

SOLID WASTE MANAGEMENT PLAN



Adopted by Council: 21 March 2002



Westland District Council

Solid Waste Management Plan

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PREFACE

Developing a Solid Waste Management Plan for Westland District

Every Council has to prepare a Waste Management Plan under the Local Government Amendment (No. 4) Act 1996. The Waste Management Plan has to make provision for the collection and reduction, reuse, recycling, recovery, treatment or disposal of waste in Westland District. The Plan also has to provide for its effective and efficient implementation.

This document is the Solid Waste Management Plan ("The Plan") for Westland District. It was adopted by the Westland District Council at their meeting held on the 21 March 2002.

This Plan has been developed from information that has been gained from:

- Submissions on Council's discussion document entitled "Options for Solid Waste Management" (adopted by Council in March 2000).
- Records of Council and public meetings held to discuss the contents of the discussion document.
- Results of community newsletters and surveys inviting public comment regarding the future management of solid waste in the District.
- Review of solid waste management plans prepared by other Councils.
- Requirements of planning documents and legislation (see Appendix A).
- Submission on the Draft Solid Waste Management Plan received and considered by the Council (30 submissions received)

Changing circumstances

This Plan is based on the situation, as the Council understands it at present. There are numerous factors that have been incorporated into the Plan that could change at any time. Any of these factors could significantly impact on the options set out in this Plan and require amendment to this Plan. The Plan is therefore a living document and will be amended to ensure that it continues to be appropriate for Westland District.

Review Provisions for the Plan

This is a living document and Council will ensure that the provisions made in the Plan continue to be appropriate for the current situation. The Plan will be subject to review every 5 years or earlier if it was considered necessary or beneficial. Any amendments to the Plan must be made through the Special Consultative Procedure set out in the Local Government Act.



This review process allows the Council to adapt the Plan to current conditions and to incorporate the best available practicable options for solid waste management.

Implementing the Plan

The Plan assumes that future changes in waste management are inevitable. It provides a framework for the long-term view while primarily focusing on actions for the next 5 years. It also acknowledges that implementation of the Plan's methods will need to be operationally flexible to allow for changes in public responses and in available technology.

The Plan therefore defines objectives and policies and provides methods to implement the policies. The Plan also sets out proposed implementation programmes that indicate how the priorities identified in the Plan will be implemented on a yearly basis through the Annual Plan.

Individual projects beyond year 2 in the proposed implementation programmes are considered possibilities; they will not proceed until benefits and costs of different options are assessed in conjunction with the Annual Plan for the relevant year. Projects in any year are subject to a cost benefit analysis if they exceed \$200,000 (as set out in the Council's Long Term Financial Strategy).

THE PLAN

**Westland District
Solid Waste Management Plan**



1.0 INTRODUCTION

1.1 Background

This document is the Westland District Solid¹ Waste Management Plan.

The Plan is a legislative requirement of, and has been prepared in accordance with, the requirements of the Local Government Amendment (No. 4) Act 1996. See Appendix A for details of the legislative requirements.

1.2 Plan Structure

The Plan has been produced with a Preface and a set of Appendices. These do not form part of the Plan. They provide supporting information that may require updating as situations or circumstances change.

The Plan contains Objectives, Policies and Methods for each of the following defined facets of the waste management system:

- integrated waste management,
- education and promotion
- waste minimisation
- collection systems
- disposal facilities
- cost recovery

1.3 Purpose

The Plan documents a strategy for the management of waste in Westland District. It will aid Council in forecasting the financial and technical resources required to appropriately manage the District's solid wastes in the foreseeable future.

The objectives in this document are in accordance with:

- the Council's Mission Statement and Role, and the proposed District Plan,
- the statutory requirements and provisions of the Health Act, the Local Government Act, the Resource Management Act, the Hazardous Substances and New Organisms Act, and other relevant Acts, and
- Central Government and Regional Authority waste management policies and plans (including "The New Zealand Waste Strategy (2002)" where appropriate for Westland).

¹ Solid waste here means all solid (not liquid or gas) waste including hazardous waste. It is recognised however that some hazardous wastes such as paints, solvents and some chemicals contain a liquid element, and these are included in the category of wastes covered in this Plan.

1.4 Council's Mission Statement and Role

The Council's mission statement is:

"To make Westland a better place to live for its residents and ratepayers."

Council's role as stated in the Annual Plan is:

- ◆ *To utilise, manage and improve the natural assets of Westland.*
- ◆ *Endeavor to ensure the viability of the community of the District with appropriate advocacy.*
- ◆ *Encourage community participation in management and maintenance of community facilities.*
- ◆ *Maintain Council's existing assets ahead of providing new facilities where appropriate.*
- ◆ *Adopt a user pay philosophy wherever practicable.*
- ◆ *Serve the District's interests first.*
- ◆ *Maintain a spirit of consultation and co-operation with all other agencies with a similar mission.*
- ◆ *To appoint, develop and retain staff who achieve job satisfaction while contributing to Westland District Council's Goals and Objectives.*

1.5 General Principles

The General Principles that the Council has adopted that guide this Plan and its initiatives are as follows:

Principle 1 – Waste Management Hierarchy

The management of solid and hazardous waste should be based on the following hierarchy in decreasing order of priority:

- reduce the amount of material that enters the waste stream
- re-use as much material as possible
- recycle as much material as possible
- recover as much material and/or energy as possible
- residual management including disposal to landfill once the solid waste stream has been reduced in each of the above stages.



Principle 2: Zero Waste

The Council in February 2000 confirmed its commitment toward a target of zero waste to landfill by 2015 (with a review in 2010). This recognises that in all cases, the reduction or diversion of material that would otherwise be permanently discarded into landfills should be promoted.

Principle 3: Sustainable Resource Management

Management of the solid and hazardous waste stream should reflect the need for sustainable management of the natural and physical resources of the District as defined in the Resource Management Act 1991. Life-cycle approaches, which consider all aspects of resource use, waste generation, storage, transport, treatment and disposal, should be considered most effective.

Principle 4: Partnerships with the Community

People and communities are at the centre of concerns for solid and hazardous waste management. They are also active participants in solid waste management systems. The ways in which wastes are managed should respect environmental limits, take account of community values and conditions, and foster community responsibility for waste management.

Principle 5: Responsibility for the Costs of Waste Management

As far as practicable, people who are disposing of waste should meet the full costs of managing the waste they seek to dispose of. A 'user-pays' approach provides a strong incentive to individuals to minimise waste.

Principle 6: Role of Ngai Tahu

The relationship of Maori with their ancestral resources is a matter of national importance under the Resource Management Act and the management and disposal of waste is an important issue for Ngai Tahu. The planning for, and activities associated with, solid waste management should recognise and provide for the relationship of Ngai Tahu with the natural and cultural resources of Westland District.

Principle 7: Transparency

The development (and amendment) and implementation of this plan will be undertaken in an open, transparent and accountable manner. Regular reporting on progress is essential to maintain the impetus and the changes that will occur.

Principle 8: Real Costs

The real costs are constraints that will impact on achieving the objectives, which are set in this Waste Management Plan. The costs include environmental, social and economic costs.

Principle 9: New Zealand Waste Strategy

This Waste Management Plan adopts the New Zealand Waste Strategy (2002) where it is appropriate for Westland.

1.6 Issues

The Council must consider the issues of:

- ensuring waste services are available and affordable to all in the Westland community, while taking into account:
 - the small and dispersed settlements within the District
 - the distance from markets that can re-use and/or recycle waste
 - the impact of tourism on the waste stream both directly generated by visitors and indirectly generated by services provided for visitors eg, building material and waste from accommodation and food premises
- predicted future demand (influenced by waste minimisation, population changes and visitor numbers)
- the availability of sites for future waste management infrastructure/facilities
- the higher standard of waste management infrastructure that is required and the significant costs to meet the standards
- the need to ensure a clean, safe, sustainable and attractive physical environment
- the relationship of the Westland District Council to other Territorial Local Authorities in providing region-wide integrated waste management services.

1.7 Linkages to Council Planning Processes

The Plan recognises legislation, as well as Regional and District Policy, Plans and resource consents. A list of these documents is provided in Appendix A.

Implementation and operation of the Plan will be coordinated directly through the Asset Management Plan and the Annual Plan. A flow chart illustrating these links is provided in Appendix B.

The Policies and Methods of the Plan will be implemented progressively as set out in the proposed implementation programmes. Resource allocation, programming and



performance measures will be addressed each year in the preparation of the Council's Annual Plan and assessed in the Council's Annual Report.

