

Katikati Solid waste
 Ongare Point Community building
 Aongatete Paengaroa Treatment schemes
 Pongakawa Regulatory services
 Water supply Rogers Road Representation
 Pios Beach Disposal
 Te Kahika Libraries & service centres
 Tuapiro Point Environment
 Tanners Point Wetlands
 Waihi Beach
 Te Puna West Transportation
 Athenree

WASTEWATER

Civil defence & emergency management
 Kaimai Connections
 Tanners Point District
 Island View Economic
 Te Puke Natural environment
 Omokoroa Planning for the future
 Plummers Point Healthy environment
 Minden
 Te Kauri Village Support services
 Pukehina Beach Stormwater
 Community facilities
 Pios Beach Treatment plants
 Maketu Clean



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 3 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, a reduced peaking factor may be discussed with appropriate staff

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.

Maketu and Little Waihi scheme

In 2011 we started construction of the Maketu/Little Waihi wastewater treatment scheme. Initially 522 properties will be connected. 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.

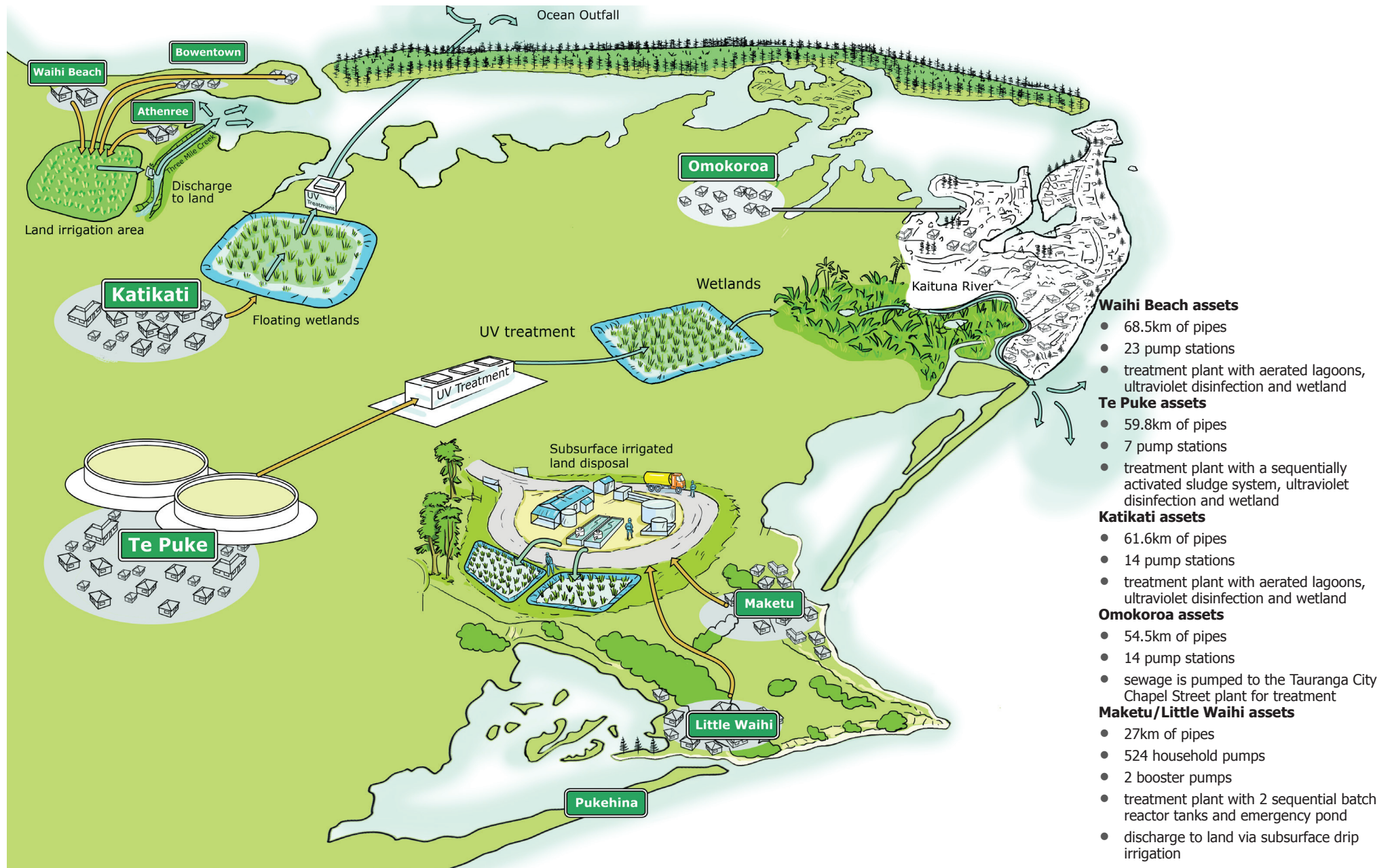
Our investigations have indicated that the communities at Kauri Point, Plummers Point and Tuapiro Point are compatible with the Regional Council's Operative Onsite Effluent Treatment Plan, as individual properties are large enough to provide sufficient areas for effective land-based treatment. At Tanners 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 investigating viable and affordable alternatives for 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.

