

**ENVIRONMENT AND INFRASTRUCTURE COMMITTEE  
7 MARCH 2012**

**A meeting of the Environment and Infrastructure Committee  
was held in the No. 1 Committee Room, Civic Offices, 53 Hereford Street, Christchurch  
on 7 March 2013 at 11.08am.**

**PRESENT:** Councillor Claudia Reid (Chairperson)  
Councillors Sally Buck, Jimmy Chen, Barry Corbett, and Aaron Keown

**APOLOGIES:** An apology for absence was received and accepted from Councillor Sue Wells.

The Committee reports that:

**PART A - MATTERS REQUIRING A COUNCIL DECISION**

**1. DRAFT WASTE MANAGEMENT AND MINIMISATION PLAN 2013**

<b>General Manager responsible:</b>	General Manager City Environment Group, DDI 941 8608
<b>Officer responsible:</b>	Unit Manager Asset and Network Planning
<b>Author:</b>	Zefanja Potgieter, Senior Resource Planner

**PURPOSE OF REPORT**

1. The purpose of this report is to seek the Council's resolution to authorise the Draft Waste Management and Minimisation Plan 2013 (the Draft Plan), a Statement of Proposal and a Summary of Information for the statutory special consultative procedure; and to appoint a hearings panel.

**BACKGROUND**

2. The Council's current Waste Management Plan for Solid and Hazardous Wastes 2006 Plan was instrumental in achieving key milestones such as the introduction of the three wheelie bin kerbside collection system in February 2009, and the establishing of both a new materials recovery facility for recyclable materials and a new organics processing plant. A modern industry leading regional landfill at Kate Valley, co-owned by the Council, has been operating since June 2005.
3. The Council's Target Sustainability resource efficiency programme which facilitates waste production in the commercial and industrial sector has expanded its reach, and a new website has been launched. Community education and raising awareness programmes continue to be provided through the Learning in Action and other initiatives.
4. In June 2012 the Council resolved that the 2006 Plan be formally reviewed and this report is the first step in that process, presenting a Draft Plan 2013 for public notification.
5. The Draft Plan 2013 retains the Vision and Goals of the current 2006 Plan, however the wording has been slightly updated to read as follows:
  - (a) Vision:
    - (i) A prosperous city, where each person, business and organisation takes responsibility for waste minimisation and actively works toward zero waste to landfill.

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- (b) Goals:
- (i) Individuals, businesses and organisations take greater responsibility for waste minimisation.
  - (ii) The Council supports and incentivises waste reduction, reuse and recycling.
  - (iii) The Council provides environmentally sound waste recovery and disposal services.

6. Since the adoption of the 2006 Plan substantial progress has been made in terms of reducing the volumes of green and kitchen waste, paper and cardboard, and plastics sent to landfill, amounting to a reduction of waste to landfill per person per year from 764 kilograms in 2005 to 524 kilograms in 2011.
7. The targets for the Draft Plan (refer **Attachment 1**) have therefore been revised based on the recent data, and to achieve these the Action Plan (part four of the Draft Plan) covers a wide ranging set of actions which will continue existing programmes, funded from existing operational budgets, with no proposed capital expenditure required.
8. In addition to the Draft Plan, a Statement of Proposal (refer **Attachment 2**) and a Summary of Information (refer **Attachment 3**) have been prepared, which also need to be approved by the Council. It is proposed that the Draft Plan be included in full into the Statement of Proposal. Please note that the public consultation Draft Plan will have photos added.
9. After adoption of the Draft Plan, the following process is proposed:

Public consultation	4 May – 7 June 2013
Hearing of submissions	26 July 2013
Council considers the submissions to the Draft Plan and adopts the Waste Management and Minimisation Plan 2013 which remains operative for a maximum of 6 years.	September 2013

10. A hearings panel therefore needs to be appointed by the Council.

#### FINANCIAL IMPLICATIONS

11. Implementing the Action Plan part of the Draft Plan will be financed from operating expenditure budgets with no capital expenditure required.

#### LEGAL CONSIDERATIONS

12. As required by the Waste Minimisation Act 2008 the Council, in June 2012, considered the relevance of the current Waste Management Plan 2006 and resolved that a new draft plan be developed for consideration by the Council, prior to a special consultative procedure.

#### CONSULTATION FULFILMENT

13. Public and stakeholder consultation will follow in May 2013 in compliance of the statutory requirements for a special consultative procedure. Non-statutory pre-consultation discussions with some commercial service providers have been held during October 2012. The Medical Officer of Health has also been consulted.

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**SUMMARY**

14. The Draft Waste Management and Minimisation Plan 2013 (refer **Attachment 1**) and ancillary documents (refer **Attachment 2** and **Attachment 3**) are presented for consideration, to be followed by the statutory special consultative procedure.

**STAFF RECOMMENDATION**

It is recommended that the Council:

- (a) Approve the Draft Waste Management and Minimisation Plan 2013, the Statement of Proposal and Summary of Information for public consultation.
- (b) Appoint a Hearings Panel to consider submissions to the draft plan and to report back directly to the Council.

**COMMITTEE RECOMMENDATION**

That the staff recommendation be adopted.

**2. INFRASTRUCTURE REBUILD MONTHLY REPORT**

<b>General Manager responsible:</b>	General Manager Capital Programme, DDI 941 8235
<b>Officer responsible:</b>	Infrastructure Rebuild Client Manager
<b>Author:</b>	Will Doughty

**PURPOSE OF REPORT**

1. To provide the Council with a monthly update on the infrastructure rebuild.

**EXECUTIVE SUMMARY**

- 2. At its April 2011 meeting, Council gave approval for an Alliance to be formed to deliver the reinstatement of the City's damaged infrastructure. It was also agreed that the Chief Executive would report regularly to the Council on progress with regard to the reinstatement work.
- 3. The report (**Attachment A**) is the 14<sup>th</sup> of what will be a regular monthly report that is provided to the Environment and Infrastructure Committee, Council and the Canterbury Earthquake Recovery Authority (CERA).

**STAFF RECOMMENDATION**

It is recommended that the Council receives the Infrastructure Rebuild Monthly Report for February 2013.

**COMMITTEE RECOMMENDATION**

That the staff recommendation be adopted.

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**3. INSTALLATION OF LOW PRESSURE PUMP SYSTEMS**

<b>General Manager responsible:</b>	General Manager, City Environment, DDI 941-8608
<b>Officer responsible:</b>	Unit Manager, Democracy Services Unit
<b>Author:</b>	Ian Thomson, Solicitor

**PURPOSE OF REPORT**

1. To recommend the delegation of authority to the Council Hearings Panel to:
  - (a) hear and determine objections lodged under schedule 12 of the Local Government Act 2002 (LGA 2002); and
  - (b) deal with appeals to the District Court made by objectors aggrieved by Council determinations made pursuant to (a) above.

**EXECUTIVE SUMMARY**

2. Low pressure pump sewer systems are being installed on private properties in areas where the gravity fed systems are no longer viable. These include parts of Aranui, Parklands, Shirley, Woolston, Halswell, Hoon Hay, Richmond and Southshore. Ultimately there will be approximately 5500 of these units installed across the city.
3. Section 181 of the LGA 2002 requires the Council to get the written consent of affected property owners before it proceeds with any of this work on their properties.
4. Stronger Christchurch Infrastructure Rebuild Team (SCIRT) and Council staff have developed, and are using, a comprehensive process of consultation in each area. Most property owners have given their consent.
5. At present there are approximately 26 owners who have objected to installation of the systems on their properties, five of these on the basis of being required to meet the electricity supply charge.
6. Section 181 provides a process for dealing with these objections. The Council must either have obtained the prior written consent of the owners or complied with the requirements of schedule 12 of the LGA 2002. These are set out in the legal considerations section of this report.
7. A number of the statutes administered by the Council provide a right of objection to the Council, and a right of appeal to the District Court. For this reason every term the Council appoints a committee of the Council, called the Council Hearings Panel, to hear these objections and make a decision on behalf of the Council. The members of the Council Hearings Panel are all Councillors and all Community Board members.
8. From time to time the delegations of the Hearings Panel need to be added to hear objections under a new statute and this need has now arisen in respect of the installation of the low pressure pump sewer systems, and the objection rights provided to landowners and occupiers by Schedule 12 of the LGA 2002.

**FINANCIAL IMPLICATIONS**

9. There is no power under the LGA 2002 that would enable the Council to charge fees for the lodging and hearing of objections. It is therefore proposed that the cost of administering the hearings panels process be met from the Rebuild Christchurch budget.
10. So far as the costs of being involved in any District Court proceedings are concerned it is proposed that this also be met from the same Rebuild Christchurch budget.

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**LEGAL CONSIDERATIONS**

11. Section 181(2) of the LGA 2002 enables the Council to construct works on or under private land or under a building on private land that it considers necessary for sewage and stormwater drainage. This is the statutory authority for installing the low pressure pump sewer systems on private land.
12. However, the power cannot be exercised unless the Council has either obtained the prior written consent of the owner of the land or complied with the requirements of schedule 12 of the LGA 2002.
13. SCIRT and Council staff are consulting extensively with affected property owners, the majority of whom have given their written consent to the system being installed on their land.
14. For those who don't, schedule 12 sets out a process that the Council must follow. This provides for:
  - (a) notice of the proposed work to be given, both publicly and to the property owner and/or occupier;
  - (b) the right of a property owner to object;
  - (c) the hearing of that objection by the Council;
  - (d) right of appeal to the District Court for any one aggrieved by the Council's decision;
  - (e) the decision of the Court is final.
15. Schedule 12 provides that, the Council may decide to abandon the proposal to install the system on the objector's land (although clearly there are practical issues with this option) or to proceed with the work as proposed with or without any alterations that the Hearings Panel thinks fit.
16. Pending the determination of an objection by the Council Hearings or District Court the Council must not proceed with the work as it has no legal authority to go onto private land. If it did so it would be trespassing.
17. It has to be stressed that the schedule 12 process would need to be used only if the steps being taken by SCIRT and Council staff to communicate with affected property owners do not result in written consent being given.
18. The experience to date is that the response has been mostly positive. However, 26 owners have objected so far and the scale of the project is such that there is the potential for relatively high numbers of objections to be received.
19. Five property owners have objected to being required to meet the cost of electricity supply charges that will be incurred to operate the system (currently estimated at about \$23.50 per annum, depending on the size of the household).
20. The power available to the Council in section 181 does not extend to a right to gain access to a dwelling for the purpose of connecting the low pressure pump sewer system to an electricity supply. Neither is there any way that such a right could be acquired without significantly breaching an owner's personal property rights.
21. There is a proposal before the Council in the draft Three Year Plan for remitting rates for property owners required to pay electricity supply charges currently being considered as part of the Three Year Plan process.
22. Given the indication of 26 owners wishing to object the Council needs to have a process in place in accordance with Schedule 12 to hear and determine those objections.

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23. The composition of the Council Hearings Panel to hear these objections would be arranged by the Democracy Services Unit as happens now with hearings such as resource consents, barking dogs, dangerous dogs or fencing of swimming pools.
24. In addition it is recommended that the City Water and Waste Unit Manager be delegated the power to issue the notice to the landowner, and to make decisions with regard to the Council's response to and the conduct of any District Court proceedings.

**STAFF RECOMMENDATION**

That the Council delegates to:

- (a) The City Water and Waste Manager, the authority to commence the Schedule 12 process by:
  - (i) depositing for public inspection descriptions of the proposed works to be completed for the installation of a low pressure pump sewer system and plans showing how they would affect any land or buildings;
  - (ii) taking the appropriate steps to effect the service of notices in writing of Council's intention to construct the proposed works;
- (b) The Council Hearings Panel the power to hear and determine objections made under Schedule 12 of the Local Government Act 2002; and
- (c) The City Water and Waste Manager the authority to make decisions on the Council's behalf in respect of any appeals to the District Court.

**COMMITTEE RECOMMENDATION**

That the staff recommendation be adopted.

**PART B – REPORTS FOR INFORMATION**

Nil.

**PART C - DELEGATED DECISIONS**

**4. APOLOGIES**

It was **resolved** that the apology from Councillor Sue Wells be accepted.

The meeting concluded at 12.20pm.

**CONSIDERED THIS 28TH DAY OF MARCH 2013**

**MAYOR**

*Christchurch City Council*

# Draft Waste Management and Minimisation Plan 2013

Christchurch City Council



**Christchurch**  
City Council 

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**NOTE:**  
Funding applications cannot be dealt with through the submissions process for this Draft Plan. Applications for funding may be directed to:

The Council's *Annual Plan* process during March/April of each year  
<http://www.ccc.govt.nz/thecouncil/policiesreportsstrategies/annualplan/index.aspx>

Or

The Council's *Metropolitan Strengthening Communities Fund*, by the end of March each year, subject to the fund's eligibility requirements  
<http://www.ccc.govt.nz/cityleisure/communityfunding/strengtheningcommunities/index.aspx>

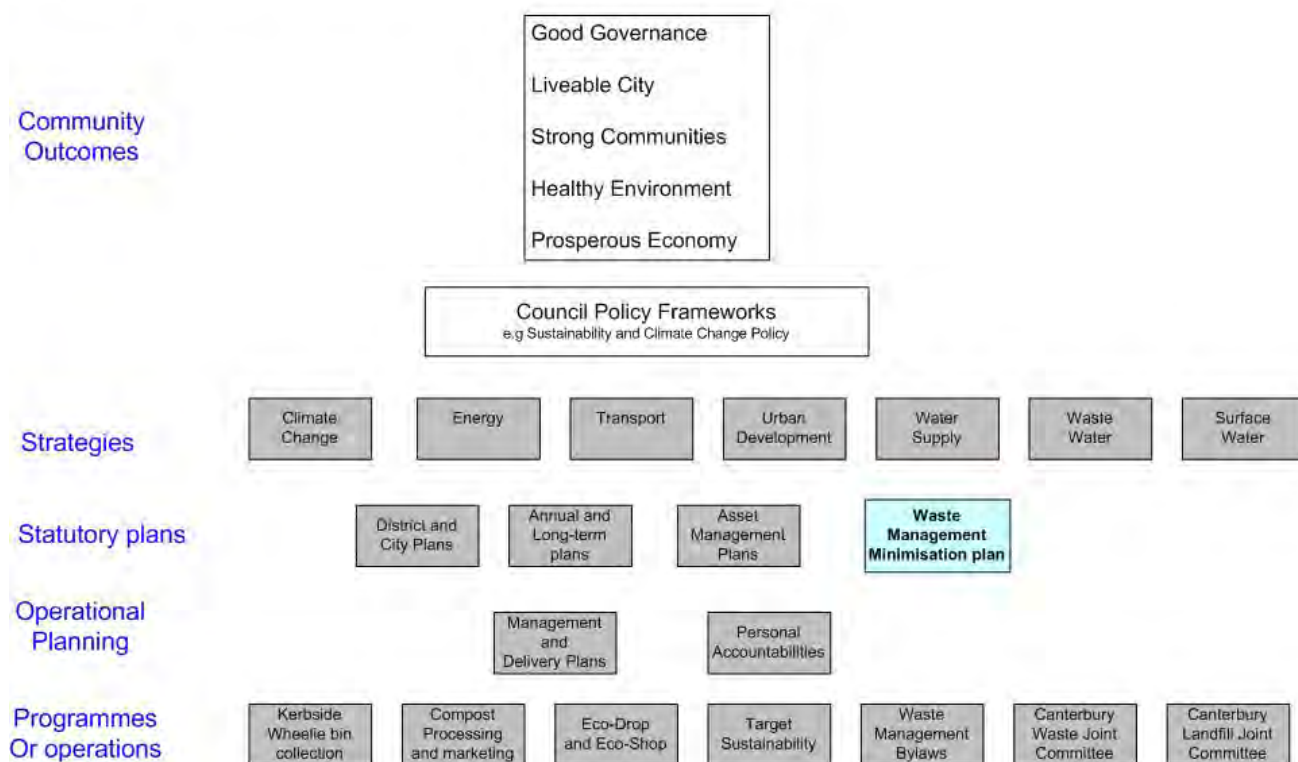


**PART ONE - INTRODUCTION**

**Purpose of the Plan**

This Waste Management Plan is a statutory plan that sits in a wider local policy and planning context – see figure below. National direction and the legal basis for this Plan is set by the New Zealand Waste Minimisation Act 2008 and the New Zealand Waste Strategy 2010. The Council actively works towards achieving its Community Outcomes, Sustainability Policy objectives and the waste minimisation targets by implementing a range of programmes that promote waste management and minimisation. These include the provision of waste disposal, reuse, recycling and composting services, education programmes, establishing bylaws and through regional collaboration.

Figure 1 – The Context of the Waste Minimisation and Management Plan



**The New Zealand Waste Strategy 2010**

This Plan has regard to the New Zealand Waste Strategy 2010 which provides direction to local government, businesses (including the waste industry), and communities on ways to:

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

The Strategy emphasizes that territorial authorities must use their waste management and minimisation plans to guide their spending of their proportion of the waste disposal levy in ways that maximise opportunities to minimise waste. The Strategy no longer includes any national targets.

<http://www.mfe.govt.nz/publications/waste/waste-strategy/>

**Waste Minimisation Act 2008**

The purpose of the Act is to *encourage waste minimisation and a decrease in waste disposal in order to protect the environment from harm; and provide environmental, social, economic and cultural benefits.*

Part 4 of the Act deals with responsibilities of territorial authorities in relation to waste management and minimisation, which *must promote effective and efficient waste management and minimisation within its*

*district.* Part 4 also requires territorial authorities to develop and adopt a waste management and minimisation plan (WMMP). In addition the Act also regulates the national waste disposal levy provisions.

WMMP's are required to be completed following an assessment of future demand for waste collection, recycling, recovery, treatment and disposal services within the district (a Waste Assessment). Christchurch's Waste Assessment was considered by Council on 28 June 2012 as part of the review of the 2006 Waste Management Plan and which resulted in Council resolving that a new draft WMMP should be prepared, and consulted upon as provided for in the Waste Minimisation Act 2008.

The Waste Assessment which contains comprehensive information on waste minimisation and flows in the city can be viewed at <http://www1.ccc.govt.nz/council/proceedings/2012/june/cnclcover28th/clause6.pdf>

### Other Statutes

Other statutes that are relevant to waste minimisation and management in a broader context include:

- Local Government Act 2002
- The Resource Management Act 1991
- The Hazardous Substances and New Organisms Act 1996
- The Climate Change Response Act 2002 (as far as it relates to disposal facilities such as Kate Valley regional landfill).
- The Health Act 1956

### Council Bylaws

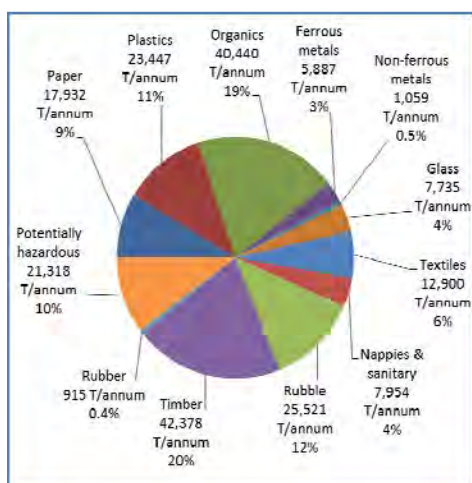
The following Council bylaws relate to waste minimisation and management:

- The purpose of the Waste Management Bylaw 2008 (with accompanying Terms and Conditions), is to prevent the contamination of recoverable resources (including materials collected through the kerbside collection services) and to maximise the recovery of recyclable resources. It is also to ensure that waste is collected in a safe and efficient manner, and that waste does not cause a nuisance.
- The *Licensed Waste Handling Facilities Bylaw 2007* requires any operation that handles waste e.g. waste transfer stations, to be licensed.
- The *Cleanfill Licensing Bylaw 2008* requires sites receiving cleanfill materials to be licensed.