The proposed implementation programme will be addressed more frequently at the operational level as results are observed from implemented methods, and as the monitoring policies allow performance of the Plan to be measured.

1.8 Implementation Priorities

There are clear implementation priorities to be addressed and physical milestones to be met during the first phase of implementing the Plan. These are primarily driven by legislative requirements of the Resource Management Act 1991, and conditions attached to the resource consents for existing landfills.

The key priorities are to:

- (i) Implement education/promotion and waste minimisation policies (methods in sections 3 and 4).
- (ii) Continue monitoring (methods 2.4, 6.3, 6.8).
- (iii) Review and improve the operational management of existing landfills, particularly with regard to waste minimisation policies (methods 6.7 – 6.9, 4.2.6 – 4.2.8).
- (iv) Review Council collection and transfer services (methods 5.1.1 – 5.1.3).
- (v) Develop collection and transfer facilities to complement the new solid waste disposal system (methods 5.1.1 – 5.1.6).
- (vi) Work towards obtaining a regional agreement with Grey and Buller District Councils for the transport to and disposal of waste at McLeans Landfill (to replace the existing Hokitika landfill after 2010 - method 6.1).

1.0 INTEGRATED WASTE MANAGEMENT

Regulatory Framework

The Local Government Act places a legal responsibility on Westland District Council to encourage efficient waste management. The Act also requires the development and implementation of a Waste Management Plan. Within the Plan, council is required to make provisions for collection and reduction, reuse, recycling, recovery, treatment or disposal of waste after specific consideration of the Waste Hierarchy. The council has the authority to implement bylaws to achieve waste management objectives.

The RMA, the Hazardous Substances and New Organisms Act (1996), and the Health Act (1956) all place legal requirements on the council's management of solid and hazardous waste.

There are other plans, policies and legislation that were considered in the preparation of the Plan. A list is given in Appendix A.

Cross-boundary Issues

The council currently provides waste services independent of other councils on the West Coast or elsewhere. Nationally there is a trend towards greater co-operation between councils in providing waste services, and towards more regional service delivery, particularly for landfills. Council currently participates in a regional liaison group on solid and hazardous waste management. This regional approach will be actively encouraged.

Objectives

- To adopt an integrated approach to managing all solid waste operations and responsibilities.
- To provide environmentally and economically sustainable solid waste management services that address community expectations and fulfil legislative responsibilities.

Policies

The Council will:

- 2.1 follow a system of integrated waste management with the goal of zero waste to landfill by 2015. This system will address the following waste minimisation hierarchy that is listed in order of priority:
 1. Reduction
 2. Re-use
 3. Recycling
 4. Recovery
 5. Residue Disposal.



- 2.2 monitor its solid waste management system to ensure a reliable information base is available, against which to measure the effect of future changes.
- 2.3 consider coordinated waste management programmes with other Councils and the private sector, where beneficial to the Westland community.

Methods

- 2.1 Provision will be made through the Annual Plan process to progressively implement the Solid Waste Management Plan.
- 2.2 Progress in implementing the Plan will be monitored by defining performance measures for the Plans Policies in each successive Annual Plan.
- 2.3 Responsibility for implementation of the Plan will be allocated to a specific and suitable person within, or on behalf of, the Council.
- 2.4 A monitoring programme for the collection of important waste management information (e.g. the district-specific waste stream, waste classifications under the NZ Solid Waste Analysis Protocol, and landfill filling rates and available capacities) will be established.
- 2.5 Community expectations of its waste management system will be monitored through the education and promotion process (refer method 3.5), and by inviting public comment through newsletters, community surveys and any other means as appropriate.
- 2.6 Promote liaison and cooperation on solid waste issues with Buller and Grey District Councils and the West Coast Regional Council.
- 2.7 Provide services in conjunction with other councils where they are a better and/or more cost effective option for Westland District.
- 2.8 Promote joint education and promotion activities with Buller and Grey District Councils and the West Coast Regional Council.
- 2.9 Use the waste surveys at Hokitika and elsewhere to help develop specific annual or biannual targets for reducing the volume of landfill waste to help achieve Zero Waste to landfill by 2015.

Proposed Implementation Programme

Financial year	Action
2001/02 & ongoing	Continue to be a member of the West Coast Waste Management Group. Make Integrated Waste Management a priority in Annual Planning. Undertake waste surveys at yearly intervals at Hokitika and less often elsewhere, to quantify the waste stream.

3.0 EDUCATION AND PROMOTION

Lack of information is a barrier to effective solid waste management. To achieve successful solid waste management, both the public and industrial sectors must be well informed about environmentally appropriate solid waste management and the different options available for waste disposal. Hence education and promotion are key elements of the Plan.

Increase Success of Promotions

The Council already recognises the importance of education and promotion but initiatives to date have been limited. To be effective, education and promotion projects require a high level of consistency with an unambiguous message. The key issues that require addressing are the regularity and consistency of promotion initiatives and the availability of information. While Westland has some unique needs, some are consistent with those of the wider West Coast and Canterbury regions. Common material may be developed with other councils and advertising used to reach several districts or regions at once.

Councils as Leaders

If the Council is to promote waste minimisation it must provide an example through its own practices. To be fully effective any Council internal initiatives should be linked to the waste management practices that the Council seeks to promote in the community.

The Future

Changes in waste management attitudes and practices take time. To be effective, education and promotion programmes must also be based on a long-term view with consistent messages, repetition, and constant availability of key information. It is also necessary to regularly update programmes to target the most important issues and key groups. These may vary in response to changing conditions and the effects of previous programmes.

Objective

- To assist all sectors of the community to contribute towards developing, sharing and achieving the objectives of this plan in an informed way.

Policies

The Council will:

- 3.1 raise awareness of good solid waste management practices in accordance with the Waste Hierarchy of reduction, reuse, recycling, recovery and residue disposal.
- 3.2 actively participate in the production and dissemination of regional and local waste reduction educational material to targeted sectors in the community.

Methods

- 3.1 Adopt a common visual style or logo for all waste management services and promotional material so that a consistent message is reinforced through repetition.
- 3.2 Use regular columns in community newspapers, leaflet drops and other suitable means (e.g. on standard refuse bags, by radio) to publicising reuse and recycling ventures and appropriate disposal options.
- 3.3 Provide in the Annual Plan a budget for promotional and educational work.
- 3.4 Fund a Waste Minimisation Officer to implement the Council's promotional and other waste minimisation activities included in this plan.
- 3.5 Measure the performance of education/promotion policies by monitoring community awareness through community feedback surveys, or other appropriate means.
- 3.6 Recognise and publicise the achievements of outstanding persons, groups, businesses and industries that implement desirable solid waste management practices.
- 3.7 Liaise with other councils and particularly Zero Waste councils in order to establish networks for education and promotion material.
- 3.8 Produce waste minimisation information resources for schools. Consider implementing a waste management promotion programme for schools, possibly coordinated with other West Coast Councils.
- 3.9 Establish a database of information and advisory services on general solid waste management methods (not technical information) for both industrial and domestic sectors. Access may be by phone inquiry, internet connection or personal visit.
- 3.10 Liaise with relevant community groups to promote the waste minimisation message and to enlist support.
- 3.11 Maintain continued active membership of appropriate waste management associations, such as WasteMINZ and RONZ.
- 3.12 Provide information to and adopt internal initiatives that promote waste minimisation with council staff and contractors.
- 3.13 Encourage contractors undertaking work for the Council to practice waste minimisation wherever possible.

Proposed Implementation Programme

Financial year	Action
2001/02 and ongoing	Instigate a waste minimisation education programme (investigate it being provided by the Zero Waste Foundation)

Seek advice from suitably qualified sources for the design and implementation of waste minimisation programmes

Information provided in the Councils newsletter, on the Council website and in other council publications

Appoint Litter Officers under the Litter Act 1979

Maintain a close liaison with the Zero Waste Foundation for the supply of information that can be used in education programmes

2002/03

Appoint a Waste Minimisation Officer

4.0 WASTE MINIMISATION

In the past waste minimisation efforts have tended to focus on post-consumer recycling. This is seen as only one aspect of waste minimisation and council will focus on all aspects of waste minimisation including, reduction, reuse, recovery and recycling (including pre-cycling). This section is therefore broken into 3 subsections that all aim to meet the overall objective for waste minimisation.

Overall Objectives

- *To minimise the quantity of residual solid waste requiring landfill disposal through reduction, reuse, recycling and recovery.*
- *To use all appropriate means to advance the Council's commitment toward a target of Zero Waste to landfill by 2015.*

4.1 Waste Reduction

Waste reduction involves reducing the *quantity* and *toxicity* of waste materials at the source of production. Producing less waste is the most cost effective and environmentally sound means of waste minimisation. This is because reduced waste production also reduces the use of precious resources and does not require costly disposal. As waste is generated at all levels of production and consumption within the community, an effective waste reduction strategy needs to target both the household and commercial sectors.