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

- ① All areas in our District served by reticulated wastewater disposal systems meet acceptable health, safety and environmental standards
- ② 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 	Lead Lead
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

What we are planning to do

All information from 2014 – 2022 includes an adjustment for inflation.

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

Project numbers	Project name	\$'000									
		2013	2014	2015	2016	2017	2018	2019	2010	2021	2022
226001	Waihi Beach pump station renewals	63	54	79	70	69	69	61	91	111	113
226013	Waihi Beach wastewater treatment plant settling tank	500	-	-	-	-	-	-	-	-	-
226025	Waihi Beach wastewater treatment plant upgrade, aeration, ultraviolet and sequentially activated sludge lagoon	-	363	376	223	-	-	-	-	-	-
225720	Katikati ocean outfall pipeline	-	467	-	-	-	-	-	-	-	-
225723	District-wide wastewater pump station renewals	35	59	66	59	59	59	72	74	64	235
225727	Katikati wastewater treatment plant resource consent renewal	-	-	32	279	-	599	-	-	-	-
225741	Katikati wastewater treatment plant wetland upgrade	450	467	-	-	-	-	-	-	-	-
225615	District-wide wastewater pump station renewals	41	38	47	71	68	57	62	64	109	167
225619	District-wide wastewater treatment plant renewals	166	23	13	28	115	192	14	-	-	-
225632	Te Puke wastewater treatment plant upgrade	-	-	-	8,918	-	-	-	-	-	-
331301	Waihi Beach – Otawhiwhi Development Plan, connect marae to Council's wastewater network	-	156	434	-	-	-	-	-	-	-
331401	Connect Te Rereatukahia Marae to Council's wastewater network	-	-	-	-	-	-	1,177	-	-	-
331701	Te Puna West wastewater system	-	-	1,720	-	-	-	-	-	-	-
331801	Ongare Point wastewater system	-	-	376	-	-	-	-	-	-	-

How our plans have changed

The timing and costs of some of our projects have been updated since we adopted our 2009 - 2019 Long Term Council Community Plan (LTCCP). The differences are shown below. This is not a complete list of the projects/programmes that have been revised.

Project number	Project name		\$						
			2013	2014	2015	2016	2017	2018	2019
317001	Waihi Beach Structure Plan wastewater	Previous Plan	464,934	1,325,5670	276,790	-	-	-	-
		Capital works programme timing and costs updated	-	-	-	-	79,724	-	-
		Difference	-464,934	-1,325,570	-276,790	-	79,724	-	-

Major projects planned for 2012 - 2022

- ▶ Completion of the Maketu/Little Waihi wastewater treatment scheme \$248,278 over 2013 and 2014
- ▶ Continuing investigations into community schemes for Ongare Point and Te Puna West
- ▶ Wastewater treatment plant renewals at Te Puke \$550,078 between 2013 and 2019
- ▶ Upgrade of Te Puke wastewater treatment plant, \$4,631,772 in 2017, \$4,793,388 in 2018
- ▶ Waihi Beach wastewater treatment plant upgrades \$962,810 between 2014 and 2016.

All information from 2014 – 2022 includes an adjustment for inflation.