### Current composition of waste and materials

More than 207,000 tonnes of waste was generated in Christchurch and disposed to landfill in 2011/12, or approximately 524 kilograms for each person in Christchurch. The primary composition of waste to transfer stations in Christchurch from July 2011 to June 2012 (in tonnes per annum) in Figure 2 below:

**Figure 2 - Composition of waste to transfer stations in Christchurch from July 2011 to June 2012**



Each person has an individual and societal responsibility for the waste they generate. While the Council can influence how waste is managed, it falls to the people and businesses of Christchurch to act in ways that avoid and minimise waste. The linkage between economic growth and waste production is well known and clearly is not a sustainable course to follow.

The challenge facing Christchurch residents and businesses is to reverse the trend of waste production, to weaken or break the link between economic growth and waste production. This requires a change both in attitude and behaviour. If the generation of waste cannot be avoided, waste should be viewed and managed as a resource to be reused, recycled, or recovered.

### **Working Together**

Meeting the waste challenge is the responsibility of all in Christchurch: residents, business, organisations and government. From individual residents and businesses to Tangata Whenua to local, regional and national government, an integrated approach is required to bring about continued improvement in managing our waste.

As a territorial authority the Council's role is to act as a facilitator, helping the community to:

- create an environment to more effectively manage its resources,
- reduce the wastes produced by the community, and
- better manage the residual waste that the community produces.

The Council works in partnership with other territorial authorities in the Canterbury region to plan and implement waste minimisation programmes through the Canterbury Waste Joint Committee and its Canterbury *Regional Waste Management Agreement*. By active participation in the Joint Committee the Council works collaboratively with other district councils to identify and implement actions that promote and facilitate waste minimisation across the region. The Joint Committee, with the assistance of Environment Canterbury, also addresses regional coordination of the management of hazardous wastes generated in the region.

The Council works with the Ministry for the Environment to address waste issues of local and national significance e.g. a collaborative approach to the collection of electronic wastes.

## PART TWO - CURRENT SITUATION AND FUTURE PROJECTIONS

### 2.1 Council waste management infrastructure and services

The Council has the following key waste management infrastructure in place:

- An organics processing plant for compostable kitchen and garden waste, producing valuable compost
- A materials recovery facility for sorting and recovery of recyclables
- A shop for used goods (*EcoShop*)
- Three refuse stations in the city (*EcoDrops*) at Metro Place, Styx Mill Road and Parkhouse Road, and various community waste separation and collection points on Banks Peninsula.
- A three-bin kerbside collection service comprising of an 80L green bin for organics, 240L yellow bin for recyclables, and a 140L red bin for rubbish, with enhanced options available.
- Kate Valley regional landfill for residual waste.
- Burwood Resource Recovery Park which was established to enable post earthquake building and construction material to be removed from demolition sites as soon as possible, and then be sorted, processed and recycled over a longer time period.

Recyclables collected at kerbside are dropped off at the Council's materials recovery facility in Parkhouse Road. The contractor operating the facility is tasked with finding markets for the sorted product.

Organics collected at kerbside is transported to an organics processing plant in Bromley. The material is processed and the product sold primarily to the agricultural market.

Rubbish collected at kerbside is dropped off to one of the three transfer stations in the city area, owned by Council but operated by contractors, and transferred to the regional landfill at Kate Valley.

For the Banks Peninsula area there are community drop off centre for recyclables and rubbish.

These facilities are supported by programmes targeted at resource efficiency and reducing waste, and include:

1. The Target Sustainability resource efficiency service which provides free support to help Christchurch businesses become more resource efficient through reducing waste and being energy and water efficient. The type of support depends on the business and includes:
  - Free resource efficiency advice for commercial building designs
  - Free resource efficiency advice for the operation of the business
  - Self help guides and tools
  - A hotline question service
  - An online Free Materials service.
  - [www.targetsustainability.co.nz](http://www.targetsustainability.co.nz)
2. An ongoing education and raising awareness service to increase participation and compliance with kerbside collections and general waste minimisation.
3. An in-house educational team focussing on programs aimed at schools. The programs have a holistic focus, taking into account the 5 Rs, being *Reduction; Reuse; Recycle; Recover, and Residual Management*.

Some of the key challenges which have emerged and are addressed in the Action Plan in Part Four, include:

- Recoverable material being placed in the (red) rubbish bin instead of in the green bin
- Seasonal spikes in arsenic readings in composted product due to treated timber and sawdust ash being put in green bins
- Getting key waste minimisation messages through to targeted groups
- Unauthorised relocation of wheelie bins

**2.2 Weight and composition of waste to landfill from Christchurch**

Under the Waste Minimisation Act 2008 (the Act), and previously the Local Government Act 2002, territorial authorities are responsible for promoting effective and efficient waste management and waste reduction practices. Pursuant to these responsibilities, Christchurch City Council has regularly measured the composition of waste being disposed of to landfill from the city, most recently in 2011/12. A summary of some key findings are included in this section of the Plan.

Based on weighbridge records from Kate Valley Landfill, a total of 207,485 tonnes of waste from Christchurch City was disposed of to landfill during the period July 2011 to June 2012. Of this total, 93% originated from the six transfer stations in Christchurch City. The other 7% was special wastes disposed of directly to landfill. Special loads taken directly to Kate Valley Landfill included wastewater plant screenings, quarantine waste, and treated industrial waste.

Waste flows, the locations of the transfer stations, and a guide to where each transfer station are analysed in the full 2011/12 Waste Assessment report which can be viewed at <http://www1.ccc.govt.nz/council/proceedings/2012/june/cnclcover28th/clause6.pdf>.

The primary compositions of waste disposed of at the six transfer stations in Christchurch and waste disposed of to Kate Valley Landfill from Christchurch City are presented in Table 1 below. The only difference between the two waste streams is the special waste disposed of directly to the landfill.

**Table 1 - Weight and composition of waste to landfill**

July 2011 to June 2012	Waste to transfer stations in Christchurch		Waste to Kate Valley Landfill from Christchurch	
	% of total	Tonnes per annum	% of total	Tonnes per annum
Paper	9.3%	17,932	8.6	17,932
Plastics	12.2%	23,447	11.3	23,447
Organics	21.0%	40,440	19.5	40,440
Ferrous metals	3.1%	5,887	2.8	5,887
Non-ferrous metals	0.5%	1,059	0.5	1,059
Glass	4.0%	7,735	3.7	7,735
Textiles	6.7%	12,900	6.2	12,900
Sanitary paper	4.1%	7,954	3.8	7,954
Rubble	13.2%	25,521	12.3	25,521
Timber	22.0%	42,378	20.4	42,378
Rubber	0.5%	915	0.4	915
Special waste	3.4%	6,544	10.3	21,318
<b>TOTAL</b>	<b>100.0%</b>	<b>192,712</b>	<b>100.0</b>	<b>207,486</b>

'Timber' and 'Organics' were the largest components of the waste stream disposed of at the six transfer stations in Christchurch, comprising 22% and 21% respectively of the total weight. The Cleanfill Licensing Bylaw banned timber from going to cleanfills after 2004, which has since resulted in an increase of timber going to landfill instead.

'Rubble' and 'Plastics' were the third and fourth largest classifications and comprised similar proportions of the total, approximately 12-13%.

**Types of waste disposed to landfill**

For each of the six transfer stations included in the survey programme, an analysis was made of the types of waste loads being disposed of at the facility.

**Table 2 - Types of waste disposed of to landfill**

Types of waste loads – July 2011 to June 2012	Tonnes/annum	Percentage of total weight to transfer stations	Percentage of total weight to Kate Valley Landfill
Construction & demolition	52,964	27.5	25.5
Industrial/commercial/institutional	58,336	30.3	28.2
Kerbside collections	55,056	28.5	26.5
Landscaping & earthworks	7,453	3.9	3.6
Residential	13,932	7.2	6.7
Special waste to transfer stations	4,972	2.6	2.4
<b>SUBTOTAL TO TRANSFER STATIONS</b>	<b>192,713</b>	<b>100.0</b>	<b>92.9</b>
Special waste direct to landfill	14,774		7.1
<b>TOTAL TO LANDFILL</b>	<b>207,487</b>		<b>100.0</b>

Approximately 25% of all waste disposed of to landfill from Christchurch is generated by construction and demolition activity. This does not represent all waste generated by construction and demolition activity in the city, as substantial quantities of demolition materials are disposed of to commercial cleanfill sites and Burwood Resource Recovery Park (See elsewhere in the Plan).

Waste from industrial/commercial/institutional activity comprised 28% of all waste to landfill and kerbside collections 26%. Kerbside collections included both Council and private collections of wheelie bins.

### 2.2.2 Comparison with results of 2008 survey programme

A similar survey programme of the overall composition of waste disposed of to landfill from Christchurch was undertaken in 2008. A comparison of the results of the two survey programmes is shown in Table 3 below. It has been assumed that the 2008 survey programme included only waste disposed of at transfer stations and not waste disposed of directly to landfill. The 2012 results are as shown for 'Waste to transfer stations in Christchurch' in Table 2.

The 2008 survey programme used ten waste classifications. To compare the results of the two survey programmes, classifications used for the 2012 surveys have had to be combined to match the ten categories shown in Table 3.

**Table 3 - Comparison with 2008 waste to landfill**

Categories	Percentage of total weight		Tonnes per annum to landfill	
	2008	2012	2008	2012
Paper and sanitary paper	14.4	13.4	34,824	25,886
Plastics	10.1	12.2	24,365	23,447
Organics – kitchen waste	22.7	11.6	55,227	22,278
Organics – greenwaste	15.0	9.4	36,335	18,162
Ferrous and non-ferrous metals	5.2	3.6	12,571	6,946
Glass	3.9	4.0	9,508	7,735
Textiles and rubber	6.7	7.2	16,156	13,815
Rubble	9.5	13.2	22,959	25,521
Timber	11.8	22.0	28,565	42,378
Special wastes	0.7	3.4	1,796	6,544
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>242,306</b>	<b>192,712</b>

The total tonnage of waste to landfill from transfer stations in Christchurch was 20% less in 2012 than in 2008. This decrease in tonnage to landfill is associated with the global financial crisis of late 2008, which resulted in a decrease of waste to landfill of about 15-20% at most landfills in New Zealand. The decrease is also associated with Council's introduction of the three-bin kerbside collection system in 2009. The earthquakes of 2010 and 2011 have affected waste generation and disposal in various ways.

In some instances tonnages have gone down between 2008 and 2012 yet as a percentage it has increased. For instance with plastics the actual tonnages of plastics to landfill has decreased however the total amount of waste to landfill has decreased proportionally more than the plastics component resulting in the proportion of plastics as part of total waste increasing.

Rubble and timber to landfill has increased from 2008 - 2012 both in actual amount to landfill and % of waste stream. This reflects the increased amount of this material being disposed of as a result of earthquake damage, added to the tonnages already diverted away from cleanfill sites.

### **2.2.3 Comparison of disposal to landfill rates in Christchurch with some other districts in New Zealand**

The per capita disposal of waste to landfill by residents of Christchurch was calculated for 2008 and 2012. These figures are compared to disposal figures from other local authorities previously surveyed by *Waste Not Consulting* in Table 4. The tonnage figures used do not include special waste disposed to landfill or cover material imported into the landfills.

**Table 4 - Comparison with other New Zealand districts**

<b>Overall waste (excluding cover materials and special waste)</b>	<b>Population</b>	<b>Waste disposed - tonnes per annum</b>	<b>Tonnes per capita per annum</b>
Westland District 2011	9,000	2,978	0.331
Waimakariri District 2010	46,900	15,770	0.336
Southland District 2011	28,900	9,917	0.343
Tauranga and WBoP District 2010	157,400	71,092	0.452
Napier City & Hastings District 2012	133,300	64,449	0.483
Gore District 2011	12,100	6,245	0.516
<b>Christchurch City 2012</b>	<b>367,700</b>	<b>192,712</b>	<b>0.524</b>
Rotorua District 2009	70,400	40,377	0.574
Invercargill City 2011	53,900	31,262	0.580
New Plymouth District 2010	72,300	46,952	0.630
<b>Christchurch City 2008</b>	<b>369,250</b>	<b>242,304</b>	<b>0.656</b>
Queenstown Lakes District 2011	28,200	19,060	0.676
Auckland Council 2010	1,463,000	1,174,078	0.803

### **2.3 Audit of Council's kerbside refuse collection (red-lidded wheelie bins)**

The audit of Council's kerbside refuse collection involved two separate eight-day audits, in November 2011 and May 2012. For each audit, the contents of 192 red-lidded wheelie bins were sorted into 24 categories and weighed. The results of the two audits, in terms of the 12 primary categories, are shown in Table 5. The annual tonnage of each material is also shown.

**Table 5 – Refuse bin audit results**

<b>Council's red-lidded wheelie bin collection</b>	<b>November 2011</b>	<b>May 2012</b>	<b>November 2011</b>	<b>May 2012</b>	<b>July 2011 – June 2012</b>
	<b>% of total</b>	<b>% of total</b>	<b>Kg/bin</b>	<b>Kg/bin</b>	<b>Tonnes/annum</b>
<b>Paper</b>	10.6	10.4	1.25	1.19	4,266
<b>Plastics</b>	13.8	14.4	1.62	1.65	5,702
<b>Organic</b>	33.8	44.0	3.96	5.03	15,689
<b>Ferrous metals</b>	2.1	2.3	0.25	0.26	898

Council's red-lidded wheelie bin collection	November 2011	May 2012	November 2011	May 2012	July 2011 – June 2012
	% of total	% of total	Kg/bin	Kg/bin	Tonnes/annum
<b>Non-ferrous metals</b>	2.0	0.8	0.23	0.09	572
<b>Glass</b>	2.9	4.6	0.35	0.53	1,530
<b>Textiles</b>	5.4	4.7	0.63	0.54	2,054
<b>Sanitary</b>	14.3	11.4	1.69	1.31	5,242
<b>Rubble, concrete, etc</b>	7.9	2.9	0.93	0.33	2,222
<b>Timber</b>	3.6	2.2	0.43	0.25	1,182
<b>Rubber</b>	0.3	0.3	0.03	0.04	127
<b>Special waste</b>	3.3	2.0	0.39	0.23	1,078
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>11.76</b>	<b>11.45</b>	<b>40,562</b>

'Organic' material was the largest primary category of kerbside refuse in the red-lidded wheelie bins in both audits, comprising 34% of the total in the November 2011 audit and 44% of the total in the May 2012 audit. This equated to four to five kilograms in the average bin. Kitchen waste comprised 74% of organic material in November 2011 and 66% in May 2012. Greenwaste (both compostable and non-compostable) comprised 12% of organic material in November 2011 and 19% in May 2012.

'Plastics' was the second largest primary category in the May 2012 kerbside refuse audit and third largest in the November 2011 audit. In both audits, 'Plastics' comprised about 14% of the total. 'Sanitary' waste, which includes nappies, tissues, paper towels, and feminine hygiene products, was the third largest category in the May 2012 audit and second largest in the November 2011 audit.

#### **2.4 Audit of Council's kerbside organic collection (green-lidded wheelie bins)**

The audit of Council's kerbside organic collection involved two separate eight-day audits, in November 2011 and May 2012, on the same days as the kerbside refuse audit. For each audit, the contents of 242 green-lidded wheelie bins were sorted and weighed. Five categories were used for the November 2011 audit and six for the May 2012 audit. The results of the two audits are compared in Table 6. The annual tonnage of each material is also shown, based on contractor tonnage data for the period July 2011 to June 2012.

**Table 6 – Organics bin audit results**

Council's green-lidded wheelie bin collection	November 2011	May 2012	November 2011	May 2012	July 2011 – June 2012
	% of total	% of total	Kg/bin	Kg/bin	Tonnes/annum
<b>Food waste</b>	19.3	29.9	2.36	2.73	10,711
<b>Compostable greenwaste</b>	72.3	63.3	8.85	5.77	30,911
<b>Non-compostable greenwaste</b>	1.6	0.1	0.19	0.01	427
<b>Timber, ash, and sawdust</b>	0.1	1.3	0.01	0.12	282
<b>Soil and rocks</b>	6.7	3.7	0.82	0.34	1,910
<b>Other contamination</b>		1.7		0.16	884
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>12.23</b>	<b>9.13</b>	<b>45,125</b>

The November 2011 audit took place during the peak period of organic waste generation. Nearly three-quarters (72%) of the contents of the green-lidded organic waste bins, almost 9 kg per bin, was classified as 'compostable greenwaste'. Although it was not measured separately, the auditors estimated that half to two-thirds of this material was lawn clippings. 'Food waste' was the second largest component, comprising 19% of the total.

The May 2012 audit took place during autumn after a long period of warm, dry weather. Nearly two-thirds (63%) of the contents of the green-lidded organic waste bins, almost 6 kg per bin, was classified as 'compostable greenwaste'. 'Food waste' was the second largest component, comprising 30% of the total.



## **2.5 Cleanfill sites**

The Council's Cleanfill Licensing Bylaw 2008 (which replaced the 2003 cleanfill bylaw) regulates all cleanfill sites in the city, including the type of materials permitted. In the year July 2011 to June 2012 a combined total of 610,000 m<sup>3</sup> (approximately 998,000 tonnes) of material was received, comprising of 51.3% natural hardfill, 39.7% construction and demolition materials, and 9% cover material. *(The total for the previous 12 month period was 452,000 m<sup>3</sup>, with an average for the previous 5 years of around 511,000 m<sup>3</sup>).* The Council continues to monitor compliance with the bylaw, with Environment Canterbury monitoring compliance with the Resource Management Act 1991.

## **2.6 Earthquake related wastes: Burwood Resource Recovery Park**

Burwood Resource Recovery Park (BRRP) was established to enable post earthquake building and construction material to be removed from demolition sites as soon as possible, and then be sorted, processed and recycled over a longer time period.

By October 2012 the volume of materials transported to the site was approximately 370,000 tonnes, with the volume to potentially increase to around 500,000 tonnes.

## PART THREE - VISION, GOALS, GUIDING PRINCIPLES AND TARGETS

### 3.1 Vision

A prosperous city, where each person, business and organisation takes responsibility for waste minimisation and actively works toward zero waste to landfill.

### 3.2 Goals

- Individuals, businesses and organisations take greater responsibility for waste minimisation.
- Council supports and incentivises waste reduction, reuse and recycling.
- Council provides environmentally sound waste recovery and disposal services.

### 3.3 Principles:

The Council takes account of the following principals in its waste management planning and implementation.

#### Integrated Waste Management

It should be emphasized that **redesign** precedes the five principles set out below, meaning that all products and services should be designed to avoid waste and to enable products at the end of their life to be reprocessed back into useful products.

The internationally accepted *waste management hierarchy* consists of:

1. *Reduce: The reduction of the volume and toxicity of waste*
2. *Reuse: The repeated or continued use of a product or item in its original form*
3. *Recycle: The reprocessing or re-manufacturing of material into new or different products*
4. *Recover: The energy, materials and biomass in waste that can be recovered obtained from a product or material, which can include energy production and composting*
5. *Residual Management: The environmentally responsible treatment or disposal of material that is not able to be reduced, reused, recycled or recovered.*

While this hierarchy is supported, it needs to be recognised that progress in the overall reduction of waste can, at times, be achieved without necessarily following this sequence, for example by undertaking kerbside recycling before all options for reduction or reuse have been implemented. In other words, while the waste hierarchy may be the ideal way to reduce waste, waste decisions have to be made in the context of economic and social factors.

It is inevitable that for the foreseeable future landfilling will be required to deal with Christchurch's residual waste, while at the same time working towards zero waste to landfill.

#### Personal Responsibility

Only if everyone takes personal responsibility for reducing the waste that they generate can progress be made towards the goal and targets.

#### Full Cost Pricing

The generator of waste should pay the cost of managing that waste in a visible way to discourage waste generation. This also reflects the principle of personal responsibility, since those responsible for generating the wastes are those who should bear the cost of disposal.

## Transparency

The process of developing this Plan, and subsequent strategies and actions will be open, transparent and accountable, and consistent with public consultation processes as required by the Local Government Act 2002.