Incentives

Although it is beneficial for the wider community if the quantity of waste can be reduced, the advantage to individual waste producers is often not sufficient to make waste reduction preferable to producing and disposing of waste. Therefore incentives are required to provide a personal advantage in avoiding waste disposal. The most effective incentives are financial disincentives, particularly through user pays charges. Other incentives such as subsidies or financial rewards for waste reduction can distort market conditions and it is difficult to ensure that the benefits justify the costs of such practices.

Cleaner Production

An effective method of targeting the commercial sector is through the promotion of cleaner production. The goal of cleaner production is to reduce the adverse impacts of production and service activities on the environment by using resources efficiently, reducing waste production, and producing environmentally sound products and services. By achieving a reduction in waste, cleaner production methods can also result in fewer expenses through reduced waste disposal costs and therefore higher profits.

By promoting cleaner production, businesses could be encouraged to set their own solid waste management targets, adopt cleaner production lines, and be encouraged and assisted to undertake waste audits to identify areas of preventable waste production.

The Future

The statistics on trends in total waste quantities indicate that waste disposed to landfill in New Zealand has increased slowly but continuously since 1985.

Measured waste quantities tend to be greater with greater affluence of the community. Increases have also been linked with higher economic growth rates. It is expected that quantities will vary in the future in response to factors such as these and that there will be forces leading to increasing waste quantities which must be overcome if reduction is to be achieved. Waste reduction is likely to depend on a change in attitude to acceptable consumption, technology changes allowing less wasteful processes, and the need to reduce business costs.

Waste Reduction Objective

- To reduce the amount of waste produced by raising awareness of waste issues and encouraging waste producers to change their practices.

Policies

The Council will:

- 4.1.1 take a leadership role in waste reduction initiatives
- 4.1.2 encourage all waste producers to implement cleaner production systems, to reduce waste production, and to carry out waste audits
- 4.1.3 work to reduce the incidence of illegal dumping of rubbish ('fly tipping') and littering.

Methods

- 4.1.1 Carry out an in-house waste audit of the Council's premises and adopt ways to reduce waste. Use results to demonstrate the environmental and financial benefits of carrying out waste audits to other businesses.
- 4.1.2 Use the results of the waste audit for promotional material.
- 4.1.3 As far as is practicable, adopt purchasing policies that favour products produced using cleaner production technologies and/or have recycling potential and/or contain a recycled content.
- 4.1.4 In conjunction with combined local government initiatives, pressure central government to tighten environmental packaging standards.
- 4.1.5 Promote waste audits to businesses, households and other organisations by promoting the financial and environmental benefits of implementing cleaner production technologies.

- 4.1.6 Educate the public about reducing the consumption of packaging material, and encourage them to purchase products that produce less waste and/or contain a recycled content and are recyclable.
- 4.1.7 Support community based waste reduction programmes.
- 4.1.8 Consider pro-active measures to identify instances of illegal dumping of rubbish (e.g. newspaper or radio requests for public identification of illegal dumping).
- 4.1.9 Enforce existing penalties by pursuing the actions required to prosecute offenders. Appoint Litter Control Officers and Litter Control Wardens (Litter Act 1979) as necessary.

Proposed Implementation Programme

Financial year	Action
2001/02 and ongoing	Undertake promotion of waste reduction Appoint Litter Officers
2002/03	Undertake a waste audit of the Council's premises and promote the results of the reduction actions put in place

4.2 Reuse And Recycling

Reuse and recycling provide further opportunities to divert waste from landfills. Historically, reuse and recycling initiatives have predominantly been provided by the private sector through second-hand stores and the processing and marketing of recycled products. The Council's role has in the past been limited to the provision of additional collection points for re-usables and re-cyclables at landfills.

Reuse Opportunities

Existing reuse systems are dominated by local second-hand dealers with a lesser amount dropped off at the Hokitika dump. These dealers handle higher value items for which there is a general demand. Council could promote the options that are provided by these private operators. The additional costs of such promotions when undertaken in conjunction with other education initiatives would be small.

For lower value items not diverted by second-hand dealers, the Council could consider the provision of further facilities at the drop-off centre at the Hokitika Landfill or future transfer station or alternative locations. Reusable items could be dropped off at the centre and resold for a small fee to other members of the community. Similar centres operate in a number of other areas and are often run by community organisations in conjunction with work experience programmes. Additional facilities of this sort should be promoted and supported as community initiatives associated with each local dump or transfer station.

To facilitate the reuse of industrial waste materials in the District, the Council could consider developing a resource exchange register. Such registers provide a valuable medium for companies to interact with others to find homes for industrial waste products, which would otherwise be disposed of to landfill. Waste exchange registers already operate in several other centres and have proven to be successful at a relatively low cost. The Council could set up an independent register but a combined effort with other councils is likely to produce better results.

Recycling

Successful recycling requires markets to exist for the recyclable material. While some markets do exist, these markets are extremely variable, making recycling a significant business risk, which requires good market knowledge. Due to the considerable risks involved and the established operation of existing private sector ventures, it is considered that the processing and marketing of recyclables should continue to be undertaken by the private sector. Hence the Council's role should be one of support for the private sector. This could be in the provision of collection methods for post-consumer recyclable materials and the promotion of existing private sector services. Initiatives in conjunction with other councils may help in achieving economies of scale for some recyclable materials.

Recyclable Collection

The Councils' role in the collection of recyclable materials has been to undertake 2 recycling collection a year and to provide collection points at landfills. These facilities need to be upgraded with particular regard to appearance and signage to make the best use of existing investments and to make recycling an integrated part of solid waste management in Westland District. Additional facilities may be beneficial in other sites, including at future transfer stations.

While kerbside collection of recyclable material does encourage recycling by making it easier for the individual, it is an expensive operation. The costs of these collections can be prohibitive and it is considered that for the Westland District it would be better to first concentrate on other methods of waste minimisation. The Council will however provide assistance and support for private kerbside recyclable collections of, for example, scrap metals.

Financial Assistance

Most reuse and recycling initiatives are undertaken by private sector ventures for those materials that have an economically viable end market. Council intervention through subsidies can distort market conditions and allow recycling of a product for which no effective demand exists. Additionally, the costs of providing financial subsidies have to be recovered from other sectors within the community. Although short term funding to support projects while they get underway may be beneficial, long-term financial assistance should be avoided.

The Future

It can be expected that recycling markets will continue to fluctuate and that the financial viability of various recycling activities will vary with global economic conditions and variations in supply and demand. Consequently it is necessary to allow flexibility to

adapt any recycling ventures to the changing market conditions. Stockpiling of recyclable material until there was a market for it could be an option. In the longer term the economics of recycling may improve (as it has done in the past), particularly with improved technology, greater pressure for cleaner production methods, and changing cost structures for new resources relative to recycled resources.

Reuse and Recycling Objectives

- To divert as much ‘waste’ as possible from landfills, through the use of reuse and recycling systems.

Policies

The Council will:

- 4.2.1 support and/or provide opportunities for domestic district-wide or region-wide reuse and recycling of waste materials
- 4.2.2 encourage and assist waste producers to separate, reuse and recycle waste.

Methods

- 4.2.1 Support voluntary and commercial organisations that provide waste minimisation services in preference to acting as the prime service provider when suitable organisations exist. Support could include financial assistance, assistance with administration and education and promotion schemes in conjunction with other waste minimisation initiatives.
- 4.2.2 Promote and maintain region-wide recycling by the provision of recycling collection points for materials for which there is a current viable market. These collection points are to be provided at landfills and at future transfer stations.
- 4.2.3 Periodically review the provision of kerbside recycling services both in Hokitika and in other smaller towns. This review would include consideration of cost, applicability to the local situation and practicality.
- 4.2.4 On a case-by-case basis, consider funding subsidies to give short-term financial support during the initiation of community-based recycling and reuse programmes.
- 4.2.5 Keep participants up to date on recycling achievements.
- 4.2.6 Regularly review the performance of existing collection stations and provide alternative replacement collection systems if appropriate.
- 4.2.7 Support drop-off centres for reusable items at the Hokitika Landfill or future transfer stations or alternative sites in conjunction with suitable community organisations or site operators.