System	30 June 2011			
	Number of connections	Properties paying availability, but not connected (includes vacant sections)	Total properties eligible to connect	Total capacity (population equivalents)
Katikati wastewater	1,702	359	2,061	2061
Maketu/Little Waihi wastewater stage 1	-	541	541	541
Omokoroa wastewater	921	169	1,090	1,090
Te Puke wastewater	2,586	91	2,677	2,677
Waihi Beach wastewater	2,423	258	2,681	2,681
Total	7,632	1,418	9,050	9,050

How we will track progress towards our goals



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

Goal	We'll know we're meeting our goal if	Actual	Target				
		2011	2013	2014	2015	2016 - 18	2019 - 22
<p>All areas in our District served by Council's reticulated wastewater disposal systems meet acceptable health, safety and environmental standards</p> <p>Council assists 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 Puke ▶ Waihi Beach <p>Level of resident satisfaction with Council's reticulated wastewater disposal system as monitored by the Annual Residents' Survey, those residents who are 'very satisfied' and 'satisfied'</p> <p>Capacity of the wastewater treatment plants to meet the daily peak demand. Current capacity allows for future growth in accordance with our existing structure plans</p>	89%	89%	89%	95%	95%	95%
		N/A	90%	95%	99%	99%	99%
		94%	94%	94%	94%	96%	96%
		97%	97%	97%	97%	98%	98%
		96%	≥95%	≥95%	≥95%	≥95%	≥95%
	>100%	>100%	>100%	>100%	>100%	>100%	

How we will track progress - levels of service

What we provide	We'll know we're meeting the service if	Actual	Target				
		2011	2013	2014	2015	2016 - 18	2019 - 22
Capacity for 100% of eligible households within the area of the Council's wastewater scheme to be connected	Percentage of eligible households, excluding vacant sections, connected within the wastewater scheme of: <ul style="list-style-type: none"> ▶ Katikati ▶ Maketu/Little Waihi ▶ Omokoroa ▶ Te Puke ▶ Waihi Beach 	99.8%	≥98%	≥98%	≥98%	≥98%	≥98%
		New	≥98%	≥98%	≥98%	≥98%	≥98%
		99.6%	≥98%	≥98%	≥98%	≥98%	≥98%
		99.8%	≥98%	≥98%	≥98%	≥98%	≥98%
		99.8%	≥98%	≥98%	≥98%	≥98%	≥98%

DID YOU KNOW?



- ⇒ Of the 45,400 residents that live in the Western Bay of Plenty, more than 18,000 are serviced by a Council wastewater system. This represents a total of 9,050 connections to the wastewater systems
- ⇒ In 2010/11 almost 1,753 million litres of wastewater was discharged into the public wastewater network
- ⇒ In 2010 the total value of Council's wastewater assets was \$107 million. The new Maketu wastewater scheme adds a further \$16.2 million to the total value of the District's wastewater assets

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 = 3</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>	Higher than predicted wastewater flows resulting in under-capacity systems and/or advanced expenditure for upgrades of reticulation and treatment assets. Lower than predicted wastewater flows would mean the assets would be underutilised
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>	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
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>	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
Wastewater asset valuations	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	Budget allocations for renewals would be incorrect
Wastewater emergency storage at pump stations	Capacity for nine hours emergency storage at pump stations	If storage capacity is insufficient, overflows would occur, with consequential environmental damage. Prosecution may follow
Legislation	There will be no significant changes to legislation affecting the wastewater activity (Health Act 1956 and Local Government Act 2002)	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