## Commitment to Regional Cooperation

The Council, as signatory to the *Canterbury Regional Waste Management Agreement*, adopted by all Canterbury territorial authorities, and as a member of the Canterbury Waste Joint Committee and Canterbury Landfill Joint Committee, has signalled its strong commitment to waste planning and minimisation on a regional basis in Canterbury. This includes the management of hazardous wastes in the region, managed in terms of the *Canterbury Hazardous Waste Management Strategy* (as coordinated by Environment Canterbury).

## Working with Tangata Whenua

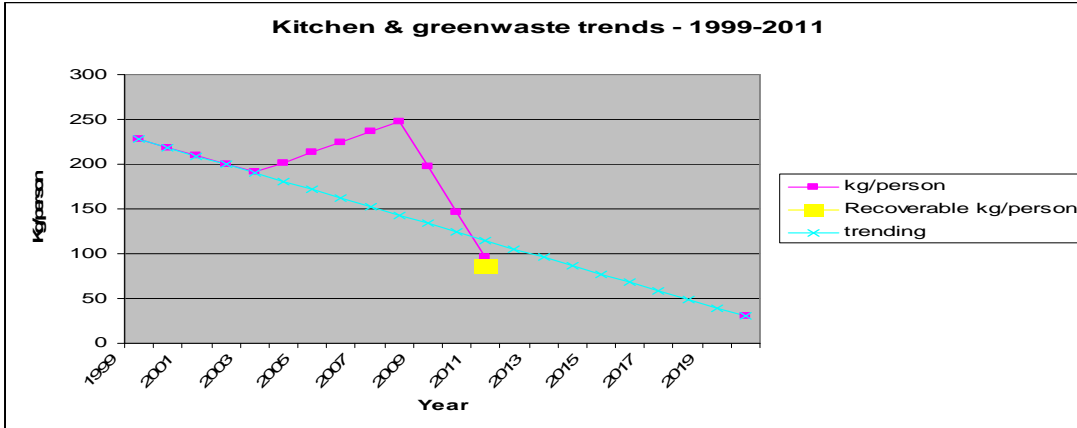
The Council acknowledges the following principles put forward by Tāngata Whenua.

- *Ngāi Tahu wishes to be consulted early (at least one month prior to an application for resource consent being lodged with the relevant Council(s)) on all Christchurch City Council matters (new and previous solid waste management projects) involving the siting of waste disposal areas, and with particular regard to be had to the Te Rūnanga or Ngāi Tahu Freshwater Policy. For significant solid waste management proposals, a cultural impact assessment report may be appropriate to determine the effects on Ngāi Tahu cultural values and to propose appropriate mitigation measures.*
- *Ngāi Tahu supports any development project that reduces waste, provided that there are no significant impacts on Tāngata Whenua cultural values. Ngāi Tahu encourages the Council to work with them to identify the parameters of 'significant impacts on Tāngata Whenua cultural values'.*
- *Ngāi Tahu supports all policies to implement recycling of waste, provided there are no significant impacts on Tāngata Whenua cultural values. Ngāi Tahu also encourages Council to keep abreast of technological advances in waste reduction and recycling methods.*
- *Ngāi Tahu would object to any future waste disposal areas being placed in or near mahinga kai areas including the estuary and coastal dune areas.*
- *Ngāi Tahu strongly objects to the siting of waste disposal areas on waahi tapu and/or waahi taonga areas of significance of their ancestors.*
- *Ngāi Tahu supports the banning of products that are non-biodegradable being used within New Zealand, or alternatively that a fee be levied on all such products to ensure that the disposal of such materials does not affect the environment.*
- *Ngāi Tahu supports an international educational process that develops and encourages farming that reduces chemical experimentation and costly disposal of hazardous containers.*
- *Ngāi Tahu encourages the council to engage in national and regional strategy development for the safe disposal of chemicals and their bi-products, and to implement such strategies as soon as practicably possible.*
- *Ngāi Tahu has concerns regarding the potential impacts of closed landfill sites on sites of cultural significance to Tāngata Whenua. Ngāi Tahu recommends a process of shared information with the council to identify which cultural sites may potentially be affected, where after a programme to determine a way forward will be considered.*

### 3.4 Waste Stream Targets

#### 3.4.1 Kitchen and Green Waste Target

- No more than 30 kg/person/year of recoverable green and kitchen waste is sent to landfill by 2020 (currently 87 kg/person/year)

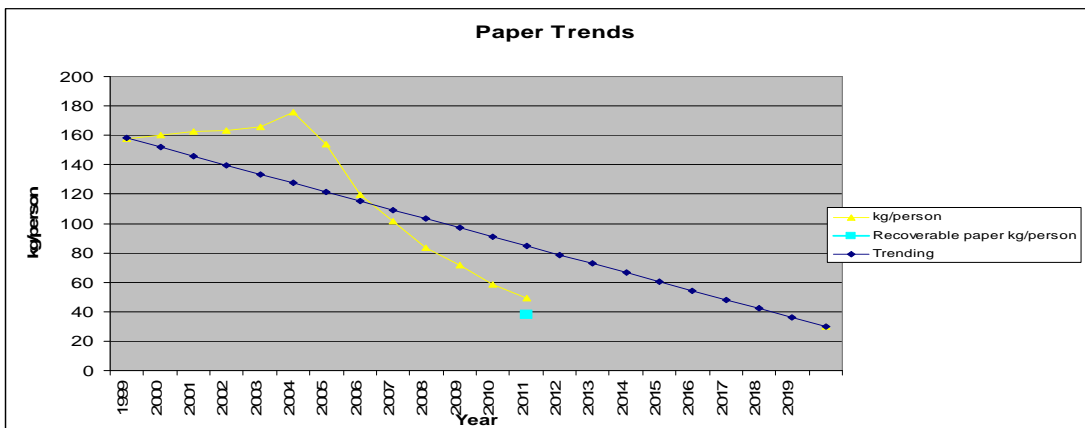


NOTE 1: 2011 population base of 367,770 used for calculations

NOTE 2: Current figures provided based on recoverable material. Currently 110 kg per person per annum is going to landfill however only 87 kg of organic material is recoverable. 23 kg/person/annum is unrecoverable either due to contamination or is unprocessable at the organics processing plant (flax, etc).

#### 3.4.2 Paper and Cardboard Target

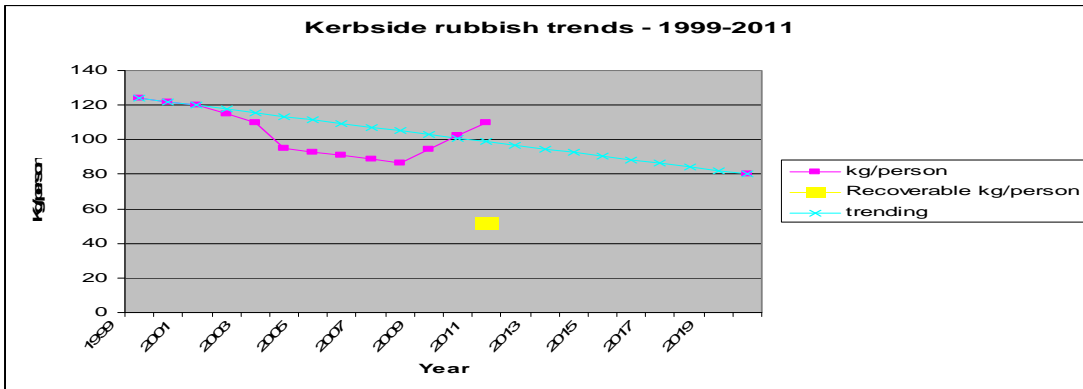
- No more than 30 kg/person/year of recoverable paper and cardboard is sent to landfill by 2020 (currently 38 kg/person/year)



NOTE: current figures provided based on recoverable material. Currently 49 kg/person/annum is sent to landfill however only 38 kg/person/year is divertible.

**3.4.3 Kerbside Waste Target**

- No more than 80 kg/person/year of kerbside waste collected by the Council is sent to landfill by 2020 (currently 110 kg/person/year)



NOTE: 110 kg per person per annum is the actual amount being disposed to landfill. Currently 52 kg per person per annum of this is recoverable.

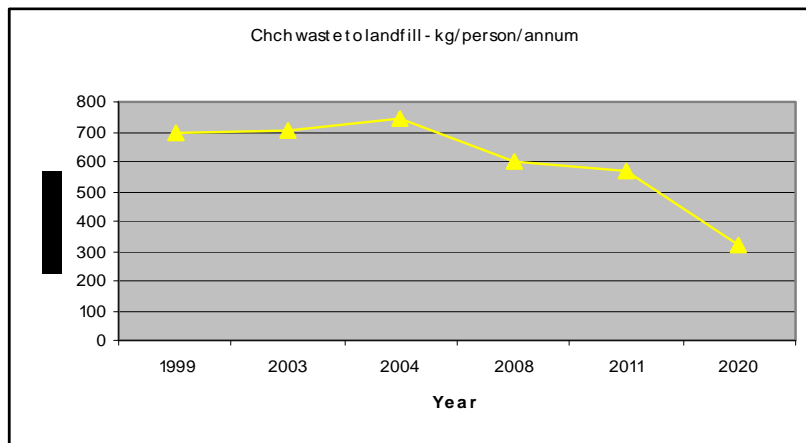
While total waste to landfill has decreased from 254,000 tonne in 2007 to 193,000 tonne in 2011, the introduction of the red rubbish bin as part of the 3 bin system has resulted in a change in the way residents deal with their rubbish. Red bins have advantages of capacity and ease of use over the old black bags, and has resulted in decreased volumes of rubbish taken by car/trailer directly to the refuse stations and increased volumes presented at the kerbside with kerbside collected volumes increasing from 33,000 tonnes to 41,000 tonnes per year over the 2007 to 2011 period.

**3.4.4 Plastics**

Only 5 kg per person per year is currently sent to landfill. At this low level no target is proposed to further reduce plastics to landfill. It is more cost effective to focus on higher volume issues such as unwanted organics in refuse bins. Volumes of plastics are still being monitored.

**3.4.5 Overall Waste to Landfill Target**

No more than 320 kg/person/year of waste is sent to landfill overall by 2020 (currently 524 kg/person/year).



NOTE: 162 kg per person is currently divertible. To achieve a target of above target 320 kg by 2020 will require diversion from areas like timber and rubble.

**PART FOUR - ACTION PLAN**

Actions listed in Table 8 recognise the importance of the following assessment criteria:

**Table 7 – Action Plan Assessment Criteria**

Criteria		The Council will give preference to options that -
Economic	Quantity	Address wastes generated in large amounts, either tonnes or volume (e.g. food scraps, greenwaste, paper and cardboard)
	Cost effectiveness	Offer value for money
Environmental	Reducing the harmful effects of waste	Assess the risk of harm to the environment and human health from wastes to identify and take action on those wastes of greatest concern
	Improving the efficiency of resource use	Will improve the efficiency of resource use to reduce the impact on the environment and human health and capitalise on potential economic benefits
Social	Public concern	Respond to public concerns (e.g. the kerbside recycling of plastic supermarket bags)
	Local benefit	Provide benefits to the Christchurch community (e.g. use recovered resources locally and create local jobs)
Cultural		Recognise Tangata Whenua principles and values
Achievability		Have the potential to succeed

**DRAFT ACTION PLAN 2013**

As the rebuild of Christchurch city will extend beyond the 6 years statutory life span of the this Plan, and with state of the art waste management and minimisation infrastructure already in place, the 2013 Action plan does not include any capital expenditure, with all actions to be funded from existing operational budgets. Actions are not allocated to specific time periods and will continue throughout the lifespan of the Plan.

Working towards the target for residual waste to landfill (no more than 320 kg/person/year by 2020) is dependant upon progress with the actions set out in the Action Plan in Table 8 (which also include specific action plan targets, additional to the waste stream targets set out above), and may also be affected by the speed of the rebuild in Christchurch.

Education and raising awareness to increase participation and compliance with kerbside collections and general waste minimisation is a generic action across all waste minimisation and will continue to be provided by a specialist team, and remain an important ongoing support function for the relevant actions listed in Table 8. The Council's *Solid Waste Education and Communication Strategy 2004* will be reviewed during 2013. Key waste minimisation advice for ratepayers are continually being identified and these will continue to be rolled out as individual messages in order to maximise potential impact and effectiveness.

**Table 8 – Action Plan 2013**

Number	Action	Action Targets	Issue	Responsibility
<b>Organic Materials</b>				
1	Increase the effectiveness of the kerbside collection service to achieve increased volumes of divertible organic materials, without increasing contamination	To reduce the volume of organics in the red bins by 10 % every 3 years, based on 2011/12 audit results	Maximise recovery of organic materials and minimise unnecessary materials going to landfill	CCC
2	Promote awareness of unwanted contaminants in organic waste stream e.g. arsenic and other	Monitor monthly reports from Living Earth	Reduction risk of contamination and increase effectiveness of service	CCC, Ecan and Living Earth

**ATTACHMENT 1 TO CLAUSE 1  
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 7 MARCH 2013**

<b>Number</b>	<b>Action</b>	<b>Action Targets</b>	<b>Issue</b>	<b>Responsibility</b>
	contaminants			
3	Raise awareness that the preferred option for residential kitchen waste is the green organics bin and not kitchen sink food dispensers	Review the number of letters sent annually to stakeholders	The organics treatment plant is the best recipient of kitchen scraps, not the wastewater treatment plant	CCC
<b>Paper and Cardboard</b>				
4	Increase the effectiveness of the kerbside collection service to achieve increased volumes of divertible paper and cardboard, without increasing contamination	Track volumes of paper and cardboard on a 3 yearly basis to ensure that diversion levels are maintained	Maximise recovery of paper and cardboard and minimise unnecessary materials going to landfill	CCC
<b>Plastics</b>				
5	Maintain the high level of diversion of plastics through the kerbside collection service	Track volumes of plastics on a 3 yearly basis to ensure that diversion levels are maintained	Maximise recovery of plastics and minimise unnecessary materials going to landfill	CCC
<b>Commercial and Industrial Waste Minimisation</b>				
6	Recruit businesses to actively take part in Target Sustainability	Average of 100 businesses actively taking part in Target Sustainability each year.	Waste reduction advice to businesses	CCC
7	Ensure that a proportion of businesses actively taking part in Target Sustainability are satisfied with the advice and support received	> = 85% customer satisfaction each year.	Customer satisfaction	CCC
8	Produce a number of waste reduction case studies for businesses actively taking part in Target Sustainability resource efficiency initiatives.	10 waste reduction case studies per year, with each case study demonstrating a greater than 10% reduction in waste sent to landfill per identified project from when businesses concerned participated in the Target Sustainability waste reduction initiative.	Promotion of commercial waste reduction	CCC
<b>Treated Timber</b>				
9	Lobby for and participate with national and regional programmes to divert treated timber from residual waste	Monitor available data and share with stakeholders	Collaboration to achieve a nation wide approach	CCC and Canterbury Waste Joint Committee
<b>Tyres</b>				
10	Lobby for and participate with national and regional programmes to deal with the problem of end of life tyres	Monitor available data and share with stakeholders	Collaboration to achieve a nation wide approach	CCC and Canterbury Waste Joint Committee
<b>Electronic Waste</b>				
11	Lobby for and participate with national and regional	Monitor available data and share with	Collaboration with Canterbury territorial	CCC and Canterbury Waste

**ATTACHMENT 1 TO CLAUSE 1  
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 7 MARCH 2013**

<b>Number</b>	<b>Action</b>	<b>Action Targets</b>	<b>Issue</b>	<b>Responsibility</b>
	programmes to divert electronic waste from landfill	stakeholders. Lobby for improvements.	authorities and with the Ministry for the Environment to achieve a nation wide approach	Joint Committee.
<b>Compostable and Biodegradable Packaging</b>				
12	Lobby relevant parties including the New Zealand Packaging Council in order to promote a workable and uniform standard for compostable and biodegradable packaging	Receive only compostable materials at the organics processing plant that do not degrade the final product.	Compostable and biodegradable packaging presents costly processing issues at the organics processing plant and reduces plastics value from materials recovery facility	CCC and Living Earth Ltd
<b>Construction and demolition wastes</b>				
13	Monitor available data and ensure compliance with the Cleanfill Licensing Bylaw 2008	Bylaw compliance	Support reuse of materials where viable	Commercially owned sites receive 95% of volumes
<b>Education and Raising Awareness</b>				
14	Review the <i>Solid Waste Education and Communication Strategy 2004</i> , and continue with current education programs	Effectively reach targeted audiences, including schools	To ensure targeted and continuous education in support of waste minimisation	CCC
<b>Handling and Disposal of Asbestos</b>				
15	Continue to work with key stakeholders to ensure safe handling and transport of asbestos waste including asbestos cement	Compliance with all relevant regulations	Ensure public health, in cooperation the Medical Officer of Health.	CCC, Department of Labour and commercial contractors
<b>Clinical and Hazardous Wastes</b>				
16	Continue to liaise with Community Public Health for the Medical Officer of Health on all matters relating to the management of clinical and hazardous wastes	Compliance with all relevant regulations	Ensure public health, in cooperation with the Medical Officer of Health.	CCC; Medical Officer of Health; Canterbury Waste Joint Committee; Environment Canterbury, and commercial contractors
<b>Litter</b>				
17	Maintain litter avoidance processes in accordance with the Council's litter Strategy 2005, focussing on education and raising awareness	Progressively reduce litter cleanup costs	Litter degrades the environment, resulting in substantial clean up cost to ratepayers	CCC: Keep New Zealand Beautiful



**PART FIVE - FUNDING**

The funding of the Council's Waste Minimisation and Disposal costs is from a combination of rates revenue, fees, charges and levies.

In respect of the rates revenue, the Rubbish component is included in the Uniform Annual General Charge, while the Recycling and Organics components are recovered via the Waste Minimisation Annual Charge. The contribution of the Ministry for the Environment's Waste Minimisation Levy to the development and ongoing operational costs of the kerbside recycling and organics collections and processing has been, and continues to be important. Use of such levies could also fund future additional waste minimisation initiatives.

There are no capital projects required for the implementation of this Plan, and the Action Plan will be funded from existing operational budgets.

Below is an extract from the Council's 2012 Annual Plan relating to Waste Minimisation and Disposal:

## Council Activities and Services

## Refuse Minimisation and Disposal

2011–12 Plan \$000	Note	2012–13 LTCCP \$000	2012–13 Plan \$000	Variance to LTCCP
<b>Cost of proposed services</b>				
7,376	1	7,115	8,032	917
15,099	2	15,441	16,879	1,438
16,303	3	19,491	18,148	(1,343)
729		854	543	(311)
<b>39,507</b>		<b>42,901</b>	<b>43,602</b>	<b>701</b>
<b>Revenue from proposed services</b>				
1,172	1	392	1,161	769
2,708	2,4	4,864	3,234	(1,630)
4,671	4	3,675	4,674	999
-		-	-	-
<b>8,551</b>		<b>8,931</b>	<b>9,069</b>	<b>138</b>
<b>Revenue by source</b>				
7,451		8,931	8,069	(862)
1,100		-	1,000	1,000
<b>8,551</b>		<b>8,931</b>	<b>9,069</b>	<b>138</b>
<b>30,956</b>		<b>33,970</b>	<b>34,533</b>	<b>563</b>
-		-	-	-
<b>30,956</b>		<b>33,970</b>	<b>34,533</b>	<b>563</b>

2011–12 Plan \$000	Note	2012–13 LTCCP \$000	2012–13 Plan \$000	Variance to LTCCP
<b>Cost of capital expenditure</b>				
806		375	376	1
6,900	5	-	1,300	1,300
228		623	625	2
-		111	-	(111)
<b>7,934</b>		<b>1,109</b>	<b>2,301</b>	<b>1,192</b>
<b>This capital expenditure is funded by</b>				
806		375	376	1
7,128		734	625	(109)
-		-	1,300	1,300
-		-	-	-
-		-	-	-
<b>7,934</b>		<b>1,109</b>	<b>2,301</b>	<b>1,192</b>

**Rationale for activity funding (see also the Revenue and Financing Policy)**

User charges are collected for services considered reasonable by the Council to fulfil the objectives of the service and within the constraints of the market. The net cost of Recyclable Materials Collection and Processing and Organic Material Collection and Processing is funded by a uniform targeted rate on serviced properties. The balance of the net operating cost is funded by general rates, as the whole community benefits from these activities. Capital expenditure is funded corporately in accordance with the Revenue and Financing Policy.