- 4.2.8 Develop existing recycling facilities so they form an integral part of the waste disposal procedure at these sites.
- 4.2.9 Improve signage at all disposal sites to explain procedures for waste separation, reuse and recycling and to incorporate the common logo/brand (refer method 3.1).
- 4.2.10 Investigate promote and support the development of programmes for businesses (e.g. cleaner production programmes) to ensure all materials for which there is a market are recycled and reused (perhaps in conjunction with neighbouring councils).
- 4.2.11 Promote and support information sharing and initiate a coordinated waste exchange network (including exchange register) in conjunction with neighbouring councils for businesses to exchange and reuse industrial waste material.
- 4.2.12 Promote the sustainability of the recycling process by encouraging end markets for recycled goods (e.g. provide the community with information on available sources and types of recycled products).

Proposed Implementation Programme

Financial year	Action
2001/02 & ongoing	<p>Promote and assist with recycling/waste reduction programmes in Franz Josef, Fox Glacier and Kumara with recycled materials being transported to Hokitika</p> <p>Information about markets for the various materials assembled and kept up to date</p> <p>Continue liaison with other councils about recycling initiatives</p>
2002/03 & ongoing	<p>Extend recycling services to Haast, Ross, Harihari and Whataroa (in priority order)</p> <p>Find and support local community representatives to run the community programmes</p>
2002/03	<p>Purchase a press for compacting waste from South Westland before it is transported to Hokitika</p> <p>Upgrade recycling facilities at Hokitika</p>

4.3 Organic Resource Recovery

Organic material currently makes up the largest single proportion of the waste stream being disposed to landfill in the Westland District. Hence the most significant advance in waste minimisation for the district would be the diversion of organic material to home and commercial scale composting.

Commercial Scale Composting

The long-term success of a commercial scale composting process relies on developing markets for the product. While Council support may still be needed, commercial scale composting is a business. Council could facilitate and assist private sector or community initiatives.

Home Composting

It is difficult to quantify exactly how much waste could be diverted by home composting, but in some New Zealand centres 50% of all households are now practicing some form of home composting. The Council could use promotion and education techniques to increase the incidence of home composting in Westland District.

The Future

Organic material will likely continue to make up the largest part of the waste stream in Westland District and the diversion of this material will be crucial to achieving successful waste minimisation. The long term success of any commercial scale composting venture will require a well developed market for the compost product as well as a reliable supply of compostable material. Experience indicates that although demand for compost products can easily exceed supply, charges for the deposit of greenwaste for composting are still necessary.

Organic material is the main contributor to landfill gas, and gas extraction and reuse is becoming increasingly economic with advances in technology. However it is unlikely that this will become viable in Westland in the period of this Plan. New composting technologies are also under development. These may lead to new processes to recover organic wastes for composting and to new combinations of composted waste types. Vermiculture (the use of worms) is already proving a good alternative for some situations, including at home.

Organic Resource Recovery Objective

- To maximise the quantity of organic material removed from the waste stream via composting or other appropriate technologies.

Policies

The Council will:

- 4.3.1 investigate and support private sector and community initiatives in commercial and small scale composting of greenwaste to maximise the quantity of compostable material diverted from the waste stream
- 4.3.2 encourage alternative methods of recovery of organic resources if they are appropriate.

Methods

- 4.3.1 Council will investigate the economics of central composting or mulching facilities as part of the consideration when new disposal facility are being designed.
- 4.3.2 Provide separate facilities for tipping of greenwaste at future refuse transfer and skip stations, for diversion to composting at the new disposal facility or separate on-site disposal.
- 4.3.3 Support voluntary and commercial organisation initiatives in composting in preference to acting as the prime service provider.
- 4.3.4 Encourage greater source separation and use of composting through inclusion of educational material in promotion schemes.
- 4.3.5 Lead by example by separating garden greenwaste from the Councils waste stream.
- 4.3.6 Develop and disseminate promotional material on home composting and worm farming (vermicomposting) or any other relevant processes to the community.
- 4.3.7 Investigate resource recovery alternatives as they become available, considering costs, applicability to local conditions, practicality and environmental impacts.
- 4.3.8 Develop and disseminate educational material about the adverse effects of the indiscriminate dumping of garden waste in rural areas, forests, along and into waterways, waterbodies and the coast.

Proposed Implementation Programme

Financial year	Action
2001/02 & ongoing	Continue to operate green waste disposal areas at the Hokitika Landfill and the Fox Glacier Transfer Station until either the site is covered or decisions are made on the future of the sites
2003/04	Complete a study of options for organic waste in Hokitika

5.0 COLLECTION SYSTEMS

5.1 Waste Collection

The purpose of a refuse collection service operated by Council is to provide a service that ensures the protection of the general health of the community and prevents contamination of the environment. Council currently lets contracts for the weekly kerbside collection of refuse from Hokitika and makes provision for the subsequent disposal of that refuse at the local landfill facility. Detail of the existing collection and disposal system is provided in Appendix D.

Domestic Refuse Collection

The Council provides a weekly domestic kerbside collection service to Hokitika for refuse in standard plastic sacks. Sacks are distributed to each Hokitika household yearly and additional bags can be purchased. No Council sponsored collections are made in other centres within the district. Rural areas in the District have no refuse collection services. Private sector collection services offer alternatives to the Council service, both within Hokitika and in unserviced parts of the district (refer to Appendix D for detail).

While the existing system is adequate for its current purpose for collection and disposal to existing landfills, this will need to be reviewed as the existing landfills are closed and the alternative strategy for the disposal of the districts waste is implemented.

The Future

The main trends in NZ for council collection services relate to how the service is provided (i.e. the extent of Council involvement and how much responsibility is left to the private sector). Historically, councils have been the sole collection service provider. However national trends indicate a growing number of private waste collectors. Private collection services are also becoming more flexible (e.g. able to take larger one-off amounts). This may result in a lower demand for access to transfer stations by non-commercial users in the future. It may even reach the point in the future where local authorities are no longer required to have an active part in waste collection.

Changes to other waste management practices, and in particular waste minimisation initiatives, may also affect the type of collection services required in the future. Composting of organic wastes may reduce the frequency of collection service needed to avoid odour problems. Greater recycling and reduction may change the quantities dealt with and hence the type of collection.

Waste Collection Objective

- To provide or administer efficient collection services for the District in a safe and environmentally responsible manner.

Policies

The Council will:

- 5.1.1 provide or administer kerbside collection services for domestic solid waste (of non-commercial source) for communities where it is viable and where the community agrees to these on a 'user pays' cost recovery basis
- 5.1.2 consider the provision of additional refuse transfer station and/or skip service facilities to allow access to waste disposal facilities for the whole district.

Methods

- 5.1.1 Periodically review the provision of kerbside collection services both in Hokitika and in other smaller towns. This review would include consideration of options such as private collection and disposal of waste.
- 5.1.2 Review the future of refuse collection in the rural District in response to community requests. These services may include alternative refuse transfer stations, regular collections or other systems as determined following community consultation.
- 5.1.3 Regularly review the most appropriate systems of administration and operation with respect to public expectations of the level of service, and in conjunction with the renewal of operating contracts.
- 5.1.4 Promote good waste management in rural areas as a specific part of the education and promotion programmes.
- 5.1.5 Implement, maintain and operate transfer stations and skip stations to the best practicable operating standards.
- 5.1.6 Adopt cost recovery systems for rural collection that are specifically suited to the rural area. Cost recovery structures may differ from those in place for urban and peri-urban areas.

Proposed Implementation Programme

Financial year	Action
2001/02 & ongoing	Provide a minimum of once weekly solid waste collections for domestic refuse in Hokitika Review extension of services to other communities close to Hokitika
2003/04	Review all collection services in conjunction with decisions on long-term waste disposal strategy

5.2 Hazardous Waste

The management of hazardous waste has been reviewed at the national level under the Ministry for the Environment's (MfE) Hazardous Waste Programme. A document entitled "Managing Hazardous Waste in New Zealand" has been prepared for MfE by the Centre for Advanced Engineering and was released in April 2000 (CAE 2000). This document provides national direction for Councils in managing hazardous waste in the future.

MfE have also released a technical working paper entitled "Towards a New Zealand Definition of Hazardous Waste" (MfE 1999). Providing a formal definition for hazardous waste is complex but for the purpose of this discussion hazardous waste is any waste material that, because of its concentration or chemical characteristics, poses a substantial or potential danger to human or animal health or to the environment. Landfills generally are able to receive only limited types of hazardous waste.

Due to their potentially dangerous nature, hazardous wastes have special handling and aftercare requirements and hence have higher management costs than general refuse. Many producers are not aware of their hazardous waste production or how to correctly dispose of these wastes. If producers of hazardous wastes could be encouraged to separate these materials before disposal, then the disposal of hazardous wastes could be controlled. Hazardous wastes that are unsuitable for disposal at District landfills could be diverted to more suitable disposal facilities and the costs of managing hazardous wastes would be reduced.

