KatikatiNatural environmentOngare PointCommunity building

Paengaroa Reduce Pongakawa Regulatory services Reuse Omokoroa

Recycle Rogers Road District Waihi Beach Representation Recover

Tuapiro PointLibraries & service centresGreenwastePios Beach

Tanners PointDispose MindenMonitor

Te Puna West Transportation Athenree

SOLID WASTE

Civil defence & emergency management

Kaimai Education Aongatete Water supply

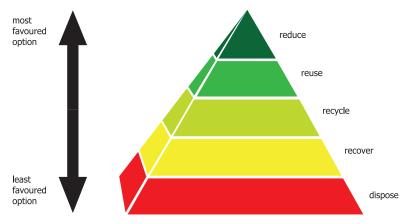
Island ViewEconomicTe Puke Stormwater Minden ReusePios Beach Planning for the future Plummers PointZero waste Maketu Planning Te Kauri Village Composting Support services Healthy environment Community facilities Pukehina Beach Waste minimisation Wastewater

SOLID WASTE

Overview

Human activity is inextricably linked to the health of our natural environment. A healthy environment is essential for overall well-being and prosperity. With our population growing, so demands on our natural resources will increase. The challenge is to lessen our impacts on the environment and reduce consumption and waste. Our Solid Waste Strategy sets out our sustainable development approach to the management of solid waste activities across our District.

The primary aim of this Strategy is to reduce the amount of waste produced overall by reducing, reusing, recycling and recovering. This is commonly referred to as the 'waste hierarchy'.



Our Strategy and actions have been developed in response to the changing waste management environment. Many of the actions are focused on encouraging change at an individual and household level. We also look at what actions can be taken at a community level to ensure that our District retains a healthy, waste-free environment for this and future generations.

Consistent with a community/household focus we do not plan to widely subsidise waste services to encourage a change in behaviour. Instead we will use other incentives to encourage responsible actions where necessary, such as providing recycling and greenwaste facilities and education programmes in schools, supported by a greater emphasis on enforcement for illegal dumping.

Our strategy seeks to progress the Joint Waste Management and Minimisation Plan's aspirational goal of 'zero waste' by 2015 and focus on waste minimisation to achieve this goal. The Plan will be reviewed after 2016 by this Council, Tauranga City Council and the Bay of Plenty Regional Council.

The Plan is available on our website www.westernbay.govt.nz/Documents/Services/A-Z%20 Services/Joint-waste-minimisation-Plan.pdf

We see our main roles being in planning for solid waste activities, education and enforcement to ensure individuals, households and businesses are dealing with their waste in the most responsible way. Our 'polluter-pays' principle guides our planning for this activity. This principle requires that those producing waste should pay the appropriate cost for its disposal and that by paying for its disposal people are more likely to change their behaviour and attitudes towards waste minimisation.

The Waste Minimisation Act 2008 puts a levy on all waste disposed of to landfills to generate funding to help local government, communities and businesses reduce the amount of waste. Territorial authorities receive 50% of the total money collected through the waste disposal levy and these payments are made on a population basis. The money must be spent on promoting or achieving waste minimisation in accordance with our Joint Sub-regional Waste Management and Minimisation Plan. We will continue to investigate suitable waste-related projects that could be either District-wide or benefit a specific area, subject to approval through the Annual Plan or Long Term Plan processes.

Free drop-off points for recyclable materials are provided at the Community Recycling Centres at Athenree, Katikati and Te Puke, they accept:

- glass bottles and jars
- paper and cardboard
- steel cans
- aluminium cans
- fluorescent light bulbs
- printer cartridges
- plastic soft drink bottles (number 1)
- plastic milk bottles (number 2)