**Explanation of operational variances from the LTCCP**

- The accounting treatment of the Materials Recovery Facility, not agreed at the time of completing the LTCCP, has resulted in an additional \$0.5 million of depreciation cost, with compensating additional income.
- Residual Waste volumes under the kerbside collection system are higher than modelled in the LTCCP. This has resulted in \$1.5 million of additional disposal costs and \$0.9 million less in revenue from sale of bins and bin bags, especially in the central city. The additional disposal costs are partially offset by reduced depreciation costs of \$0.5 million at the Burwood landfill site which has now re-opened to accommodate earthquake waste, and whilst attracting \$0.6 million in extra revenue, is offset by a similar amount in maintenance costs applicable to operating the site.
- Depreciation from the Organics Plant was overestimated by \$0.6 million in the LTCCP. Modelling of expected volumes of organic waste was also overestimated, resulting in a \$0.8 million reduction in Service Contracts.
- The Waste Minimisation Levy income of \$1.0 million was included as part of the Residual Waste Activity in the LTCCP. This has been moved to the Organics Activity as the intent of the levy is to encourage a reduction in waste to landfill.

**Explanation of capital variances from the LTCCP**

- An assessment of the cashflow for the rebuild based on the current estimate and likely programme is included.

**STATEMENT OF PROPOSAL  
FOR  
THE DRAFT WASTE MANAGEMENT AND MINIMISATION PLAN 2013**

***1. The Proposal***

A waste management and minimisation plan is the Council's strategy to manage solid wastes according to the requirements of the Waste Minimisation Act 2008. At present, the Christchurch City Council operates under the 2006 Waste Management Plan, which now needs to be updated.

On 28 March 2013 the Council approved the **attached** *Draft Waste Management and Minimisation Plan 2013* (the Draft Plan) to invite public submissions on the Draft Plan, through the statutory special consultative process as set out in Section 83 of the Local Government Act 2002, as referenced in the Waste Minimisation Act 2008.

***2. The Process***

The process for finalising the Draft Plan is as follows:

1. Council authorisation of the attached draft plan for consultation (scheduled for 28 March 2013).
2. A special consultative process for public submissions from 4 May to 7 June 2013.
3. Hearing of submissions on 26 July 2013.
4. The Council will consider the Hearings Panel report, and adopt a finalised 2013 Plan in September 2013.

A copy of this Statement of Proposal with the attached Draft Plan will be available during ordinary office hours at the following places:

- Civic Offices Reception, 53 Hereford Street, Christchurch
- Council Libraries and Service Centres.

It may also be viewed on the Council's website ([www.ccc.govt.nz/haveyoursay/](http://www.ccc.govt.nz/haveyoursay/)).

A *Summary for Information* of the Statement of Proposal will be distributed for the purpose of providing a basis for general consultation.

***3. Written submissions***

Written submissions on the proposal are invited between 4 May and 7 June 2013. These may be made:

1. Electronically at the Council's webpage ([www.ccc.govt.nz/haveyoursay/](http://www.ccc.govt.nz/haveyoursay/)),
2. Hand delivered to the Civic Offices at 53 Hereford Street,
3. By writing to:  
Draft Waste Plan Submissions  
Christchurch City Council  
PO Box 73014  
Christchurch 8154.

**Submissions must be received (not postmarked) by 5 pm on 7 June 2013.** Full name, address and a telephone number must be provided. Anonymous submissions will not be accepted.

Any person who makes a submission can request a hearing by a Council appointed hearings panel. Hearings will be held on 27 July 2013, and submitters who requested to be heard will be advised of the hearing details in due course.

The Local Government Act 2002 requires the Council to make all written submissions available to the public. This requirement is subject to the provisions of the Local Government Official Information and Meetings Act 1987. Anyone wishing to have information in their submission withheld should contact the Council's Communications Consultation Team Leader at telephone number 941 8999, or 0800 800 169.

## Summary of Information

### Draft Waste Management and Minimisation Plan 2013

This *Summary of Information* contains extracts from the *Draft Waste Management and Minimisation Plan 2013*, included in the *Statement of Proposal* for the draft plan, which can be viewed in full on the Council's webpage ([www.ccc.govt.nz/haveyoursay/](http://www.ccc.govt.nz/haveyoursay/)), at the reception desk at 53 Hereford Street, Council libraries and service centres, or by contacting the Council's customer services desk on 941 8271.

Written submissions on the draft plan are invited between 4 May and 7 June 2013. These may be made:

1. Electronically at the Council's webpage ([www.ccc.govt.nz/haveyoursay/](http://www.ccc.govt.nz/haveyoursay/)),
2. Hand delivered to the Civic Offices at 53 Hereford Street, or
3. By writing to:

Draft Waste Plan Submissions  
Christchurch City Council  
PO Box 73014  
Christchurch 8154.

A brief summary of the Draft Plan 2013 follows:

#### PART ONE - INTRODUCTION

##### **Purpose of the Plan**

*The Waste Management Plan is a statutory plan that sits in a wider national, regional and local policy and planning context.*

##### **The Challenge**

*Each person has an individual and social responsibility for the waste they generate. While the Council can influence how waste is managed, it falls to the people and businesses of Christchurch to act in ways that avoid and reduce waste.*

*More than 207,000 tonnes of waste was generated by Christchurch in 2011/12, about 524 kilograms for each person in Christchurch. This waste was disposed of at the Kate Valley Landfill*

#### PART TWO - CURRENT SITUATION AND FUTURE PROJECTIONS

*Based on weighbridge records from Kate Valley Landfill, a total of 207,485 tonnes of waste from Christchurch City was disposed of at the landfill during the period July 2011 to June 2012. Of this total, 93% originated from the six transfer stations in Christchurch City. The other 7% was special wastes disposed of directly to landfill. Special loads taken directly to Kate Valley Landfill included wastewater treatment plant screenings, quarantined waste, and treated industrial waste.*

*The primary type of waste disposed of at the transfer stations in Christchurch, and waste disposed of at Kate Valley Landfill from Christchurch, are presented in the table below.*

July 2011 to June 2012	Waste to transfer stations in Christchurch	
Primary category	% of total	Tonnes per annum
Paper	9.3	17,932
Plastics	12.2	23,447

<b>Organics</b>	21.0	40,440
<b>Ferrous metals</b>	3.1	5,887
<b>Non-ferrous metals</b>	0.5	1,059
<b>Glass</b>	4.0	7,735
<b>Textiles</b>	6.7	12,900
<b>Sanitary paper</b>	4.1	7,954
<b>Rubble</b>	13.2	25,521
<b>Timber</b>	22.0	42,378
<b>Rubber</b>	0.5	915
<b>Special waste</b>	3.4	6,544
<b>TOTAL</b>	<b>100.0</b>	<b>192,712</b>

**Burwood Resource Recovery Park: Earthquake related wastes**

*Burwood Resource Recovery Park (BRRP) was established after the earthquakes to enable material to be removed from demolition sites as soon as possible, and then sorted, processed and recycled over a longer period at BRRP. The facilities are therefore not a permanent disposal site but are used for temporary storage of demolition material while it is sorted and its potential uses are identified.*

**PART THREE -VISION, GOALS, GUIDING PRINCIPLES AND TARGETS**

**Vision:** *A prosperous city, where each person, business and organisation takes responsibility for waste minimisation, and actively works toward zero waste to landfill.*

**Goals:**

- *Individuals, businesses and organisations take greater responsibility for waste minimisation.*
- *Council supports and incentivises waste reduction, reuse and recycling.*
- *Council provides environmentally sound waste disposal services.*

**Waste Stream Targets:**

- 1) **Green and Kitchen Waste:**  
*No more than 30 kg/person/year of recoverable green and kitchen waste is sent to landfill by 2020 (currently 87 kg/person/year).*
- 2) **Paper and Cardboard:**  
*No more than 30 kg/person/year of recoverable paper and cardboard is sent to landfill by 2020 (currently 38 kg/person/year).*
- 3) **Kerbside Waste:**  
*No more than 80 kg/person/year of kerbside waste collected by the Council is sent to landfill by 2020 (currently 110 kg/person/year).*
- 4) **Overall waste:**  
*No more than a total of 320 kg/person/year of waste is sent to landfill by 2020 (currently 524 kg/person/year).*

**PART FOUR - ACTION PLAN**

*As the city's rebuild will extend beyond the six year statutory lifespan of the this plan, and as the city already has state of the art infrastructure in place, the action plan does not propose any capital expenditure, with all actions funded from existing operational budgets.*

*Education and raising awareness to increase participation and compliance with kerbside collections and general waste minimisation initiatives will continue to be provided by a specialist team, and remain an important ongoing support function for the relevant actions listed in the table below. Key advice messages for ratepayers are continually being identified and these will continue to be rolled out as individual messages in order to maximise potential impact and effectiveness.*

*For a full description of the action listed below consult the Statement of Proposal referred to earlier in this Summary.*

<i>Increase the effectiveness of the kerbside collection service to achieve increased volumes of divertible organic materials, without increasing contamination</i>
<i>Promote awareness of unwanted contaminants in organic waste stream e.g. arsenic and other contaminants</i>
<i>Raise awareness that the preferred option for residential kitchen waste is the green organics bin and not kitchen sink food dispensers</i>
<i>Increase the effectiveness of the kerbside collection service to achieve increased volumes of divertible paper and cardboard, without increasing contamination</i>
<i>Maintain the high level of diversion of plastics through the kerbside collection service</i>
<i>Recruit businesses to actively participate in Target Sustainability</i>
<i>Ensure that a proportion of businesses actively participating in Target Sustainability are satisfied with the advice and support received</i>
<i>Produce a number of waste reduction case studies for businesses actively taking part in Target Sustainability resource efficiency initiatives.</i>
<i>Lobby for and participate in national and regional programmes to divert treated timber separately from residual waste</i>
<i>Lobby for and participate in national and regional programmes to deal with the problem of end of life tyres</i>
<i>Lobby for and participate in national and regional programmes to divert electronic waste from landfill</i>
<i>Lobby relevant parties including the New Zealand Packaging Council regarding biodegradable and compostable packaging</i>
<i>Monitor available data and ensure compliance with the Cleanfill Licensing Bylaw 2008</i>
<i>Review the 2004 Solid Waste Education and Communication Strategy</i>
<i>Continue to work with key stakeholders to ensure safe handling and transport of asbestos waste including asbestos cement</i>
<i>Continue to liaise with Community Public Health on all matters relating to the management of clinical and hazardous wastes</i>

**PART FIVE - FUNDING**

*The funding of the Council's waste minimisation and disposal costs comes from a combination of rates revenue, fees, charges and levies.*

*Landfill waste costs are paid for by the uniform annual general charge, while recycling and organics charges are recovered through the waste minimisation annual charge.*

*The contribution of the Ministry for the Environment's waste minimisation levy to the development and ongoing operational costs of the kerbside recycling and organics collections and processing has been, and continues to be important. Use of such levies could also fund future additional waste minimisation initiatives.*

*There are no capital projects required for the implementation of the plan, and the action plan will be funded from existing operational budgets.*



New Zealand Government

**INFRASTRUCTURE REBUILD PROGRESS REPORT  
FEBRUARY 2013**



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## 1. INTRODUCTION

The purpose of this report is to provide Council, CERA and NZTA an update on the horizontal infrastructure rebuild. For this month, and going forward, progress on all horizontal infrastructure rebuild work is reported. This includes the work activity being delivered by SCIRT (section 4.1) and work being delivered under business as usual (BAU) mechanisms (section 4.2).

## 2. ACTIVITIES FOR THE MONTH

The infrastructure rebuild is now back in full swing after the Christmas shut down. In the months of December and January SCIRT delivered nearly \$65 million of work with a year to date total of \$251m against a budget of \$440m.

By the end of December (half way through the financial year) SCIRT had achieved over \$320m of work in design against a target of \$600 for the financial year. SCIRT are currently working on 167 projects (including 5 extra to support new land development). In terms of people involved with the rebuild by end of December there was a total of 1,850 people including 1,320 field staff, 250 in asset investigations team and 280 in the design and management teams. Training and recruitment of field staff is ongoing to meet the predicted peak demand.

In the first quarter of 2013 there is a focus on demonstrating value in the programme of rebuild work. This is now possible as the set up and ramp up phases are complete and the focus is on long term continued delivery of the programme over the next few years. A number of initiatives are underway to develop and report key value metrics. It is anticipated that these will be incorporated into this report as they become available. Linked with demonstrating value is the implementation of a planned audit framework over the next few months including the New Zealand Transport Agency (NZTA) and the Office of the Auditor General (OAG).

The updated rebuild estimate is being incorporated into the draft three year plan. There are ongoing discussions with Central Government around the overall funding framework for the Horizontal Infrastructure Rebuild.

Community and stakeholder liaison remains a high priority with the increase in work sites across the city. There are also a number of key projects within the community which will start this year which will require good communications as safety through road works remains a key priority.

Overall 2013 will be another big year for the Infrastructure rebuild with a focus on continued delivery in the field. The next round of Community Board meetings are being scheduled for March to update on progress and discuss key upcoming projects for the rebuild.

### 3. FINANCIALS

#### 3.1 2012/13 Annual Plan - Actual Year to date cost against budget

Below is a summary of the financials for the horizontal infrastructure rebuild. These have been separated into rebuild activities being carried out by SCIRT (including NZTA State Highway rebuild work) and Council infrastructure rebuild activities being undertaken through Council business as usual mechanisms.

This report includes a breakdown for the current financial year to date as per the agreed SCIRT annual target budget and the Council Annual Plan in section 3.1 and actual life to date costs against the overall infrastructure rebuild estimate (plus additional projects) in section 3.2. For the purpose of this report all indirect costs have been allocated based on portion of the programme estimate per activity.

The table below summarises the year to date and life to date of the horizontal infrastructure rebuild activities performed by SCIRT, rebuild activities performed by others and other CCC renewal projects performed by SCIRT.

During January 2013, budgets of \$599k and \$379k were allocated in Solid Waste and Waste Water Treatment area respectively for Burwood landfill and CWTP new access road projects.

**Table 3.1 Summary Cost Table**

FINANCE AS AT 31 JANUARY 2013				
Activity	Year to date FY12/13		Life to date Forecast Total	
	Budget	Actual Cost YTD	Spend	Actual Cost LTD
Rebuild activities performed by SCIRT	\$ 440,000,000	\$ 251,430,407	\$ 1,751,095,238	\$ 522,174,167
Rebuild activities performed by others	\$ 111,578,414	\$ 20,218,761	\$ 305,546,857	\$ 81,558,716
Other activities performed by SCIRT	\$ 28,145,960	\$ 16,056,241	\$ 49,532,045	\$ 21,259,901
<b>GRAND TOTAL</b>	<b>\$ 579,724,374</b>	<b>\$ 287,705,409</b>	<b>\$ 2,106,174,140</b>	<b>\$ 624,992,784</b>

### 3.1.2 SCIRT actual year to date costs

The approved annual target budget for SCIRT is \$440m. This includes NZTA State Highway rebuild activities of \$10.9m. Table 1.1 below presents the actual costs for each activity for the year to date reported against the agreed annual target budget for SCIRT.

**Table 3.2 Actual costs for year to date of rebuild works by SCIRT**

FINANCE AS AT 31 JANUARY 2013						
SCIRT						
Activity	Description	2012/13 SCIRT Target Budget	Actual Cost YTD	Year End Forecast	Year End Forecast Variance	
Road Network	Roading	\$ 105,410,459	\$ 71,568,351	\$ 119,661,933	-\$	14,251,474
Wastewater Collection	Wastewater	\$ 272,979,267	\$ 159,401,985	\$ 266,012,595	\$	6,966,672
Water Supply	Water Supply	\$ 26,872,162	\$ 13,308,962	\$ 26,325,688	\$	546,474
Waterways & Land Drainage	Stormwater	\$ 23,824,220	\$ 4,680,669	\$ 23,378,283	\$	445,937
NZTA Highways		\$ 10,913,892	\$ 2,470,441	\$ 11,121,502	-\$	207,610
<b>TOTAL SCIRT INFRASTRUCTURE REBUILD PROGRAMME</b>		<b>\$ 440,000,000</b>	<b>\$ 251,430,408</b>	<b>\$ 446,500,000</b>	<b>-\$</b>	<b>6,500,000</b>

### 3.1.3 Non-SCIRT actual year to date costs

The balance of the annual plan budget for the infrastructure rebuild (\$110.6m) is being delivered by Council business as usual mechanisms. Table 3.3 below presents the actual costs for the year to date of the infrastructure rebuild performed by Council for each activity against the 2012/13 Annual Plan budget. These costs are up to the end of January 2013.

During January 2013, budgets of \$599k and \$379k were allocated in Solid Waste and Waste Water Treatment area respectively for Burwood landfill and CWTP new access road projects.

Non-SCIRT rebuild projects are forecast to be \$30.4m under budget by year end, including \$14.1m to be carried forward to next financial year.

**Table 3.3 Actual costs for year to date of non-SCIRT rebuild works**

FINANCE AS AT 31 JANUARY 2013				
Non SCIRT				
	2012/13 Approved Budget	Actual Cost YTD	Year End Forecast	Year End Forecast Variance
<b>TOTAL NON-SCIRT INFRASTRUCTURE REBUILD PROGRAMME</b>	<b>\$ 111,578,414</b>	<b>\$ 20,218,761</b>	<b>\$ 81,145,632</b>	<b>\$ 30,432,782</b>

**3.2 Overall Infrastructure Rebuild estimate - actual life to date costs against current infrastructure rebuild estimate.**

The current estimate for the overall rebuild of the City's horizontal infrastructure is \$2.015 billion (including contingency and excluding escalation), plus \$16.4m project budget not included in the horizontal infrastructure cost estimate. In addition to the above there is an estimate of \$25m for NZTA State Highways rebuild. For the purpose of this monthly progress report the current overall estimate reported against is therefore \$2.057 billion.

The revised programme estimate is anticipated to be included in the draft Long Term Plan in February 2013.

**3.2.1 SCIRT actual life to date against estimate**

Table 2.1 includes the overall life to date costs against the current estimate for the SCIRT performed rebuild of the City's infrastructure. SCIRT is performing \$1.7b of Council infrastructure rebuild, plus \$25m NZTA Highways rebuild.



**Table 2.1 SCIRT Actual life to date costs against estimate**

SCIRT								
Activity	Description	Current Estimate of Cost	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost LTD	Forecast Total Spend	Programme Variance
Road Network	Roading	\$ 814,857,143	\$ 11,812,105	\$ 71,944,425	\$ 71,568,351	\$ 155,324,881	\$ 814,857,143	\$ -
Wastewater Collection	Wastewater	\$ 714,095,238	\$ 10,376,296	\$ 129,686,110	\$ 159,401,985	\$ 299,464,391	\$ 714,095,238	\$ -
Water Supply	Water Supply	\$ 128,142,857	\$ 1,857,860	\$ 35,385,420	\$ 13,308,962	\$ 50,552,242	\$ 128,142,857	\$ -
Waterways & Land Drainage	Stormwater	\$ 69,000,000	\$ 999,542	\$ 6,505,956	\$ 4,680,669	\$ 12,186,167	\$ 69,000,000	\$ -
NZTA Highways		\$ 25,000,000	\$ -	\$ 2,176,046	\$ 2,470,441	\$ 4,646,487	\$ 25,000,000	\$ -
<b>TOTAL</b>		<b>\$ 1,751,095,238</b>	<b>\$ 25,045,803</b>	<b>\$ 245,697,957</b>	<b>\$ 251,430,408</b>	<b>\$ 522,174,168</b>	<b>\$ 1,751,095,238</b>	<b>\$ -</b>

### 3.2.2 Non-SCIRT actual life to date against estimate

Table 2.2 includes the overall life to date costs against the current estimate for infrastructure rebuild activities being delivered by Council business as usual mechanisms. This table also includes \$16.4m budget from Earthquake Building/Infrastructure Shortfall Allowance for the Waste Water Treatment Plant.