To aid the separation and controlled disposal of domestic hazardous wastes, a collection point will be located at Hokitika Landfill. This will be a temporary storage facility for the containment of limited types and quantities of these wastes until removal to a more appropriate out-of-region disposal facility. Large quantities of hazardous wastes cannot be collected under this system and commercial wastes will continue to be the responsibility of the producer.

The Council is currently participating in a West Coast group discussing management of hazardous waste issues on a regional basis.

The Future

Hazardous and difficult waste will continue to require control systems to ensure that they are identified within the waste stream and are treated in the best possible manner. The Ministry for the Environment's (MfE) Hazardous Waste Programme will address these issues at the national level. Changing technology will give rise to new waste types and will lead to new options for treating existing problem wastes.

Hazardous Waste Objective

- To endeavour to minimise adverse effects on the environment and the community arising from the handling, transportation, treatment and final disposal of hazardous waste.

Policies

The Council will:

- 5.2.1 adopt or develop a protocol for managing hazardous waste
- 5.2.2 work with producers and the general public to reduce the quantity of hazardous waste requiring disposal and eliminate the disposal of untreated hazardous waste to landfill.

Methods

- 5.2.1 Develop a protocol for managing hazardous waste that may include the passing of bylaws that clearly state the rules for disposal of hazardous waste in the District.
- 5.2.2 Continue to improve established systems of waste identification at landfills in order to divert unsuitable hazardous wastes to more suitable disposal options. In particular this could be done by identifying relevant waste producers and assisting them to find alternative uses or disposal methods for hazardous wastes.
- 5.2.3 Maintain a database and provide information on, facilities that treat hazardous waste and that are able to dispose of waste unable to be disposed of at district landfills.
- 5.2.4 Provide support for the development of joint hazardous waste management and reduction systems with other territorial authorities in the West Coast Region.
- 5.2.5 Provide information to the public through regular education programmes on the range and toxicity of household hazardous wastes and on alternative disposal options.
- 5.2.6 Consider providing a collection point at Hokitika landfill for small quantities of selected types of domestic hazardous waste. Investigate options for disposal of the collected material at a suitable disposal facility.
- 5.2.7 Promote reduction of commercial hazardous wastes through education programmes, involvement in cleaner production programmes, and by imposing special disposal costs.
- 5.2.8 Implement and maintain charges that reflect the true costs of specialised handling and aftercare requirements for hazardous wastes.



Proposed Implementation Programme

Financial year	Action
2001/02 & ongoing	Continue to participate in the West Coast Waste Management Group
2002/03	Establish a safe collection site in Hokitika for hazardous wastes Use techniques such as amnesties for the disposal of small amounts of hazardous waste Ensure safe storage then dispose of hazardous wastes as soon as practicable
2003/04	Comply with the transitional requirements of Hazardous Substances and New Organisms Act (1999)

6.0 DISPOSAL FACILITIES

It is Council's responsibility to ensure that residual waste is disposed of in a safe and environmentally responsible manner. Currently in New Zealand the most appropriate method for disposal of this residual waste is to landfill it.

There are currently seven landfills operating in the District (refer to Appendix D for details of existing landfills). Resource consent applications have been made for these landfills. The resource consent terms proposed vary between landfills. Most of the existing landfills are expected to close by the end of 2005 and all the remaining un-lined sites by 2010. A replacement for these facilities will be required by that time.

The Council has established its preferred option for replacement of these disposal facilities. This is to reach an agreement with the Grey District Council that allows for the transfer of Westland District's solid waste to the McLeans Landfill near Greymouth. The preferred option would also involve a regional transport system. A regional approach that also involves Buller District Council would offer further economies of scale. The implications of this decision are reflected in other aspects of the Plan. In particular the management of waste collection and transfer methods (presented in Section 5.0 above) are influenced by the preferred disposal option that has been chosen.

Nationally, there is a trend towards the establishment of regional disposal sites in preference to smaller local or District landfills. There is also a trend to greater private sector involvement in landfill ownership and operation.

While the cost of transporting waste to McLeans Landfill may be high, the construction, ownership and operation of a new landfill carries with it significant commercial and environmental risks for Council. Consents for new landfills are increasingly difficult to obtain and establishment costs are now a substantial investment. These costs and risks could be shared with Grey District Council and possibly also with Buller District Council if McLeans Landfill was established as a regional disposal facility.

The Future

It is possible that other new disposal methods may lead to the diversion of some waste types from landfills, or to the adoption of new disposal methods for most of the waste stream. Waste minimisation methods discussed in Section 4 will also result in reduced volumes of waste in the future. This will have cost implications where substantial investment is made in developing a new landfill facility for long-term use. However at this time disposal to landfills is the only proven large-scale waste disposal method in New Zealand. In addition it seems likely that significant quantities of waste will still require disposal in the foreseeable future.

Objective

- To efficiently and effectively manage the disposal of residual solid waste and to ensure disposal is carried out in a safe and environmentally responsible manner.

Policies

The Council will:

- 6.1 consider alternative methods of solid waste disposal (including high temperature incineration and other options) for the Westland District having regard to cost, applicability to local conditions, practicality, and environmental impacts
- 6.2 provide or administer cost effective and efficient solid waste disposal facilities that minimise adverse environmental, social and cultural effects.

Methods

- 6.1 Reach a suitable agreement with the Grey and Buller District Councils for a regional transport system and regional disposal of solid waste at McLeans Landfill.
- 6.2 Continue to use landfills for the disposal of residual waste until the preferred waste transport system is fully operational.
- 6.3 Continue to own and operate the seven council operated landfills until their closure according to their specific resource consent conditions.
- 6.4 Undertake post closure management of landfills as necessary or required.
- 6.5 Investigate options for the possible use of existing landfill sites following their closure.
- 6.6 Encourage private sector involvement in establishing any new disposal facilities.
- 6.7 Ensure that the best practicable options in regard to landfill disposal are implemented at existing Council landfills.
- 6.8 Ensure landfill operations meet resource consent requirements and other relevant legislative requirements.
- 6.9 Develop and operate all Council landfills in accordance with the Management Plan for each site, which describes the framework for the management, development and eventual closure of each site.
- 6.10 Control public access to all landfills and reduce landfill opening times.
- 6.11 Introduce operator staffing of all landfills or transfer stations and only allow waste disposal when the staff are in attendance.
- 6.12 Charge fees for waste disposal, which more fully reflect the real costs of operation of landfills.
- 6.13 Establish and maintain facilities for the disposal of cleanfill.

Proposed Implementation Programme

Landfills

The following generally small to very small landfills are either operational or have recently closed:

Site	Status
Otira	Closed July 2001
Kumara	Operational
Hokitika	Operational
Ross	Operational
Harihari	Operational
Whataroa	Operational
Franz Josef	Operational
Fox Glacier	Closed August 2001
Denis Road, Haast	Operational
Hannahs Clearing, Haast	Closed September 2001
Neils Beach/Jackson Bay	Closed June 2001

In addition, there are unofficial operating dumps at Jacobs River, South Westland and at Turnbull River, Haast. There are also at least 6 old (> 15 years since closure) landfills scattered around the district.

Transfer Stations

Transfer stations are planned at the following locations:

Otira	(currently a temporary transfer station using skips)
Kumara	(currently a refuse site)
Hokitika	(currently a refuse site)
Ross	(currently a refuse site)
Harihari	(currently a refuse site)
Whataroa	(currently a refuse site)
Franz Josef	(currently a refuse site)
Fox Glacier	(currently a temporary transfer station)
Neils Beach/Jackson Bay	(currently a trailer mounted cage for waste transport to Denis Road landfill)

A programme for the development of these transfer stations has been established as follows:

Location	Establishment Date
Otira	Existing, upgrade in 2005
Kumara	2006



Hokitika	2005
Ross	2003
Harihari	2004
Whataroa	2005
Franz Josef	2005
Fox Glacier	Existing, upgrade in 2003, new site needed?
Neils Beach/Jackson Bay	Existing trailer, upgrade if warranted

Transfer stations will be established on existing landfills where possible, to provide continuity of service, use of the accumulated site monitoring data, and to avoid finding new sites. Over the next three years, the effectiveness of the Otira and Fox Glacier transfer systems will be assessed to ensure the facilities are operating in the most effective and efficient manner possible. Experience from developing and operating these small sites will be directly transferable to new small site transfer station developments within the district.