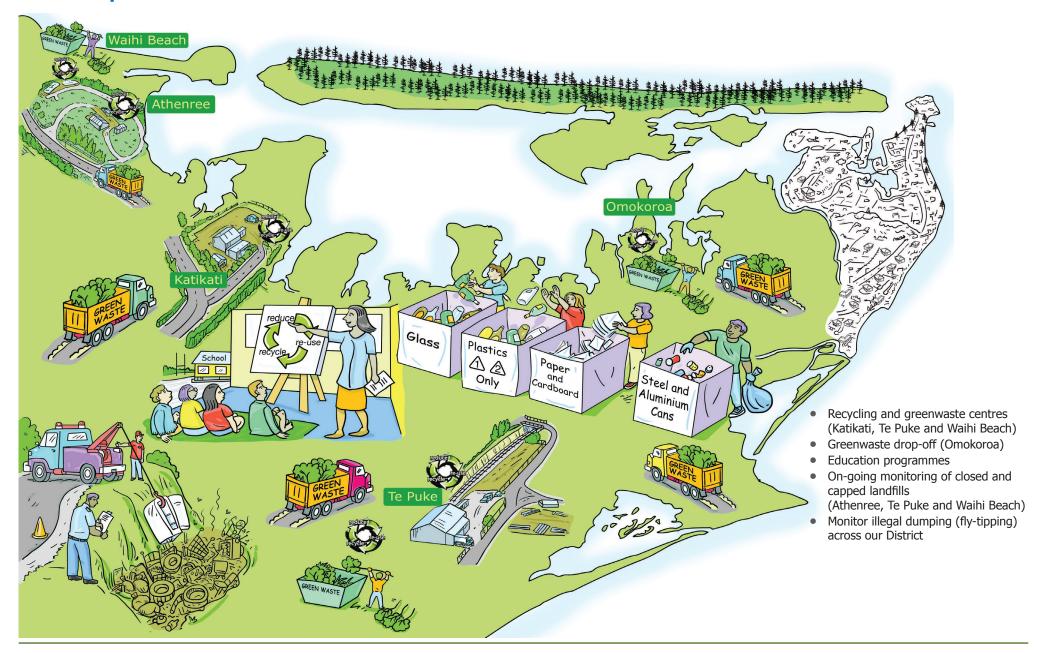
and, for a fee, we offer greenwaste disposal services at the above sites and also Omokoroa.

A recycling contractor collects the recycled materials from Athenree and Katikati and Council works in partnership with Avalon for the Te Puke recycling centre; recyclable materials are on-sold to reputable recyclers. This ensures recyclable materials are diverted from landfill.

Greenwaste is collected from the drop-off points by contractors for composting.

We maintain closed and capped landfills at Te Puke, Waihi Beach and Athenree in accordance with consent conditions. We have no plans to develop new cleanfill or landfill facilities in the District.

What we provide



Why we provide it

Our community outcome

Efficient waste management practices minimise environmental harm and waste

Our goals

- 1 Minimise the total quantity of residual waste for disposal through effective planning, education and enforcement so people reduce, reuse and recycle
- 2 Provide good information so people dispose of residual waste in an environmentally acceptable manner
- Work with our communities to create a clean environment by encouraging and recognising innovative solutions to waste problems

How we will achieve our community outcome

Goal	Our approach	Our role
Minimise the total quantity of residual	Illegally dumped waste	
waste for disposal through effective planning, education and enforcement so people reduce, reuse and recycle	 Change attitudes towards fly-dumping by ensuring that people know where they can dispose of their waste safely Work with local communities to achieve clean roadsides and waterways Monitor public spaces where fly-dumping occurs and where appropriate install mobile closed circuit television cameras at problem sites Pursue infringements and prosecutions where there is sufficient information to support such action 	Lead
	Refuse by-law	
	Enforce the Refuse By-law to ensure that all people in our District take responsibility for the proper disposal of their waste	Lead
	Design principles for new developments	
	Eco-design principles result in well-planned, well-executed and sustainable developments. We support the application of eco-design principles in developments when opportunities are available and will consider the inclusion of these principles in Council plans	Facilitator
	Advocacy	
	Advocate where possible for stronger responsibility by producers, brand owners, importers and retailers for the minimisation of waste accompanying their goods, e.g. packaging	Advocate
	Composting	
	Educate communities, households and workplaces on the benefits of composting organic waste and greenwaste	Advocate/Facilitator
	Provide greenwaste drop-off facilities that accept garden waste for composting off site	

