# 12 Month Review to 30 June 2014

## **Table of Contents**

Water Resource	3
Air Quality	16
Coast	21
Regional Policy Statement	24
Governance and Community	25
Flood Protection & Control Works	29
Rivers and Waterway Management	
Biosecurity	40
Environmental Incident Response	45
Natural Hazards	48
Emergency Management	52
Dam Safety	55
Transport	57

#### Water Resource

#### What we want to achieve

Level of Service - N	laintain or improve	water qualit	У	
Measure 1 Water quality limits for surface and groundwate (Plan Change 6A). Contaminants measured are:		ichedule 15 o	f the Region	al Plan: Water
<ul> <li>Rivers</li> <li>Nitrite-nitrate nitrogen</li> <li>Dissolved reactive phosphorous</li> <li>Ammoniacal nitrogen</li> <li>E.coli</li> <li>Turbidity</li> </ul>	Total p	itrogen hosphorous niacal nitroge ity	en	
Target Measures of Success	Actual Measure a	t 30 June 201	4	
All monitoring to be compliant with Schedule 15 of the Regional Plan: Water.	The results of Environment sites each site are show	s measuring		
		2009-2	2014 20	008-2013
	All comply 4 out of 5 levels co 3 out of 5 levels co 2 out of 5 levels co 1 out of 5 levels co None met <b>Total</b>	omply 9 omply 6		20 19 9 7 3 0 <b>58</b>
	Plan Change 6A b The data shown benchmark for me	for the 2	008-13 yea	rs above is the
	Most of the sites Otago and the up intensity sheep fa Poorer water qua intensity farming o	per Clutha, w rming and/or lity is found	vhere land u r dominated in river catcl	se tend to be low by tussock lands. hments with high
100% of dairy farms to comply with permitted activity rules for the discharge of dairy effluent each year (non compliance measure is in respect of grade 4 & 5 non compliance only – Note 1).	Dairy inspection re	esults were a	s follows:	
		2013/14	2012/13	2011/12
	Inspections Compliant Non compliant	435 407 (94%) 28 (6%)	417 382 (92%) 35 (8%)	410 387 (94%) 23 (6%)

Note 1: -Grade 4 non compliance – minor actual or potential adverse effects.Grade 5 non compliance – significant actual or potential adverse effects.

## Level of Service – Ensure water is managed to meet Otago's environmental, social, cultural and economic needs

#### Measure 1

Sustainable environmental flows and allocation limits set on rivers and streams to protect their environmental, economic, social and cultural values.

Target Measures of Success	Actual Measure at 30 June 2014
No violation of minimum flows due to abstraction at any minimum flow site as set out in the Regional Plan: Water.	No violations of minimum flows have been observed. River levels have been high, and no low flow triggers have been met. (2012/13: Nil)
No violation of groundwater or lake minimum levels due to abstraction at any minimum level site as set out in the Regional Plan: Water.	No violations of minimum levels have been observed. Groundwater levels are high and no trigger levels have been reached. (2012/13: Nil)

#### Measure 2

Maximum extraction volumes set on aquifers

Target Measure of Success	Actual Measure at 30 June 2014
No violation of maximum abstraction volume and allocation limits from any aquifer as set out in the Regional Plan: Water.	No violation of maximum abstraction volumes has been found. <i>(2012/13: Nil)</i>

#### Measure 3

Performance monitoring (self monitoring) returns on consents requiring self-monitoring, to show compliance with consent conditions.

Target Measure of Success	Actual Measure	at 30 June 201	.4	
100% of performance monitoring returns to show compliance with consent conditions.	Performance mo was as follows:	onitoring data	processed dur	ing the period
(non-compliance measure is in respect of grade 4 & 5 non compliance only – Note 1).		2013/14	2012/13	2011/12
	Data processed Compliant Non compliant	3,356 3,135 (93%) 221 (7%)	2,965 2,626 (89%) 323 (11%)	3,111 2,844 (91%) 267 (9%)

#### Measure 4

Audits of consents to show compliance with consent conditions.

Target Measures of Success	Actual Measure	at 30 June 201	4	
90% or more of audits of consent conditions show compliance with consent conditions (non compliance measure is in respect of grade 4 & 5 non compliance only – Note 1).	Audits undertake	en during the p	eriod were as fo	ollows:
	Discharge	2013/14	2012/13	2011/12
	consents:	122	123	244
	Compliant	97 (80%)	85 (69%)	167 (68%)
	Non Compliant	25 (20%)	38 (31%)	77 (32%)
	Ground/surface			
	water takes:	156	383	176
	Compliant	129 (83%)	239 (62%)	116 (66%)

Non Compliant	27 (17%)	144 (38%)	60 (34%)
In 2012/13 priorit water takes.	y was given to	o auditing gr	ound/surface

Level of Service - Process resource consent applications for the use of water in a timely manner.			
Measure 1 Process applications in compliance with statutory procedures and timeframes set out in the RMA 1991.			
e of Success Actual Measure at 30 June 2014			
variations, 7 on water pe	3 of which related rmits. Nine wate	d to varying th	e reporting date
	-		
	Non	Limited	
Time	Notified	Notified	Notified
In time	372	28	17
Exceed	0	0	0
Other decisi	ons made were as	follows:	
	Certificate		Water
Time	Compliance	Variations	Exemptions
In time	0	61	8
Exceed	0	0	0
	y procedures Actual Meas 456 consen variations, 7 on water per were receive Decisions we variations t follows: Time In time Exceed Other decisi Time In time	Actual Measure at 30 June 20 456 consent applications we variations, 73 of which related on water permits. Nine water were received. Decisions were given on 4 variations to reporting date follows: Non Time Notified In time 372 Exceed 0 Other decisions made were as Certificate Time 0	y procedures and timeframes set out in the R Actual Measure at 30 June 2014 456 consent applications were received, variations, 73 of which related to varying th on water permits. Nine water exemptions were received. Decisions were given on 417 consent variations to reporting dates, and eight follows: Non Limited Notified Notified In time 372 28 Exceed 0 0 Other decisions made were as follows: Certificate Time Compliance Variations In time 0 61

## What we achieved to 30 June 2014

Objective 1 Monitor State of the Environment surface and groundwater quality and quantity, and publicise the results.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Undertake monitoring programme for State of the Environment reporting (surface water quality and freshwater, wetlands, including contact recreational activities, groundwater aquifer levels, and groundwater quality at selected sites.	Monitoring was undertaken on the selected sites during the reporting period. Contact recreation sampling at key sites was undertaken as required. Site data trends are reported through State of the Environment reporting every five years, the last being completed in 2012.	

# Objective 2 Encourage environmentally and legally sound water management, which minimises adverse effects of and management on water health, achieve effective community water management and the adoption of efficient water use.

