				
		2014	2016	2017	2018	2019 - 21	2022 - 25
Maintain wastewater systems and have capacity to meet demand.	<p>The number of dry weather sewerage overflows from Council's sewerage system, expressed per 1000 sewerage connections to that sewerage system.</p> <p>NOTE: only applies when, 1mm of rain has fallen in a 24 hr period.</p>	NEW	≤2	≤2	≤2	≤2	≤2
	<p>Compliance with resource consents for discharge from the sewerage system measured by the number of;</p> <ul style="list-style-type: none"> • Abatement notices • Infringement notices • Enforcement orders • Convictions <p>received in relation to those resource consents.</p>	NEW	0	0	0	0	0
Provide wastewater services that meet customer needs.	<p>The median response time for Council to attend to sewerage overflows resulting from a blockage or other fault in the Council sewerage system.</p> <ul style="list-style-type: none"> • Attendance time: from the time that Council receives notification to the time that service personnel reach the site. • Resolution time: from the time that Council receives notification to the time that service personnel confirm resolution of the blockage or other fault. 	NEW	≤1 hour	≤1 hour	≤1 hour	≤1 hour	≤1 hour
	<p>The total number of complaints received by Council about:</p> <ul style="list-style-type: none"> • Sewerage odour • Sewerage system faults • Sewerage system blockages • Council's response to issues with sewerage system <p>Expressed per 1000 connections to the Councils sewerage system.</p>	NEW	≤24 hours	≤24 hours	≤24 hours	≤24 hours	≤24 hours
	<p>The total number of complaints received by Council about:</p> <ul style="list-style-type: none"> • Sewerage odour • Sewerage system faults • Sewerage system blockages • Council's response to issues with sewerage system <p>Expressed per 1000 connections to the Councils sewerage system.</p>	NEW	≤45	≤45	≤45	≤45	≤45

KEY ASSUMPTIONS

ASSUMPTION	DESCRIPTION	RISK
Domestic wastewater flows	<p>Average dry weather flow (ADWF) or average domestic daily wastewater flow of 220 litres per person per day.</p> <p>Number of people per dwelling = 2.7.</p> <p>For accommodation facilities, for example campgrounds and motels, different factors are applied. For holiday areas, for example Waihi Beach and Maketu/Little Waihi, the wastewater schemes have been designed for peak holiday resident populations forecast to 2021.</p>	<p>Higher than predicted wastewater flows resulting in under-capacity systems and/or advanced expenditure for upgrades of reticulation and treatment assets.</p> <p>Lower than predicted wastewater flows would mean the assets would be under-utilised.</p>
Industrial and commercial wastewater flows	<ul style="list-style-type: none"> • Light flow 0.4 litres per second per hectare • Medium flow 0.7 litres per second per hectare • Heavy flow 1.3 litres per second per hectare <p>Flow assumptions are generally greater than currently experienced by Western Bay of Plenty District industries. Flow data may be distorted by high water-use industries.</p>	<p>Higher than predicted wastewater flows would result in under-capacity systems and/or advanced expenditure for upgrades of reticulation and treatment assets. Lower than predicted flows would result in under-utilised assets.</p>
Wastewater assets economic life	<p>Economic life of assets:</p> <ul style="list-style-type: none"> • Polyvinyl chloride (PVC), polyethanol (PE) plastic components 80 years • Pumps 15 years • Electrical 15 years • Concrete structures 60 years <p>Concrete structures are given a lower life in wastewater environments based on experience and condition rating.</p>	<p>Asset renewals are required earlier than programmed, requiring funding earlier than budgeted. Alternatively asset renewals can be deferred due to longer than expected life resulting in savings.</p>
Wastewater asset valuations	<p>Asset valuations have been calculated from unit rates using data from the Rawlinsons Publication and comparing it with previous actual data. A 20% allowance is made for design and consenting. Unit rates have adequate allowance for construction variations.</p>	<p>If the unit rates used budget allocations for renewals would be incorrect.</p> <p>This may require greater funding.</p>
Wastewater emergency storage at pump stations	<p>Capacity for nine hours emergency storage at pump stations.</p>	<p>If storage capacity is insufficient, overflows would occur, with consequential environmental damage. Prosecution may follow.</p>
Legislation	<p>There will be no significant changes to legislation affecting the wastewater activity (Health Act 1956 and Local Government Act 2002).</p>	<p>If new standards for wastewater that required upgrades to existing infrastructure were imposed, this would impact on the amount of rates paid by those served by Council schemes.</p>

