

WASTE MANAGEMENT AND MINIMISATION PLAN 2018







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Part A

Foreword

This is the Council's third Waste Management and Minimisation Plan (WMMP), the last one being adopted in 2012. The statutory review cycle for Waste Management Plans is 6 yearly, but this review has been carried out a little earlier than required so it can inform the Council's next Long Term Plan (LTP), which among other things sets out the levels of service for its various activities that the Council proposes to provide in the following 10 year period.

The previous WMMP contained a commitment to investigate the feasibility of introducing a multiple bin kerbside collection system, and this was carried out in 2014 with community feedback on the results being sought in October of that year. Positive feedback from that process led to a firm proposal for the introduction of kerbside bin services to be included in the draft 2015 -2025 Council LTP. However, the Council decided not to introduce bin services. The Council became concerned from the public submissions on the LTP, that the proposals as they stood would have increased rates, which could create financial difficulties for a sector of the community. At the time staff were asked to "go back to the drawing board" to investigate cost-effective ways/methods to further advance waste minimisation.

The draft WMMP therefore included new proposals for bin based kerbside collection services, but they allowed the flexibility for those that did not want to use the proposed new bin services to continue to use the same recycling bin as at present and to continue to buy Council bags and place them at the kerbside to deal with their refuse. This final document includes the "Your Choice" kerbside service that was included in the Council's 2018-28 Long Term Plan (LTP). This service gives ratepayers the choice of using bags or bins for Council rubbish collection, and the choice of bins for a Council-provided mixed organics collection.

Of course a WMMP is about more than just kerbside services. It examines all waste issues that have been identified within the district, including how to further advance waste minimisation. It considers which waste management and minimisation issues need to be addressed, and if so, how they might best be dealt with. Details of those assessments are included in this plan and its accompanying document the Waste Assessment.

The Waimakariri District already performs well in its efforts at waste minimisation, with a waste to landfill per capita well below the average for other like districts. More can always be done though, and the WMMP identifies both those actions that Council proposes to keep doing, as well as new initiatives that are expected to improve the amount of waste diversion.

Most waste streams in the country contain large amounts of organic waste, and many Councils have faced or will face a decision as to whether make a step change in waste diversion by addressing organics. This WMMP provides an opportunity for the community to express its views about whether it wants to take that step at this particular time.

Feedback on this document will determine the decisions the Council will make about which actions and initiatives will go forward into the budget for the 2018-2028 Long Term Plan, which in turn will affect the amount of waste going to landfill. The choices to be made and their effects are clearly shown in the graph on page 28 of the Waste Assessment.



1 Introduction

Waimakariri District Council (the Council) has a statutory responsibility under section 42 of the Waste Minimisation Act 2008 (the Act) to "promote effective and efficient waste minimisation" within the Waimakariri District. In order to do this, the Council is required to adopt a Waste Management and Minimisation Plan (WMMP) under section 43 of the Act.

This WWMP is a guiding document which identifies Waimakariri's vision, goals, objectives, targets and methods for achieving efficient and effective waste management and minimisation. It also provides information on how Council intends to fund the activities of the WMMP over the next six years.

In addition to the legislative framework in which this WMMP has been developed, it has also been developed in the context of the New Zealand Waste Strategy 2010 (NZWS) and its two goals of:

- Goal 1: reducing the harmful effects of waste
- Goal 2: improving the efficiency of resource use

The adopted waste targets are to:

- Reduce annual per capita waste to landfill to 236kg per capita over a 10-year period
- Increase the annual per capita quantity of materials diverted to 228kg per capita over a 10-year period

This WMMP should also be read in association with Councils Waste Assessment (WA). With the exception of the vision, goals, objectives and targets, those matters covered in detail in the WA are not repeated in full in this WMMP, but are summarised where appropriate. A copy of the WA is attached as Appendix A to this WMMP.

This WMMP covers solid waste generated in the Waimakariri District including biosolids generated from wastewater treatment. In developing the Plan to address solid waste in the District the Council has considered the waste minimisation hierarchy of reduce, reuse, recycle, recover, treatment and disposal.



2 Vision, goals, objectives, policies and targets

Working together, Council and the community can achieve more effective and efficient waste management and minimisation in the District. Council is proposing the following vision, goals, objectives and targets. Taken together these form the strategy for Council's WMMP.

2.1 Vision for the future

Our vision for the future is:

"To value resources and eliminate waste and its harm to the environment"

2.2 Goals, objectives, policies and targets

Goals

The goals that we will use are those from the New Zealand Waste Strategy:

- Improving the efficiency of resource use
- Reducing harmful effects of waste

Our objectives and policies

Our objectives and policies to meet our goals are:

Table 1 Objectives and Policies

Goals	Objectives:	Policies		
Goal 1: Improving the Efficiency of Resource Use	 Our community has opportunities for avoiding or reducing waste at source. 	 Provide practical information and advice to all parts of the community (residential, businesses, industry) on how to minimise waste 		
	2. The Council works with other councils, central government, industry and other parties to improve product stewardship (i.e. aiming to reduce the environmental	 Collaborate with other councils to collectively promote producer responsibilities and product stewardship in the District and Region Promote and support product stewardship programmes operating in-district 		
	 impact of the life cycle of products). 3. Our community has opportunity to maximise the diversion of material for reuse, recycling or recovery. 	 Improve opportunities for residential and commercial properties to divert reusable and recyclable material from the waste stream at source 		
		• Ensure that there is adequate infrastructure provided to manage diverted material		
		Use bylaws where appropriate to facilitate waste minimisation		
	 The range of diverted material will be improved and the quality of these materials enhanced. 	 Set a baseline of the current quantity of materials diverted and monitor and measure the diverted materials to determine if there is an increase in diversion as a result of changes in the range and quality of diverted materials 		