Key Activities	Achievement to 30 June 2014			
Activity 1 Encourage environmentally and legally sound water management which achieves effective community water management and the adoption of efficient water use, by undertaking the following: • Undertake catchment based programmes to develop community awareness of water use in the Arrow, Manuherikia, Upper Taieri, Cardrona /Wanaka Plains, Lowburn, Lindis and Bannockburn catchments.	<ul> <li>Work undertaken during the year included the following:</li> <li>Manuherikia – visits to farmers and community leaders were undertaken to discuss water takes, storage options and irrigation development. In November, the Manuherikia Catchment Water Strategy Group launched its feasibility study on future irrigation in the area. Staff liaised closely with the Group to ensure the work complements Council's strategy for water quantity and quality.</li> <li>Upper Taieri – assistance was given to the irrigators in the Kyeburn subcatchment who are developing a future water management regime. Staff met with the Hawkdun – Idaburn Irrigation Co., and the Upper Taieri Water Management Group during the period. Staff attended a meeting of the Upper Taieri Water Users group to discuss high E.coli results in the Taieri River at Waipiata.</li> <li>Cardrona – assistance was given to the Cardrona Landcare group, and the Cardrona Farms open day.</li> <li>Lowburn &amp; Lindis – no activity during the year.</li> <li>Bannockburn – Farmers met with staff to discuss water measurement installation progress, and introduced the idea of community managed water.</li> <li>No progress this reporting period.</li> </ul>			
<ul> <li>Activity 2</li> <li>Encourage environmentally and legally sound water management, which minimises adverse effects of land management on water health, by undertaking the following:</li> <li>Undertake catchment based programmes to develop community awareness of land use and stream interactions from land management practices in the Lower Taieri, Tokomairiro/Tuakitoto, South Otago, Owaka, Lakes District, Kakanui /Waianakarua, and the Waitaki Plains catchments.</li> </ul>	<ul> <li>Work undertaken during the period included the following:</li> <li>Lower Taieri – discussions were held with Fonterra Sustainable Dairying on issues such as grazing on flood banks and leased land near significant wetlands. Staff presented at a workshop on dairy basics, and met with a farmer to discuss the upgrade of dated systems and managing environmental risk.</li> <li>Tuakitoto – work was undertaken to formalise an operating regime for the management of Lake Tuakitoto. Staff met with farmers to discuss the proposed management regime. Staff assisted with a Beef and Lamb farm plan workshop at which 15 farmers attended. Identifying environmental risks on property, mitigation strategies and how the new 6A rules apply were discussed.</li> <li>Tokomairiro – field days were held to discuss stream and winter stock management, to achieve good water quality.</li> </ul>			

	Meetings held included with the planner and forester of the Glendhu Forestry block to discuss forestry operations and good practice options, with a forest owner to explore options to fell and extract trees surrounding a regionally significant wetland, and Federated Farmers to discuss the water plan. ORC had a stall at the Tokomairiro A & P Show.
	<b>South Otago</b> – meetings held included with Clinton farmers to discuss options to improve Kuriwao stream bank erosion, and Waipahi farmers re a winter round of sampling of ten sites. ORC met a group to discuss riparian management, river bank erosion and gravel extraction. A Pomahaka stakeholder group field day was held to discuss water plan issues. Staff spoke at a Trees of Farm workshop at Paretai, attended by 50 people, to discuss Plan Change 6A.
	<b>Owaka</b> – meetings were held with two dairy farmers on improving water quality.
	<b>Lakes District</b> – assistance was given to the Glenorchy Landcare Group, to identify suitable waterways to monitor water quality. Eighteen waterways are being measured with three rounds of monitoring to be undertaken. Staff met with consultants and farmers to discuss setting up the N leaching project for the Lakes District, this being an outcome from mediation on plan change 6A.
	<i>Kakanui</i> – meetings held included Ravensdown Environmental re nutrient budgeting and the reduction of nitrogen loss. Staff participated in fortnightly NOSLaM meetings to assist with water quality challenges and a model for achieving change. Staff presented to a meeting of all the Kakanui River irrigators re a nitrogen leaching sensitive aquifer zone along the Kakanui River. Farmers were visited to discuss improvements of discharges under 6A, and harvesting water for storage using "capture dams".
	<b>Waitaki Plains</b> – a Memorandum of Understanding in respect of plan change 6A was signed with the lower Waitaki irrigators collective. Working with the community on how to implement 6A will commence in 2014/15.
Visit all farms planning a dairy conversion to assist knowledge of and compliance with the Regional Plan: Water requirements.	Ten properties were visited during the period, to work through dairy conversion assessments with the farmers. Three enquiries were received about converting to dairy in the Manuherikia Valley.
Implement pilot projects which assist the understanding of the effects of land management on water quality:	
Nitrate movement in free draining soils.	Dairy farms in the Waiareka catchment were visited to find effluent ponds suitable for trialling the addition of alum to effluent ponds to assist phosphorus application rates. Two farms were chosen and a series of sampling and dosing runs were undertaken to bind the phosphorus to the sediment. This trial has since been discontinued as early results showed that the alum dosing rates were not going to improve phosphorus retention outcomes.

<b>Γ</b>	
<ul> <li>Water quality of farm tile or open drains.</li> </ul>	A pilot project has been initiated on a property near Milton to check the effectiveness of a constructed wetland on improving water quality from a tile drain. On going measuring of water quality is undertaken when the weather is wet enough for the drain to run.
<ul> <li>Irrigation on rolling country, nutrient movement and effects on water quality in the Lindis catchment</li> </ul>	Work was undertaken in North Otago rather than the Lindis this year. Staff participated in a SFF hill country irrigation teleconference. The aim is to make recommendations, based on topography and soil type, on application rates and depths for irrigation in North Otago rolling country.
Activity 3 To assist knowledge of and compliance with the Regional Plan: Water, hold in association with stakeholders and user groups at least 20 local community study/discussion days on land management and locally significant environmental issues. Events to be held on Sheep, Beef and Deer Farming, Dairy farming and urban issues.	<ul> <li>Work undertaken during the year included the following:</li> <li>Staff spoke at eight field days during the period, on topics including the Water Plan schedules 15 and 16, prohibited and permitted activities, nitrogen loading, instream values, and biological farming systems. More than 240 people attended the field days.</li> <li>Discussions were held with Ravensdown on nitrogen leaching, and staff spoke at a seminar for masters' students at the University of Otago.</li> <li>A meeting was held with DairyNZ, Fonterra, Open Country Guardians and Federated Farmers to discuss 6A implementation strategies and opportunities to work together.</li> <li>Staff met with the Alexandra scouts for a practical water quality measuring exercise, and to present on good water quality.</li> <li>Staff attended public meetings, expos, discussion groups, school groups and stakeholder meetings, primarily about water quality and plan change 6A.</li> </ul>
Activity 4 Assist with community group projects such as Sustainable Farming Fund programmes and Beef and Lamb Monitor Farms.	Assistance was given to a group of farmers wishing to study environmental, productive and logistical aspects of dairy grazing in Central Otago. Staff liaised with National Beef and Lamb to ensure they have appropriate water plan information for their Otago farm plan templates. Staff met with AgResearch and Environment Southland to explore developing a joint wintering impact project, as wintering stock on crop or grass is a high risk activity for discharging contaminant to water water
Activity 5 Develop published and website material on best management practice to achieve environmental protection, to include a booklet on water quality self assessment and best practice recommendations for sheep, beef and deer.	discharging contaminants to waterways. Assistance was given to producing the Guide to 6A, a guide on how to take water samples. Work continues on developing fact sheets on "What is a river" and 6A interpretation fact sheets to assist all industries. An environmental consideration booklet for wetlands is currently being developed.

Activity 6 Identify those catchments and subcatchments that are at high risk of not being compliant with Plan Change 6A, and review current land use practices within those catchments.	science, community liaison and enforcement has collected geographical and other information that identifies higher risk			
Activity 7 Hold appropriate communication activities on what represents best practice in relation to improving water quality, on topics including land use activities, climate, soil types and topography for the high risk catchments.	Field days, presentations and meetings have been undertaken about what represents best practice in relation to improving water quality, however a full education programme will commence in 2014/15.			
Activity 8 Identify options (including their costs and benefits) that may be used to assist compliance with Plan Change 6A.	Some mitigation options have been identified. Work on this will continue through 2014/15.			
Activity 9 Establish work with community groups to test the efficiency and effectiveness of key options identified.	A technical advisory group has been set up to assist with this target. Work will commence in the 2014/15 year.			