SIGNIFICANT EFFECTS OF PROVIDING THIS ACTIVITY

WELL-BEING	POSITIVE	NEGATIVE	HOW WE ARE ADDRESSING THESE EFFECTS
Social	<ul style="list-style-type: none"> + 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. 	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> • We will continue to encourage households to reduce the amount of wastewater they produce, for example through reuse of grey water for garden irrigation. • We will continue to investigate alternatives for the sustainable disposal of sewage sludge.
Environmental	<ul style="list-style-type: none"> + Having wastewater treatment plants reduces the amount of untreated effluent entering the environment. 	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> + 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'. 	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> • We will continue to monitor our wastewater systems to ensure they are working well and meeting levels of service.
Cultural	<ul style="list-style-type: none"> + Respects cultural sensitivity around receiving environments. + Receiving environments are improved. 	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> • Council has opted for a land-based disposal approach with the Maketu/Little Waihi wastewater scheme.

SUMMARY FINANCIAL FORECAST

DISTRICT-WIDE WASTEWATER

All information from 2017-2025 includes an annual adjustment for inflation

FOR THE YEARS ENDED 30 JUNE	ACTUAL	BUDGET	FORECAST									
	\$'000	\$'000	\$'000									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Analysis of expenditure by activity												
Waihi Beach wastewater	3,241	3,302	3,424	3,432	3,884	3,558	3,571	3,537	3,540	4,289	3,598	3,614
Katikati wastewater	1,722	1,733	1,900	2,306	1,889	1,861	1,804	1,757	2,408	1,599	1,519	1,522
Omokoroa wastewater	3,890	4,098	4,060	4,027	4,368	4,581	4,638	4,698	4,812	4,848	4,921	5,160
Te Puke wastewater	1,754	1,627	1,737	1,709	1,674	1,585	1,554	1,453	1,315	1,216	1,097	939
Maketu Beach wastewater	1,071	1,045	1,190	1,245	1,297	1,356	1,426	1,490	1,557	1,628	1,709	1,795
Ongare Point wastewater	-	-	50	1	114	115	115	114	120	121	117	117
Total operating expenditure	11,679	11,804	12,360	12,721	13,226	13,056	13,107	13,049	13,752	13,701	12,961	13,148
Analysis of expenditure by class												
Direct costs	3,096	3,143	3,915	4,339	4,543	4,261	4,474	4,535	5,490	5,729	5,200	5,419
Overhead costs	1,262	1,345	1,310	1,343	1,390	1,410	1,437	1,492	1,522	1,559	1,628	1,660
Interest	3,940	3,891	3,651	3,527	3,560	3,608	3,401	3,188	2,878	2,552	2,242	2,059
Depreciation	3,381	3,425	3,484	3,513	3,733	3,777	3,795	3,835	3,862	3,861	3,892	4,010
Total operating expenditure	11,679	11,804	12,360	12,721	13,226	13,056	13,107	13,049	13,752	13,701	12,961	13,148
Revenue												
Targeted rates	8,347	8,776	9,338	9,278	9,876	10,322	10,861	11,425	12,012	12,378	12,748	13,138
User fees	1	2	2	2	2	2	3	3	3	3	3	3
Financial contributions	604	631	1,382	1,375	1,440	1,891	2,295	2,357	2,464	2,533	2,885	3,006
Subsidies	-	404	-	4,024	476	-	-	-	-	-	-	1,435
Vested assets	88	340	340	353	363	375	388	401	416	432	449	468
Other income	50	-	-	-	-	-	-	-	-	-	-	-
Total revenue	9,090	10,153	11,062	15,032	12,157	12,591	13,546	14,185	14,894	15,346	16,085	18,050
Net cost of service - surplus/(deficit)	(2,589)	(1,651)	(1,298)	2,311	(1,069)	(465)	439	1,137	1,142	1,645	3,124	4,902
Capital expenditure	1,164	1,398	1,009	7,746	2,426	1,415	2,245	1,438	1,422	1,909	5,480	4,002
Vested assets	88	340	340	353	363	375	388	401	416	432	449	468
Total other funding required	(3,840)	(3,389)	(2,647)	(5,788)	(3,858)	(2,256)	(2,194)	(703)	(696)	(696)	(2,805)	432
Other funding provided by												
General rate	560	-	950	1,500	1,500	1,600	1,600	1,500	1,500	1,500	1,500	1,500
Environmental protection rate	343	476	468	384	432	466	507	552	602	645	690	742
Debt increase/(decrease)	(1,091)	(780)	(739)	1,315	(421)	(1,122)	(297)	(1,282)	(1,260)	(789)	2,646	(567)
Reserves and future surpluses	4,029	3,693	1,969	2,588	2,347	1,311	384	(67)	(147)	(660)	(2,031)	(2,106)
Total other funding	3,840	3,389	2,647	5,788	3,858	2,256	2,194	703	696	696	2,805	(432)