Goals	Objectives:	Policies
Goal 2: Reducing Harmful Effects of Waste	 Our community has access to services for effective and efficient management of waste that comply with current environmental and health practices. 	 Continue providing timely convenient and cost effective kerbside waste collection services to serviced areas and extend areas where needed Ensure that cost-effective convenient facilities such as drop-off points, resource recovery park, transfer station facilities and hazardous and clean fill waste are available for residents to dispose of waste Continue providing timely, convenient and cost effective management of litter in public spaces Work with commercial service providers to ensure that adequate alternative services are available for disposal of waste when the council is not providing the service
	2. The disposal of sewage treatment residuals complies with current environmental and health practices	• Ensure the management of sewage treatment residuals is consistent with best practice
	 Our community is informed and educated regarding issues regardin hazardous waste and residual 	 Provide practical information and advice to the community on how to minimise and dispose of hazardous and residual waste
	waste.	 Gather and report on information about waste streams in the District to ensure effective waste management

Our targets

The **advanced** option for improved services and waste minimisation initiatives has been adopted after consultation of the draft WMMP and LTP. Under this option our targets are to:

- Reduce annual per capita waste to landfill from 294kg per capita in 2015/16 to 236kg per capita over a 10-• year period.
- Increase the annual per capita quantity of materials diverted from 170kg per capita in 2015/16 to **228kg per capita** over a 10-year period.



3 The waste situation

3.1 Overview of existing waste management and minimisation infrastructure and services

A summary of the current services provided by Council and non-Council providers is outlined below. For a detailed description of Council and non-Council solid waste services, refer to Part 1 and Appendix 1 of the attached Waste Assessment.

Services provided by Council

The main services and facilities include:

- Kerbside waste collection (user pays bags)
- Kerbside recycling collection (bins funded by a targeted rate)
- Drop off facilities at Kairaki Beach, Waikuku and Woodend Beach
- Oxford Transfer Station
- Southbrook Resource Recovery Park (RRP)
- Sutherlands Pit clean fill disposal site
- Hazardous waste drop off facilities
- Waste minimisation education
- Management of five closed landfills

Council does not operate its own landfill with residual waste being sent to the regional Kate Valley landfill facility in the Hurunui District.

Governance arrangements for regional waste minimisation lie with the Canterbury Waste Joint Committee where nine councils are represented, including Waimakariri.

All recyclable materials from kerbside collections are sent to the Eco Central Limited Materials Recovery Facility (MRF) in Christchurch.

Non-council provided services and facilities

Private companies meet the waste collection requirements of business and households beyond those supplied by Council and have approximately a two-thirds share of the domestic collection services market. These services are provided at an additional cost and include:

- Kerbside refuse collection (residential and business)
- Collection of divertible material recyclables and green waste
- Collection of agricultural recycling and agrichemical containers
- Hazardous waste collection and disposal



3.2 Public health protection

The range of public and private waste services in the Waimakariri District and Canterbury region ensures public health will be adequately protected in the future. Waimakariri has access to a landfill that meets national legislative requirements for at least 20 years. The community has adequate access to council or privately-owned drop-off and collection services for refuse, hazardous waste and litter, but further waste minimisation is achievable as outlined in this Plan. This Plan proposes services for better waste minimisation.

The Canterbury District Health Board reviewed the Waste Assessment and draft WMMP and confirmed that they had no comments to add.

3.3 Summary of the volume and composition of waste and diverted materials

The Council is currently sending 16,580 tonnes of refuse to the Kate Valley Landfill. Around 2,450 tonnes is from the Council kerbside collection, 300 tonnes from litter bins, removal of fly-tipping, and other Council contracts, and the remainder includes private waste collections from commercial and residential properties (8,880 tonnes) and waste self-delivered by residential and commercial customers (4,950 tonnes). More detailed information about the Districts waste and its composition is provided in the Waste Assessment (Appendix A).

Due to commercial sensitivity, limited data is available on the type and volume of waste collected by private waste providers although it is recognised that some waste will be transported in (or out) of the district for reuse, recycling or disposal. At this stage, it is not possible to track waste that has been transported from outside the District to Councils facilities for disposal.

A summary of the per capita waste in the Waimakariri District, composition of Council domestic kerbside refuse bags and composition of general waste received at the Southbrook RRP is shown in Figure 1 and Figure 2 below.

Figure 2 shows that the total amount of waste going to landfill per capita per year has remained relatively static since 2011/2012 with only a minor increase noticeable in the 2013/2014 year. The quantity of recycled material overall has also remained relatively static since 2011/12 and the total amount of other diverted material also remained static over the same period.



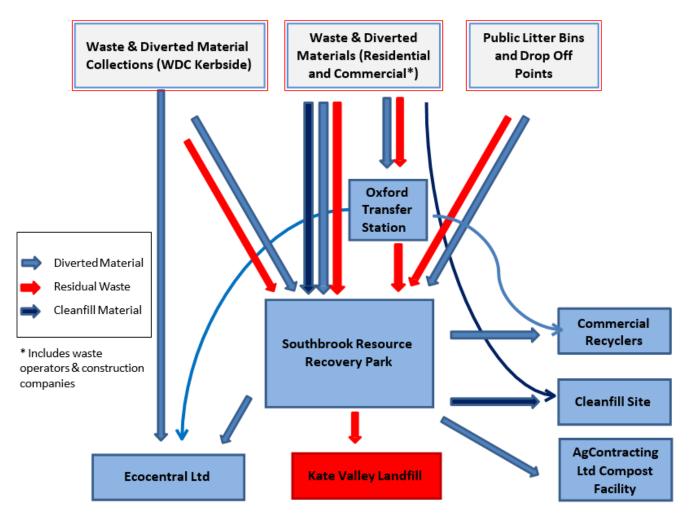


Figure 1 Source and Destination of Waste and Diverted Materials managed by the Council