Objective 3 Collect and analyse surface and groundwater resource information as needed for the implementation of, and future changes to, the Regional Plan: Water.					
Yey Activities Achievement to 30 June 2014					
Activity 1 Undertake and report on catchment studies for minimum flow, residual flow and water resource management in the Low Burn, Pisa Range, 12 Mile Creek, Kaihiku and Lindis subcatchments (residual flow).	A technical report for the Low Burn and Tuapeka River have been completed and published. Temporary flow records were installed and recorded flows in 12 Mile Creek and the Kaihiku Stream. The data collected will be reported on during the 2014/15 financial year. Flows were recorded in a number of tributaries of the Lindis River during the 2013/14 irrigation season. This information has been published in the form of a report card and is available to the public.				
<b>Activity 2</b> Carry out investigations and report on water quality in the Shag, Lake Tuakitoto and Lindis catchments.	Water quality reports have been completed on the Shag River and Lake Tuakitoto. The Shag River report findings included the following:				
	<ul> <li>Water quality is generally good;</li> <li>Results from the SoE sites and the 2012-13 survey were compared to the receiving water limits in plan change 6A, and this showed that all seven sites were likely to comply with limits for ammoniacal nitrogen (NH<sub>4</sub>-N), dissolved reactive phosphorus (DRP) and turbidity.</li> <li>The Goodwood Pump site nears the DRP limit.</li> <li>The upper Shag River sites (Collins Bridge and The Grange)</li> </ul>				

	<ul> <li>were only sites likely to comply with the nitrate-nitrite nitrogen (NNN) limits.</li> <li>The mid to lower Shag River sites (Craigs Road, Deepdell Creek and Goodwood Pump) complied with the E.coli limit, while most other sites were close to the limit.</li> <li>The Lake Tuakitoto report findings included the following:</li> <li>All 13 sites in the catchment met the Schedule 15 water quality limits for NH₄-N and DRP.</li> <li>The receiving water quality limit for NNN was exceeded at all sites in Stony Creek and at the upper sites in Lovells Creek.</li> <li>The receiving water quality limit for E.coli was met at the upper Frasers Stream site, Lovells Creek east branch and Lake Tuakitoto at the outlet exceeded the receiving water quality limit for turbidity.</li> <li>Water quality sampling is underway at fortnightly intervals at a number of sites in the Lindis catchment, and will be reported on in the 2014/15 financial year.</li> </ul>
Activity 3 Carry out investigations and report on groundwater resource management for the Pomahaka, Wairuna and Kuriwao /Clydevale aquifers.	<ul> <li>A report on the groundwater resources of the Pomahaka, Wairuna, Kuriwao and Clydevale aquifers has been completed. The main findings of the report were:</li> <li>The South Otago aquifers have been wrongly classified as alluvial aquifers; they are fractured rock aquifers which differ significantly from alluvial-gravel aquifers. Rock aquifers rely on discontinuities such as joints, fractures and crevices to transmit water. Water availability is therefore localised. It is not possible to manage the hard rock aquifer at a regional or even aquifer scale.</li> <li>The current groundwater management regime for the Pomahaka and Kuriwao basins may be overly restrictive. The water plan should be amended to reflect the aquifer type (Fractured rock).</li> <li>In general, the piezometric surface (water table) follows the contours of the land. The groundwater levels are generally higher than the river levels, suggesting that the surface water bodies are discharge points for groundwater.</li> <li>Groundwater quality suggest that the groundwater may not be aesthetically pleasing as the pH and total iron levels are generally outside of the New Zealand Drinking Water Guideline (2005).</li> <li>Faecal coliform bacteria are present in seven bores located in the Pomahaka, Wairuna and Kuriwao basins, probably due to local contaminants and/or poor well-head protection</li> </ul>
Activity 4 Monitor and report on bacteriological water quality for marine and freshwaters for contact recreational purposes.	Weekly monitoring commenced in December, the beginning of the bathing season, and continued to the end of March. Results were made available on the ORC website. Taieri at Waipiata showed elevated levels of E.coli. Potential sources of

	contamination were investigated with a number of sources identified and reduced or removed.		
Activity 5 Aid the development of protocols for effective water utilisation in the Upper Taieri, Manuherikia, Lindis, and Cardrona catchments.	Work is ongoing in the Upper Taieri, specifically in the Kyeburn and Swin Burn catchments, aiding the transition from deemed permits to RMA permits. Work continues in the Lindis and Cardrona River, mostly around minimum flow and allocation limit setting.		
Activity 6 Identify and install appropriate monitoring bores for long term State of the Environment monitoring.	Four monitoring bores were installed during the year.		
Activity 7 Complete an efficient irrigation application report for all of Otago to aid the consents group in allocation of Otago's water resource.	Aqualinc was contracted to produce an irrigation application report for all of Otago to aid the consents group in allocation of Otago's water resource. The report is still to be received.		
Activity 8 Model Kakanui groundwater surface water interaction with respect to Nitrate losses and effects on the Kakanui River.	Attempts have been made to model this system but it has been found it to be very complicated. A report commissioned from Lincoln environmental has concluded that further data is needed to make any modelling possible.		
	As a result, resources have been directed to real time nitrate flow and groundwater monitoring to collect the data set needed to build a robust model of the Kakanui catchment. Two real time nitrate and flow sites have been installed in the Kakanui and eight monitoring bores from which fortnightly water quality samples will be taken. It is expected that this data collection will run for 12 months before attempting to produce a model of the system.		

Objective 4 Monitor and review the effectiveness of the Regional Plan: Water			
Key Activities	Achievement to 30 June 2014		
Activity 1 Notify proposed plan changes through to the release of decisions on submission for the Pomahaka, Waiwera and Waikouaiti Rivers, the Cardrona River and Wanaka- Cardrona Aquifer, the Benger Burn and Ettrick Aquifer, and the Lindis River and connected aquifers.	Briefings and field trips with KTKO Ltd and Te Ao Marama Inc have been undertaken for catchments where minimum flows are being proposed. In December 2013, a joint field trip was undertaken for the Lindis and Cardrona catchments, and in February 2014, a field trip was undertaken for the Waiwera, Pomahaka and Benger Burn catchments. Pomahaka River: A third community workshop was held at Tapanui in May 2014, evaluating a preferred option for the minimum flow and allocation regime. The Consultation Draft of Proposed Plan Change 3B (Pomahaka catchment minimum flow) was released for comment on 4 June 2014. Feedback was received from seven parties. Waiwera River: The Consultation Draft for a proposed plan		

	change is being finalised, following a third community
	workshop held at Clinton in May 2014, which evaluated a preferred option for a minimum flow and allocation regime.
	Waikouaiti River: A hui was held in October 2013 to identify tangata whenua values for the catchment and share information on the river with the wider community. The health of the estuary remains a primary concern for the runanga, although any minimum flow will have limited effect on this value because of the dominance of tidal flows. A third community workshop was held at Waikouaiti in April 2014, evaluating a preferred option for the minimum flow and allocation regime. Further work is being done on this proposal in the light of feedback received.
	Cardrona River and Wanaka-Cardrona Aquifer: Over the winter of 2013, two workshops, a field trip and an open session were held to consider options for surface and ground water management. A further scientific study was undertaken over the summer of 2013/14. The preferred option for the minimum flow and aquifer allocation is now being prepared.
	Benger Burn and Ettrick Aquifer: The preferred option for managing the aquifer and Benger Burn was discussed at a community workshop in Ettrick in March 2014. As a consequence of issues raised during that workshop, more scientific work will be undertaken on the aquifer and understanding its connectivity with the Clutha River/Mata-Au before the proposed plan change is progressed.
	Lindis River and connected aquifers: The preferred option for managing surface and groundwater resources in the Lindis was presented to a community workshop in April 2014, and the Consultation Draft of the proposal was released later that month. Feedback was received from 24 parties, and as a consequence, the proposal is now being amended before being presented for notification.
Activity 2	
Consult communities on catchment values associated with flow and allocation options for the Manuherikia River.	Background information about the Manuherikia has been assembled in preparation for the first plan-change related workshop on community values.
	A meeting was held with the technical group supporting the Manuherikia Water Strategy in November 2013, outlining the minimum flow and allocation consultation process. Staff suggested an initial Council-facilitated workshop on catchment values could be held early in 2014, to complement the Strategy timeframes. However, the Strategy Group has not yet indicated they are ready to hold the values workshop.
Activity 3 Prepare and consult communities on water quality limits for the North Otago Volcanic Aquifer, and Kakanui-Kauru Alluvial Aquifer.	No progress has been made on this project, as further technical work is being undertaken first.
Activity 4 Notify proposed plan changes through to	Proposed Plan Change 4B (Groundwater allocation) was