In the short term, temporary transfer stations utilising mini-skips have and will be used to replace closing small-scale landfills. The first of the future dump closures will be at Ross, followed by Harihari and then Whataroa. Conversion to transfer station will then follow at the larger sites: Kumara, Franz Josef and Hokitika.

Denis Road landfill at Haast will remain open and be re-developed into a lined "modern" landfill to continue operating beyond 2010. The cost of transferring waste from the Haast area is unsupportable, and a small site will be required in the Haast area for the foreseeable future.

Closure of Existing Dumps

A programme to close the remaining small dumps has been established as follows:

Location	Closure Date	Reason
Kumara	2006	Unlined site
Hokitika	2006	Site full?
Ross	2003	Site full, bad location
Harihari	2004	Bad location, river erosion risk
Whataroa	2005	Bad location, full?
Franz Josef	2005	Unlined site, full?

A summary of the future development timeline for Westland solid waste disposal sites is shown in Table 1 below.

This programme will focus on the closing of small unlined landfills before the Central Government 2010 deadline for such sites. The programme is in broad agreement with the Options for Solid Waste Management questionnaire (2000), which indicated 60% support for a mixture of in-district disposal and transfer stations.

If the preferred option for waste disposal is able to be implemented, then by 2007, Westland District will have a landfill at Denis Road (Haast), and an agreement for out-of-district disposal (to McLeans Landfill near Greymouth) for all other waste. All the existing landfills will have been closed and been converted to transfer stations.



Table 1 PROPOSED PROGRAMME OF LANDFILL CLOSURES AND TRANSFER STATION ESTABLISHMENT

Site	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Otira	Closed														
Otira TS	Start				upgrade										
Kumara					Close										
Kumara TS						Start									
Hokitika					Close										
Hokitika TS					Start										
Ross			Close												
Ross TS			Start												
Harihari				Close											
Harihari TS				Start											
Whataroa					Close										
Whataroa TS					Start										
Franz Josef					Close										
Franz Josef TS					Start										
Fox Glacier	Closed														
Fox Glacier TS	Open		upgrade												
Denis Road		Close													
Denis Road New cells		Start ##													
Hannahs	Closed														
Neils Beach	Closed														
Neils Beach TS	Started	upgrade													

may need to transfer Hannahs waste here

TS= transfer station

7.0 COST RECOVERY

Solid waste management is a significant financial commitment for any council. The costs must be recovered from the community. Costs can be recovered from the general community, from targeted sections within the community or from individuals. Cost recovery can also be used to assist and encourage the community to make informed choices regarding their waste disposal based on an awareness of the true cost of their actions.

To promote waste reduction, waste management would ideally be totally funded by direct user charges. Individuals would pay in proportion to the amount of waste they generate and the extent of service they use. However the costs of collecting some direct user charges can be administratively inefficient and hence uneconomic. In addition there is a component of public benefit in some waste services provided by Council, which cannot be allocated to individual waste producers.

Westland District Council currently recovers some of the costs of waste management through a special rate for domestic collection services, and a significant amount of general rates funding.

Waste Minimisation Programmes

The costs of waste minimisation initiatives must also be recovered from the community, as few initiatives are self-funding. Reuse, recycling and recovery programmes divert waste from the landfill and therefore save landfill operation costs. However, there are still significant costs associated with these activities, which must be recovered.

The costs of waste minimisation initiatives could be recovered by an additional charge for refuse disposal. By applying a levy on disposal charges, the cost of these services would also increase, thereby acting as an additional incentive to minimise wastes.

Objective

- To implement the most appropriate method of cost recovery for collection and disposal services and waste minimisation initiatives, whilst having regard to cost efficiencies and the public good component.

Policy

The Council will:

- 7.1 recover costs for solid waste management using direct user charges where costs can be attributed to specific groups or individuals, where direct user charges are proven to be cost efficient, and where charges will encourage waste minimisation.

Methods

- 7.1 Continue to recover the costs of the basic domestic refuse collection service via bag charges and a special rate. Progressively increase the charges and the rate.
- 7.2 Increase gate charges at existing landfills and monitor results both for waste reduction and non-compliance. Council will consider all charges annually.
- 7.3 As current landfills are closed and replaced by transfer stations, investigate and implement appropriate direct user charges.
- 7.4 Continually review waste collection and disposal charges, and structure these charges as required to encourage waste producers to separate waste, reuse and recycle as much as possible (i.e. have quantity based charges).
- 7.5 Recover costs for waste minimisation initiatives via a combination of rates and a levy on disposal charges where direct user charges for waste minimisation services cannot be implemented.
- 7.6 Publicise reasons for cost recovery charges and the benefits of services provided so that the community can make informed decisions in managing their waste.
- 7.7 Follow appropriate accounting procedures that enable the Council to identify the true costs of each aspect of its solid waste management strategies and which will aid Council in determining and reviewing appropriate methods of cost recovery. Include a figure for opportunity cost savings from landfill volume saved due to waste minimisation initiatives.

Proposed Implementation Programme

Financial year

Action

Increase gate charges to the following *indicative levels* (subject to cost variations of future waste disposal options). All charges will be considered annually.

	<i>car</i>	<i>trailer/ute</i>	<i>per tonne</i>
2001/02	\$1	\$2	\$10
2002/03	\$5	\$10	\$40
2003/04	\$10	\$20	\$80
2004/05	\$15	\$30	\$120
2005/06	\$20	\$40	\$160
2006/07	\$20	\$40	\$160
2007/08	\$20	\$40	\$160
2008/09	\$20	\$40	\$160
2009/2010	\$20	\$40	\$160

GLOSSARY

<i>Cleanfill</i>	Inert waste material (e.g. bricks, glass, gravel, steel and rubber).
<i>Commercial waste</i>	Waste from commercial (non-domestic) sources, including industrial and institutional sources e.g. shops and other businesses, hospitals etc.
<i>Domestic waste</i>	Waste from domestic (non-commercial) sources, e.g. from residential houses, schools etc. Waste from shops and other businesses is not domestic waste.
<i>Hazardous waste</i>	Waste that poses a substantial present or potential danger to the environment (i.e. toxic to humans, plants, or animals, flammable, corrosive or explosive or having high chemical reactivity (e.g. toxic heavy metals, pathological medical care wastes, solvents etc). See also <i>waste</i> .
<i>Landfill</i>	For the purpose of this report ‘landfill’ means a site for the entombment of residual waste without any intended design for future resource use. The beneficial filling of land with inert material to add value to the land is not considered a landfill in this regard.
<i>Organic waste</i>	Also referred to as ‘greenwaste’. Organic waste material (e.g. food and vegetable wastes, paper, wood and garden waste). See also <i>waste</i> .
<i>Special waste</i>	Waste that requires special methods of disposal (e.g. car bodies, whiteware. liquid sludges). See also <i>waste</i> .
<i>Waste</i>	For the purpose of this Plan ‘waste’ is considered to be any rubbish, litter or other waste material that may eventually be disposed of at Council facilities. The Landfill waste stream is made of distinct components that can be managed and disposed of separately. (Refer also to <i>cleanfill</i> , <i>organic</i> or ‘ <i>greenwaste</i> ’, <i>special waste</i> and <i>hazardous waste</i>).
<i>Zero waste</i>	For the purpose of this Plan the concept of ‘Zero Waste’ indicates the direction that Council will head in its waste management objectives, by maximising the potential of reduction, reuse, recycling, and resource recovery activities. Council acknowledges that truly zero (nil) quantities of waste needing disposal are probably not literally achievable in the foreseeable future.

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APPENDICES

- A. A Brief History of the Development of the Plan
- B. Legislation and Planning Documents
- C. Linkages of Council Planning Processes
- D. The Existing Solid Waste Management System
- E. Key Waste Management Statistics
- F. Deciding Between Disposal Options



Appendix A – Legislation and Planning Documents

Legislation and Planning Documents

Planning documents and legislation considered during the preparation of the Plan are listed below. Note that these are discussed in Section 2 of the discussion document Options for Solid Waste Management in Westland District and the reader is referred to this document for more detail.

- The Resource Management Act (1991)
- The Local Government Act 1974 (and Amendments)
- The Health Act 1956
- The Litter Act 1979
- The Transport Act 1972
- Hazardous Substances and New Organisms Act 1996
- West Coast Regional Policy Statement
- Regional Plan for Discharges to Land (operative in part)
- Proposed Regional Air Quality Plan (1998)
- Regional Coastal Plan (2000)
- Proposed Soil Conservation and Erosion Control Plan
- Proposed Westland District Plan
- West Coast Regional Solid Waste Management Strategy (1992)
- Resource Consent applications and draft conditions for existing Westland Landfills

New Planning Document

- The New Zealand Waste Strategy – Towards zero waste and a sustainable New Zealand (Ministry for the Environment and Local Government New Zealand, March 2002).