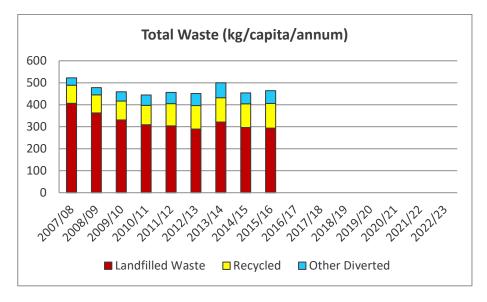


Figure 2 Composition of total waste per capita per year



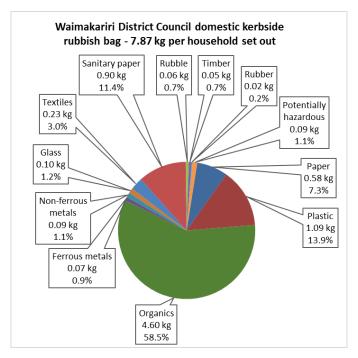


Figure 3 Composition of Council domestic kerbside refuse bags (SWAP 2017)

Figure 3 shows that the highest proportion of waste material in kerbside refuse bags was organic making up over half of the waste collected at 58.9%. Other potentially divertible material includes plastics, paper, glass, metals, timber and textiles, totalling a further 28.3%. These waste streams represent significant opportunities to divert more waste from landfill.

The composition of the overall waste stream being disposed of to the Kate Valley landfill from Southbrook RRP was calculated by combining four separate waste streams that were assessed in the audit; kerbside rubbish bag collection from the Council; privately collected domestic kerbside bins; general waste and waste from the Oxford transfer station.

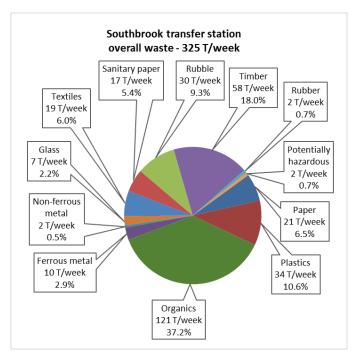


Figure 4 Composition of overall waste received at the Southbrook RRP (SWAP 2017)



Figure 4 gives the waste composition breakdown of the general waste that is sent to landfill from the Southbrook RRP in 2017. Organic waste (garden and food waste) made up the largest proportion of the waste (37.2% of total). Timber was the second largest (18.0%), followed by plastics (10.6%), rubble (9.3%), paper (6.5% each) and textiles (6.0%). There remains a significant opportunity to divert more waste from landfill at Southbrook RRP.

Sewage treatment residuals

Screenings are removed from all of Council's wastewater treatment plants and are taken to Christchurch City Council's Bromley wastewater treatment plant for further treatment. Oxidation pond sludge is placed in geotextile tubes to dewater over a number of years. Once dried the sludge will be tested and disposed of in accordance with relevant environmental and health requirements. It is proposed that this practice will continue.

3.4 Forecast future demand

Population growth, and to a lesser extent economic growth, is expected to increase and total waste is expected to increase accordingly. Diversion services are required to limit the pressure on the landfill and other waste handling facilities to be able to manage the associated increase in demand for waste services. Council has adopted a growth scenario for the purposes of infrastructure planning between the medium and high growth scenarios from Statistics NZ, with a District expected population in 2048 of approximately 97,000.

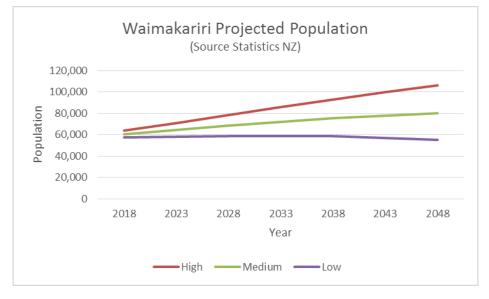


Figure 5 Projected Population

3.5 Cost of the current level of service

Council provides its waste services and facilities at an annual cost of \$6,200,000 (FY2015/16). Funding is predominantly provided through user charges (facility gate fees and rubbish bag sales; \$4,900,000) and rates (general and targeted; \$1,300,000). Solid waste accounts for approximately 8% of Council's total operating costs and approximately 4% of Council's rates funding. Due to growth, it is anticipated that the current level of service will cost \$7,300,000 by 2017/18.

On average, ratepayers inside the serviced areas pay \$86 per household per year in targeted rates from 2017/18, and households either purchase WDC-branded bags to use Council's rubbish bag service or have a private wheelie bin service. Council bags cost \$3.00 each (from 2017/18). The annual cost in 2017/18 for 52 bags plus the targeted rate for the recycling service would be \$242.



The targeted rate was increased from \$86 to \$103 in 2018/19 owing to the effects of fluctuating global recycling markets.

Private wheelie bin services cost from \$202 to \$740 per year depending on the size of the wheelie bin requested and the frequency of collection. This cost is additional to the targeted rate for the recycling service.

In addition, households and commercial customers pay for waste disposal when using the Southbrook RRP or Oxford Transfer Station.