release of decisions on submissions for proposed plan changes addressing permitted water transfers and groundwater		
management.	The permitted water transfers proposal has been placed on hold, pending further discussion with Council on how this may better support Plan Change 1C (Water Allocation and Use).	

Objective 5 Ensure compliance with Regional Plan: Water rules, regulatory and resource consent requirements, through consent process advisory and enforcement processes.				
Key Activities	Achievement to 30 June 2014			
Activity 1 Process 100% of consent applications, surrenders, transfers, lapsing, cancellations and expiries in accordance with the Council's Consent Procedure Manual and the Resource Management Act 1991.	100% of all application types received were processed in accordance wit the Council's Consent Procedure Manual and the Resource Management Act.			
Activity 2 Begin the review of consents for a catchment, subcatchment or an aquifer within two months of a minimum flow or a level or water quality standard being operational.	No reviews were required to be undertaken during the year.			
Activity 3 Investigate and undertake enforcement procedures on breaches of rules, resource consents and regulations of water.	<ul> <li>Five infringement notices were issued during the period, for the following:</li> <li>Discharging contaminants to land where it may enter water (one); and</li> <li>Discharging contaminants to land in breach of a regional rule (four).</li> <li>(2012/13: 15 infringement notices issued; 2011/12: 21</li> </ul>			
	<ul> <li>infringement notices issued).</li> <li>Eight abatement notices were issued requiring the following: <ul> <li>To cease taking water in breach of a resource consent; and</li> <li>To cease taking water in breach of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.</li> </ul> </li> <li>(2012/13 &amp; 2011/12: Nil abatement notices issued).</li> </ul>			
	Six prosecutions were authorised during the period for discharging contaminants to land where it may enter water. (2012/13: 3 prosecutions authorised; 2011/12: 13 prosecutions authorised).			
Activity 4 Uphold compliance of resource consents and rules in the Regional Plan: Water for Otago by processing all performance monitoring returns, 90% of which will be	All monitoring returns (3,356) were processed within one month of receipt.			

within one month of receipt.			
Activity 5 Investigate and report on breaches about water quality and quantity.	Reported water related incidents were as follows:2013/142012/132011/12Total Incidents414403309Water Quantity3643Water Quality378360		
<ul> <li>Activity 6 Undertake audits of:</li> <li>100% of animal waste collection systems</li> <li>90% of newly installed water metering installations</li> <li>50% of discharges to land and water.</li> <li>100% of newly built waterway structures.</li> <li>100% of operational gravel extractions.</li> <li>100% of active and 30% of closed landfills.</li> </ul>	<ul> <li>Audits undertaken during the year were as follows:</li> <li>435 (100%) dairy farms were inspected. 26 (6%) were found to be non compliant.</li> <li>99 out of 278 (36%) of newly installed water meters were inspected. 4 (4%) were found to be non compliant.</li> <li>141 out of 1,004 (14%) discharge consents were monitored. 25 (18%) were found to be non compliant.</li> <li>Six structures (excluding bores) out of 49 (12%) were inspected. All were compliant.</li> <li>Seven gravel extractions were monitored and found to be</li> </ul>		
<ul> <li>Activity 7 Undertake investigations of compliance with permitted activity rules in the following areas:</li> <li>Urban storm water discharges into Lake Wakatipu around the Queenstown/Frankton Arm area, Lake Wanaka and Silverstream.</li> <li>On site waste water discharges into streams, lakes and rivers, around Kingston and Arrowtown.</li> </ul>	Lake Wakatipu (Horne Creek) & Lake Wanaka – Pollution complaints were reviewed and reported locations compared with storm water and foul water infrastructure. The land use types in Queenstown have been digitized, and compared against the complaints database and infrastructure to identify outfalls for further investigation. Dry and wet weather inspections of discharges into Horne Creek were undertaken, suggesting no particular issues that require further investigation. Potential areas for inspection around Lake Hawea have been identified and inspections are being planned.		
	<ul> <li>Silverstream – Significant stormwater outfalls and clusters of septic tanks in areas where stormwater is reticulated have been identified.</li> <li>Water of Leith – Lindsay Creek - Work continued on Lindsay Creek from 2012/13. The length of the creek was inspected, and faecal contamination located in a particular section of the Creek. Investigations suggest an animal source for pollution. Further inspections have not been made.</li> <li>Kingston and Arrowtown –mapping the location of houses from aerial photography has been undertaken.</li> <li>Septic Tanks – a region wide report on Septic Tanks was completed in June.</li> </ul>		

### Estimated and Actual Costs

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Monitor quality & quantity	2,356	2,169	(187)
Encourage sound practice	1,469	1,506	37
Water Studies	408	463	55
Regional Plan Water	1,210	960	(250)
Consents, compliance & enforcement	2,323	2,816	493
Irrigation Grants	0	1,000	1,000
Total	7,766	8,914	1,148

## Estimated and Actual Revenue

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Monitoring	709	579	130
Encourage sound practice	0	10	(10)
Consents, compliance & enforcement	1,096	1,902	(806)
Total	1,805	2,491	(686)

## Air Quality

## What we want to achieve

Level of Service – Improve air quality.				
Measure 1 PM <sub>10</sub> micrograms per cubic metre in a 24 hour period.				
Target Measure of Success	Actual Measure at 30 June 2014			
No more than one reading of $PM_{10}$ per annum (winter months) in all Air Zones in Otago, to be higher than 50 micrograms per	For the winter of 2013, the breaches and highest readings in all Air Zones in Otago were as follows:			
cubic meter.		Target	2013 No. Days	Highest
		Reading	Over	Reading
	Alexandra	50	47	130
	Arrowtown	50	17	77
	Balclutha	50	4	88 66
	Clyde Cromwell	50 50	10 33	107
	Dunedin	50 50	0	46
	Milton	50	44	139
	Mosgiel	50	5	62
	WIOSBICI	50	5	02
			2012	
		Target	No. Days	Highest
		Reading	Over	Reading
	Alexandra	68	8	93
	Arrowtown	68	7	147
	Balclutha	50	13	75
	Clyde	54	5	65
	Cromwell	60	11	91
	Dunedin	50	1	71
	Lawrence	50	2	68
	Milton	51	26	144
		2011		
		Target	No. Days	Highest
		Reading	Over	Reading
	Alexandra	123	1	144
	Arrowtown	122	0	115
	Balclutha	50	4	93
	Clyde	64	12	107
	Cromwell	93	2	100
	Dunedin	50	14	70
	Lawrence	50	3	57
	Milton	52	18	137
	conditions, a	nd emissions	to air. Long	variable climatic term trends are il's initiatives and

policies for improving air quality.
-------------------------------------

Level of Service – Ensuring air discharges conform to the rules of the Regional Plan: Air and regulatory requirements.						
<b>Measure 1</b> Performance monitoring (self monitoring) retu with consent conditions.	irns on consents re	equiring self-n	nonitoring, to s	how compliance		
Target Measure of Success   Actual Measure at 30 June 2014						
100% of performance monitoring returns to show compliance with consent conditions (non compliance measure is in respect of grade 4 and 5 non compliance only – Note 1). Measure 2	Performance mo as follows: Data processed Compliant Non compliant	onitoring data 2013/14 248 231 (93%) 177%	processed duri <b>2012/13</b> 221 208 (94%) 13 (6%)	ing the year was <b>2011/12</b> 244 232 (95%) 12 (5%)		
Audits of consent to show compliance with con	nsent conditions.					
Target Measure of Success	Actual Measure at 30 June 2014					
90% or more of audits of consent conditions show compliance with consent conditions (non compliance measure is in respect of grade 4 and 5 non compliance only – Note 1).	46 discharge con	isents were au 2013/14	dited as follow: 2012/13	s: <b>2011/12</b>		
	Audits Compliant Non compliant	46 39 (85%) 7 (15%)	60	102 95 (93%) 7 (7%)		