**Table 2.2 Non-SCIRT actual life to date costs against estimate**

Non SCIRT								
Activity	Description	Current Estimate of Cost	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost LTD	Forecast Total Spend	Programme Variance
Road Network	Roading	\$ 77,761,905	\$ 848,201	\$ 692,114	\$ 191,626	\$ 1,731,941	\$ 77,761,905	\$ -
Wastewater Collection	Wastewater	\$ -	\$ 1,634,066	\$ 13,757,590	\$ 12,456	\$ 15,379,201	\$ -	\$ -
Parks & Open Spaces	Greenspace	\$ 56,952,381	\$ 611,310	\$ 1,835,060	\$ 3,621,998	\$ 6,068,368	\$ 56,952,381	\$ -
Refuse Minimisation & Disposal	Solid Waste	\$ 8,761,905	\$ 2,076,017	\$ 3,091,587	\$ 2,115,115	\$ 7,282,719	\$ 8,761,905	\$ -
Wastewater Treatment & Disposal	WW Treatment Plant	\$ 96,356,381	\$ 4,488,038	\$ 13,249,043	\$ 10,240,011	\$ 27,977,092	\$ 96,356,381	\$ -
Water Supply	Water Supply	\$ 24,095,238	\$ 4,266,124	\$ 830,545	\$ 1,985,795	\$ 7,082,464	\$ 24,095,238	\$ -
Waterways & Land Drainage	Stormwater	\$ 41,619,048		\$ 13,960,259	\$ 2,076,671	\$ 16,036,930	\$ 41,619,048	\$ -
<b>TOTAL</b>		<b>\$ 305,546,857</b>	<b>\$ 13,923,757</b>	<b>\$ 47,416,198</b>	<b>\$ 20,218,761</b>	<b>\$ 81,558,716</b>	<b>\$ 305,546,857</b>	<b>\$ -</b>

## **4. COMMUNICATIONS**

### **4.1 Strategic Communications**

The Strategic Communications Plan is now being rolled out, with budgeted advertising and other activities being booked and set to start in coming weeks.

The Communications Working Group has prepared the first of what will become a regular memo to key stakeholders, including elected members, local MPs and other interested parties.

Media interest in road works, traffic management and the condition of roads has been high and backgrounder articles on what's happening on our roads (focusing on traffic management and road maintenance) are being prepared for submission to The Press in coming weeks.

The next quarterly round of visits to local Community Boards is now underway, led by Will Doughty, with generally positive feedback being received from Board Members. The next CERA-organised briefing for elected members is set for 20 February. Councillors and Community Board Members received their monthly update on progress as usual at the beginning of February.

There has been some media attention around funding for the infrastructure rebuild, as a result of recent discussions between the Council and the Earthquake Recovery Minister about the Council's financial planning activities. As of today, information about the new cost estimate for the rebuild has not been made public; however this is expected to happen once details of the Council's Three Year Plan are released to the media.

## 4.2 Operational Communications

SCIRT has now produced almost 1000 individual work notices which have been distributed to more than 250,000 residences. Staff have carried out nearly 5000 face-to-face interactions and almost 500 meetings as part of our commitment to letting people know about our work.

Portable, interactive displays have been built by SCIRT delivery teams for use at community meetings and events. The portable displays bring to life some of the most complex aspects of the rebuild work, including dewatering, trenching, the new wastewater network, community impacts, retaining wall construction and community impacts.

In coming months there will be a major communication focus on the new wastewater network being implemented in many areas of the city. In February, SCIRT is engaging with hundreds of residents about pressure wastewater systems at community meetings in East Avondale and Parklands via face to face meetings, due to the highly technical nature of this work. This is supported by coordinated printed material developed between the IST and delivery teams. The new network will also be promoted on our Council service centre display boards and in the upcoming CERA February newsletter.

The updated four year schedule of work will be promoted on the website and through other media when it is available.

SCIRT's communication team continues to work closely with the traffic team to produce proactive information about major traffic impacts. A number of high impact projects underway in February will test our performance.

### **4.3 Talking points for the month ahead**

The Communications Working Group is preparing monthly talking points to circulate amongst client organisations and key stakeholders. Talking points for the month ahead are:

- Around 100 projects worth \$300 million are under construction.
- 175 projects worth \$95 million are now complete.
- Community engagement around the new, stronger wastewater network is a major focus in February, with numerous public meetings planned.
- SCIRT will shortly release an updated schedule of works showing where work will be happening this year and throughout the programme.
- About 1850 people are working on the horizontal rebuild.

### **Over-arching key messages from the Strategic Communications Plan remain the same this month:**

- Good progress is being made on fixing Christchurch's earthquake damaged roads and underground services. (Use latest rebuild statistics in conjunction with this message).
- The rebuild is a partnership between Central Government and Council working for their communities.
- There is a big job ahead but we are fully confident of success and have the right people involved.
- Roads are going to get busier as the rebuild ramps-up - we're doing all we can to minimise the disruption to residents.

## 5. ENVIRONMENT

### 5.1 Key Outcomes

- A high level of consent compliance continues across the programme of work.
- The Main Road causeway consent has been granted subject to conditions.
- A further three consent applications have been lodged for global consents (air discharge, fuel storage and stormwater discharge).  
With the granting of these consents, SCIRT will have obtained a full suite of environmental authorisations for the programme. The focus of the environmental team is ensuring compliance is maintained.

### 5.2 Upcoming Priorities

- Focus on adding value through improved waste minimisation during 2013.
- The development of a SCIRT environmental training programme in conjunction with Environment Canterbury.
- SCIRT is currently negotiating conditions for the Triumphal Arch repairs consent which is expected to be granted during February. Based on some learnings from the Triumphal Arch's design and consent process, a heritage design guideline is being developed.

### 5.3 Environmental Statistics

Description	January 2013	LTD
Environmental Hazards	94	1,112
Environmental Opportunities	283	890
Environmental Team Initiatives	15	89
Community Organised Events	-	24
Number of Environmental Incidents	49	360
Infringement Notices	-	-
Abatement Notices	-	-
% of waste reduced, re-used, recycled	41%	19%

*Data from SCIRT Operational report – February 2013*

## **6. PROGRAMME**

### **6.1 SCIRT Work Activity**

#### 6.1.1 Achievement Report

The progress report for this month includes an achievement report which outlines progress made by the construction projects against key metrics for each asset type.

<b>Asset Type</b>	<b>Unit</b>	<b>Network Total</b>	<b>Identified Damaged</b>	<b>Of Total</b>	<b>Completed</b>	<b>Of Damaged</b>	<b>Completed in January</b>
<b>WASTEWATER</b>							
<b>Reticulation</b>	KM	1,858	685	37%	111	16%	7.707
<b>Pump Station</b>	No	164	136	83%	26	19%	-
<b>WATER SUPPLY</b>							
<b>Reticulation</b>	KM	2,990	78	3%	21	27%	0.507
<b>Pump Station</b>	No	107	103	96%	6	6%	-
<b>Reservoirs</b>	No	113	113	100%	3	3%	0
<b>STORM WATER</b>							
<b>Reticulation</b>	KM	1,031	27	3%	6	23%	0.171
<b>Pump Station</b>	No	38	15	39%	0	7%	-
<b>ROADING</b>							
<b>Roading</b>	m <sup>2</sup>	n/a	1,618,951	0%	158,602	10%	1.138
<b>Storm water</b>	KM	691	135	20%	-	0%	-
<b>Bridges</b>	No	228	228	100%	13	6%	0
<b>Retaining Walls</b>	No	490	141	29%	3	2%	320m <sup>2</sup>

*All data for the SCIRT Work Activity Section was sent from SCIRT – Received February*

### 6.1.2 Number of Ongoing SCIRT Projects

The following table is a summary of the programme pipeline as at January 31<sup>st</sup> 2013. It shows how many projects and the total value at each stage of the project lifecycle.

Project Lifecycle Stage	December Estimate	January Estimate	December Estimated Construction Cost	January Estimated Construction Cost
Investigation (Asset Assessment)	24	12	\$96.1m	\$20.9m
Concept Design	127	125	\$865.7m	\$914.9m
Detailed Design	106	64	\$645.7m	\$350m
Construction	102	154	\$315.9m	\$569.4m
Handover	237	243	\$109.5m	\$114.2m
<b>Grand Total</b>	<b>596</b>	<b>589</b>	<b>\$2,033m</b>	<b>\$1,910.5m</b>

*Data sent from SCIRT – Received February*

In the table above, the previous monthly report totals have also been included to show the change in activity.

### **6.1.3 Ongoing Projects by Ward**

#### **6.1.3.1 Introduction**

The progress report this month includes a summary of all SCIRT projects that are currently either in detailed design or construction separated on a Ward basis. A separate table has been included specifically for projects either in detailed design or construction within the central city (within the four avenues). This has been created to assist in the coordination with the Central City Recovery Plan and vertical infrastructure rebuild going forward.

For projects in construction – estimated construction cost (Target Outturn Cost) has been included together with actual Life to Date Costs as at the end of January 2013.



**6.1.3.2 Burwood / Pegasus**

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10620	Pages Rd Bridge	Repair to Pages Rd Bridge, including road network connecting to roundabout on North end of bridge.
10796	NZTA Anzac Bridge Repairs	Ground improvements, removal of landward bridge spans, demolish and rebuild abutments, repair piers, approaches and underpasses
10956	NZTA - Travis Road & Anzac Drive Repairs (RD)	Repairs to the State Highway
10959	Aranui Catchment NE4 Vacuum Pump Station, Pages Road (WW)	Construction of a vacuum pump station to service the Aranui catchment including an above ground, architecturally designed pump station building, biological filter bed, shared generator building with PS36 and an access road. This pump station is located at the same site as PS36 and has some shared facilities.
10961	Aranui Catchment NE4 Vacuum Arm 2: Pages Rd West Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10962	Aranui Catchment NE4 Vacuum Arm 3: Shortland Street Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10963	Aranui Catchment NE4 Vacuum Arm 4: Marlow Road Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10964	Aranui Catchment NE4 Vacuum Arm 5 and 6: Portchester Street Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10975	NE12 - North New Brighton Wastewater Catchment Repairs (WW)	Repair of the Wastewater network within the North New Brighton area.
10976	NE13 - Beach Road & Bower Ave Wastewater Catchment Repairs (WW)	Wastewater replacement in the Beach and Bower Ave Catchment within Parklands East.
10977	NE13 - Parklands East Wastewater Catchment Repairs (WW)	Replacement of the Wastewater system in the Parklands East area.
10978	NE13 - Parklands West Wastewater Catchment Repairs (WW)	Wastewater repairs to the Parklands West catchment area.
11020	Keyes Road Catchment - New Brighton and Frosts Road - Roding Stormwater and Water Supply (WS,SW,RD)	Repair of Earthwork damage to Stormwater, Roding and Water Supply for the Areas including Frosts Road, Travis Drive, Bower Avenue, Palmers Road and Baker Street. Stormwater issues may be affected by the adjacent New Brighton Road Project.
11032	Parklands East (RD, SW, WS)	Repairs to roading, stormwater and water supply assets.
11033	Parklands West (RD, SW, WS)	Repairs to roading, stormwater and water supply assets
11034	Parklands South (RD, WS, SW)	Repairs to roading, stormwater and water supply assets

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
11035	North New Brighton and North Shore (RD, WS, SW)	Repairs to roading, stormwater and water supply assets
11040	PS 56 - Burwood North Wastewater (WW)	Wastewater Repair/Renewal within the Burwood North area
11041	Burwood East Wastewater (WW)	Replacement of the Wastewater System in the Burwood East Area
11042	Burwood West Wastewater & Trunk Sewers (WW)	Replacement of Wastewater system within the Burwood West Area
11043	Burwood Pressure Main 54 (WW)	Replacement of Pressure Main 54 within the Burwood Area
11045	South New Brighton - Gravity Repairs (WW)	South New Brighton gravity repairs. This has been split out of the original projects 10861 and 10318 scopes.

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10314	Keyes Road Catchment (WW, WS)	Repair and/or reinstatement of wastewater system.	26/03/2012	12/04/2013	\$9,615,000	\$9,156,682
10318	PS37 North Catchment (WW)	Wastewater repairs and renewal for northern half of PS37 catchment. Includes one new pump station and approximately 100 pressure sewer pumps.	30/04/2012	03/07/2013	\$5,345,000	\$5,090,574
10363	PS 108 Catchment (old PS39 Catchment)	A large waste water catchment of approx 12 streets which all drain to Pump Station 54 in Avondale.	14/11/2011	15/02/2013	\$5,307,000	\$5,209,072
10416	PS37 (PS)	Repairs to existing PS37, including new pump intakes and repairs to yards.	15/03/2013	05/06/2013	\$926,000	\$717,650
10429	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WS, SW, RD)	Repairs to roads, stormwater and water in Estuary Road between Bridge Street and Beatty Street.	01/10/2012	15/04/2013	\$1,352,000	\$1,203,805
10430	PS28 - Catchment	PS 28 catchment services residential and industrial land loosely bounded by Pages Rd, Cuffs Rd, Wainoni Rd and Shortland St in the suburb of Wainoni. Other pockets of	24/07/2012	13/12/2013	\$15,842,000	\$3,518,089

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
		land are also serviced including 650 m of Wainoni Rd north of Shortland St and 240 m of Breezes Rd, an area west of Wainoni Rd including a portion of Avonside Dr, Newport St, Tenby Pl and Emlyn Pl, 350 m of Wainoni Rd south of Cuffs Rd and an area south of Pages Rd including Price Pl, 180 m of Kearneys Rd and Mecca Pl. The seismic events caused liquefaction and land settlement throughout the catchment. The pump station is still operational and in a serviceable state. The majority of the network suffered either loss of grade, cracks and breakages or a combination of the two. Therefore a significant proportion, if not all, of the network will need to be replaced.				
10553	Avondale Road Bridge Works (RD)	Retrofit repair to bridge involving new abutments, piles, wingwalls and associated road approaches and services.	24/09/2012	06/09/2013	\$2,768,000	\$988,850
10557	Gayhurst Road Roding (RD)	Design for road reconstruction to repair moderate to severe earthquake damage to carriageway, kerb and channel, and footpaths from Dallington Bridge northwards to Mundys Road. This project will become part of PS108 Catchment Phase 1 Roding, Storm Water and Water Supply. This work follows wastewater repairs/replacement.	16/07/2012	24/05/2013	\$2,869,000	\$1,583,801
10585	PS25 - Catchment Vacuum Solution (WW)	Wastewater design for Pumping station 25 Catchment. This area includes sections of Banks Ave and Achillies Street that will be diverted into PS 108. This area also includes the Strathmore Gardens area. The majority of the catchment requires replacement of WW lines.	18/03/2013	17/01/2014	\$6,578,000	\$599,574
10694	PS36 Renewal (WW)	New PS36 to replace existing PS36. New station capacity approximately 900 L/S. This project covers all design for the project and construction for above ground activities. A related project covers 2M of below ground construction works required.	22/06/2012	01/07/2013	\$4,984,000	\$4,427,429
10705	Owles Tce (WW)	Project released from hold March 2012.	06/11/2012	22/11/2013	\$7,360,000	\$1,304,312

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10724	Bridge St bridge and approaches	Replace damaged bridge abutments and approaches with new structure including roadworks and services reinstatement.	21/08/2012	28/11/2013	\$10,021,000	\$2,781,212
10765	PS 108 New Pump Station	Minor new pump station.	15/10/2012	25/02/2013	\$1,056,000	\$858,801
10786	PS 108 Catchment Stormwater, Water Supply and Rooding Renewals (SW,WS,RD)	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with associated storm water and water supply works in 11 streets situated immediately to the east and west of Gayhurst Rd from McBratneys Rd northwards to Mundys Rd. This work will follow construction of wastewater repairs/replacement.	03/10/2012	22/04/2013	\$1,916,000	\$873,993
10800	PS 108 Phase 2 Waste Water	Detailed Design of remediation works for wastewater catchment 108.	14/08/2012	24/04/2013	\$4,542,000	\$3,749,337
10801	PS108 Phase 2 Rooding and Storm Water Renewals (RD,SW,WS)	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with associated storm water and water supply works in 10 streets situated immediately to the east and west of Gayhurst Rd - generally south of Strathfield Ave in the west and McBratneys Rd in the east. This work will follow construction of wastewater repairs/replacement.	15/02/2013	06/06/2013	\$2,693,000	\$394,921
10802	PS54 Stage 1 - Northern Rooding Renewals Incl Breezes Road	Road design for 8 roads in Avondale. New pipe systems are needed in multiple roads requiring asset managers understanding and buy-in. Includes stormwater full dynamic modelling with probable need to restore capacity by optioneering new components (new basin and/or pump upgrading).	10/09/2012	03/10/2013	\$3,783,000	\$1,726,940
10803	PS54 Stage 1 Southern Rooding Renewals (South of Breezes Road)	Road design for Pembroke St and Horton Place in Avondale. A new pipe system is needed on Horton St requiring asset managers understanding and buy-in.	02/07/2012	15/03/2013	\$1,092,000	\$1,039,656

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10846	Water Main Replacement Projects Vivian St, Admirals Way, Pine Ave (WS)	Water Main replacement projects for: Vivian St, Admirals Way, Pine Ave. Other streets have been moved to other projects: Port Hills Rd and Flavell St to 10681. Keyes Road to 10314. All others removed.	25/05/2012	08/02/2013	\$957,000	\$911,364
10896	Minor Works - Demolition of Porrit Park and Snells Footbridges, PS26 and PS27 Pump Stations	Demolition and make safe work for Porrit Park Footbridge, Snells Footbridge, PS26 and PS27. Rebuild of the bridges to be undertaken in separate standard projects.	27/08/2012	13/02/2013	\$223,000	\$139,400
10898	Minor Works - Medway Footbridge Removal	Removal and make safe of the footbridge. Store off site until a decision is made regarding the structure	11/02/2013	22/02/2013	\$82,000	\$17,051
10926	PM 63 (WW)	The 700mm pressure main 63 will run for 4km generally following the route of Anzac Drive from Parklands to Bexley. It will connect to pump station 63 which is being designed and constructed under the project number 10415.	07/01/2013	20/08/2013	\$7,301,000	\$2,164,486

### 6.1.3.3 Fendalton / Waimairi

DETAILED DESIGN		
Reference	Project	Project Description
10968	Bridge Repair - Carlton Mill Footbridge - F110 (RD)	Bridge inspection and deign of repairs for damage sustained during earthquakes. Limited geotechnical investigation, analysis and reporting.