Table 2 Council services currently provided and their funding methods

Council Service	Funding Methods
Waste minimisation education, promotion, enforcement (e.g. by	National waste disposal levy
law), communication, monitoring and policy development	Sale of recyclables
	General rate
Kerbside collection of waste	Targeted rate
	 User charges (via refuse bag purchase)
Kerbside collection of recyclables	Targeted rate
Waste disposal, Southbrook RRP and Oxford Transfer Station	User charges
	General rate
	Sale of recyclables
Diversion at Southbrook RRP and Oxford Transfer Station and	• General rate
public drop off points	Local waste disposal charge
Provision of public litter bins	General rate



4 Policies, plans and regulation

There is a clear legislative and policy framework within which the Council provides waste services and facilities within its District. A summary of the framework and legislation is outlined below, however a full and complete list of the legislation, plans and regulations that create the waste framework within which this WMMP is based, is included in Appendix B.

While the Waste Minimisation Act sets out the legislative requirements regarding waste, the New Zealand Waste Strategy 2010 (NZWS) provides the Government's strategic direction for waste management and minimisation in New Zealand. The goals of this WMMP replicate those from the NZWS.

Local, regional and national plans and policies affect the Council's provision of waste and diverted material services. Primarily, they are requirements under the WMA and the Local Government Act 2002. Figure 6 below illustrates the statutory planning requirements that the Council is required to follow.

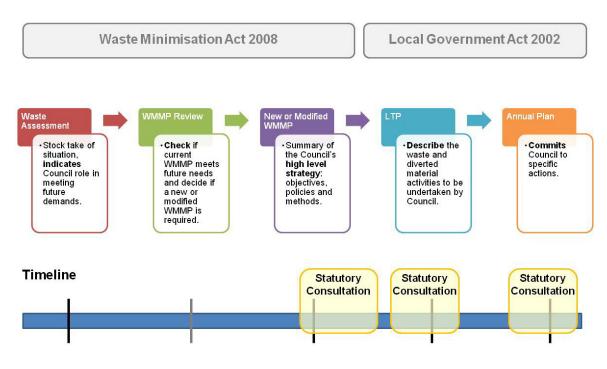


Figure 6 Statutory planning sequence

4.1 Key legislation

A summary of the key legislation affecting waste is listed below. A more detailed description of this legislation and a list of other related legislation is included in Appendix B:

- Waste Minimisation Act 2008
- Local Government Act 2002
- Resource Management Act 1991
- Climate Change Response Act 2002 (Emissions Trading)
- Litter Act 1979
- Health Act 1956



4.2 Other relevant documents

The Council and Environment Canterbury have a number of other strategic documents that are integral to waste management, including:

- Canterbury Hazardous Waste Management Strategy 2006
- Canterbury Regional Policy Statement
- Canterbury Land and Water Regional Plan
- Proposed Canterbury Air Regional Plan
- Waimakariri District Council Long Term Plan 2015-2025 (note the 2018-2028 Plan will be informed by this WMMP)
- Solid Waste and Waste Handling Licensing Bylaw 2016
- Waimakariri District Council Solid Waste Activity Management Plan 2018



5 Proposed methods for achieving effective and efficient waste management and minimisation

5.1 Council's role

In undertaking this WMMP Council has considered what options are available for it to achieve effective and efficient waste management and minimisation to meet future demands for services and facilities.

Service provision	Providing or facilitating the provision of waste management or waste minimisation service
Governance	Council further investigating demand and the cost effectiveness of services and options to meet demand, either alone or in collaboration with other councils or private sector parties
Regulation	The Council using a legal mechanism to facilitate or promote waste management and waste minimisation e.g. bylaws and District Plan rules
Community leadership	Providing information and promoting awareness and involvement in waste management and waste minimisation activities
Advocacy	Promoting actions to address waste reduction and waste management issues which are outside the Council's direct control e.g. advocate for appropriate legislation, standards and guidelines to the Regional Council and the Government
Financier	Investing in initiatives that facilitate waste management and minimisation activities, e.g. grants and subsidies, developing a waste minimisation industry cluster

The role of the Council includes:

In providing waste management and minimisation services, the Council will aim to make existing services more cost effective and ensure that any increases to levels of services are both cost effective and affordable. The Council will, as far as practicably possible, make services accessible to the majority of the District.

5.2 Opting out of providing waste services

As an alternative to Council continuing to provide waste services and facilities, Council could decide to opt out of providing waste services all together. This would require the commercial sector to provide all waste services for the District.

In 2008, the Council sought the public's view on Council withdrawing from collecting waste as part of the consultation on the WMMP. The feedback from the public was clear that they did not want that to happen, and Council has subsequently continued to provide waste services.

5.3 Identified district waste issues

Council has reviewed progress against the previous WMMP action plan and has identified waste issues that need to be addressed. The options considered to deal with these issues include education, regulation, and service provision. Options were assessed for alignment with the vision, goals and objectives, costs and ease of implementation before a preferred option was identified. Table 3 below provides a summary of the issues and Councils preferred option to deal with each issue.



Table 3 Summary of District specific issues and preferred option to respond to each issue

#	Issue	Preferred option to respond to issue		
1.	A high volume of domestic divertible material is going to landfill	 Provide information to customers on how to responsibly dispose of organic and recyclable waste, including using private waste collection services Provide separate organic bin and collection service Investigate the provision of additional recycling drop off points or facilities 		
2.	Meeting differing needs of rural and urban households and businesses	 Refine and publish Council policy regarding extent of kerbside collection service, both the urban/rural boundary and residential/commercial extent of service 		
3.	Lack of capacity at Southbrook Resource Recovery Park	 Upgrade the Southbrook Resource Recovery Park including the recycling recovery area, refuse disposal pit re-use shop and education facility 		
4.	Inappropriate farm waste / rural disposal practices result in damage to the environment	• Adopt a proactive and collaborative approach working with Environment Canterbury, the Canterbury Waste Joint Committee, Ministry for the Environment and private sector parties such as AgRecovery and Federated Farmers on farm waste management in addressing the potential for harm to the environment and adverse community health effects		
5.	High volume and increasing proportion of construction and demolition waste going to landfill	 Adopt a proactive and collaborative approach to work with the construction and demolition industry to change behaviours through education, promote waste separation, recycling of materials and beneficial reuse Support regional development of clean fill regulation 		
6.	The inappropriate disposal of e- waste and hazardous waste	 Ensure that residents are aware that household hazardous waste is rates funded and that e-waste disposal is partially subsidised 		

A full description of these issues and a high-level assessment of all options is included in Part 3 of the WA which is attached as Appendix A.