Note 1: -Grade 4 non compliance – minor actual or potential adverse effects.Grade 5 non compliance – significant actual or potential adverse effects.

Level of Service – Process resource consent applications for the discharge to air in a timely manner.

#### Measure 1

Process applications in compliance with statutory procedures and timeframes set out in the Resource Management Act 1991.

Target Measure of Success	Actual Measure at 30 June 2014				
Process 100% of applications within the given timeframes.	20 resource consent applications and two variations were received, and decided on as follows:				
	Time	Variations	Non Notified	Limited Notified	Notified
	In time	2	16	0	4
	Exceed	0	0	0	0

## What we achieved to 30 June 2014

Objective 1 Measure air quality in key air quality zones and publicise the results.				
Key Activities	Achievement to 30 June 2014			
Activity 1 Continuously measure PM <sub>10</sub> at sites in Dunedin and Alexandra, and measure during winter months Mosgiel, Arrowtown, Palmerston, Clyde, Cromwell, and Milton.	All sites were measured for air quality in accordance with State of the Environment monitoring requirements.			
<b>Activity 2</b> Report air quality measurements:	Reporting undertaken was as follows:			
<ul> <li>As collected on Council's website.</li> <li>In weekly summary reports</li> <li>By weekly public notices of breaches of the AQNES, and</li> <li>Publishing an annual report card on the state and trends in air quality at the measurement sites by 1 December.</li> </ul>	<ul> <li>All data was reported on the Council's website.</li> <li>17 weekly reports were produced and distributed by email and posted on the website.</li> <li>Six monthly public notices of all AQNES breaches were published.</li> <li>The annual report card was completed, and presented at the January 2014 Council meeting.</li> <li>13 Air Watch reports were published by the ODT.</li> </ul>			
Activity 3 Undertake and report studies that define the winter spatial distribution of particulate air quality in Arrowtown and Wanaka.	A report detailing the results of the spatial $PM_{10}$ studies for Arrowtown and Wanaka was finalised and presented to the Technical Committee in June 2014. The report noted that Arrowtown's highest $PM_{10}$ levels are consistently seen in the eastern part of the town. Burner age, fuel use and topography all contribute to these high figures. For Wanaka, there are times and places when $PM_{10}$ is elevated however due to the location and layout of the area, it is considered unlikely that the AQNES limit will be exceeded under normal winter conditions. Wanaka is in Air Zone 2, and the study indicates that this is the correct zone designation.			
Activity 4 Undertake and report on studies that identify any need for monitoring of air quality in any further Air Zone 3 towns in Otago.	The purpose of this project was to identify if there were any remaining towns that might need to be monitored and possibly gazetted. While some preliminary work has been done on this project, it has not been completed. This is partly due to the delay in			
	Census data release, a key component required for the analysis. Additionally, NIWA analysis that was to be used was also delayed until the next financial year.			
	In November 2013, it was decided to delay this project and have it become part of the new air quality management strategy included in the 2014/15 Draft Annual Plan. By that time, all data will have been released and a fuller analysis will be possible.			

## Objective 2 Advance the use of cleaner air technologies in homes, industries and land uses of Otago, and assist home heating technology changes in air quality zones not meeting the AQNES.

Key Activities	Achievement to 30 June 2014
Activity 1 Co-ordinate the replacement of approved clean heating appliance in 160 homes across Arrowtown, Alexandra, Cromwell, Clyde and Milton.	During the period 84 clean heating appliances were installed in Air Zone 1 towns. This is the first year that ORC has operated without the supporting insulation package. Incentive may not be sufficient to encourage remaining home owners to change.

Г

Objective 3 Uphold compliance with air quality regulatory requirements, resource consents and permitted activity rules through education, advisory and enforcement processes.					
Key Activities	Achievement to 30 June 2014				
Activity 1 Process 100% of consent applications, surrenders, transfers, lapsing, cancellations and expiries in accordance with the Council's Consent Procedure Manual and the Resource Management Act 1991.	100% of all applications received were processed in accordance with the Council's Consents Procedure Manual and the Resource Management Act 1991.				
Activity 2 Investigate and undertake enforcement procedures on breaches of resource consents conditions and rules in the Regional Plan: Air.	<ul> <li>15 infringement notices were issued for discharging contaminants to air in breach of the Regional Plan: Air.</li> <li>Three prosecutions were authorised for the following: <ul> <li>Burning prohibited materials; and</li> <li>Burning prohibited materials and burning at a landfill.</li> </ul> </li> <li>(2012/13: 10 infringement notices issued for outdoor burning).</li> </ul>				
Activity 3 Uphold compliance of resource consents and rules in the Regional Plan: Air for Otago by processing all performance monitoring returns, 90% of which will be within one month of receipt.	All performance monitoring returns received (248) were assessed within one month of receipt.				
Activity 4 Investigate and report on breaches about air quality in the Otago region.	674 air quality incidents throughout the region were responded to during the year. The incidents were as follows:Backyard burning90Burning incidents, e.g., rural130Domestic chimney206Dust30Industrial air discharge26Odour180Spray drift12				

Activity 5 Undertake audits of 75% of industrial air discharges.	A total of 46 air discharge consents (23%) out of 199 consents were audited.
Activity 6 Produce over the winter months, monthly Airzone brochures and distribute to Air Zone 1 and Milton residents.	Three Airzone brochures were produced over the winter months and distributed to Airzone 1 and Milton residents.
Activity 7 Begin a review of consents within 2 months of an air quality standard being operational.	No reviews have been required to be undertaken.

Objective 4 Assess, update and advance policy governing air quality controls in Otago, including consent requirements and restrictions.				
Key Activities	Achievement to 30 June 2014			
Activity 1 Notify a proposed plan change for Milton and Lawrence.	Work on a plan change addressing re-zoning Milton and Lawrence is deferred until an Air Strategy direction is agreed.			