How we will achieve our community outcome

Goal	Our approach	Our role
Minimise the total quantity of residual waste for disposal through effective planning, education and enforcement so people reduce, reuse and recycle	Recycling services (a) Recycling drop-off facilities Where viable options for recycling are proposed by private or community sectors we will investigate	Lead
	whether these options can enhance or replace our operated services (b) Weekly residential recycling collection Continue to monitor the effectiveness of private sector weekly 'kerbside' residential recycling collection through the licensing system and where necessary take enforcement action against private sector operators through the General By-law 2008	Lead/Research and Monitoring
	Public recycling Subject to community demand and willingness-to-pay, work with community boards to establish public recycling facilities in public places	Facilitator
	Education and information Education and information are vital tools for changing attitudes and behaviours towards waste minimisation and management	
	(a) Partners in providing education and distributing information Partner with organisations that specialise in waste matters, for example Tauranga City Council the Bay of Plenty Regional Council, Ministry for the Environment, Environmental Education for Resource Sustainability Trust and waste service businesses to ensure a co-ordinated, consistent and up-to-date response to education and information needs	Partner
	 (b) Schools Support the waste minimisation education programme in schools across our District Advocate for central government to assume responsibility for waste minimisation education as a core part of the education curriculum 	Partner/Advocate
	(c) Community Assist in funding waste minimisation education programmes for the wider community, targeting community groups and organisations in the first instance, as well as community events	Partner
	(d) Business and rural sectors Support key business and rural sector groups to establish waste minimisation education programmes that each sector can own and sustain into the future	Facilitator

How we will achieve our community outcome

Our approach	Our role
(e) Communication Provide user-friendly access to waste services information available through our libraries and service centres and our online Waste Services Directory. We operate libraries and service centres at Katikati, Omokoroa, Te Puke, Waihi Beach and a service centre at Barkes Corner, Tauranga. These centres will provide the first line of response on waste services and information requests. From time to time, we may tour special displays on solid waste. We will establish a web page on waste services information. This information will be updated regularly as part of administering the licensing system for waste operators. Other related businesses will also be encouraged to list information with us on their location and the types of waste material that they specialise in.	Lead
(f) Welcome pack Include information on weekly kerbside collections and drop-off facilities within the welcome pack we distribute to all new residents in our District	Lead
(g) Waste exchange Continue to support the Waste Exchange Register, a Waikato-Bay of Plenty information database of business waste materials that are available for others to use	Partner
(h) Signage Ensure that industry-standard signage is provided showing where waste materials can be disposed of at known fly-tipping trouble spots	Lead
Hazardous waste management Provide funding to the Bay of Plenty Regional Council for the safe collection, storage and disposal of hazardous waste	Facilitator
Landfills Continue with our aftercare responsibilities for closed landfills at Athenree, Strang Road, Te Puke and Waihi Beach as required by the conditions of resource consent. Landfill facilities and user-pays drop-off sites for specific waste are provided by the private sector	Lead
Community waste initiatives (a) Provide grants to community groups interested in establishing local waste management initiatives that adopt environmentally sound practices (b) Support community organisations in their applications to appropriate funding sources to establish such	Partner/Advocate/Facilitator Partner/Advocate
	(e) Communication Provide user-friendly access to waste services information available through our libraries and service centres and our online Waste Services Directory. We operate libraries and service centres at Katikati, Omokoroa, Te Puke, Waihi Beach and a service centre at Barkes Corner, Tauranga. These centres will provide the first line of response on waste services and information requests. From time to time, we may tour special displays on solid waste. We will establish a web page on waste services information. This information will be updated regularly as part of administering the licensing system for waste operators. Other related businesses will also be encouraged to list information with us on their location and the types of waste material that they specialise in. (f) Welcome pack Include information on weekly kerbside collections and drop-off facilities within the welcome pack we distribute to all new residents in our District (g) Waste exchange Continue to support the Waste Exchange Register, a Waikato-Bay of Plenty information database of business waste materials that are available for others to use (h) Signage Ensure that industry-standard signage is provided showing where waste materials can be disposed of at known fly-tipping trouble spots Hazardous waste management Provide funding to the Bay of Plenty Regional Council for the safe collection, storage and disposal of hazardous waste Landfills Continue with our aftercare responsibilities for closed landfills at Athenree, Strang Road, Te Puke and Waihi Beach as required by the conditions of resource consent. Landfill facilities and user-pays drop-off sites for specific waste are provided by the private sector Community waste initiatives (a) Provide grants to community groups interested in establishing local waste management initiatives that adopt environmentally sound practices