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 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 projects 😞 Significant compliance costs for developers, businesses and individual households 	<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 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual	Budget	Forecast									
	\$'000	\$'000	\$'000									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
Waihi Beach wastewater	3,658	3,313	3,203	3,238	3,286	3,322	4,024	3,354	3,310	3,263	3,313	3,366
Katikati wastewater	1,788	1,618	1,800	1,835	1,942	2,665	2,035	2,096	2,146	2,197	2,253	2,300
Omokoroa wastewater	3,748	3,759	3,855	4,024	4,226	4,548	4,770	4,991	5,199	5,425	5,639	5,819
Te Puke wastewater	1,691	1,689	1,739	1,741	1,774	1,807	2,012	2,292	2,568	2,644	2,736	2,819
Maketu Beach wastewater	30	670	749	1,274	1,319	1,368	1,462	1,521	1,578	1,637	1,701	1,760
Total operating expenditure	10,916	11,049	11,346	12,112	12,547	13,710	14,302	14,255	14,800	15,167	15,642	16,064
Analysis of expenditure by class												
Direct costs	2,749	2,947	2,798	2,914	3,113	3,954	4,195	3,678	3,868	4,071	4,289	4,523
Overhead costs	1,531	1,473	1,392	1,454	1,496	1,503	1,539	1,611	1,613	1,646	1,732	1,739
Interest	3,933	4,108	4,098	4,307	4,474	4,760	4,967	5,248	5,420	5,510	5,638	5,776
Depreciation	2,702	2,521	3,058	3,438	3,465	3,493	3,601	3,717	3,899	3,941	3,983	4,026
Total operating expenditure	10,916	11,049	11,346	12,112	12,547	13,710	14,302	14,255	14,800	15,167	15,642	16,064
Revenue												
Targeted rates	5,922	6,682	7,562	8,320	9,145	9,193	9,885	10,762	11,718	12,850	14,113	15,502
User fees	45	-	2	2	2	2	2	3	3	3	3	3
Financial contributions	286	325	808	1,193	1,271	1,333	2,283	2,392	2,488	3,572	3,701	3,871
Subsidies	4,200	11,842	-	156	2,531	-	-	-	1,177	-	-	-
Vested assets	-	190	340	353	366	379	394	407	422	438	456	475
Interest	-	-	180	194	207	285	347	323	276	384	627	922
Total revenue	10,454	19,039	8,892	10,217	13,522	11,193	12,912	13,888	16,084	17,247	18,900	20,773
Net cost of service – surplus/(deficit)	(462)	7,990	(2,455)	(1,895)	974	(2,517)	(1,390)	(367)	1,284	2,080	3,258	4,710
Capital expenditure	2,487	5,079	1,468	2,188	3,170	939	5,033	5,781	1,954	268	309	777
Vested assets	-	190	340	353	366	379	394	407	422	438	456	475
Total other funding required	(2,949)	2,721	(4,263)	(4,436)	(2,561)	(3,835)	(6,817)	(6,556)	(1,092)	1,374	2,493	3,458
Other funding provided by												
Environmental protection rate	277	295	315	346	380	396	411	448	487	534	587	645
Debt increase/(decrease)	(586)	(704)	(705)	(272)	(772)	(427)	957	1,021	(1,143)	(1,454)	(1,626)	(1,620)
Reserves and future surpluses	3,259	(2,313)	4,654	4,361	2,952	3,865	5,449	5,087	1,747	(454)	(1,454)	(2,483)
Total other funding	2,949	(2,721)	4,263	4,436	2,561	3,835	6,817	6,556	1,092	(1,374)	(2,493)	(3,458)

Council's additional asset requirements - District-wide wastewater

All information from 2014 - 2022 includes an adjustment for inflation.

Capital expenditure	\$'000									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
To meet additional demand (capacity for future residents - growth)	-	1,043	376	223	80	-	-	19	-	195
To improve the level of service	213	356	2,531	-	-	-	1,177	-	-	-
To replace existing assets (renewals)	1,255	789	263	716	4,953	5,781	777	249	309	582
Total capital expenditure	1,468	2,188	3,170	939	5,033	5,781	1,954	268	309	777

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

- ▶ **225632 - Te Puke treatment plant upgrade**
To meet resource consent conditions
- ▶ **225741 - Katikati wetlands upgrade**
To meet resource consent conditions