#### Estimated and Actual Costs

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Monitoring quality	316	317	1
Clean heat, clean air	259	666	407
Consents, compliance & enforcement	342	305	(37)
Regional Plan Air	36	164	128
Total	953	1,452	499

## Estimated and Actual Revenue

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Clean heat, clean air	121	370	(249)
Consents, compliance & enforcement	171	188	(17)
Total	292	558	(266)

#### Coast

#### What we want to achieve

Level of Service – Protect the coastal marine area.–					
Measure 1 Performance monitoring (self monitoring) returns on consents requiring self-monitoring, to show compliance with consent conditions.					
Target Measure of Success   Actual Measure at 30 June 2014					
Target Weasure of successActual Measure at so Julie 2014100% of performance monitoring returns to show compliance with consent conditions (non compliance only – Note 1).Performance monitoring data processed during the period was as follows:2013/142012/132011/12 					
Measure 2 Audits of consent of all high risk sites to show compliance with consent conditions.					
Target Measure of Success     Actual Measure at 30 June 2014					

90% or more of audits of consent conditions show compliance with consent conditions (non compliance measure is in respect of	20 coastal discharge consents were audited as follows:			
		2013/14	2012/13	2011/12
grade 4 and 5 non compliance only – Note 1).	Audits	20	46	26
	Compliant	18 (90%)	41 (89%)	23 (88%)
	Non compliant	2 (10%)	5 (11%)	3 (12%)

Note 1: -Grade 4 non compliance – minor actual or potential adverse effects.Grade 5 non compliance – significant actual or potential adverse effects.

#### Level of Service – Safe navigation for all users of Otago's harbours.

#### Measure 1

Number of harbour incidents.

Target Measure of Success	Actual Measure at 30 June 2014
No major harbour incidents (collision in the shipping channel).	There were no major harbour incidents during the period.

#### Level of Service – Process resource consent applications for coastal activities in a timely manner.

#### Measure 1

Process applications in compliance with statutory procedures and timeframes set out in the Resource

Target Measure of Success	Actual N	/leasure at 30	June 2014		
Process 100% of applications within the given timeframes.	30 resource consent applications and two variations were received during the period.				
	28 appli follows:	ication decisio	ons and thre	e variations	were given as
	Time	Variations	Non Notified	Limited Notified	Notified
	In time	3	15	0	13
	Exceed	0	0	0	0

#### What we achieved to 30 June 2014

Objective Ensure compliance with Coast Plan regional rules, regulatory and resource consent requirements through consent process, compliance monitoring, enforcement processes and advisory.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Process 100% of consent applications, surrenders, transfers, lapsing, cancellations and expiries in accordance with the Council's Consent Procedures Manual and the Resource Management Act 1991.	All applications were processed according to procedures.	
Activity 2 Uphold compliance of resource consents and rules in the Regional Plan: Coast for Otago, by reviewing all performance monitoring returns, of which 90% will be achieved within one month of receipt.	A total of 147 performance monitoring data were assessed that related to 36 activities. All were processed within one month of receipt.	
<b>Activity 3</b> Inspect 100% of newly built coastal structures.	No inspections were undertaken this reporting period.	
Activity 4 Audit 60% of discharges to the Coastal Marine Area.	10 discharge consents (19%) out of 54 current consents were audited. 8 (80%) were found to be compliant, and 2 (20%) were found to be non compliant. (2012/13.: 46 audits, 88% compliant, 11% non compliant).	

Activity 5	
procedures on breaches of rules, resource	One infringement notice was issued during the period for unlawful occupation of the common marine and coastal area, and one abatement notice was issued to cease the display of advertising signage in the common marine and coastal area.
	(2012/13: No enforcement action required).

Objective Monitor State of the Environment coastal and estuarine water quality, and publicise the results.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Undertake long term monitoring programmes for State of the Environment network (estuarine and coastal quality including contact recreation activities at selected sites).	Contact recreation sampling was undertaken at selected sites during the summer months Council continued to monitor sea level and tides from the Green Island wave recorder as required.	

#### Estimated and Actual Costs

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Monitoring	14	14	0
Consents, compliance & enforcement	94	111	17
Regional Plan Coast	10	0	(10)
Harbours	120	214	94
Total	238	339	101

### Estimated and Actual Revenue

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Consents, compliance & enforcement	17	78	(61)
Total	17	78	(61)

## **Regional Policy Statement**

### What we achieved to 30 June 2014

Objective Assess and update the Regional Policy Statement and advance policy governing the management of the natural and physical resources of the Otago region.		
nievement to 30 June 2014		
egion-wide workshop for Otago territorial authority mayors I councillors, KTKO Ltd and Te Ao Marama Inc. was held in xandra in September 2013. 30 people attended.		
e workshop built on desired outcomes for quality of life, ilience and a good natural environment and the factors that tribute to, or hinder, achieving these outcomes. Topics uded land use change, use of productive land, landscape I tourism, coastal development and hazard management. s work fed into issues and options for consultation.		
ther workshops were held in December 2013 and March 4, prior to consulting on issues and options. The nawhenua working group met in January and June 2014.		
ere are four main areas of jurisdictional overlap between ional and local levels of governance: coast, natural hazards, ste and indigenous biodiversity. Roles and responsibilities be clarified. Common processes are being considered for essing some matters of national importance, including standing natural features and landscapes, whenua tupuna ltural landscapes) and areas of significant indigenous getation and significant habitats of indigenous fauna.		
nsultation on high level issues and options commenced in y 2014. Comments were received from 114 individuals, sinesses and stakeholder groups. There was a level of heral support for the direction that Council has been taking, a number of requests were made for specific outcomes. gulation was identified as an important role for the Council, well as encouragement, protection and enforcement.		
io st es st lt ge st st r s f a s v e		

#### Estimated and Actual Costs

Project	Actual to 28 February \$000s	Estimated to 30 June 2013 \$000s	Variance ( ) = Unfavourable
Regional Policy Stmt	735	498	(237)
Total	735	498	(237)

## **Governance and Community**

#### What we want to achieve

Level of Service – Effective, open and transparent democratic Council processes.		
Measure 1 Completion of statutory public accountability processes		
Target Measure of Success   Actual Measure at 30 June 2014		
Completion of statutory planning and reporting documents (Long Term Plan, Annual Plans and Annual Reports) within statutory requirements.	The Annual Report was completed in September 2013, and the 2014/15 Annual Plan was completed in June, both within the statutory reporting timeframe.	
Measure 2 All Council meetings conducted in compliance with statutory requirements.		
Target Measures of Success	Actual Measure at 30 June 2014	
Public notices given for all meetings of Council and Committees, and agendas for all Council and Committee meetings to be made available on the Council's website prior to the meeting.	Eight Council meetings and 36 committee meetings were held during the period and public notice was given for all. Details were also made available on the Council's website prior to the meetings.	

## What we achieved to 30 June 2014

ement to 30 June 2014 ia releases were distributed during the year about the is of Council.
tion produced included the following: <b><i>ets, Information Sheets &amp; Newsletters:</i></b> In flood information sheets abit control brochure ic algae brochure m landfill and offal pit brochure en issues of the Leader's Brief to issues of Airzone ir issues of Waterlines. <b><i>ce Reports</i></b> In recreational water quality summary reports

<ul> <li>Policy and plan information</li> <li>Resource consent processes</li> <li>Monthly key climatic information.</li> </ul>	<ul> <li>River, Tokomairiro, and Shepherd Creek water quality reports</li> <li>Channel Morphology of the Rees, Kakanui and Kauru rivers.</li> </ul>
	<ul> <li>Presentations to Interest Groups</li> <li>11 schools (Elm Grove, Mt Aspiring College, John McGlashan, Tahuna Intermediate, Macandrew Bay, Arthur Street, Warrington, George St, Otago Boys, Port Chalmers, and Grants Braes schools)</li> <li>Ballance Farm awards</li> <li>Four community meetings on flood hazard in Glenorchy, Kingston, Wanaka and Queenstown</li> <li>Promotion of GoBus student fare trial during Orientation week.</li> <li>93 businesses in Queenstown and 74 in Wanaka were given flood hazard information.</li> </ul>
	Website Information
	<ul> <li>The website is updated on a daily basis.</li> <li>New pages introduced include Proposed Plan Change 4B (Groundwater allocation), surveys for six bus routes under evaluation, Regional Policy Statement review, and Lake Tuakitoto catchment programme.</li> <li>The bus journey planner was implemented.</li> <li>Design changes were made to the homepage to improve presentation.</li> </ul>

Objective 2 Support Kai Tahu ki Otago and other Maori participation in natural resource management.	
Key Activities	Achievement to 30 June 2014
Activity 1 Hold at least two meetings each year with Iwi representatives.	Meetings held with Iwi during the period included six meetings with Te Roopu Taio, two Mana to Mana meetings, one KTKO meeting and one TRoNT meeting.
Activity 2 Provide assistance with the development of a Kai Tahu ki Otago resource inventory.	Kai Tahu ki Otago have advised that they no longer require any assistance from ORC on this matter.