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10425	Glandovey/Bryndwr Cluster	Design for repair to severe earthquake damage to wastewater and minor damage to carriageways, kerbs and channels, and footpaths (severity yet to be confirmed) storm water and water supply. This cluster incorporates the 9 streets immediately adjacent to and including Glandovey Road between the Wairarapa Stream and Strowan Road	10/12/2012	02/07/2013	\$2,856,000	\$919,714
10485	Merivale WW	Approximately 9km of WW gravity system, one new pump station.	14/05/2012	19/06/2013	\$14,270,000	\$10,996,477
10575	Papanui Rd - Knowles to May (WW)	The area has been broken into wastewater sub-catchments in order to determine the best catchment wide solution. 10575 therefore includes Browns Rd north of Mansfield Ave, McDougal Ave east of Murray Pl, Murray Pl, Innes Rd between Papanui Rd and Browns Rd, Heaton St east of Circuit St, Papanui Rd between Innes Rd and Mays Rd, approximately 230 m of the eastern end of Knowles St, Weston Rd and Chapter St, Approximately 280 m of the western end of Normans Rd and 150 m of the eastern end of Mays Rd. The seismic events caused some liquefaction and land settlement in parts of the sub-catchment. Much of the network is made up of Earthenware pipe laid during the 1920s and 1930s. Much of the network suffered either loss of grade, cracks and breakages or a combination of the two. Therefore a significant proportion, if not all, of the network will need	17/05/2012	19/03/2013	\$4,796,000	\$4,647,346

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
		to be repaired or replaced.				
10595	Wairakei Road (WW)	Replacement of the deep 225 mm sewer main and the construction of new 150 mm sewer rider mains over the deep main. The wastewater works are from Aorangi Street to Idris Road.	02/08/2012	12/04/2013	\$1,005,000	\$964,506
10839	Merivale Catchment RD SW WS	Linked to #10485 for the RD SW and WS elements of the One Pass Projects	14/02/2013	23/07/2013	\$883,000	\$221,848
10852	Minor Works - Casebrook Block	Minor footpath and pavement repairs	31/05/2012	16/04/2013	\$226,000	\$89,604
10884	Merivale Pumping Station (PS)	New Pumping station for the Merivale Catchment Project. Linked to Project #10485	02/04/2013	22/07/2013	\$895,000	\$191,037
10894	Fendalton Bridge Repair Package - Minor Repairs (RD)	Repair of 6 damaged bridges within the general region of Fendalton. The six bridges included are: R131, R133, R137, R148, R153, R166.	18/02/2013	05/04/2013	\$155,000	\$61,302

**6.1.3.4 Central City**

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10464	F106 Antigua Street Footbridge	Replacement of existing structure, or incorporate historical elements into major repair works
10466	R109 Fitz Twin Bridges	Ground improvements and major structural repair/bridge replacement of twin bridges
10467	R114 Colombo St (North) Bridge	Major structural repair works Northern Colombo St, over the Avon, heritage bridge near intersection of Oxford Tce & Colombo St.
10469	R702 Moorhouse Ave Overbridge	Major structural repair works
10966	Bridge Repair - Armagh Street - R122 (RD)	Bridge inspection and design of repairs for damage sustained during the earthquakes. Limited geotechnical investigation, analyses and reporting.

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10401	Moorhouse Brick Barrel 01 (SW)	Repair of a failed stormwater Brick Barrel pipe on Moorehouse Ave under the Colombo St over bridge	28/03/2013	28/05/2013	\$486,000	\$103,132
10482	Triumphal Arch	All works related to both temporary bracing to arch to support the structure and all permanent repair works. In CBD, Heritage structure.	02/04/2013	06/08/2014	\$3,319,000	\$684,397
10844	Central City Pump Station PS2 Catchment (WW)	Repair/replacement of wastewater system in the north west of the CBD. Excludes WW Brick barrel which is considered under Project 10845.	21/01/2013	19/03/2014	\$7,230,000	\$827,969
10845	Central City - Brick Barrel Assessment, Relining and Repairs	Full assessment, relining and repair works for the Brick Barrel Trunk network within the CBD Catchment. Includes all WW and SW Brick Barrels. A separate Project has been created for the Kilmore St Brick Barrel and concept / detailed design should be undertaken in conjunction with this work.	21/05/2012	26/06/2013	\$18,687,000	\$13,077,155
10893	Minor Works- Bridge Minor Works Project Package 01 Bridging	Minor repairs to bridges requiring little design input. Project to be led by SCIRT Project Manager and Delivery teams	23/07/2012	27/02/2013	\$222,000	\$143,133



<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10936	Fast Track - Central City - New Regent Street Wastewater Repair (WW,WS,SW,RD)	Accelerated repair of the 150 dia WW pipe work to provide service to businesses on New Regent Street, an area under development supported by the CCC as a 'Restart' Area.	15/10/2012	15/03/2013	\$515,000	\$314,040
10985	Central City - Kilmore Street Catchment Area SW Brick Barrel (SW)	Repairs to SW brick barrel along Kilmore Street, from Durham Street to Colombo Street in the north west of the CBD. During Concept, this was part of the Kilmore Street Catchment Area Project (Project #10844).	21/01/2013	17/04/2013	\$506,000	\$19,948

**6.1.3.5 Hagley / Ferrymead (\*excludes central city)**

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10347	Gayhurst Rd Bridge Works EW (RD)	Retrofit repair to bridge involving new abutments, piles, wingwalls and associated road approaches and services.
10563	Retaining Wall Area 2 - Clifton Retaining Walls	Design and delivery of the repairs required to retaining walls.
10564	Retaining Wall Area 2 - Galilee Lane (RW)	Collapsed retaining wall design and repair.
10565	Retaining Wall Area 3 - Seamount Tce Retaining Walls (RW)	Retaining wall design and construction. Includes walls with RAMM id's of: 1207, 1208, 1212, 1213, 1217, 1214, 1216, 1218, 1219.
10655	CCC - Main Road 3 Laning Sea Wall - Capital Works Project (RD)	
10795	PS57 McCormacks Bay Rd Pump Station Repairs (PS)	Repairs to building at existing pump station.
10823	St Johns (SW,WS,RD)	Catchment study for a full one pass rebuild of remaining services within the catchment area. Refer to Project 10449 for WW assets in this area.
10832	PS15 - Alport Place Pump Station Replacement (PS)	Construct a new Pump Station; tie in works, odour control system and demolition of existing PS15.
10897	Woolston Ferrymead PS15 Central (WW)	Repair of the gravity trunk sewer network discharging to PS15. PS15 Pump Station rebuild under Project #10832 (Yellow Team)
10907	Site 226 Soleares Ave	Stabilisation of rock face and re instatement of the access road damaged in Feb 2011 earthquake
10908	CCC - The Causeway, Main Road Sumner, Culvert Replacement (SW)	Renewal of the culvert structure linked to the Causeway project #10634. CCC BAU Project.
10916	Bromley & Woolston PS15 North (WW)	Full catchment rebuild - WW Elements
10917	PS15 Bromley & Woolston SE12-SE18 (SW,WS,RD)	Full catchment rebuild - SW,WS and RD elements
10927	Retaining Wall - 1 to 3 Maffey's Road (RW)	Repair of the retaining wall at 1-3 Maffey's Road. Linked to 10307
10979	CCC - Main Road 3 Laning - Capital Project (RD)	CCC Capital project for the 3 laning of Main Road. To be completed in conjunction with the SCIRT earthquake repair job of 10634, and the culvert replacement CCC project 10908.
10996	Avonside Linwood Stage 2 (WW,SW,RD)	One pass approach renewing wastewater, roading and stormwater assets within stage two of the Avonside Linwood Catchment. Standard project resulting from Catchment Studies 10875 and 10876.

**DETAILED DESIGN**

<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10997	Avonside Linwood Stage 3 (WW,WS,SW,RD)	One pass approach renewing wastewater, roading and stormwater assets within stage three of the Avonside Linwood Catchment. Standard project resulting from Catchment Studies 10875 and 10876.

**CONSTRUCTION**

<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10303	Site 229 Mt Pleasant Rd Retaining Wall (RW)	60m replacement retaining wall and road reinstatement, in Mt Pleasant	16/05/2013	03/09/2013	\$458,000	\$82,404
10306	PM11 Randolph (WW)	3.6km, 1.2m dia WW pressure main	05/03/2012	28/05/2013	\$14,601,000	\$13,905,550
10307	173 Maffey's Road Retaining Wall (RW)	Repair of retaining wall in Maffey's Rd, along with associated buried services	08/10/2012	27/06/2013	\$1,505,000	\$1,316,278
10317	Heberden Ave Permanent Solution (WW)	New gravity sewer diversion to replace broken sewer down Scarborough Cliffs.	09/04/2013	17/05/2013	\$506,000	\$481,527
10459	Lower Richmond-Stanmore to Fitzgerald (WW)	Approximately 5km of WW, gravity system; requiring 2 new pump stations	20/03/2012	28/05/2013	\$11,865,000	\$10,082,907
10472	Charleston	Approx 2.9km WW enhanced gravity system, 1 new pump station; 0.3km SW; 8600m2 carriageway reconstruction, and 1830m2 localised repairs	07/05/2012	30/04/2013	\$3,738,000	\$3,622,066
10483	Lower Richmond (Southern Section) WS,SW,RD	Full reconstruction of intersection (80m), and localised repairs on remaining streets; 86m of SW replacement	07/02/2013	06/05/2013	\$316,000	\$156,303
10498	Woolston South 1	5km WW gravity system and 1 new pump station with associated rising main, and individual pressure pumps for industrial properties; roading repair works with design for 1 road; approximately 350m new WS, and currently unknown extent of SW	01/02/2013	17/12/2014	\$9,734,000	\$749,811
10541	PS 11 - Randolph		11/06/2012	04/04/2013	\$915,000	\$871,741
10548	Gloucester Street	Design for Wastewater, Stormwater, Water & Roading along Gloucester Street between Woodham Road and	26/06/2012	14/02/2013	\$1,415,000	\$1,347,780

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
		Avonside Drive. Close to complete replacement of all WW and Roading assets. Stormwater is reasonably intact.				
10578	PS 107	Minor new pump station.	29/10/2012	21/03/2013	\$603,000	\$574,155
10579	PS5 - Catchment (West of river)	Pump Station 5 catchment originally serviced an area either side of the Avon River at the northern end of Linwood Avenue and south eastern edge of lower Richmond. Pump Station 5 was badly affected in the series of earthquakes. A proposal to split the PS5 catchment either side of the river to enable removal of pump station from close proximity of the river has received informal agreement among CCC Asset and technical representatives. This project relates to the reinstatement of sewer services to the portion of the original PS5 catchment to the west of the Avon River. Initial assessment of condition suggests that the entire sewer network requires replacement, due to gross and differential land settlement and consequential adverse impact on sewer grades, in addition to physical damage to the predominantly earthenware piping. Reinstatement options will consider the range of options allowed under the technical standards and will likely require a new pump station or siphon crossing beneath the Avon river.	15/10/2012	30/05/2013	\$2,422,000	\$628,125
10582	PS8 - Catchment	Design for repair to severe earthquake damage to wastewater within Pump Station 8 catchment green zone. The green zone is located to the north-west of the Avon River and generally bounded by Flesher Ave to the east and south, Chrystal St to the west and Medway St to the north.	04/02/2013	16/08/2013	\$2,974,000	\$99,904
10584	PS27 Catchment Area (WW)	Assessment and repairs/relay of wastewater services in the catchment of the old pump station 27 on Avonside Drive.	25/02/2013	12/07/2013	\$1,910,000	\$427,185
10634	Main Road (Mt Pleasant - Beachville) Sumner	Repairs to main road causeway including replacement of estuary seawall and minor cross culverts and carriageway	31/07/2013	16/01/2014	\$1,190,000	\$225,896

**ATTACHMENT 1 TO CLAUSE 2  
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 7. 3. 2013**

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
	Causeway (RD)	repairs.				
10680	Clifton No. 4 Reservoir	Repair and retrofit of reservoir.	21/11/2011	13/03/2013	\$438,000	\$343,203
10799	NZTA Horotane Overpass Bridges (RD)	Propping system between piers, subject to ground investigation results	23/11/2012	27/11/2013	\$1,614,000	\$251,841
10820	McCormacks Bay Reservoir Stages 3,4 and 5	Tank 1 and 2 and access reinstatement.	01/06/2012	30/09/2013	\$1,106,000	\$1,094,828
10822	McCormacks Bay Reservoir Stage 2 Walls	Retaining walls and rockfall protection works at reservoir site.	30/01/2012	17/03/2013	\$1,549,000	\$1,152,027
10841	Charleston Catchment Area (RD,SW,WS)	Linked to Project 10472 WW for the RD SW and WS elements.	26/10/2012	02/07/2013	\$1,399,000	\$431,677
10843	Lower Richmond Catchment RD SW WS	Linked to #10459 for the RD SW and WS elements of the project	19/02/2013	26/07/2013	\$1,495,000	\$171,702
10853	McCormacks Bay Reservoirs - Rock Face Protection Work	Rock protection work to facilitate the repairs to the reservoir tanks	07/05/2012	13/11/2013	\$1,232,000	\$1,189,706
10862	Lower Richmond Pump Stations - Avalon and Haywood	Pump station construction in conjunction with the Richmond project.	16/07/2012	23/05/2013	\$1,322,000	\$1,153,060
10863	Charleston Waste Water Pump Station	Pumps Station Construction	15/02/2013	11/06/2013	\$503,000	\$119,964
10895	PM11 Randolph Phase 5 (WW)	All remaining design works for the design and delivery of the 3.6km, 1.2m waste water pressure main. This is a CCC business as usual project and is the fifth phase. Phases one to four are included under project number 10306.	18/02/2013	05/09/2013	\$906,000	\$247,603
10931	Retaining Wall - Site 182 & 183 - Glenstrae Road (RW)	Repair of the retaining wall	01/03/2013	06/05/2013	\$185,000	\$176,236
11022	Emergency Repair -	Emergency Repair for the 1525mm Dia Trunk Sewer.	12/04/2013	14/01/2014	\$500,000	\$272,700

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	Southern Relief Sewer - Worcester Street (WW)	Currently reported by Operational Team as high risk of imminent failure. Depressions forming at road level around manhole. Falls within existing Project Area # 10995				

### 6.1.3.6 Lyttelton / Mt Herbert

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10981	Retaining Wall Area 1 - Lyttelton 1A Brittan Terrace (RW)	Design and construction of multiple soil retaining walls from Lyttelton town centre west towards Diamond Harbour Blvd.
11005	Retaining Wall Area 1 - Simeon Quay (RW)	Stabilise face or provide new retaining wall at Simeon Key, Lyttelton

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10475	Site 079 Coleridge/Dublin St Ret. Walls	200m replacement retaining wall and road reinstatement in Lyttelton	02/04/2013	22/01/2014	\$1,607,000	\$125,842
10511	RW Package 06 - Selwyn and Ross	Five retaining walls on Selwyn Street and Ross Terrace, Lyttelton. The walls range in height from 1.5m to 3m, and are of high heritage value.	01/02/2013	03/04/2013	\$188,000	\$128,633
10818	NZTA Norwich & Gladstone Quay State Highway Repair (RD, WW, SW, WS)	Repairs to state highway adjacent to the Port of Lyttelton.	04/02/2013	01/05/2013	\$1,102,000	\$135,842
10905	Sumner Rd Retaining Wall L - Stage 2 Wall and Stage 1 and 2 Roads (RW, RD)	Stage two of new 450m long modular block retaining wall.	07/01/2013	16/08/2013	\$2,054,000	\$105,264
10475	Site 079 Coleridge/Dublin St Ret. Walls	200m replacement retaining wall and road reinstatement in Lyttelton	02/04/2013	22/01/2014	\$1,607,000	\$125,842
10511	RW Package 06 - Selwyn and Ross	Five retaining walls on Selwyn Street and Ross Terrace, Lyttelton. The walls range in height from 1.5m to 3m, and are of high heritage value.	01/02/2013	03/04/2013	\$188,000	\$128,633

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10818	NZTA Norwich & Gladstone Quay State Highway Repair (RD, WW, SW, WS)	Repairs to state highway adjacent to the Port of Lyttelton.	04/02/2013	01/05/2013	\$1,102,000	\$135,842
10905	Sumner Rd Retaining Wall L - Stage 2 Wall and Stage 1 and 2 Roads (RW, RD)	Stage two of new 450m long modular block retaining wall.	07/01/2013	16/08/2013	\$2,054,000	\$105,264



### 6.1.3.7 Riccarton / Wigram

DETAILED DESIGN		
Reference	Project	Project Description
10831	CCC - PS60 (PS)	Upgrade of pump station 60 and pressure main 60 to ensure increased flows can be managed in the short term.

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10409	Halswell WW Package 03	Repair wastewater along a section of Halswell Rd, O'Halloran Dr, within private properties behind Muir Ave.	09/07/2012	15/02/2013	\$2,001,000	\$1,905,773
10768	CCC - Wilmers Road Water Pumping Station (WS, PS)	New water source and pumping station to cater for projected growth in the western area of Christchurch.	30/04/2012	30/04/2013	\$4,524,000	\$3,757,323
10909	Minor Works - Port Hills Package 01	Minor road repairs within the Port Hills	16/07/2012	28/02/2013	\$288,000	\$274,164
10920	CCC - PS105 Pump Station (WW, PS)	Construction of PS105, a CCC Capital Works Project. Linked to Project #10793 for critical path construction scheduling.	29/10/2012	28/01/2014	\$5,821,000	\$1,802,778

**6.1.3.8 Shirley / Papanui**

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10858	Minor Works - Pump Station Demolition and Repairs (WW)	Minor repair works to slightly damaged Pump Stations that require no major works during the rebuild programme. Demolition of 3 PS buildings to make safe in Red Zones. Project led by the delivery team with a SCIRT Design input and coordination. Close liaison with CCC Operations team required throughout the project.
10914	Shirley NW2 Wastewater Gravity Network (WW)	Full catchment rebuild (WW elements)

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10344	Edgeware Road - Emergency Works	A large complex repair to a sewer trunk main in Edgeware Rd.	23/09/2011	14/02/2013	\$3,066,000	\$2,920,097
10457	Purchas & Madras (Bealey - Edgeware)	WW, SW and roading repairs. Includes traffic calming on Purchas St to conform with IDS and City Plan requirements for Local Road widths.	08/11/2011	28/02/2013	\$5,474,000	\$5,213,789
10534	Innes & Knowles - subcatchment	The local wastewater reticulation on Innes Rd and Knowles St between Philpotts Rd and Bretts Rd suffered earthquake induced damage during the recent seismic events. Some liquefaction and land settlement was recorded in the area. Investigations continue however much of the network is made up of Earthenware pipe laid during the 1920s and 1930s. This material has not performed well in other areas therefore it is anticipated some form of repair or replacement will be required for the majority of the network.	10/08/2012	18/11/2013	\$9,218,000	\$3,991,893
10535	Rutland Rd - subcatchment	Wastewater repair along a single street east of Papanui. This project area is lightly to be revised.	10/04/2012	14/03/2013	\$1,562,000	\$1,476,910
10810	PS7 Catchment Phase 1 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapleton's Road and Shirley Road which bisect the catchment. (Area 1 of 4, south of catchment)	28/05/2012	30/04/2013	\$4,631,000	\$3,699,402

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10812	PS7 Catchment Phase 2 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 2 of 4, eastern quarter of catchment)	21/05/2012	22/05/2013	\$5,460,000	\$4,216,283
10814	PS7 Catchment Phase 3 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 3 of 4, north western quarter of catchment)	23/07/2012	25/06/2013	\$6,154,000	\$3,248,256
10816	PS7 Catchment Phase 4 Waste Water Renewals	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 4 of 4, central/western quarter of catchment)	11/03/2013	20/12/2013	\$3,188,000	\$243,537
10886	Innes & Knowles Pump Station 118 and 119 (PS)	New pump station for the waste water reticulation system in the region of Innes Rd and Knowles St. This project covers the pump station only, with the waste water system being undertaken under the SCIRT project number 10534.	21/01/2013	20/05/2013	\$802,000	\$225,599
10899	Minor Works - Lower Styx Road & Turners Road	Pavement repairs	08/10/2012	23/04/2013	\$164,000	\$128,626
10930	PS7 Phase 3 Pump Station Shirley Road (PS)	New wastewater Pump Station in the PS7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment (area 3 of 4, north western quarter of catchment).	31/07/2012	05/04/2013	\$985,000	\$840,143

### 6.1.3.9 Spreydon / Heathcote

<b>DETAILED DESIGN</b>		
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>
10623	Worsleys Rd No.1 and No.2 Reservoir Repair (WS)	Work to reinstate the waterproofing of the roof structures (to prevent ingress of rainwater), and seal gaps between walls and roof structures.
10888	Hillmorton & Hoonhay S-7 (WW)	
10889	Hillmorton & Hoonhay S-7 (WS,SW & RD)	
10922	Rossmore Terrace Retaining Walls (RW, WW,SW,WS,RD)	