COUNCIL'S ADDITIONAL ASSET REQUIREMENTS

DISTRICT-WIDE WASTEWATER

All information from 2017-2025 includes an annual adjustment for inflation.

CAPITAL EXPENDITURE	\$'000									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
To meet additional demand (capacity for future residents - growth)	180	831	909	-	895	-	-	661	2,641	812
To improve the level of service	100	5,882	636	298	194	-	-	305	158	1,655
To replace existing assets (renewals)	729	1,033	881	1,117	1,156	1,438	1,422	943	2,680	1,535
Total capital expenditure	1,009	7,746	2,426	1,415	2,245	1,438	1,422	1,909	5,480	4,002

WHAT WE'RE DOING TO IMPROVE THE LEVELS OF SERVICE

This is not a complete list of the projects/programmes we have planned for this group of activities. The full list is available on our website www.westernbay.govt.nz

- 319902 – DISTRICT WIDE TRADE WASTE BYLAW IMPLEMENTATION \$50,000 PER YEAR FOR 2016-2025

SUMMARY FINANCIAL FORECAST

KATIKATI WASTEWATER

WASTEWATER

COMMUNITY OUTCOME

Wastewater services are well planned and maintained to ensure a clean and healthy environment.

GOALS

- All areas in our District served by our reticulated wastewater disposal systems meet acceptable health, safety and environmental standards.
- Assist small urban communities along the Tauranga Harbour to ensure that the wastewater disposal options available to them meet health and safety requirements.

DISCUSSION / RATIONALE

Provision of reticulated wastewater systems in the district provides public health and sanitation benefits to the community. If adequate wastewater disposal systems were unavailable economic development may be constrained or environmental standards may be compromised, which would affect the community as a whole.

Individuals provided with reticulated wastewater can be identified and charged for the service. Wastewater reticulation systems, treatment facilities and disposal systems have surplus capacity designed to cater for growth. Developers who take advantage of this capacity by subdividing can be identified and charged.

Increased volumes of wastewater produced by some commercial and industrial users (trade waste) require that the capacity of the system be larger. Higher toxicity of the wastewater produced by some users requires more treatment in order to meet consents for disposal.

Many ratepayers are not connected to our wastewater systems and construct and maintain their own septic tanks.

Actions that result in increased expenditure on this activity include:

- Illegal disposal of stormwater into the wastewater systems via illegal private connections and sub-standard private connections
- Infiltration and inflow into reticulation systems through poorly maintained or badly constructed reticulation systems
- Illegal discharges of trade waste into domestic sewers
- Trade waste discharges which are not measured or charged
- Pollution of the harbour and coastal areas from poorly maintained septic tanks
- Pollution caused by septic tank de-sludging
- Contractors disposing of septage at non-conforming disposal sites.

Wastewater infrastructure typically has a long life:

- Reticulation and manholes 60 to 100 years, depending on pipe material
- Pumps and pump stations 25 years on average
- Wastewater treatment and disposal facilities 50 years.

FUNDING APPROACH

Capital expenditure

Initially financed from loans and serviced from:

- Financial contributions, if expenditure is to accommodate growth and/or to pay for the consumption of excess capacity in the wastewater supply system. Includes the related loan servicing (holding) costs
- Wastewater targeted rates over the applicable area of benefit for capital expenditure (excluding renewals) to service existing ratepayers.

Operational, maintenance and renewals expenditure including financing costs that relate to existing ratepayers

Funding sources to cover 96% of the revenue requirement include:

- Area of benefit targeted rates (uniform charges)
- Availability charges
- Multiple connection charges
- Capital charges
- Financial contributions
- Fees and charges from trade waste and connections
- Subsidies (if available).

To fund 4% of the revenue requirement:

- Environmental protection rate.

General Rates may be used to service interest payments and growth related debt in times of low growth.

Funding sources - Wastewater 2015/16