Local Government Act Provisions

Part XXXI of the Act relates to refuse collection and disposal. This part of the Act was amended in 1996 to require local authorities to establish a waste management plan.

Important provisions include the following:

Section 538: Duty of territorial authority to encourage efficient waste management –
Every territorial authority shall promote effective and efficient waste management within its district and, in so doing, shall –

- (a) *Have regard to environmental and economic costs and benefits to the district, and*
- (b) *Ensure that the management of waste does not cause a nuisance or be injurious to health.*

Section 539: Waste Management Plan –

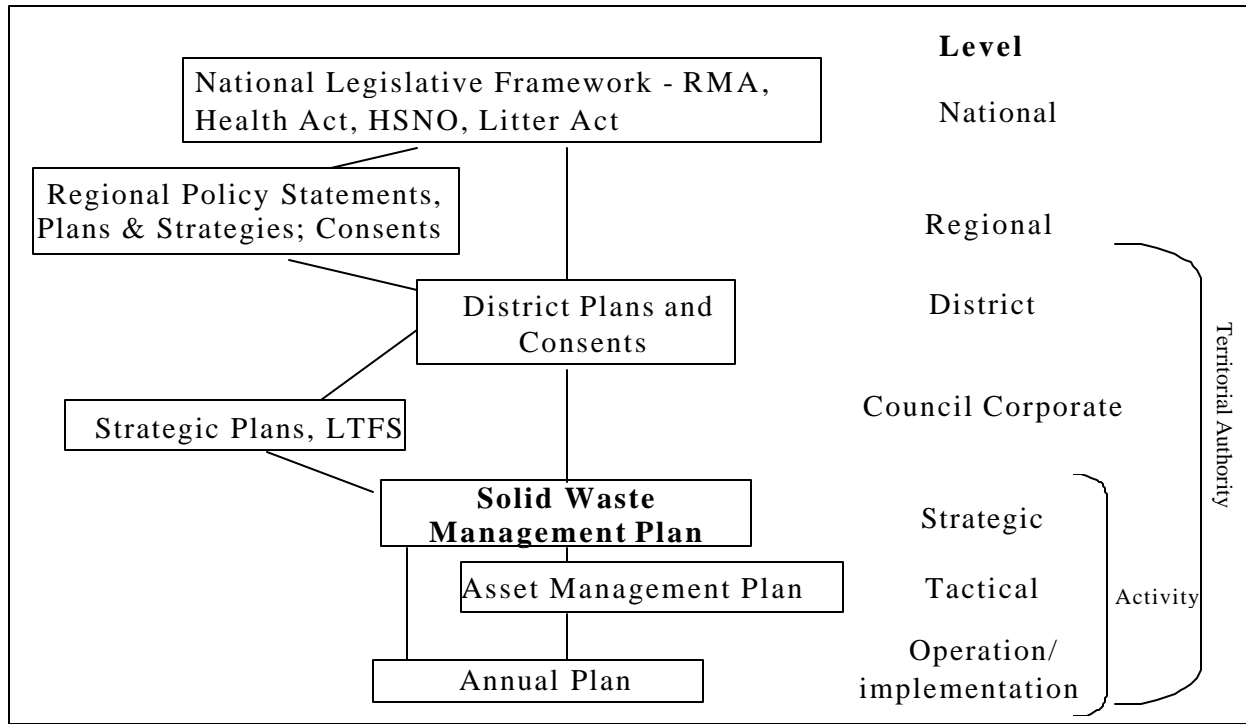
- (1) *Every territorial authority –*
 - (a) *Shall adopt a waste management plan; and*
 - (b) *May from time to time –*
 - (i) *Amend its waste management plan; or*

- (ii) *Revoke its waste management plan, and substitute a new waste management plan.*
- (2) *Every waste management plan shall –*
 - (a) *Make provision for the collection and reduction, reuse, recycling, recovery, treatment, or disposal of waste in the district:*
 - (b) *Provide for the effective and efficient implementation, or for activities considered appropriate for that purpose to be undertaken by, or under contract to, the territorial authority*

The Act also gives territorial authorities wide powers relating to waste management operations and facilities, By-laws, grants for waste minimisation and allocation of costs. Please see a copy of the Act for the details of the provisions.

Appendix B – Linkages between Council’s Planning Processes

Linkages between Council's Planning Processes



Appendix C – A Brief History of the Development of the Plan

A Brief History of the Development of the Plan

1. Resource consents for existing landfills

A hearing was held on 10 September 1999 to consider resource consent applications from the Westland District Council (WDC) with respect to the operation of nine existing landfill sites. The Commissioner's decision was in favour of granting short-term consents for discharges to land, air, and water from these sites subject to a number of conditions. One of the conditions requires the WDC to develop a future Solid Waste Management Strategy for the Westland District.

2. Legal requirement for the Plan

A legal requirement of the Local Government Amendment Act No. 4 (1996) is that all territorial authorities must prepare and adopt a waste management plan. The Act defines several attributes of this plan including a requirement that the plan address the issues of waste reduction, reuse, recycling, recovery, treatment and disposal.

3. Developing the Plan

Development of the Plan will occur in three stages as follows.

Stage 1: Scoping Study

This stage involved the preparation of the discussion document entitled "Options for Solid Waste Management" by consultants Beca Carter Hollings and Ferner Ltd. This was circulated in April/May 2000 along with a survey document "Options for the future of Solid Waste Management". 206 responses were received to the documents.

Stage 2: Consultation Programme

This document, the Solid Waste Management Plan, has been prepared based on outcomes from the written responses to the options document from the public. It has been written and reviewed by Council staff and the Planning and Development Committee of Council.

Stage 3: Plan Formalisation

This stage involves the special consultative procedure outlined in the Local Government Act No. 4, required as part of the process to formalise the Solid Waste Management Plan. The draft Plan was publicly notified on 19 December 2001 with submission closing on the 28 February 2002. In addition a "flyer" containing a summary of the main aspects of the draft plan as well as information about how to make a submission was sent to all ratepayers with the December rates de mand.

Thirty written submission were received on the plan and eight parties indicated that they wished to speak to their submissions. The submissions were analysed and summarised by council staff.

The Council's Planning and Development Committee heard the oral submission (4 were presented) at a meeting on the 14 March 2002. The committee then considered each

submission and made decisions about whether the draft plan needed to be amended as a result of the submissions.

The amended plan was recommended by the Planning and Development Committee to the Council for adoption. The Council adopted the Plan at their 21 March 2002 meeting.



Appendix D – The Existing Solid Waste Management System

Existing Solid Waste Management System

1. Introduction

The Council currently contracts out refuse collection services in Hokitika, as well as maintenance and operation services for the Council's Hokitika landfill. Details of the contract agreement and specifications are defined in Council's Contract Document No: 97/98/21- Refuse Collection (WDC 1998) and Hokitika Refuse Site Maintenance Management Contract No. 00/01/1, (WDC August 2000).

The Council currently operates seven landfills. None of these have been granted resource consents. A further four small sites have been recently closed. These also have pending resource consent applications, which will now only cover closure and aftercare matters when they are granted.

A map showing the locations of existing landfills and the areas receiving collection services is provided in the discussion document Options for Solid Waste Management (Beca Carter 2000). Detail of the nature of collection services, landfill operations, and consent applications are also provided in the discussion document. A brief summary is outlined in Sections 2-4 below.

2. Refuse Collection

Refuse collection services in Hokitika are provided by the Council in the form of weekly rubbish bag collections of official Council rubbish bags carrying no more than 15 kg per bag from households and businesses.

Refuse collection services are also provided by the Council in the form of litter bins, which are collected from commercial areas weekly at Hokitika, Franz Josef, Fox Glacier, Haast and Jackson Bay.

A skip service is provided for the Otira area, with collections on a 2-3 weekly basis depending on demand.

The Fox Glacier area also has a skip system, with weekly collection of waste.

In addition refuse collection services are also provided by private operators who provide and empty large drums (200 litres) or Maxibins (3.8m³) for households and businesses in Hokitika, Franz Josef and Fox Glacier Township.

The remaining communities in the district do not receive a refuse collection service and are responsible for taking their own refuse to local landfills.

3. Refuse Disposal

3.1. Transfer Stations

There is currently one transfer station in operation in the Westland District. This is located on the closed Fox Glacier landfill site, off the Fox Glacier access road. It houses ten 3.8m³ Maxibins, which are emptied weekly by a frontloading truck, with waste transported to Hokitika.