Summary financial forecast

Katikati wastewater All information from 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual	Budget	Forecast									
	\$'000	\$'000	\$'000									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
Katikati wastewater	1,788	1,618	1,800	1,835	1,942	2,665	2,035	2,096	2,146	2,197	2,253	2,300
Total operating expenditure	1,788	1,618	1,800	1,835	1,942	2,665	2,035	2,096	2,146	2,197	2,253	2,300
Analysis of expenditure by class												
Direct costs	568	474	548	560	633	1,332	690	722	749	779	813	848
Overhead costs	353	335	325	323	333	343	342	357	359	366	383	387
Interest	232	306	285	303	321	328	335	343	356	363	363	363
Depreciation	636	504	642	649	655	662	668	675	682	688	695	702
Total operating expenditure	1,788	1,618	1,800	1,835	1,942	2,665	2,035	2,096	2,146	2,197	2,253	2,300
Revenue												
Targeted rates	1,229	1,320	1,446	1,592	1,745	1,712	1,873	2,040	2,223	2,434	2,670	2,928
User fees	24	-	-	-	-	-	-	-	-	-	-	-
Financial contributions	89	63	108	142	135	140	390	404	434	494	514	535
Subsidies	-	-	-	-	-	-	-	-	1,177	-	-	-
Vested assets	-	70	70	73	75	78	81	84	87	90	94	98
Interest	-	0	95	90	67	96	86	130	161	202	270	349
Total revenue	1,342	1,453	1,719	1,897	2,023	2,026	2,430	2,658	4,083	3,220	3,548	3,910
Net cost of service – surplus/(deficit)	(446)	(164)	(81)	62	80	(639)	395	561	1,937	1,023	1,294	1,610
Capital expenditure	141	182	551	1,420	98	338	59	658	1,802	74	64	235
Vested assets	-	70	70	73	75	78	81	84	87	90	94	98
Total other funding required	(587)	(416)	(702)	(1,430)	(93)	(1,054)	255	(181)	48	859	1,136	1,278
Other funding provided by												
Environmental protection rate	45	55	60	66	73	71	78	85	93	101	111	122
Debt increase/(decrease)	(91)	(69)	(85)	313	(108)	(44)	(155)	25	(9)	(218)	(248)	(221)
Reserves and future surpluses	633	430	727	1,050	128	1,027	(178)	71	(131)	(743)	(1,000)	(1,179)
Total other funding	587	416	702	1,430	93	1,054	(255)	181	(48)	(859)	(1,136)	(1,278)

Summary financial forecast

Maketu wastewater All information from 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual		Budget		Forecast							
	\$'000		\$'000		\$'000							
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
Maketu wastewater	30	670	749	1,274	1,319	1,368	1,462	1,521	1,578	1,637	1,701	1,760
Total operating expenditure	30	670	749	1,274	1,319	1,368	1,462	1,521	1,578	1,637	1,701	1,760
Analysis of expenditure by class												
Direct costs	8	575	331	362	394	432	511	549	593	636	676	720
Overhead costs	12	32	29	172	177	177	182	191	192	196	206	207
Interest	10	51	37	35	43	53	63	76	88	101	114	128
Depreciation	-	12	353	705	705	705	705	705	705	705	705	705
Total operating expenditure	30	670	749	1,274	1,319	1,368	1,462	1,521	1,578	1,637	1,701	1,760
Revenue												
Targeted rates	-	177	400	406	432	460	507	559	615	646	683	724
User fees	-	-	2	2	2	2	2	3	3	3	3	3
Financial contributions	-	-	11	11	12	13	13	28	30	32	34	36
Subsidies	4,200	11,842	-	-	-	-	-	-	-	-	-	-
Total revenue	4,200	12,020	412	420	446	475	523	590	648	681	719	763
Net cost of service – surplus/(deficit)	4,170	11,350	(337)	(854)	(873)	(893)	(938)	(932)	(931)	(956)	(982)	(998)
Capital expenditure	1,915	4,269	-	-	-	-	-	-	-	-	-	-
Total other funding required	2,255	7,080	(337)	(854)	(873)	(893)	(938)	(932)	(931)	(956)	(982)	(998)
Other funding provided by												
Environmental protection rate	-	24	16	16	17	18	20	22	25	26	27	29
Reserves and future surpluses	(2,255)	(7,104)	321	838	856	875	918	909	906	930	954	969
Total other funding	(2,255)	(7,080)	337	854	873	893	938	932	931	956	982	998