# Objective 3 Contribute funding and/or support for projects that promote the sustainable use of resources in Otago.

Key Activities	Achievement to 30 June 2014
Activity 1 Provide funding assistance for projects undertaken by external parities, including:	<ul> <li>Funding assistance of approximately \$794,000 was provided and included the following:</li> <li>Otago Rescue Helicopter \$350,000</li> </ul>
<ul><li>Otago Rescue Helicopter</li><li>Animal Health Board</li></ul>	<ul> <li>Animal Health Board \$150,000</li> <li>Lower Waitaki River works \$185,000</li> </ul>

• Three graduate research projects.	Graduate research projects \$67,000
	<i>Graduate Research Projects</i> The PhD studentship on growth dynamics and behaviour of braided river deltas was completed in August. Some of the research was incorporated into the assessment of the morphology of the Dart/Rees Rivers.
	The PhD on the effect of land use on nutrient inputs, nutrient cycling and water quality in Lake Wanaka is nearing completion. A draft report detailing the work undertaken was received.
	The PhD looking at landscape management has moved into completion phase. The research has identified landscape management principles and grouped these into substantive, constructive and procedural, and dimensions relating to material, social and symbolic. The thesis is due for completion in January 2015.
Activity 2 Provide technical and funding support for community led investigations of infrastructure requirements for bulk rural water.	Funding of \$175,000 has been provided to the Manuherikia towards feasibility studies for the water management of the catchment.
Activity 3 Assist through a facilitative role, wilding conifer control, by encouraging community groups and landholders to undertake	ORC continued to provide an active advocacy role for the Central Otago Wilding Conifer group. Staff attended meetings to provide advice on wilding control options.
control in a co-ordinated manner.	Mapping the spread of wilding conifer in the Central Otago area on the Kakanui Ranges near Naseby, to assist the group's wilding pine control strategy was completed.
	Advice is also provided to the Queenstown Lakes Wilding conifer group when requested.
	The Chairperson has signed a Trust Deed as an advisory member of the Otago Wilding Tree Trust.
	Staff recently identified Contorta present in Upper Clutha. Those properties have been requested to supply management plans.
	Audits on two properties in the Queenstown area that have management plans, identified a lack of control works and further enforcement action will be taken.

Objective 4 Respond to issues, activities, and queries on matters that require a regional perspective or impact on regional resource management functions.	
Key Activities	Achievement to 30 June 2014
<ul> <li>Activity 1</li> <li>Submit on the following, where they affect Council's responsibilities and functions:</li> <li>National policies and significant</li> </ul>	<ul> <li>Submissions made included the following:</li> <li>Ministry for the Environment re proposed changes to the Exclusive Economic Zone and Continental Shelf Act and Proposed amendments to the National Policy Statement</li> </ul>

Γ

<ul> <li>legislation</li> <li>Regional and district plans and policies, plan changes and consent applications</li> <li>Conservation plans and strategies</li> <li>Codes of practice, standards and guidelines.</li> </ul>	<ul><li>Strategy for Otago;</li><li>Proposed amendments to the National Policy Statement</li></ul>
---	--

## Estimated and Actual Costs

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Democracy	1,569	1,496	(73)
Public information	690	648	(42)
Iwi relationships	124	101	(23)
Financial contributions	1,085	1,008	(77)
Forsyth Barr Stadium	568	555	(13)
Response to Issues	224	187	(37)
Total	4,260	3,995	(265)

## Estimated and Actual Revenue

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Democracy	5	0	5
lwi relationships	16	0	16
Forsyth Barr Stadium	139	0	139
Financial contributions	150	127	23
Total	310	127	183

## **Flood Protection & Control Works**

#### What we want to achieve

Level of Service - Reduce the flood risk to people and property by maintaining flood protection works to agreed standards.

#### Measure 1

- New flood mitigation works are designed and built to agreed performance standards.
- Existing flood mitigation works perform to agreed standards.
- Existing flood mitigation works are monitored and maintained to agreed standards.

Target Measure of Success – Leith Flood Protection Scheme	Actual Measure at 30 June 2014	
By 2018/19, increase capacity to 171 m <sup>3</sup> /s (measured at St David Street footbridge). Represents 1 in 100 year flood with freeboard.	Progress during the period included completing construction of the Leith Street to Forth Street section, with the exception of minor flood damage that occurred in April 2014, the partial completion of the next stage of work (St David Street to Union Street) and the investigation, design and documentation preparation work associated with the third stage through / adjacent to the University campus.	
Target Measure of Success – Alexandra Flood Protection Scheme	Actual Measure at 30 June 2014	
Convey all floods with no failure of any scheme floodbank.	No failure of the Alexandra floodbank network occurred during the period.	
Contain all floods up to 142.75 metres (above mean sea level) at Alexandra Bridge with 0.5m freeboard, corresponding with a flood flow of approximately 4,350 m <sup>3</sup> /s and being equivalent to the greatest recorded flood (in 1878), but with the Hawea control gates closed.	The highest level reached by the Clutha River over the period was 134.9m above mean sea level, recorded on 25 October 2013.	
Target Measure of Success – Lower Clutha Flood & Drainage Scheme	Actual Measure at 30 June 2014	
Convey all floods with no failure of any scheme floodbank.	No failure of any scheme floodbank occurred. Overtopping of a couple of sections of floodbank close to the Matau mouth occurred on 20 and 21 April (attributable to storm related partial blockage of the Matau mouth) but no failure occurred.	
No flooding of Barnego in all floods up to 2,850 m <sup>3</sup> /s, Kaitangata, Inch Clutha and Paretai up to 4,000 m <sup>3</sup> /s and Balclutha up to 5,400 m <sup>3</sup> /s (all flows measured at Balclutha) based on past observed floods.	No flooding of Barnego, Kaitangata, Inch Clutha, Paretai or Balclutha occurred. Flow in the Clutha River (as measured at Balclutha) peaked at 1,549 cubic metres a second on 8 July 2013; river levels at Balclutha peaked at 6.66m above mean sea level, compared with the adjacent Balclutha floodbank crest height of 10.6m above mean sea level.	