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10310	Milton St and Frankleigh St Wastewater Reconstruction (WW)	Repair of road and all buried services along Milton and Frankleigh Streets, including the section of Lyttelton either side of the intersection	07/02/2013	14/11/2013	\$4,353,000	\$554,430
10311	Antigua St / Burke St Arterial Roads (WW,WS,SW,RD)	Repair of road and all buried services along Antigua St (between Moorehouse & Brougham) and Burke St (between Selwyn & Montreal)	18/04/2012	17/07/2013	\$3,152,000	\$2,713,388
10379	Fisher Ave & Eastern Tce Syphon (WW)	Repair of Syphon near Fisher Ave	04/05/2012	15/02/2013	\$1,417,000	\$1,349,755
10385	Bewdley Evesham and Dellow	Repair of road and all buried services along Bewdley St, Eversham Cres & Dellow Pl.	20/04/2012	28/02/2013	\$2,450,000	\$2,333,595
10398	Somerfield Package 01 (WW,SW,RD,WS)	Repair and reconstruction of all assets within a small catchment block.	19/11/2012	21/08/2013	\$4,130,000	\$568,121
10407	St Martins Package 02 (WW,WS,SW,RD)	Repair of road and all buried services within the St Martins loop, north of Centraurus Rd.	20/08/2012	16/12/2013	\$8,385,000	\$4,308,593

<b>CONSTRUCTION</b>						
<b>Reference</b>	<b>Project</b>	<b>Project Description</b>	<b>Estimated Start</b>	<b>Estimated Finish</b>	<b>Estimated Cost</b>	<b>Life To Date</b>
10520	Hoon Hay Package 01	Repair of road and all buried services along a section of Hoon Hay Rd (between Halswell & Sparks), including Penny In, Weir Pl, McBeath Ave, Muirson Ave & Greenpark St.	23/07/2012	29/08/2013	\$6,768,000	\$3,545,960
10785	Holliss Ave / Glamis Place - All Services (WW,WS,SW,RD)	Repair of water & roading along a section of Holliss Ave (between Gunns & Centaurus) and all services within Glamis Pl.	03/10/2012	12/02/2013	\$287,000	\$266,867
10793	CCC - Pressure Main 105 BAU Project (WW)	Delivery of the pressure main element of this CCC BAU project.	00/01/1900	04/06/2013	\$13,269,000	\$6,859,469
10797	NZTA Heathcote/Opawa Bridge Repairs	Ground improvements, and underpinning and lifting (jacking) of the abutments	26/11/2012	08/10/2013	\$2,292,000	\$438,415
10821	Huntsbury Reservoir Tank No 2 & demolition	New reservoir tank (no.2) constructed in NE corner of old reservoir.	10/02/2012	28/02/2013	\$5,065,000	\$4,823,577
10829	CCC - Victoria Reservoir Replacement (WS)	Victoria reservoir is being replaced by SCIRT and funded by CCC.	13/08/2012	15/02/2013	\$1,551,000	\$1,476,790
10892	Antigua Burke Stormwater (SW)	Repair of storm water assets along Antigua St (between Moorehouse & Brougham) and Burke St (between Selwyn & Montreal). Related to project 10311 which has completed Detailed Design.	04/03/2013	27/05/2013	\$213,000	\$173,881

### **6.1.4 Projects Complete by Ward**

The following section outlines the projects within each ward that have been completed since SCIRT was established on 1<sup>st</sup> September 2011. It includes both a summary of numbers of projects as well as a list of specific projects. It is anticipated that the completed projects for the last quarter will be reported on a monthly basis.

<b>Ward</b>	<b>December Number of Projects</b>	<b>January Number of Projects</b>	<b>December Projects Life To Date Cost</b>	<b>January Projects Life To Date Cost</b>
Burwood-Pegasus	97	97	\$37,479,068	\$44,936,524
Fendalton-Waimari	3	4	\$210,796	\$388,208
Central City	8	9	\$1,734,789	\$7,002,459
Hagley-Ferrymead	72	73	\$21,751,063	\$27,060,024
Lyttelton-Mt Herbert	4	4	\$464,597	\$599,781
Riccarton-Wigram	8	8	\$4,929,676	\$5,218,837
Shirley-Papanui	23	23	\$7,084,133	\$7,427,102
Spreydon-Heathcote	19	19	\$7,475,940	\$8,424,623
<b>Total</b>	<b>234</b>	<b>237</b>	<b>\$81,130,063</b>	<b>\$101,057,557</b>

*Data sent from SCIRT – Received February*

In the table above, the previous monthly report totals have also been included to show the change in activity.

**6.1.4.1 List of Projects Complete by Ward**

<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
<b>Burwood-Pegasus</b>	10312	Rowes/Tomrich Street Watermain	\$264,371
	10315	Ferner Street - Emergency Works	\$226,236
	10321	PM 51 Emergency Repair	\$1,510
	10325	Cresswell Avenue - Watermains (WS)	\$148,731
	10327	Pembroke Street	\$146,897
	10328	De Ville Place (WS)	\$107,810
	10331	PM 39 - Gayhurst Road	\$1,600,571
	10332	PM54 - Niven-Avonside	\$375,476
	10335	PS54 - Catchment	\$6,755,624
	10336	Kingsford & Liggins Streets (Projects 10336 & 10885)	\$204,574
	10338	Wainoni Road (WW EW - Ottawa to Avonside)	\$908,330
	10339	Woodham Road (Temp Repairs)	\$4,219,313
	10340	Ottawa Road Sewer Emergency Repair	\$517,444
	10343	PM16 - Oakmont Green	\$4,287
	10346	Fleete Street - Emergency Repair	\$9,791
	10349	PS39 - Birchfield Avenue WW EW	\$234,969
	10351	Ardrossan Street - Temp. Solution	\$347,571
	10355	Landy Street	\$19,322
	10359	PS54 - Niven Street (WW)	\$62,282
	10364	Shortland Street	\$345,061
	10366	McBratneys Road - WM	\$17,612
	10376	PM 28	\$1,499,953
	10384	Pacific_Tedder Watermain Replacement	\$529,142
	10421	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WW)	\$2,615,596
	10440	PS 25C	\$703,930
	10443	PM 38 Beach Rd	\$596,770
	10484	Pump Station 25 connection repair	\$8,977
	10532	Cnr Pages & Cuff - Emergency Repair	\$2,832,202
	10547	New Brighton Road	\$46,450
	10576	PM 106 - Woolley	\$4,364
	10577	PS 106 - Woolley	\$747,409
	10604	PM 45 (WW)	\$324,352
	10605	Sylvia Street watermain (WS)	\$134,753
	10606	Chadlington Street Water Mains	\$38,448
	10607	PM 37 (WW)	\$1,910,857
	10608	PM 35	\$1,087,993
	10614	Aldershot Street watermain (WS)	\$256,332
	10615	Willryan Avenue Watermain	\$241,522
	10616	Flemington and Ascot Ave	\$529,188

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
		Watermains	
	10617	PM 46	\$55,868
	10621	Chartwell Street Water Mains	\$385,049
	10638	630 Pages Road 450mm (WW)	\$25,397
	10639	23 Leaver Tce WW	\$62,983
	10641	Kirner St WW	\$21,497
	10645	Inwoods Close 450mm WW	\$128,404
	10647	Travis Rd watermains and submains	\$217,197
	10649	Corhampton Street watermains and submains	\$261,372
	10650	Water Main on Bridge Street Bridge (WS)	\$162,633
	10651	Keyes Road Watermain (WS)	\$196,079
	10664	Saltaire (Bower to Marriots Rd) (WS)	\$69,544
	10665	Sinclair (Keyes to Rawson) - WS	\$251,723
	10669	Palmers Road PS Stabilisation	\$16,065
	10670	Major flooding Pratt St.	\$295,425
	10671	Owles Tce Temp. (WW)	\$114,950
	10676	Marine Parade Watermain	\$153,588
	10681	Bower Avenue Watermain and Submains (WS)	\$475,045
	10682	Briarmont Street watermain (WS)	\$88,373
	10683	Cowes St Watermain and Submains (WS)	\$107,955
	10684	Gresham Terrace Watermain and Submains (WS)	\$161,638
	10685	Inverell Pl Watermain and Submains (WS)	\$63,517
	10686	Orrick St Watermain and Submains (WS)	\$84,547
	10688	Blake St Watermain (WS)	\$344,751
	10689	Pegasus Ave Watermain	\$169,225
	10690	Bassett St Watermain (WS)	\$225,196
	10691	Falcon St Watermain	\$180,732
	10692	Beach Rd Watermain	\$138,848
	10695	Allstone Watermain	\$90,800
	10696	Marriotts Road Watermain	\$36,740
	10700	Hulverstone Drive Emergency Repair	\$22,188
	10702	Rawhiti Water Well Stormwater Outfall	\$147,524
	10706	Bowhill Watermain (WS)	\$150,141
	10708	Rookwood Ave Watermain (WS)	\$174,448
	10711	Waitaki St Temp. Sewer	\$3,360
	10714	Kate Sheppard Emergency Repair (Barkers Lane Temp Works) (WW)	\$187,764
	10723	Merrington Cres Watermain	\$184,198



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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	10728	Rowan Ave Emergency Work WW	\$458,135
	10744	PS 36 Gravity Main (Pages Rd)	\$226,756
	10749	Beach Rd Gravity Sewer (WW)	\$67,291
	10752	Desal plant long term storage (WS)	\$79,908
	10756	PM39 Temp Overland Pipe (PM)	\$7,828
	10760	Pages Road	\$69,558
	10769	Keyes Pumping Station (WS)	\$3,319,459
	10789	Woodham Road Water Supply Pumping Line Renewal	\$84,995
	10794	Pratt Street (Keyes Road) Water Main from Pumping Station	\$221,724
	10806	Pages & Cuffs Emergency Repair Rooding (RD)	\$481,611
	10833	Fast Track - PS36 Sewerage Overflow Repairs Pages/Waitaki (WW)	\$25,266
	10834	Minor Works - Stage 1 Schools	\$7,770
	10838	Minor Works - Banks Avenue	\$132,029
	10859	CCC - Private Laterals Keyes Road (WW)	\$51,036
	10865	Catchment Study - Burwood Rebuild NE8 (WW) - 11040, 11041, 11042, 11043	\$309,636
	10873	Catchment Study - PS36 Catchment, Area NE4 split into 10959-65 (WW)	\$379,904
	10874	Catchment Study - PS36 Catchment, Area NE4 (RD,SW,WS)	\$1,103,265
	10882	Emergency Work - Beatty Street	\$242,453
	10903	Catchment Study - Parklands & North New Brighton split into 10975-78 NE12, NE13 (WW)	\$493,214
	10904	Catchment Study - Parklands & North New Brighton (RD,WS,SW) split to 11032, 11033, 11034, 11035	\$908,302
	10928	Emergency Works - Merrington Crescent (WW)	\$117,141
	10973	Water Supply - Lamorna Road Renewal (WS)	\$68,466
<b>Fendalton-Waimari</b>	10354	Papanui Road - Emergency Work	\$54,652
	10480	R126 Monavale Footbridge	\$37,775
	10590	Thornycroft Street - Pri4 (WS)	\$127,548
	10857	Minor Works - Bridge Minor Works Project Package 02	\$168,233
<b>Central City</b>	10445	Fitzgerald Ave Wall and Rooding	\$5,159,599
	10447	Fitzgerald Ave Temp Sewer Replacement (WW)	\$22,117
	10506	Hagley Syphon	\$645,461
	10726	Stormwater Pump Station 203	\$44,715

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	10764	PM 3 Temporary Repair (Complex Emergency)	\$55,524
	10790	Liverpool Street Water Main (CBD)	\$115,675
	10867	Fitzgerald Ave Retaining Wall Footpath	\$728,437
	10880	Kilmore St Brick Barrel Repair - Emergency Work (WW)	\$190,110
	10941	Minor Works - 789 Colombo Street (WS)	\$40,820
<b>Hagley-Ferrymead</b>	10301	CCC - Tanner Street Replacement Well (WS)	\$15,792
	10319	St Martins Package 01 (WW) Wilson's Rd South, St Martins Rd and Gamblins Rd	\$1,387,573
	10326	Retreat Road	\$686,204
	10333	PM 57 - Replacement (Stage 2 March)	\$2,075,207
	10337	Avonside - WW Trunk Sewer	\$205,110
	10341	River Road - Siphon (WW)	\$675,331
	10350	Avonside Drive/Retreat - Gravity Sewer Repair	\$93,588
	10352	Avonside Drive/Morris Bowie - Gravity Sewer Temp. Solution	\$86,006
	10353	294 Avonside Drive - Temp. Solution	\$241,562
	10356	Woodham Rd (PS5 east of river)	\$3,198,498
	10358	PS57 - McCormacks Bay Rd Sewer Overflow Renewal	\$175,999
	10361	PS54 Catchment Temp. Solutions	\$925,541
	10362	PS5 - Glade	\$545
	10372	Dacre Street	\$128,612
	10386	St Andrews Hill Rd Sewer (Major Hornbrook)	\$70,183
	10391	Stevens St Watermain	\$165,913
	10402	Moorhouse SW BB 02	\$73,019
	10403	Barbour St Water (WS)	\$147,111
	10406	226 Main Road SW	\$4,627
	10411	Clifton Reservoir 3	\$405,877
	10417	Upper Balmoral Reservoir	\$481,323
	10418	Lyttelton Dyers Road Pump Station (WS, PS)	\$6,949
	10422	PM 31 Renewal Works (WW)	\$1,598,048
	10428	RW Mt Pleasant Rd Wall 156 (RW)	\$238,368
	10431	PS15 Alport	\$1,383,442
	10434	PS 12 Smith	\$546,893
	10441	Ferry Road 873	\$366,749
	10442	PS15 Gould Cres Overflow Structure	\$214,274
	10448	PM 12	\$710
	10451	Manning-Ferry	\$17,158

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	10452	WW No Service Grafton	\$134,202
	10454	225 Linwood Ave	\$74,062
	10458	31 Stanmore Road	\$49,606
	10463	Hamner Street - waste water relay	\$72,948
	10471	33 River Terrace	\$38,939
	10473	Wickham St Watermain Replacement	\$307,303
	10478	F805 McCormacks Bay 1 Footbridge	\$10,689
	10479	F806 McCormacks Bay 2 Footbridge	\$8,473
	10481	R223 Heathcote Barrage	\$9,929
	10496	PS13 Tilford	\$10,687
	10497	PS 10 Linwood WW	\$14,699
	10499	Saxon Street Waste Water	\$15,687
	10537	Patten Street	\$638,489
	10539	Brittan Street	\$577,859
	10586	PM 107	\$273,344
	10609	PM 47	\$24,815
	10612	McCormacks Bay Reservoir No 2-2	\$1,038,702
	10613	Mt Pleasant Reservoir 2/2	\$107,113
	10618	Beachville Road Pressure + Gravity Main	\$478,131
	10629	McCormacks Bay Rd WR mains and submains (WS)	\$2,191,757
	10644	55 Clark St WW	\$1,561
	10666	Head Street - Esplanade to Nayland (WS)	\$79,566
	10677	Beachville Watermain (WS)	\$250,873
	10679	Moncks Spur No. 3	\$281,520
	10687	Wakefield Ave Watermain (WS)	\$156,967
	10716	PM 34 Sumner - Replacement	\$1,665,105
	10729	WW, Gravity Bridal Path and Cannon	\$262,298
	10739	Heberden Ave Temporary Solution (WW)	\$109,222
	10746	Ruru Ave Repair PM 11	\$42,191
	10747	Bromley Waste Water Treatment	\$25,345
	10753	WW No Service Glendevere (WW)	\$2,081
	10763	Moncks Bay Walkway - Temp Repairs	\$45,416
	10770	Linwood Ave / Humphrys Dr Retaining Wall Emergency Permanent Repairs (RW)	\$496,881
	10772	Monks Bay Main Road Emergency Repair (WW)	\$15,503
	10779	CCC - Linwood Avenue Water Main	\$456,743
	10782	15 Dunoon Place Emergency Stabilisation / Sewer Repair	\$179,641
	10792	Truro Street Emergency Waste	\$219,934

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
		Water Sewer Renewal (Van Asch School)	
	10830	Minor Works - Bridge Minor Works Project Package 01 Roding	\$82,626
	10835	Minor Works - Avonside Girls High School	\$80,249
	10836	PS27 Catchment Area (RD)	\$76,061
	10864	Woodham Road (SW,RD,WS)	\$525,898
	10875	Catchment Study - Avonside & Linwood Area CE-5,6,7,9,10,11,12 (WW)	\$73,385
	10876	Catchment Study - Avonside & Linwood Area CE5,6,7,9,10,11,12 (RD, SW & WS)	\$237,312
<b>Lyttelton-Mt Herbert</b>	10636	Priority Roads - Governors Bay Road Rebuild (RD)	\$475,438
	10672	Sutton Quay Retaining wall 441 (RW)	\$41,391
	10878	Minor Works - Cunningham Terrace & Sumner Rd Temp Access Works	\$37,029
	10940	Retaining Walls - Delivery Plan Area 4	\$45,923
<b>Riccarton-Wigram</b>	10309	Halswell Minor Roding Works - All Areas	\$338,476
	10380	Halswell WW Package 02	\$2,053,828
	10383	PS73 Kennedys Bush	\$160,480
	10387	Townshend Crescent Wastewater	\$48,809
	10389	Sparks Rd Watermain	\$177,705
	10392	Halswell WW Package 1 (WW)	\$2,118,825
	10408	Glovers Street water (WS)	\$147,859
	10912	Sparks Road Pavement Repairs	\$172,855
<b>Shirley-Papanui</b>	10308	Riselaw Street	\$92,150
	10313	PM 6 - Harrison St	\$221,306
	10322	Ranfurly Street (WS)	\$118,878
	10323	Chrystal Street (WS)	\$83,953
	10329	Hope Street	\$146,273
	10330	Orontes Street - WS	\$90,091
	10334	PM 7 - Stapletons Road	\$244,594
	10345	Nancy Ave / Weston Road	\$16,297
	10348	Shirley Road - Wastewater (Emergency Repair)	\$8,629
	10369	Orion Street	\$41,907
	10435	Temporary Gravity Sewer Lower Styx Road	\$1,092,291
	10437	PM 40 Marshlands	\$585,684
	10439	Heyders 29-65 (WW)	\$320,151
	10446	Brooklands Roding - Temporary Repairs	\$364,289
	10453	PS78 Heyders (PS)	\$50,363

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	10460	449 Durham Street North	\$313,618
	10536	Edgeware Rd - WW	\$1,850,570
	10555	Madras Street / Forfar Wastewater	\$604,788
	10581	Catchment Study - PS7 (10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817)	\$142,399
	10805	Madras Street Road, Storm Water & Water Supply Repairs	\$427,239
	10837	Minor Works - Shirley Boys High School	\$115,367
	10851	Minor Works - Marshland Road & Belfast Road	\$375,231
<b>Spreydon-Heathcote</b>	10320	Murray Aynsley Reservoir 2	\$155,007
	10381	Rydal St (WW)	\$939,464
	10390	Centaurus Rd Watermain	\$145,542
	10393	Smartlea WW Emergency Repair	\$109,989
	10396	75 Wilsons Emergency Repair	\$825
	10397	Glenelg Spur 01	\$166,121
	10404	Hollis Ave Water (WS)	\$180,545
	10410	Hollis Ave WW	\$996,484
	10432	PS19 Beckford	\$3,201
	10433	PS20 Locarno	\$49,164
	10476	F207 Aynsley Tce Footbridge	\$23,100
	10477	F212 Sloan Tce Footbridge	\$15,899
	10545	PS19 - Syphon	\$357
	10597	Huntsbury Reservoir (WS)	\$4,684,941
	10717	Colombo St (South) Bridge - Concept only, no construction work undertaken (RD)	\$80,730
	10745	CCC - Sydenham Stn Replace Wells (WS)	\$236,486
	10755	PS19 Fifield - 171 Fifield - Sheetpiling protection of riverbank	\$114,715
	10787	Rydal Street Water Supply, Storm Water and Roading Renewals (SW,WS, RD)	\$426,085
<b>Grand Total</b>			

*Data sent from SCIRT – Received February*

## **6.2 NON-SCIRT Work Activity**

### **6.2.1 Introduction**

The following section of the report included a progress report against infrastructure and other associated rebuild projects that are not being delivered by SCIRT. It includes a report on progress on Greenspace projects, Christchurch Wastewater Treatment Plant and Organics Processing Plant, Burwood Landfill and Water Supply Wells.