5.4 Kerbside options

The Council considered eight options for its kerbside collection service, a key part of Council's waste management service. The Council selected two preferred options from these original eight to consult on. For full information on the eight kerbside collection options, refer to Part 3 of the Waste Assessment in Appendix A.

Overall, Council wants to increase diversion but retain customer choice and this has been considered in selecting the preferred options to consult with the community on through the WMMP review.

The enhanced service option would:

- Introduce bins for waste
- Retain the choice to continue to use bags or private bins for waste
- Retain 240L recycling bins collected fortnightly
- Offer a range of bin sizes for waste (140L or 80L) and recycling (240L or 140L)



• Indicative annual household cost \$86-\$281 depending on service choice selected. Note that the base rate increased by \$17 p.a. in 2018/19, which increases the indicative annual household cost to \$103-\$384.

The **advanced** service option would:

- Introduce organics (food waste and green waste) bins
- Provide the choice to not use the organics service
- Introduce bins for waste
- Retain the choice to continue to use bags or private bins for waste
- Retain 240L recycling bins collected fortnightly
- Offer a range of bin sizes for waste (140L or 80L), recycling (240L, 140L or 80L) and organics (240L, 140L or 80L)
- Indicative annual household cost \$86-\$381 depending on service choice selected. Note that the base rate increased by \$17 p.a. in 2018/19, which increases the indicative annual household cost to \$103-\$484.

It is intended that these services will be funded by the income received by those using the services. However, the Council's market share will have to be estimated in advance and it may be necessary to part fund the services through the use of the landfill levy or rates.

The **advanced** service was the preferred option following consultation of the draft WMMP. This service, referred to as the "Your Choice" collection service, was included in the Councils draft 2018-28 Long Term Plan (LTP) consultation. This service was included in the adopted 2018-28 LTP in June 2018.

5.5 Southbrook RRP upgrade options

The Council has considered three options in relation to the Southbrook RRP, those options were:

- Status quo no change to the Southbrook RRP
- Enhanced service option increased width and depth of refuse tipping area; relocate and upsize re-use store and increase recycling activities
- Advanced service option enhanced service plus introduce sort line for construction and demolition waste

The preferred option is the enhanced service option due to the high cost to implement the advanced option.



Part B



1 Action Plan

1.1 Action Plan

The proposed action plan shows how Council's proposed actions address the key issues and how the activities will be funded.



Table 4 Proposed WMMP Action Plan (condensed) – showing both existing and new actions

Objective		Action	New/ existing	Implementation timeframe	Funding source
1.	Our community has opportunities for avoiding or reducing waste at source	Circulate educational information to promote Council's waste management and minimisation services	Existing	Ongoing	Levy Rates
		Provide educational programmes and support other programmes aimed at waste management and minimisation and sustainability e.g. boomerang bags and 'no plastic straw' campaign	Existing	Ongoing	Levy
		Establish an educational facility for promotion of waste management and minimisation at the Southbrook RRP as part of the planned upgrade of the Southbrook RRP	New	Ву 2022/23	Levy Rates
		Support organisations leading litter clean-up and campaigns at raising awareness of waste minimisation, potentially by means of grants	Existing	Ongoing	Rates
		Collaborate with other councils, to promote waste management and minimisation and waste acceptance criteria in a regionally and nationally consistent way	Existing	Ongoing	Levy Rates
		Promote and support existing waste minimisation and resource efficiency initiatives targeting local industry	Existing	Ongoing	Levy
2.	Council works with other councils, central government, industry and other parties to improve product stewardship	Advocate to government, possibly via a coordinated approach with other organisations, such as Canterbury Waste Joint Committee, Local Government New Zealand and WasteMINZ	Existing	Ongoing	Rates
		Promote and support product stewardship programmes operating in- district	Existing	Ongoing	Rates Levy

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Objective		Action	New/ existing	Implementation timeframe	Funding source
3.	Our community has opportunity to maximise the diversion of material for reuse, recycling or recovery	Refine and publish Council's policy regarding the extent of kerbside collection service, both the urban/rural boundaries and the residential/commercial extent of services.	New	2018/19	Rates
		Improve RRP and Transfer Station facilities (Oxford TS and Southbrook RRP) to expand associated services for diverted material.	Existing	Ongoing	Gate fees Rates
		Upgrade Southbrook RRP and Oxford TS facilities to increase capacity when required.	New	2018 to 2022	Gate fees Rates Levy
		Optimise the separation of diverted material at the RRP and TS facilities through procurement processes and contractual agreements	New	2018/19 and ongoing	Rates
		Use financial incentives to encourage the separation of reusable and recyclable materials from the waste stream.	Existing	Ongoing	Gate Fees
		Investigate the feasibility of providing recycling bins alongside litter bins in the District, and implement where appropriate.	Existing	Ongoing	Rates
		Maintain existing drop-off points for diverted material in beach townships and investigate the feasibility of establishing recycling drop- off points at suitable locations for rural resident use, including trialing new locations.	Existing	Ongoing	Rates Levy
4.	The range of diverted material will be improved and the quality of these materials enhanced	Continue monitoring the composition of waste going to landfill through SWAP studies and investigate further waste minimisation measures when warranted.	Existing	Ongoing	Levy Rates