How we will achieve our community outcome

Goal	Our approach	Our role
Work with our communities to create a clean environment by encouraging and recognising innovative solutions to waste problems	Events and promotions (a) National promotions Assist in the promotion of national campaigns that contribute to the goals for solid waste by providing community group contacts and local administrative support	Partner
	(b) Recognition of community actions Advocate for the introduction of local awards to recognise outstanding contributions and innovations by communities and businesses to achieving our solid waste goals	Advocate
	(c) Mobile recycling and waste services Provide event organisers with a resource kit to encourage waste reduction and recycling at major events in line with the Western Bay of Plenty Sub-regional Events Strategy	Advocate





\Rightarrow Average weights for recyclable material per cubic metre

On average: Kg/m3

Glass: 240kg (Source: Recyclonomics)

Plastics: 25kg (Source: Recyclonomics + averages)

Cardboard: 30kg (Source: Recyclonomics)

Paper: 90kg (Source: Full Circle)

Aluminium: 30kg (Source: Recyclonomics) Steel cans: 90kg (Source: CMA recycling) Solid steel: 700kg (Source: CMA recycling)

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 number	Project name	\$′000									
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
318601	District-wide solid waste - waste minimisation funding pool	-	-	-	72	148	153	158	163	169	175
318602	Investigation and enforcement of District-wide waste minimisation	20	21	-	-	-	-	-	-	-	-
318603	Contribution to Katikati College and Te Puke High School for Enviro- Challenge Programme	5	-	-	-	-	-	-	-	-	-

Major projects planned for 2012 - 2022

Waste minimisation funding pool

This pool of funding is set at \$130,000 each year between 2017 – 2022 (\$967,274 in total including an adjustment for inflation).

Future projects may include:

- Investigation of a recycling/drop-off facility on Matakana Island in conjunction with an upgrade of the Omokoroa greenwaste facility (dependent on population growth)
- Installation of weighbridge facilities at Katikati and Te Puke recycling facilities to assist in reporting accurate data on recycled volumes to the Ministry for the Environment
- Investigation of composting for sewage sludge disposal
- Investigation and enforcement of District-wide waste minimisation \$41,000 for 2013 and 2014 (including an adjustment for inflation)
- Funding of \$5,000 for delivery of the Envio-Challenge programme for Katikati and Te Puke High schools in 2013

Weights for whiteware on average/per piece:

Dishwasher – 55kg

Dryer – 45kg

Refrigerator – 80kg

Microwave – 20kg

Oven/stove - 90kg

Washing Machine - 50kg

 □ Total percentage by weight of recyclables from Katikati & Waihi Beach Recycling Centres

Glass - 70%

Paper - 17%

Plastic - 4%

 □ Total percentage by weight of recyclables from Te Puke Recycling Centres
 □

Glass - 48%

Paper - 28%

Plastic - 4%

DID YOU KNOW?