Summary financial forecast

Omokoroa wastewater All information from 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual	Budget	Forecast									
	\$'000	\$'000	\$'000									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
Omokoroa wastewater	3,748	3,759	3,855	4,024	4,226	4,548	4,770	4,991	5,199	5,425	5,639	5,819
Total operating expenditure	3,748	3,759	3,855	4,024	4,226	4,548	4,770	4,991	5,199	5,425	5,639	5,819
Analysis of expenditure by class												
Direct costs	577	616	605	636	665	697	732	762	800	840	883	929
Overhead costs	403	386	355	315	325	323	331	353	350	358	382	378
Interest	2,099	2,126	2,218	2,391	2,546	2,831	3,003	3,166	3,331	3,503	3,642	3,772
Depreciation	669	631	676	683	690	697	704	711	718	725	732	739
Total operating expenditure	3,748	3,759	3,855	4,024	4,226	4,548	4,770	4,991	5,199	5,425	5,639	5,819
Revenue												
Targeted rates	1,008	1,108	1,234	1,379	1,536	1,679	1,696	1,870	2,061	2,348	2,670	3,028
Financial contributions	12	117	239	391	431	447	718	744	770	1,599	1,664	1,732
Subsidies	-	-	-	-	2,097	-	-	-	-	-	-	-
Vested assets	-	70	70	73	75	78	81	84	87	90	94	98
Total revenue	1,021	1,295	1,543	1,843	4,139	2,204	2,495	2,698	2,918	4,037	4,428	4,858
Net cost of service – surplus/(deficit)	(2,727)	(2,464)	(2,311)	(2,181)	(87)	(2,344)	(2,274)	(2,293)	(2,281)	(1,388)	(1,211)	(961)
Capital expenditure	215	7	27	7	2,097	-	-	-	-	-	-	-
Vested assets	-	70	70	73	75	78	81	84	87	90	94	98
Total other funding required	(2,942)	(2,541)	(2,408)	(2,261)	(2,259)	(2,422)	(2,356)	(2,377)	(2,368)	(1,479)	(1,305)	(1,059)
Other funding provided by												
Environmental protection rate	46	46	51	57	64	70	71	78	86	98	111	126
Debt increase/(decrease)	(97)	(103)	(130)	(144)	(159)	(175)	(194)	(214)	(236)	(261)	(289)	(321)
Reserves and future surpluses	2,993	2,598	2,487	2,347	2,354	2,527	2,479	2,513	2,518	1,642	1,483	1,253
Total other funding	2,942	2,541	2,408	2,261	2,259	2,422	2,356	2,377	2,368	1,479	1,305	1,059

Summary financial forecast

Te Puke wastewater All information from 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual	Budget	Forecast									
	\$'000	\$'000	\$'000									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
Te Puke wastewater	1,691	1,689	1,739	1,741	1,774	1,807	2,012	2,292	2,568	2,644	2,736	2,819
Total operating expenditure	1,691	1,689	1,739	1,741	1,774	1,807	2,012	2,292	2,568	2,644	2,736	2,819
Analysis of expenditure by class												
Direct costs	693	627	654	661	692	726	763	798	836	878	924	975
Overhead costs	348	331	327	325	334	336	345	363	368	376	394	397
Interest	102	138	160	150	137	128	200	333	406	414	422	430
Depreciation	548	593	599	605	611	617	704	798	958	977	997	1,016
Total operating expenditure	1,691	1,689	1,739	1,741	1,774	1,807	2,012	2,292	2,568	2,644	2,736	2,819
Revenue												
Targeted rates	1,356	1,495	1,639	1,803	1,977	1,939	2,109	2,284	2,475	2,693	2,936	3,202
User fees	1	-	-	-	-	-	-	-	-	-	-	-
Financial contributions	71	42	115	196	221	230	470	486	513	584	608	633
Interest	-	-	85	103	140	189	261	193	115	183	263	351
Total revenue	1,428	1,537	1,840	2,102	2,338	2,359	2,839	2,963	3,103	3,460	3,807	4,186
Net cost of service – surplus/(deficit)	(263)	(152)	100	361	564	552	827	670	535	816	1,071	1,367
Capital expenditure	157	382	261	119	85	308	4,826	5,054	90	83	134	234
Total other funding required	(420)	(534)	(160)	241	479	243	(3,998)	(4,383)	445	732	937	1,133
Other funding provided by												
Environmental protection rate	56	62	68	75	82	81	88	95	103	112	122	133
Debt increase/(decrease)	(108)	(281)	(199)	(288)	(299)	183	1,860	1,912	(120)	(139)	(143)	(133)
Reserves and future surpluses	472	752	291	(29)	(262)	(507)	2,050	2,376	(428)	(705)	(917)	(1,134)
Total other funding	420	534	160	(241)	(479)	(243)	3,998	4,383	(445)	(732)	(937)	(1,133)