Obj	ective	Action	New/ existing	Implementation timeframe	Funding source
5.	Our community has access to services for effective and efficient management of waste that comply with current environmental and health practices	Continue to provide litter collection bins at certain locations throughout the District	Existing	Ongoing	Rates
		Ensure that littering and illegal dumping in public places is managed effectively	Existing	Ongoing	Rates
		Maintain existing RRP and Transfer Station facilities (Oxford TS and Southbrook RRP) and associated services for waste disposal, including domestic hazardous waste disposal.	Existing	Ongoing	Rates
		Ensure all resource consent requirements for Council owned solid waste services, facilities and closed landfills are complied with	Existing	Ongoing	Rates Gate fees
6.	The disposal of sewage treatment residuals complies with current environmental and health practices	Disposal of screenings from the Council's wastewater treatment plant (WWTP) at Kate Valley landfill and dewatered sewage sludge at Christchurch City Council's Bromley WWTP, or alternative facility or site if feasible.	Existing	Ongoing	Rates
7.	Our community is informed and educated about hazardous waste and residual waste	Carry out educational campaigns to raise awareness about littering, including larger scale illegal dumping, when warranted.	Existing	Ongoing	Rates





2 Funding

2.1 Funding the plan

The action plan will be funded using the suite of tools available to Council in the delivery of solid waste services. The activities will be funded by:

- General rates
- Targeted rates
- Fees and charges (including gate fees, licensing fees, user pays)
- Subsidies and grants
- Debt (if required)

Through the action plan, it is expected that the cost for the provision of the services will increase from \$7,300,000 in 2017/18 to \$11,100,000 in 2022/23 when new services are fully introduced and facility upgrades are complete.

2.2 Waste minimisation levy funding expenditure

Council will continue to use the Waste Minimisation Levy funding income to fund waste education, investigations, trials, and to fund capital expenditure for diversion facility upgrades.

2.3 Grants

Section 47 of the Waste Minimisation Act gives councils the ability to give grants to a person, organisation or group to promote or achieve waste management and minimisation. Under this WMMP the Council will continue to give grants at its discretion and on any terms of condition it deems appropriate provided there is an allocated and approved budget for that activity.





3 Monitoring, evaluating and reporting progress

3.1 Monitoring and evaluation

The Council intends to monitor and report on progress regarding the WMMP and will develop and implement a clear, transparent monitoring and reporting system. Accurate information on how services provided by Council are performing is essential for monitoring the effectiveness of the Plan's vision, objectives, goals and methods and planning for future demand.

Council's current levels of service and performance measures are in the 2015-2025 Long Term Plan and are focussed on:

- The availability of transfer facilities
- Providing a kerbside waste and recycling collection service
- Reducing the amount of annual waste per capita
- Increasing the annual per capita quantity of materials diverted

Council will review its key performance indicators as part of the 2018-2028 Long Term Plan. Data will be gathered through community satisfaction surveys, Council records (Call Centre records, KPIs, etc.), contractors and Solid Waste Analysis Protocol Audits (SWAPs). Progress will be reported through Council publications, website and the annual report.

3.2 Reporting

The Council will report progress of the implementation and effectiveness of this WMMP through:

- Annual Reports
- Council's website

The Council will also provide progress reports of expenditure of its waste levy funds to the Ministry for the Environment.





Glossary

Key Definitions and abbreviations

Clean fill/clean fill material	inert materials disposed of, into or onto land, at a consented clean fill. Materials typically include construction and demolition waste such as concrete, uncontaminated soil and rock.
Commercial waste	waste from premises used wholly or mainly for the purposes of trade or business, recreation or entertainment, excluding, mines, quarries and agricultural waste. May also include some household waste collected by commercial operators
Diverted material	anything no longer required for its original purpose and, but for commercial or other waste minimisation activities, would be disposed of or discarded, and includes any materials that are recyclables, compostable, or can be recovered and/or re-used, as determined by the Council by resolution
Hazardous waste	waste that is potentially harmful to human and/or environmental health. It typically has one or more of the following hazard properties: explosive, flammable, oxidising, corrosive, radioactive, toxic or ecotoxic, or it may react with air or water to have one of these properties
Household waste	solid waste generated by households. Household waste does not include divertible waste, hazardous waste, commercial waste, prohibited waste, trade waste or liquid waste of any nature, or any material banned or prohibited under the Council's solid waste bylaw
Organic waste	compostable materials that are organic in origin and appropriate to be used as feedstock for composting, and includes green waste and food waste
Recycling	the reprocessing of waste or diverted material to produce new materials
Resource Recovery Park (RRP)	a facility where solid waste materials such as residual waste, construction and demolition waste, recyclables, organics waste and household hazardous wastes are delivered for sorting or before taken away for treatment, processing, recycling or disposal, and which may also include a retail outlet for the re-sale of used goods and materials deposited at the site.
Reuse shops	items that are salvaged or diverted from the waste stream undergo little or no modification and are sold at shops run by the community or





	territorial authorities		
Sewage treatment residuals	solid wastes generated through the process of wastewater treatment		
Solid Waste Analysis Protocol (SWAP):	a study to determine the composition of waste as described by the Ministry for the Environment		
Transfer Station (TS)	a facility where solid waste materials such as residual waste, construction and demolition waste, recyclables, organics waste and household hazardous wastes are delivered for consolidation before being taken away for treatment, processing, recycling or disposal		
Waste	 anything disposed of, or discarded, and: includes a type of waste that is defined by its composition or source (for example, organic waste, electronic waste, or construction and demolition waste), and to avoid doubt, includes any component or element of diverted material, if the component or element is disposed of or discarded. 		
Waste disposal levy	a levy imposed under the Waste Minimisation Act 2008 on waste		
Waste minimisation	the reduction of waste and the reuse, recycling and recovery of waste and diverted material		