3.2. Operational Landfills

Resource consents applications have been made for all operational and some closed landfills in the District. The consent terms proposed by WCRC are outlined below:

Landfill	Proposed Consent Term (years)
Otira (closed)	2
Kumara	10
Hokitika	10
Ross	3
Harihari	5
Whataroa	10
Franz Josef	10
Fox Glacier (closed)	2
Denis Rd, Haast,	5
Hannahs Clearing, Haast (closed)	4
Neils Beach, Haast (closed)	2

Note: these terms relate to the future operational life of each site. Where the sites have closed the future term will cover the post closure works and maintenance. All sites also have applications for 35 year terms for discharge of products of waste decomposition.

Hokitika, Kumara and Franz Josef landfills are the only sites permanently supervised during operating hours. At these sites all refuse is covered and compacted daily. At Fox Glacier, a small transfer station is open for 2-3 hours per day, with a site supervisor. At all other sites public access is available 24 hours a day and there is no operator supervision of refuse disposal. At these sites the contracted operator is required to regularly inspect the site, push refuse over the tip face, supply cover material, and cover the tip face, as and when required.

Many of the smaller landfills are close to the limit of their volume capacity or have already reached their desirable limit. This has been recognised by the Regional Council and has resulted in short duration consent terms for all District landfills except the Hokitika, Kumara, Whataroa and Franz Josef sites. All unlined landfills will be required to close before 2010 (Environment 2010 policy statement). After that time, only the proposed new cells of the Denis Rd facility and any new site developed for the Hokitika area will remain in operation as landfills.

3.3. Closed Landfills

In addition to the nine operational landfills, the Otira, Fox Glacier and Neils Beach landfills have been officially closed, capped with cover material and re-landscaped. Hannahs Clearing landfill has been closed due to the danger of sea erosion of the site. It has been temporarily capped pending development of a proposed new cell at Denis Road, where the whole waste accumulation will probably have to be relocated.

A number of other sites are used or have been used in the past as unofficial dumps. A register of such sites is maintained by the council. The continued use of these sites is

discouraged, and assistance is offered to very small communities to find better options for waste disposal.

4. Waste Reduction

Collection facilities for some recyclable and reusable materials have been established at various points around the District but are mostly concentrated in and around Hokitika.

Metals and white-ware, glass, cardboard, paper, plastics and batteries are separated from the waste stream at the Hokitika landfill and stored for reuse and recycling. Car bodies are stockpiled at Hokitika, Kumara and Franz Josef landfills. The car bodies, metals and white-ware are compacted by private contractor and taken out of district for recycling.

Glass, cardboard, paper, plastics and steel and alloy cans are transported to Hokitika from the Franz Josef and Fox Glacier refuse disposal sites.

Many businesses (eg. service stations, mechanics garages etc) have storage drums for used oil. There is a public facility for the collection of used oil at the Hokitika landfill. Waste oil is collected by a number of agencies in NZ and sold for reuse as a fuel or as re-refined oil. Contamination of waste oil with solvents or fuels can cause it to become highly flammable, in which case the collection agencies charge for removing the oil.

Green waste is currently composted on a small scale (home composting) basis by many individuals in the community. A greenwaste facility has recently been established at Hokitika landfill to cover old parts of the dump and form a vegetative layer prior to the establishment of post closure plantings. This process will continue around the site as the surface of the waste is progressively planted in final cover. Green waste is also collected separately at Fox Glacier for local disposal on the closed landfill.



Appendix E – Key Waste Management Statistics

Information about waste generation

The only existing data on waste generation for the whole District is that contained in Options for Solid Waste Management (BC 2000), which used average generation rates for the populations of the small centres around each refuse site. These estimates are probably low as they do not account for the large numbers of tourists visiting the glacier region, nor the sustained building boom that has accompanied the tourists.

A Waste Analysis Survey was undertaken at Hokitika Landfill in November 2000. Results are reported in Waste Analysis Survey, Hokitika Landfill (Cotton and Weaver 2000). Follow-up surveys and extension of this survey to outlying areas are required to increase the level of detail, decrease sampling errors and show seasonality and trends in the data. In addition, this data is needed to show progress towards the Zero Waste goal.

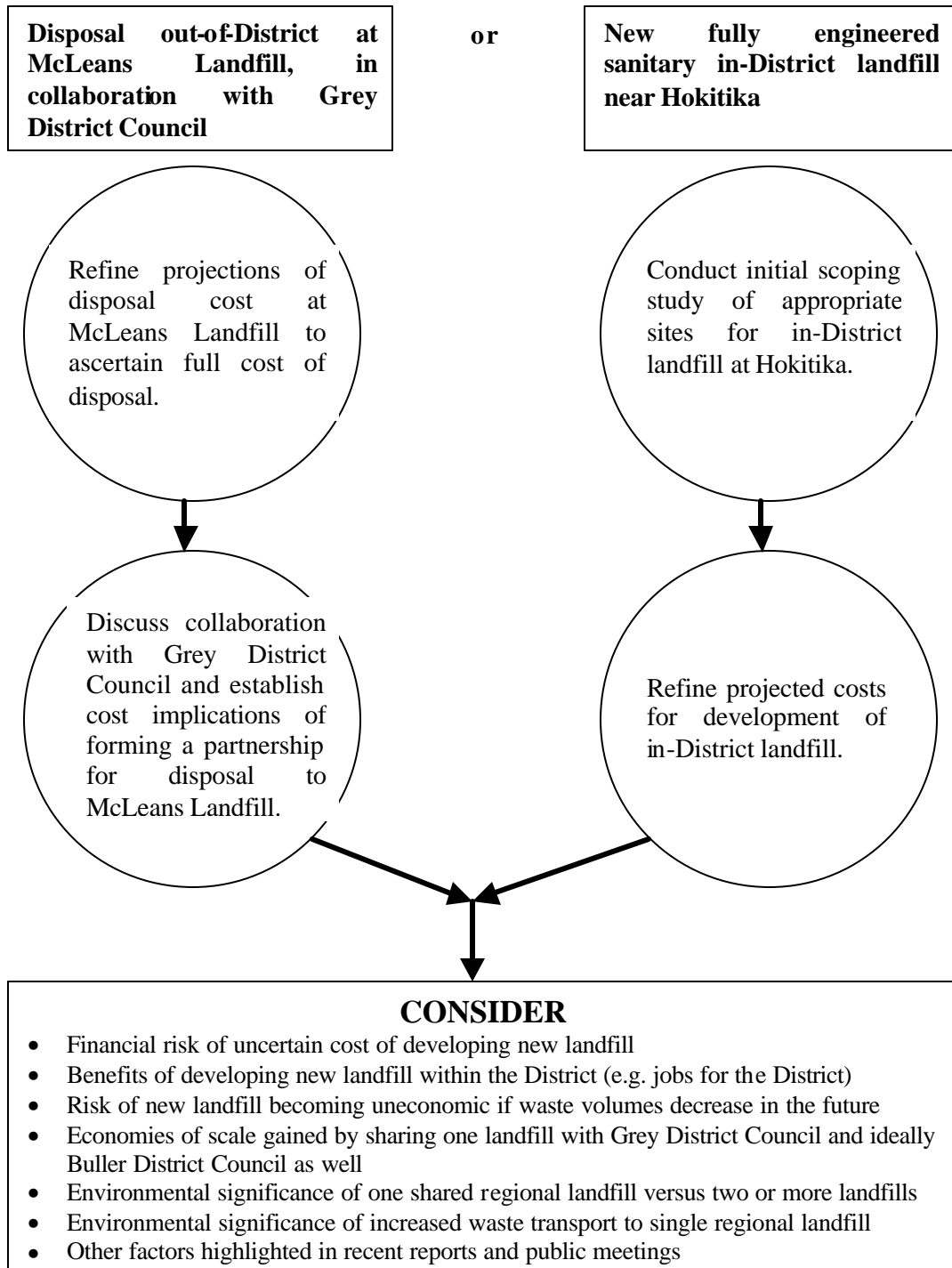
Landfill operators retain records of numbers of loads entering each site, but these are visual estimates only. No site is equipped with a weighbridge.

Face surveys have been completed at irregular intervals during 2001 at the Hokitika site to show progressive rates of accumulation. These are reduced to average monthly volumes of accumulation. These surveys will continue in future to allow better estimation of the filling rate, and hence the future life of the site.



Appendix F – Deciding Between Disposal Options

OPTIONS



Decision pathway used to define the preferred option for solid waste disposal in the Westland District.