Summary financial forecast

Waihi Beach wastewater All information from 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual	Budget	Forecast									
	\$'000	\$'000	\$'000									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
Waihi Beach wastewater	3,658	3,313	3,203	3,238	3,286	3,322	4,024	3,354	3,310	3,263	3,313	3,366
Total operating expenditure	3,658	3,313	3,203	3,238	3,286	3,322	4,024	3,354	3,310	3,263	3,313	3,366
Analysis of expenditure by class												
Direct costs	904	656	660	695	729	766	1,499	847	889	938	993	1,052
Overhead costs	416	388	355	318	326	324	339	347	345	350	368	369
Interest	1,489	1,488	1,400	1,428	1,426	1,420	1,365	1,331	1,239	1,130	1,098	1,083
Depreciation	849	781	789	797	805	813	821	829	837	846	854	863
Total operating expenditure	3,658	3,313	3,203	3,238	3,286	3,322	4,024	3,354	3,310	3,263	3,313	3,366
Revenue												
Targeted rates	2,328	2,581	2,842	3,139	3,455	3,403	3,701	4,010	4,344	4,728	5,153	5,620
User fees	20	-	-	-	-	-	-	-	-	-	-	-
Financial contributions	114	102	334	452	472	503	692	731	741	864	883	936
Subsidies	-	-	-	156	434	-	-	-	-	-	-	-
Vested assets	-	50	200	208	215	223	232	240	248	258	268	279
Interest	-	-	-	-	-	-	-	-	-	-	94	222
Total revenue	2,463	2,734	3,376	3,955	4,576	4,129	4,624	4,980	5,333	5,850	6,398	7,057
Net cost of service – surplus/(deficit)	(1,195)	(579)	173	717	1,290	807	601	1,626	2,023	2,586	3,086	3,691
Capital expenditure	60	239	630	642	890	293	149	69	61	111	111	308
Vested assets	-	50	200	208	215	223	232	240	248	258	268	279
Total other funding required	(1,255)	(868)	(656)	(132)	185	291	220	1,318	1,714	2,218	2,706	3,104
Other funding provided by												
Environmental protection rate	130	108	118	131	144	156	154	167	181	197	215	234
Debt increase/(decrease)	(291)	(251)	(290)	(153)	(206)	(390)	(555)	(702)	(778)	(836)	(947)	(945)
Reserves and future surpluses	1,416	1,011	828	155	(124)	(56)	181	(782)	(1,117)	(1,579)	(1,974)	(2,393)
Total other funding	1,255	868	656	132	(185)	(291)	(220)	(1,318)	(1,714)	(2,218)	(2,706)	(3,104)

Where the money comes from

Who benefits from this activity

Provision of reticulated wastewater systems in our 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.

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.

Wastewater reticulation systems, treatment facilities and disposal systems have surplus capacity designed to cater for projected future growth in accordance with our existing Structure Plans.

Funding sources

Financial contributions are used to fund the capital development of wastewater schemes, including holding costs where those schemes are required to accommodate future growth. In dealing with different types of funding, for example for growth and for existing ratepayers, loans which are serviced through Wastewater targeted rates are used, where appropriate, to finance capital expenditure (excluding renewals).

Revenue is generated from annual user fees and charges for those customers connected to the system. These include an Environmental Protection Rate which funds 4% of the revenue requirement. The remaining revenue, including renewals of capital and all operating, maintenance and financing costs and the share of capital expenditure that relates to existing ratepayers will come from:

- ▶ Area of benefit targeted rates (Uniform Annual Charges)
- ▶ Availability charges
- ▶ Multiple connection charges
- ▶ Capital charges
- ▶ Development levies
- ▶ Subsidies (if available)
- ▶ Fees and charges trade waste and connections

General rates may be used to service interest payments and growth-related debt in times of low growth. We propose to do this 2013-2016.

Additional asset requirements

Funding sources

Growth-related projects (capacity for future residents) will be recovered by financial contributions over a 25 year period and from future rates. These also include an allocation for interest.

Additional levels of service are funded by targeted rates for connections.

Renewals are funded from depreciation reserves provided from targeted rates.

Funding sources - Wastewater 2012/13