Part C





Appendix A – Waste assessment





Appendix B – Legislative context

The New Zealand Waste Strategy 2010

The New Zealand Waste Strategy 2010 provides the Government's strategic direction for waste management and minimisation in New Zealand. This strategy was released in 2010 and replaced the 2002 Waste Strategy. The New Zealand Waste Strategy has two goals. These are to:

- Reduce the harmful effects of waste
- Improve the efficiency of resource use

The strategy's goals provide direction to central and local government, businesses (including the waste industry), and communities on where to focus their efforts to manage waste. The strategy's flexible approach ensures waste management and minimisation activities are appropriate for local situations.

Under section 44 of the Waste Management Act 2008, in preparing their waste management and minimisation plan (WMMP) councils must have regard to the New Zealand Waste Strategy, or any government policy on waste management and minimisation that replaces the strategy. Guidance on how councils may achieve this is provided in section 4.4.3.

Waste Minimisation Act 2008

The purpose of the Waste Minimisation Act 2008 (WMA) is to encourage waste minimisation and a decrease in waste disposal to protect the environment from harm and obtain environmental, economic, social and cultural benefits.

The WMA introduced tools, including:

- Waste management and minimisation plan obligations for territorial authorities
- A waste disposal levy to fund waste minimisation initiatives at local and central government levels
- Product stewardship provisions

Part 4 of the WMA is dedicated to the responsibilities of a council. Councils "must promote effective and efficient waste management and minimisation within its district" (section 42). Part 4 requires councils to develop and adopt a WMMP. The development of a WMMP in the WMA is a requirement modified from Part 31 of the Local Government Act 1974, but with even greater emphasis on waste minimisation. To support the implementation of a WMMP, section 56 of the WMA also provides councils the ability to:

- Develop bylaws
- Regulate the deposit, collection and transportation of wastes
- Prescribe charges for waste facilities
- Control access to waste facilities
- Prohibit the removal of waste intended for recycling





Waste disposal levy

From 1 July 2009, the Waste Minimisation Act introduced a waste disposal levy on all waste disposed of at disposal facilities, currently \$10 per tonne, to:

- Raise revenue for promoting and achieving waste minimisation
- Increase the cost of waste disposal, to recognise that disposal imposes costs on the environment, society, and the economy

Half of the levy money is given to territorial authorities on a population basis, and the remainder of the levy is available via a contestable fund. The portion returned to Council can only be spent to promote or achieve waste minimisation and in accordance with a council's WMMP.

Local Government Act 2002

The Local Government Act 2002 (LGA) provides the general framework and powers under which New Zealand's democratically elected and accountable local authorities operate. The LGA contains various provisions that may apply to councils when preparing their WMMPs, including consultation and bylaw provisions. For example, Part 6 of the LGA refers to planning and decision-making requirements to promote accountability between local authorities and their communities, and a long-term focus for the decisions and activities of the local authority. This part includes requirements for information to be included in the long-term plan (LTP), including summary information about the WMMP.

Bylaws

The Act enables councils to make bylaws. A bylaw can allow for licences to collect and transport waste from households, and require reporting on the quantity, composition, and destination of waste. The Council adopted the Solid Waste Handling Licensing Bylaw on 6 September 2016.

The purpose of the Bylaw is to:

- To prevent the contamination of recoverable resources and maximise the recovery of recyclable resources.
- Also ensure that waste is collected in a safe and efficient manner, and that waste does not cause a nuisance
- Regulate and monitor operators collecting, managing, storing and using waste within the district through a licensing process
- Protect, promote and maintain public health and safety
- Provide comprehensive data and information for planning and waste management and minimisation purposes

The Bylaw requires specified waste operators to hold a waste licence with the Council in order to operate within the District, and to report to the Council quarterly on the quantity of waste they handle.





Resource Management Act 1991

The Resource Management Act 1991 (RMA) promotes sustainable management of natural and physical resources. Although it does not specifically define 'waste', the RMA addresses waste management and minimisation activity through controls on the environmental effects of waste management and minimisation activities and facilities through national, regional and local policy, standards, plans and consent procedures. In this role, the RMA exercises considerable influence over facilities for waste disposal and recycling, recovery, treatment and others in terms of the potential impacts of these facilities on the environment. Under section 30 of the RMA, regional councils are responsible for controlling the discharge of contaminants into or on to land, air or water. These responsibilities are addressed through regional planning and discharge consent requirements. Other regional council responsibilities that may be relevant to waste and recoverable materials facilities include:

- Managing the adverse effects of storing, using, disposing of and transporting hazardous
- Wastes
- The dumping of wastes from ships, aircraft and offshore installations into the coastal marine area
- The allocation and use of water

Under section 31 of the RMA, Council responsibility includes controlling the effects of land-use activities that have the potential to create adverse effects on the natural and physical resources of their district. Facilities involved in the disposal, treatment or use of waste or recoverable materials may carry this potential. Permitted, controlled, discretionary, noncomplying and prohibited activities, and their controls, are specified in district planning documents, thereby defining further land-use-related resource consent requirements for waste-related facilities.