**6.2.2 Greenspace**

<b>Ward</b>	<b>Work Package Number</b>	<b>Project</b>	<b>Description</b>	<b>Number of projects in package</b>	<b>Phase</b>	<b>Estimated Construction Start</b>	<b>Estimated Construction Finish</b>	<b>Estimated Cost</b>
<b>Banks Peninsula Wards</b>	WP0000537	PARKS Marine Structures Repairs	Marine Structures Repairs	13	BUILD	01/08/2011	30/06/2013	\$412,000
	WP0000551	PARKS Marine Structures Assessments	Marine Structures Assessments	10	COMPLETE	01/08/2011	30/11/2011	\$50,000
	WP0000783	B/P Retaining Walls	Retaining wall repairs in parks and cemeteries on Banks Peninsula	4	INVESTIGATION	01/07/2012	30/06/2013	\$241,000
<b>Burwood Pegasus</b>	WP0000251	PARKS CEAF 1.1 Sth New Brighton CAPEX	Hard surface and playground undersurfacing renewals	4	BUILD	01/10/2011	30/06/2013	\$227,000
	WP0000257	PARKS CEAF 1.2 B/P CAPEX	Bexley, Avondale and Burwood Parks hard surfacing renewals	3	COMPLETE	01/09/2011	31/10/2011	\$100,400
	WP0000258	PARKS CEAF 1.2 B/P OPEX	Hard surface repairs	11	COMPLETE	01/10/2011	29/02/2012	\$148,500
	WP0000284	PARKS CEAF 2.6 TRAVIS CAPEX	Hard surface renewals	5	COMPLETE	01/12/2011	29/02/2012	\$340,500
	WP0000285	PARKS CEAF 2.7 AVON PARK CAPEX	Hard surface renewals	2	COMPLETE	01/03/2012	30/06/2013	\$63,850
	WP0000286	PARKS CEAF 2.8 ESTUARY CAPEX	Hard surface renewals	1	INVESTIGATION	01/03/2012	30/06/2013	\$300,000
<b>City wide</b>	WP0000177	PARKS Playground Softfall - CAPEX	Replacement of contaminated softfall to playgrounds	24	COMPLETE	01/08/2011	30/11/2011	\$335,755
	WP0000206	PARKS Playground Softfall - OPEX	Repairs to playground undersurfacing	8	COMPLETE	01/08/2011	20/12/2011	\$54,200
	WP0000269	PARKS CEAF 2.2 S/P,F/W,R/W,L/M OPEX	Hard surface and minor structural repairs	11	COMPLETE	01/03/2012	31/05/2012	\$90,500
	WP0000312	PARKS Hard Surface Nthn & Sthn - OPEX	Hard surface repairs	58	COMPLETE	01/03/2012	30/04/2013	\$450,000
	WP0000313	PARKS Hard Surfaces Nthn & Sthn CAPEX	Hard surface renewals	14	COMPLETE	01/03/2012	30/04/2013	\$550,000
	WP0000318	PARKS Hard Surfaces Eastern CAPEX	Hard surface renewals	23	BUILD	01/03/2012	30/04/2013	\$755,000
	WP0000321	PARKS Hard Surface	Hard surface repairs	75	COMPLETE	01/03/2012	30/04/2013	\$490,110

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Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
		Eastern - OPEX						
	WP0000323	PARKS City Wide Turf Repairs - OPEX	Repairs to non sports turf surfaces	110	COMPLETE	01/11/2011	31/05/2012	\$390,550
	WP0000357	PARKS Retaining Walls CAPEX	Minor retaining wall renewals	5	BUILD	01/08/2011	30/06/2013	\$393,000
	WP0000358	PARKS Retaining Wall Repairs	Minor retaining wall repairs	24	BUILD	01/08/2011	30/06/2013	\$336,000
	WP0000376	PARKS Minor Structures CAPEX	Minor structures renewals	8	INVESTIGATION	01/08/2011	30/06/2013	\$439,000
	WP0000377	PARKS Minor Structures Repairs	Minor structures repairs	60	BUILD	01/08/2011	30/06/2013	\$471,000
	WP0000571	PARKS 2012 Sports Fields Repairs	Repairs to sports turf 2011/12	45	COMPLETE	01/09/2011	31/03/2012	\$691,000
	WP0000768	PARKS Mature Tree Replacements	Tree renewals at Hagley Park and Sth Brighton Domain	2	COMPLETE	01/03/2012	30/06/2013	\$100,000
	WP0000769	PARKS Port Hills Restoration	Port Hills rock fencing and planting	2	INVESTIGATION	01/07/2012		\$200,000
	WP0000205	PARKS Sports Fields Repair - Moderate	Repairs to sports turf	19	COMPLETE	01/05/2011	31/07/2011	\$244,000
	WP0000207	PARKS Sports Fields Repair - Minor	Repairs to sports turf	23	COMPLETE	01/05/2011	31/07/2011	\$122,550
	WP0000779	Structural	Bridge repairs on Parks City wide	14	INVESTIGATION	01/07/2012	30/06/2014	\$919,000
	WP0000780	Regional Parks	Repairs to structures and hard surfaces	6	INVESTIGATION	01/07/2012	30/06/2013	\$465,000
	WP0000781	Trees	City wide tree renewals	1	BUILD	01/07/2012	30/06/2013	\$500,000
	WP0000782	Ponds	Repairs to small ponds and outflows in parks	2	COMPLETE			\$50,000
	WP0000784	Cemeteries - Operational	Repairs and make safe work to headstones in Operational cemeteries	18	COMPLETE	01/12/2011	30/06/2013	\$250,000
	WP0000785	Cemeteries - Heritage	Repairs and make safe work to headstones in Heritage cemeteries	3	INVESTIGATION	01/07/2012	30/06/2015	\$250,000



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Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
	N/A	On Hold	Projects on hold due to them being in Red Zoned areas, cordons, rock fall risk etc. Depending on land decisions some of these repairs/renewals may become redundant in the future.	141	ON HOLD	TBC	TBC	\$6,347,200
	N/A	Port Hill Parks/Tracks Reopening Project	Port Hill Parks/Tracks Reopening	21	INVESTIGATION	TBC	TBC	\$2,196,020
<b>Hagley Ferrymead</b>	WP0000252	PARKS Victoria Lake CAPEX	Relining Victoria lake	1	COMPLETE	01/07/2011	29/02/2012	\$500,000
	WP0000253	PARKS CEAF 1.3 Hagley Pk/Bot.Gdns CAPEX	Hard surface and playground undersurfacing renewals	5	COMPLETE	01/09/2011	29/02/2012	\$228,000
	WP0000254	PARKS CEAF 1.4 Hagley Pk North CAPEX	Irrigation and Turf renewals	2	COMPLETE	01/07/2011	31/07/2011	\$30,000
	WP0000263	PARKS CEAF 1.6 H/F CAPEX	Hard surface renewals	5	COMPLETE	01/10/2011	29/02/2012	\$230,500
	WP0000264	PARKS CEAF 1.6 H/F OPEX	Hard surface, track and minor structure repairs	20	COMPLETE	01/10/2011	29/02/2012	\$142,000
	WP0000265	PARKS CEAF 1.8 BOT. GARDENS CAPEX	Playground undersurfacing repairs	1	COMPLETE	01/10/2011	29/02/2012	\$50,000
	WP0000287	PARKS CEAF 2.9 VICTORIA SQUARE CAPEX	Hard surface, track and minor structure renewals	4	COMPLETE	01/12/2012	30/06/2013	\$277,000
	WP0000288	PARKS CEAF 2.10 CENTRAL CITY PARKS CAPEX	Hard surface renewals	3	ON HOLD	TBC	TBC	\$15,000
	WP0000289	PARKS CEAF 2.10 CENTRAL CITY PARKS OPEX	Hard surface, track and minor structure repairs	10	ON HOLD	TBC	TBC	\$19,100
	WP0000767	PARKS Sumner/Scarborough Restoration	Hard surface renewals	9	BUILD	01/12/2011	30/04/2013	\$187,000
<b>Riccarton Wigram</b>	WP0000280	PARKS CEAF 2.5 MONA VALE CAPEX	Hard surface, bridge and wall renewals	5	INVESTIGATION	01/07/2012	30/06/2013	\$322,000

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Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
<b>Shirley Papanui</b>	WP0000255	PARKS CEAF 1.5 Groynes CAPEX	Car Park, Driveway, Turf, Track and Jetty renewals	6	COMPLETE	01/08/2011	30/09/2011	\$96,000
	WP0000256	PARKS CEAF 1.7 Temp Changing Rooms CAPEX	Portable changing facilities for sports parks	2	BUILD	01/02/2012	31/12/2012	\$300,000
	WP0000268	PARKS CEAF 2.1 English Park CAPEX	Car Park renewal	1	COMPLETE	01/08/2011	30/10/2011	\$247,500
	WP0000277	PARKS CEAF 2.3 S/P OPEX	Hard surface and track repairs	5	COMPLETE	01/03/2012	31/05/2012	\$20,500
	WP0000278	PARKS CEAF 2.3 S/P CAPEX	Hard surface renewals	3	COMPLETE	01/03/2012	31/05/2012	\$100,000
	WP0000778	Roto Kohatu	Repairs to bankworks at Roto Kohatu Reserve	1	COMPLETE	01/02/2011	30/04/2011	\$200,000
<b>Spreydon Heathcote</b>	WP0000279	PARKS CEAF 2.4 S/H OPEX	Hard surface and minor structural repairs	11	COMPLETE	01/11/2011	31/03/2012	\$153,615
		<b>ACC:</b> Auckland City Council grant						
		<b>CEAF:</b> Canterbury Earthquake Appeal fund						
		<b>NOTE:</b> Canterbury Earthquake Appeal Fund projects are billed directly to Dept. Internal Affairs.						
		CCC labour costs to design, project manage and supervise these projects are charged to 721/120 codes depending on the asset type						
		<b>Status Summary</b>		<b>64</b>	<b>Investigation</b>	\$3,581,000		
	<b>141</b>			<b>Build</b>	\$4,437,000			
	<b>505</b>			<b>Complete</b>	\$6,797,030			
	<b>154</b>			<b>On Hold</b>	\$6,381,300			
						<b>\$21,196,330</b>		

Data from Asset and Network Planning Unit, Christchurch City Council

### 6.2.3 Wastewater Treatment Plant and Organics Processing Plant

Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
<b>Clarifiers</b>	C4 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new structure.	Complete	Nov 11	3 Feb 12	\$9,432,768
	C3 - New structural bottom - CIPP repairs to influent pipe. - Modify Arms to suit new structure	Complete	24 Jan 12	30 June 12	
	C1 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new Structure	Construction	July 12	15 Feb 13	
<b>Civil &amp; Structural</b>	<ul style="list-style-type: none"> <li>• Paving</li> <li>• C2 water</li> <li>• Crack repairs to structures.</li> <li>• Reclad Digester 2</li> <li>• PST &amp; Grit Tank Repairs</li> <li>• <b>SCT Tank Repairs</b></li> </ul>	Complete Complete Complete Complete <b>Complete Construction</b>	Oct 11 Oct 11 April 11 Sept 11 Aug 12 <b>Jan 13</b>	Sept 12 Feb 12 Nov 12 Dec 11 Feb 13 <b>April 13</b>	\$4,514,760
<b>CWTP Contaminated Sand Disposal Point</b>	<ul style="list-style-type: none"> <li>• Repair after hours access road &amp; improve for increased traffic movements.</li> <li>• Repair and strengthen dump point into Lagoon 2.</li> </ul>	<b>Complete</b> <b>Complete</b>	Oct 12 Oct 12	<b>Jan 13</b> <b>Jan 13</b>	\$1,500,000
<b>Oxidation Ponds</b>	<ul style="list-style-type: none"> <li>• Transfer structures 1-4</li> <li>• Transfer Structure 4-5.</li> <li>• Pond banks strengthen and reinstate to design levels.</li> <li>• Estuary outfall structure</li> <li>• Dyers Road transfer structure</li> </ul>	Complete Complete Construction Complete Construction	Oct 11 Dec 11 Jan 12 July 12 Oct 12	Feb 12 Mar 12 Feb 13 Dec 12 April 13	\$16,250,000
<b>Galleries</b>	<ul style="list-style-type: none"> <li>• South Gallery – drainage and structural <i>Proposed repair strategy unsuccessful, redesign underway</i></li> <li>• North Gallery – drainage &amp; joints</li> <li>• Diagonal Gallery – drainage &amp; joints</li> <li>• Pump Stn A – drainage &amp; joints</li> <li>• Sludge Rm A – drainage &amp; joints</li> </ul>	Design <b>Complete</b> Design Design Design	<b>TBA</b> June 12 Jan 13 Dec 12 Jan 13	<b>TBA</b> Jan 13 Mar 13 Mar 13 Mar 13	\$1,353,550
<b>CWTP Trickling Filters</b>	<ul style="list-style-type: none"> <li>• External Repairs to Trickling Filter 1</li> </ul>	Design/ Loss	<b>TBA</b>	<b>TBA</b>	

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<b>Project</b>	<b>Description</b>	<b>Phase</b>	<b>Estimated Construction Start</b>	<b>Estimated Construction End</b>	<b>Estimated Cost</b>
<b>Stage 1</b>	<ul style="list-style-type: none"> <li>External Repairs to Trickling Filter 2</li> </ul>	Adjusters Design/ Loss Adjusters	<b>TBA</b>	<b>TBA</b>	\$3,500,000
<b>Stage 2</b>	<ul style="list-style-type: none"> <li>Investigate and repair any damage to Trickling Filter internal structure</li> </ul>	Loss Adjusters	2020		
<b>Mechanical &amp; General Repairs</b>	<ul style="list-style-type: none"> <li>Digesters 2</li> <li>Digesters 1</li> <li>Digester 4</li> <li>Digester 3</li> <li>Digesters 5</li> <li>Digester 6</li> <li>Buffer Tank</li> <li>Primary Sedimentation Tanks</li> <li>Bio- Solids Holding Tank</li> </ul>	Construction Construction Investigation Investigation Investigation Complete Complete Loss Adjusters	Oct 11 Nov 12 April 13 June 13 Jan 14 Jun 14 Nov 11 June 11 <b>TBA</b>	Feb 13 April 13 Aug 13 Dec 13 Jun 14 Nov 14 Jan 12 July 12 <b>TBA</b>	\$5,450,250
<b>Organics Processing Plant</b>	<ul style="list-style-type: none"> <li>Demolish &amp; Reconstruct Tunnels</li> <li>Repair &amp; Strengthen Process Hall</li> <li>Repair Hard Standing</li> </ul>	Construction	Mar 12	<b>Oct 13</b>	\$9,518,133
<b>Facilities</b>	<ul style="list-style-type: none"> <li>Laboratory</li> <li>Control Room</li> <li>Workshops</li> <li>Offices/ Cafeteria/ Mtg Room</li> </ul>	<b>Loss Adjusters</b> <b>Loss Adjusters</b> Investigation <b>Loss Adjusters</b>	<b>TBA</b> <b>TBA</b> Feb 13 <b>TBA</b>	<b>TBA</b> <b>TBA</b> June 13 <b>TBA</b>	\$2,741,000
<b>Outlet Structure</b>	<ul style="list-style-type: none"> <li>Replace Broken Outlet Pipes</li> <li>New Outlet Structure</li> <li>Decommission Broken Pipes</li> </ul>	<b>Loss Adjusters</b>	<b>TBA</b>	<b>TBA</b>	\$2,300,000
	<b>TOTAL</b>				<b>\$56,433,249</b>

*Data from Project Management Unit, Christchurch City Council*

In the table above, the bolded text identifies a change in activity since the previous monthly report.

### 6.2.4 Burwood Landfill

Project	Description	Material Received (tonnes)	Material Processed (tonnes)	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
<b>Burwood Landfill</b> Liquefaction and Infrastructure Rebuild Waste Disposal	<ul style="list-style-type: none"> <li>Prepare areas for disposal</li> <li>Operate and maintain disposal site</li> <li>Restoration and landscaping</li> <li>Resource consent application</li> <li>Consultation documents to affected parties</li> <li>Consultation Feedback documents to affected parties</li> <li>Consents granted</li> </ul>	383,550	383,550	Complete	Feb 11	Jan 12	Self Funded
				Operation	Feb 11	Dec 17	
				Operation	Jan 12	Dec 17	
				Completed	Jan 12	Aug 12	
				Complete	Apr 12	Jul 12	
				Complete	Jun 12	Jul 12	
<b>Burwood Landfill</b> Residual Demolition Waste Disposal	<ul style="list-style-type: none"> <li>Design of new cell for residual waste</li> <li>Cell construction</li> <li>Operate and maintain disposal site</li> <li>Restoration and landscaping</li> <li>Resource consent application</li> <li>Consultation documents to affected parties</li> <li>Consultation Feedback documents to affected parties</li> <li>Consents granted</li> </ul>	0	0	Complete	Oct 11	Jun 12	To be funded by Transwaste Canterbury
				Construction	Mar 12	Mar 13	
				Construction	Mar 13	Dec 17	
				Design	Jul 17	Dec 17	
				Complete	Oct 11	Aug 12	
				Complete	Apr 12	Jul 12	
<b>Burwood Resource Recovery Park</b> Demolition Sorting and Processing Facility	<ul style="list-style-type: none"> <li>Construct areas for storage of material and associated roading</li> <li>Design of sorting plant</li> <li>Construction of sorting plant</li> <li>Sorting operation</li> <li>Rehabilitation and landscaping</li> <li>Resource consent application</li> <li>Consultation documents to affected parties</li> <li>Consultation Feedback documents to affected parties</li> <li>Consents granted</li> </ul>	382,400	0	Complete	Feb 11	Jun 11	To be funded by Transwaste Canterbury
				Complete	Mar 11	Jun 12	
				Commenced	Jul 12	Mar 13	
				Design	Mar 13	Dec 17	
				Design	Jul 17	Dec 17	
				Completed	Oct 11	Aug 12	
				Completed	Apr 12	Jul 12	
				Completed	Jun 12	Jul 12	
Completed	Jul 12	Sep 12					
<b>TOTAL</b>		<b>765,950</b>	<b>383,550</b>				

Data from City Water and Waste Unit, Christchurch City Council

### 6.2.5 Wells

The damage to wells has been reported separately from the remainder of the non-SCIRT infrastructure rebuild because much of the wells repair work is reactionary due to the ongoing aftershocks.

Forward programming is limited by the reactionary work and the operational requirements of the water supply network, meaning that each package of work is programmed “on the fly” on a prioritised basis before it is issued.

The programme of work must be kept flexible in order to keep as many damaged wells operational as possible while at the same time moving forward with the repair and replacement programme. Only a limited number of wells can be taken out of service at one time to avoid affecting the demand on water supply network, and to minimise water restrictions.

	January At Ground Level	February At Ground Level	January Below Ground Level	February Below Ground Level	January Totals	February Totals
Total number of active wells						154
Wells yet to be repaired <sup>+*</sup>		31		29		60
Cost Estimate all repairs <sup>+</sup>		\$4,692,000		\$19,313,000		\$24,005,000
Wells repaired to date <sup>+*</sup>		71		109		180
Cost to date <sup>+</sup>		\$3,085,467		\$7,297,923		\$10,383,390

*Data from Capital Delivery Team, Christchurch City Council*

+ includes replacement wells

\* some wells are damaged both at and below ground level