How we will track progress towards our goals



Efficient waste management practices minimise environmental harm and waste

Goal	We'll know we're meeting our goal if	Actual	tual Target				
		2011	2013	2014	2015	2016 - 18	2019 - 22
The total quantity of residual waste for disposal is minimised by reduction, reuse and recycling	Percentage of actions, identified in the Solid Waste Action Plan for the year that have been completed. This identifies the total annual actions required for this strategy. Actions are required within specification and budget	100%	90%	90%	90%	90%	90%
People dispose of residual waste that they cannot reduce, re-use or recycle in an environmentally acceptable manner	Percentage of customer satisfaction with household rubbish disposal methods. As measured through our Annual Residents' Survey, those customers who are 'very satisfied' and 'satisfied'	65%	≥70%	≥70%	≥70%	≥70%	≥70%
Council and communities work together to create a clean environment	Percentage of waste recycled or recovered as estimated and reported by licensed operators (excludes waste disposed of privately) We include estimates because we do not have weighbridges	0%	40%	40%	50%	50%	65%
	Number of initiatives funded by the Ministry for the Environment Waste Minimisation Scheme	1	1	1	1	1	1

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
All Council-owned solid waste facilities, including closed landfills, meet environmental standards	Number of abatement/infringement notices received	0	0	0	0	0	0
Provide and maintain drop-off recycling services	Number of greenwaste and/or recycling facilities provided	4	4	4	4	4	4
Assist in the provision of opportunities for the removal of hazardous waste	Number of 'haz-mobile' collection services held in our District each year	1	1	1	1	1	1

Key assumptions

Assumption	Description	Risk		
Solid waste changes in technology	Technology could potentially reduce operational and disposal costs and reduce impacts on the environment	Increased costs and mitigation measures		
Changes to attitude that 'waste needs to be disposed of', based on research and implementation of the Waste Minimisation Act 2008	Research opportunities provide ways of trialling alternative practices that make waste a valuable resource. It is recognised that research opportunities take a reasonable time to establish, deliver results and test the sensitivity of those results. Product stewardship and waste levy provisions in the Waste Minimisation Act 2008 should assist in attitude change	The proportion of different types of waste diverted for uses other than disposal does not increase		
Solid waste generation rate Note: this includes diverted materials	Estimate of 640kg per year of municipal solid waste per person, reducing over ten years	Progress towards waste minimisation not achieved		
Solid waste levels of service	It is assumed that levels of service for recycling facilities may increase and all other levels of service will remain constant	Changes in funding required due to changes in levels of service		
Solid waste socio-economic profile	Social changes and economic growth lead to increased waste generation created by increased consumption, less time to sort and separate waste and less need to reuse materials. Conversely in an economic downturn individuals may not have money to pay for rubbish collection and may resort to fly-dumping and illegal disposal	If changes in the socio-economic profile of residents leads to a change in behaviour facilities will either be under-or over-utilised. This may lead to increased costs or uneconomic operation of facilities		
Solid waste environmental consciousness profile	Communities in the western Bay of Plenty district are more conscious of the environmental impact of their actions. Willingness to take actions to reduce this acknowledged impact will take time to establish	If changes in the environmental- consciousness profile of our residents leads to behaviour contrary to the assumption made, facilities will either be under-or over-utilised. This may lead to increased costs or uneconomic operation of facilities		
Waste Minimisation Act	The Waste Minimisation Act was passed in September 2008. The Act provides for, among other things, additional funding through a waste levy to be collected on waste delivered to landfill sites and applied to waste minimisation activities and product stewardship schemes	Changes to the Act could result in reduced funding or elimination of the waste levy		
Joint Solid Waste Management and Minimisation Plan	Tauranga City Council and Western Bay of Plenty District Council will continue to maintain a Joint Solid Waste Management and Minimisation Plan. Waste management and minimisation plans are required by section 41 of the Waste Minimisation Act 2008	If partner councils fail to work together on the Plan there may be additional costs		