In addition, the RMA provides for the development of national policy statements and for the setting of national environmental standards (NES). There is currently one enacted NES that directly influences the management of waste in New Zealand – the Resource Management (NES for Air Quality) Regulations 2004. This NES requires certain landfills (e.g. those with a capacity of more than one million tonnes of waste) to collect landfill gases and either flare them or use them as fuel for generating electricity. Unless exemption criteria are met, the NES for Air Quality also prohibits the lighting of fires and burning of wastes at landfills, the burning of tyres, bitumen burning for road maintenance, burning coated wire or oil, and operating high-temperature hazardous waste incinerators. These prohibitions aim to protect air quality.

New Zealand Emissions Trading Scheme

The Climate Change Response Act 2002 and associated regulations is the Government's principal response to manage climate change. A key mechanism for this is the New Zealand Emissions Trading Scheme (NZ ETS) The NZ ETS puts a price on greenhouse gas emissions, providing an incentive for people to reduce emissions and plant forests to absorb carbon dioxide.

Certain sectors are required to acquire and surrender emission units to account for their direct greenhouse gas emissions or the emissions associated with their products. Landfills that are subject to the waste disposal levy are required to surrender emission units to cover methane emissions generated from landfill. These disposal facilities are required to report the tonnages landfilled annually to calculate emissions.





Climate Change Response Act 2002 (Emissions Trading) and the Climate Change Amendment Act 2008

The Climate Change Response Act 2002, Climate Change (Waste) Regulations 2010 and Amendments to the Climate Change (Unique Emissions Factors) Regulations are implemented through the New Zealand Emissions Trading Scheme (ETS). The purpose of the ETS is to reduce the amount of greenhouse gases emitted in New Zealand. The waste sector is affected by the ETS, as those who operate landfills are required to participate in the scheme and report emissions.

Although the Council no longer operates a landfill within the District, there are implications for the Council from disposing of waste to the regional landfill.

The Climate Change Amendment Act 2008 provides for disposal facility regulations and the ETS.

Litter Act 1979

Under the Litter Act 1979 it is an offence for any person to deposit litter of any kind in a public place, or onto private land without the approval of the owner. The Litter Act is enforced by territorial authorities, who have the responsibility to monitor litter dumping, act on complaints, and deal with those responsible for litter dumping. Councils reserve the right to prosecute offenders via fines and infringement notices administered by a litter control warden or officer. The maximum fines for littering are \$5,000 for a person and \$20,000 for a corporation. Council powers under the Litter Act could be used to address illegal dumping issues that may be included in the scope of a council's waste management and minimisation plan.

Health Act 1956

The Health Act 1956 places obligations on councils (if required by the Minister of Health) to provide sanitary works for the collection and disposal of refuse, for the purpose of public health protection (Part 2 – powers and duties of local authorities, section 25). The Act specifically identifies certain waste management practices as nuisances (section 29) and offensive trades (Third Schedule). The Health Act enables councils to raise loans for certain sanitary works and/or to receive government grants and subsidies, where available. Health Act provisions to remove refuse by local authorities have been repealed.

Other legislation

Other legislation that relates to waste management and/or reduction of harm, or improved resource efficiency from waste products includes:

- Hazardous Substances and New Organisms Act 1996
- Biosecurity Act 1993
- Radiation Protection Act 1965
- Ozone Layer Protection Act 1996
- Health and Safety in Employment Act 1992 (soon to be replaced by the outcome of the Health and Safety Reform Bill)
- Agricultural Chemicals and Veterinary Medicines Act 1997





Canterbury Hazardous Waste Management Strategy

The Canterbury Hazardous Waste Management Strategy has been developed as part of the commitment by local authorities in Canterbury to work together to achieve integrated and environmentally sound management of hazardous wastes. It is not a statutory document but seeks to provide guidance for local authority statutory plans, service delivery and regulation. While the Strategy is primarily designed to provide direction for local authorities, including Environment Canterbury, it also provides guidance for hazardous waste generators and those individuals or organisations involved in the waste management industry.

The vision for hazardous waste management in Canterbury is achieving zero hazardous waste by 2020.

The long-term objective is:

To eliminate the adverse effects of hazardous waste on the environment

The Council has adopted the Canterbury Hazardous Waste Management Strategy, and is committed to supporting its implementation programme. However, the Council currently has no provision to manage and appropriately dispose of hazardous wastes that are stored and used within the District beyond the provision of domestic hazardous waste disposal facilities. Instead commercial and rural hazardous waste management is achieved by industry taking responsibility for their own disposal, or by Canterbury Councils coordinating on specific materials.

Other waste related legislation

Other legislation relevant to waste management and minimisation includes:

- Health and Safety at Work Act 2015 (HSWA) is New Zealand's workplace health and safety law.
 HSWA sets out the principles, duties and rights in relation to workplace health and safety
- Hazardous Substances and New Organisms Act 1996 that provides regulations and standards related to hazardous substances
- Local Government (Rating) Act 2002
- Health Act 1956 and its provisions for local authorities to provide for collection and disposal of refuse and other offensive matter and for the licensing of offensive trades
- Freedom Camping Act 2011 which controls freedom camping on all land controlled or managed by a particular local authority

Regional policy statements, regional plans and strategies

Environment Canterbury Regional Council has a Regional Policy Statement and Regional Plan which contains rules relating to discharges to air, land and water, which are relevant for facilities (e.g. resource recovery parks, transfer stations, landfills) and waste processing (e.g. composting, biosolids processing).

The focus of regional waste strategies is co-operation between councils. Waimakariri District Council is a member of the Canterbury Waste Joint Committee.

International commitments

New Zealand is party to the following key international agreements:

• Montreal Protocol - to protect the ozone layer by phasing out the production of numerous substances





- Basel Convention to reduce the movement of hazardous waste between nations
- Stockholm Convention to eliminate or restrict the production and use of persistent organic pollutants
- Waigani Convention bans export of hazardous or radioactive waste to Pacific Islands Forum countries