Significant effects of providing this activity

Well-being	Positive	Negative	How we are addressing these effects
Social	 Providing recycling facilities promotes environmental consciousness Community and school involvement in programmes Better awareness of waste minimisation methods fosters improved community health, safety and well-being Community participation in services and events provides positive social feedback 	Under-provision of recycling facilities fails to promote a positive shift in the community's attitude to waste	Each main urban community in our District has greenwaste and/or recycling facilities
Environmental	 The hazardous waste collection removes potentially harmful substances Protection and enhancement of our District's environment 	 Landfill sites can create leachate that infiltrates groundwater and gases that are discharged into the environment Collection services can lead to visual pollution on roadsides 	 We will continue to manage and monitor the closed landfill sites to meet compliance with Resource Consent conditions We will not develop additional landfill sites We will continue to license and monitor waste collection operators
Economic	 Provision of user-pay services ensures that the generator of waste pays for the provision of the service 	 User-pays can lead to illegal dumping of rubbish to avoid payment Financial cost of recycling and disposal services. The cost of recycling services is affected by the world markets for recyclable materials, for example glass and plastic 	We monitor trends in these markets and revise the expected costs of our recycling services through the Annual Plan or Long Term Plan processes. These cost are weighed against the environmental benefits of recycling
Cultural	 Waste disposal services protect culturally sensitive Māori land and water resources 	Waste entering water bodies affects the mauri of the environment	We will continue to take enforcement action against fly tipping

Summary financial forecast

Solid waste All information from 2014-2022 includes an adjustment for inflation

For the years ended 30 June	Actual	Budget					Forec					
	\$ ′000	\$′000					\$′00					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Analysis of expenditure by activity												
District solid waste	411	396	507	526	525	618	719	749	776	806	845	880
Western solid waste	395	524	521	540	553	562	579	604	626	653	684	713
Eastern solid waste	356	374	399	408	419	428	436	450	458	468	487	506
Central solid waste	112	133	136	144	153	160	169	179	188	197	208	218
Total operating expenditure	1,273	1,427	1,564	1,618	1,650	1,767	1,903	1,982	2,048	2,124	2,223	2,317
Analysis of expenditure by class												
Direct costs	741	860	987	1,031	1,056	1,178	1,309	1,367	1,427	1,495	1,569	1,647
Overhead costs	463	457	452	465	478	483	494	514	520	530	552	561
Interest	39	86	88	85	77	66	59	58	57	54	56	60
Depreciation	30	24	36	38	39	40	41	43	44	46	47	49
Total operating expenditure	1,273	1,427	1,564	1,618	1,650	1,767	1,903	1,982	2,048	2,124	2,223	2,317
Revenue												
Targeted rates	729	788	892	982	1,077	1,101	1,147	1,240	1,340	1,458	1,588	1,730
User fees	25	82	63	67	71	75	79	84	89	96	103	110
Subsidies	129	125	130	135	140	145	151	156	161	167	174	181
Interest	-	-	-	-	-	-	2	4	8	13	34	45
Other income	(79)	25	20	21	-	-	-	-	-	-	-	-
Total revenue	805	1,020	1,105	1,204	1,287	1,320	1,378	1,484	1,599	1,734	1,899	2,067
Net cost of service – surplus/(deficit)	(468)	(406)	(458)	(414)	(363)	(447)	(525)	(498)	(449)	(390)	(324)	(250)
Capital expenditure	445	260	-	-	-	-	-	-	-	-	-	-
Total other funding required	(913)	(666)	(458)	(414)	(363)	(447)	(525)	(498)	(449)	(390)	(324)	(250)
Other funding provided by												
Environmental protection rate	405	359	487	505	525	545	568	593	614	639	670	699
Debt increase/(decrease)	(434)	(11)	(4)	(13)	-	-	-	-	-	-	-	-
Reserves and future surpluses	941	318	(25)	(78)	(162)	(98)	(43)	(95)	(165)	(249)	(346)	(448)
Total other funding	913	666	458	414	363	447	525	498	449	390	324	250

Where the money comes from

Who benefits from this activity

Our District as a whole benefits from the education, promotion of waste minimisation, planning for and monitoring waste.

The community benefits from the remediation and monitoring of closed landfills to prevent downstream effects on our environment.

Local areas benefit from greenwaste and recycling facilities.

Funding sources

Solid waste targeted rates over the applicable area of benefit are used to service capital expenditure (excluding renewals) which is initially loan funded.

Operational, maintenance and renewals costs are funded from the Environmental Protection Rate, area of benefit targeted rates, income from the Waste Minimisation levy and user fees.

Funding sources - Solid waste 2012/13