Target Measure of Success – Lower Taieri Flood Protection Scheme	Actual Measure at 30 June 2014
Convey all floods with no failure of any scheme floodbank.	No failures of the Lower Taieri floodbank network occurred during the period.
No flooding of the East Taieri Upper Ponding area from Taieri River flows up to 800 m <sup>3</sup> /s, or Silver Stream flows up to 160 m <sup>3</sup> /s.	The Upper Pond remained partly inundated over the first ten days of the year primarily due to spill from the Taieri River during the June 2013 flood event. No Taieri River spill to the Upper Pond occurred. Minor spill from the Silver Stream occurred on 18 April 2014.
	The highest recorded flow in the Taieri River (as measured at Outram) occurred on 19 April 2014, with flow peaking at 378 cubic metres per second. The highest recorded flow in the Silver Stream (as measured at the Gordon Road bridge) also occurred on 18 April 2014, with flow peaking at 128 cubic metres per second.
	Taieri River cross-sections were re-surveyed to provide confirmation that following the June 2013 flood event the Scheme can still meet design standards.
No flooding of the East Taieri Lower Ponding area from Taieri River flows up to 2,500 m <sup>3</sup> /s or Silver Stream flows up to 260 m <sup>3</sup> /s.	The Upper Pond remained partly inundated over the first fifteen days of the year primarily due to spill from the Owhiro Stream in June 2013. No Taieri River or Silver Stream discharge to the Lower Pond occurred over the period. See above for highest recorded flow during the period.
No flooding of West Taieri from Taieri River flows up to 2,500 m <sup>3</sup> /s.	No flooding of the West Taieri area from the Taieri River occurred during the year. The highest recorded flow in the Taieri River (as measured at Outram) occurred on 19 April 2014, with flow peaking at 378 cubic metres per second.
No flooding of Mosgiel from Silver Stream flows up to 260 m <sup>3</sup> /s.	No flooding of Mosgiel from the Silver Stream occurred; the highest recorded flow in the Silver Stream (as measured at the Gordon Road bridge) occurred on 18 April 2014, with flow peaking at 128 cubic metres per second.

# Level of Service – Improve the productive capability of land by maintaining land drainage works to agreed standards.

#### Measure 1

- Existing land drainage works perform to agreed standards.
- Existing land drainage works are monitored and maintained to agreed standards.

Target Measure of Success – Lower Clutha Flood & Drainage Scheme	Actual Measure at 30 June 2014
Provide drainage modulus of 7.5mm per day pumped drainage capacity for Matau District, 9mm per day for Inch Clutha and	The moduli were generally provided over the period; some planned maintenance work took place to both the Kaitangata and Paretai Pump Stations. The Paretai maintenance had no effect on levels of service but the Kaitangata maintenance had

10mm per day for Paretai District.	<ul> <li>a minimal impact on levels of service in April. Daily rainfall (as measured at Balclutha) exceed:</li> <li>7.5mm per day on 29 occasions over the period,</li> <li>9mm per day on 24 occasions over the period,</li> <li>10mm per day on 19 occasions over the period.</li> </ul>
Target Measure of Success – West Taieri Drainage Scheme	Actual Measure at 30 June 2014
Provide drainage modulus of 10mm per day pumped drainage capacity.	The modulus of 10mm per day was largely provided over the period; the Henley station had outages totalling three days while Waipori and Lake Ascog stations had no outages. The new F pumps were operable but not required over the period. Daily rainfall (as measured at Riccarton Road) exceeded 10mm per day on 26 occasions over the period, with only three exceedances during the first five months.
Target Measure of Success – East Taieri Drainage Scheme	Actual Measure at 30 June 2014
Provide drainage modulus of 8mm per day pumped drainage capacity for East Taieri Upper Ponding area and 18mm per day for East Taieri Lower Ponding area.	The moduli of 8mm and 18mm for the Upper and Lower Ponds were provided over the period. No station outages occurred. Daily rainfall (as measured at Riccarton Road) exceeded 8mm per day on 29 occasions, mostly from December 2013 to June 2014. A daily total of 18mm was exceeded on five occasions over the period, once in December, twice in February and twice in April.

## What we achieved to 30 June 2014

#### Objective 1 Leith Flood Protection Scheme To manage the risk of Dunedin city between Malvern Park and Otago Harbour being flooded by the Water of Leith.

Key Activities	Achievement to 30 June 2014
Activity 1 Undertake flood hazard mitigation work for the Water of Leith between St David Street and Union Street.	Work completed included investigation and design work, tender processes, commencement/ completion of enabling works (modifications/ relocation of in-ground services impacted by the works), commencement of the main construction contract and ongoing liaison with University of Otago staff. The main construction is 50 to 60% complete. The works between the St David and Union Street bridges were not completed because delays both in starting construction and during construction, due in part to the complexity of the services encountered, but mostly due to the delays in receiving permission from the University to commence work, and changing requirements as the works have proceeded.

Activity 2 Inspect, operate, and maintain scheme	The Scheme asset management plan is being developed, and
assets in accordance with the scheme Asset Management Plan and Operations Manual.	the Operations Manual is still to be developed. The boulder traps were routinely inspected but were free of debris and required no maintenance. Significant amounts of rubbish and litter dumped in the Leith were removed.

Objective 2 Alexandra Flood Protection Scheme To manage the risk of the Clutha River / Matu-Au flooding Alexandra.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Operate and maintain the scheme assets.	Scheme assets were inspected and maintained in accordance with the Operations and Maintenance Manual during the year.	

Objective 3 Lower Clutha Flood & Drainage Scheme
Manage flood risk by constructing, renewing, replacing, altering, operating and maintaining
Clutha Flood Protection Scheme flood protection and control works.

ſ

Key Activities	Achievement to 30 June 2014	
Activity 1 Report twice yearly to the Scheme Liaison Committee on scheme performance, activities and work programme.	A meeting of the Lower Clutha Scheme Liaison Committee was held in February. The Committee considered a range of technical and financial reports relating to scheme activity.	
Activity 2 Inspect, operate and maintain scheme assets in accordance with the scheme Asset Management Plan and Operations Manual.	with the Operations and Maintenance manual.	
	Tide and wind conditions during Easter lead to a sandbar forming at the mouth of the Matau branch of the Clutha river. Staff and volunteers worked together sandbagging areas while contractors worked on opening the mouth to release the build up of water. Level sensors are to be installed at Rutherfords to trigger an alert if water starts to back up, indicating that the mouth may be starting to block. The affected farmers can have some assurance that contingency plans are in place and contractors on standby prior to the mouth closing.	
Activity 3 Investigate and design improvements to the Koau right floodbank at Factory Road that reduce the risk of floodbank failure at that location.	Site survey and affected party consultation took place over the period.	

Objective 4 Lower Clutha Flood & Drainage Scheme Manage land drainage by constructing, renewing, replacing, altering, operating and maintaining Clutha Flood Protection Scheme land drainage works.		
Key Performance Targets	Achievement to 30 June 2014	
Activity 1 Report twice yearly to the Scheme Liaison Committee on scheme performance, activities and planned work programmes.	A meeting of the Lower Clutha Scheme Liaison Committee was held in February. The Committee considered a range of technical and funding reports relating to scheme activity.	
Activity 2 Inspect, operate and maintain scheme assets in accordance with the scheme Asset Management Plan and Operations Manual.	Scheme assets were inspected and maintained during this reporting period.	
	All scheduled drains in the Paretai and Inch Clutha areas were sprayed.	
	The Alexandra pump was sent to Kaitangata and installed to cover the pump while it was being serviced.	
	Repairs were carried out on the Puerua outfall culverts. This included repairing the culvert pipes and reinstating the rockwork with a concrete finish.	
<b>Activity 3</b> Refurbish the Smith Road Pump Station so as to improve the reliability of the station.	Preliminary scoping and investigation work took place over the period.	
Activity 4 Widen the screen cleaning platform at the Paretai Pump Station to improve the effectiveness and safety of the station.	During the period, design work was completed, and tenders were invited and closed during the year.	

#### Objective 5 Lower Taieri Flood Protection Scheme Manage flood risk by constructing, renewing, replacing, altering, operating and maintaining Lower Taieri Flood Protection Scheme flood protection and control works.

Key Activities	Achievement to 30 June 2014	
Activity 1 Reconstruct a 400m section of the Contour Channel floodbank between Otokia Road and bridge 11 (stage 5 of the programmed upgrade).	Resource Consent for this and the subsequent five stages was obtained from the Dunedin City Council and Otago Regional Councils over the period. No further progress was made.	
Activity 2 Commence obtaining approvals for constructing new upper/lower pond link spillways or the alternative option of relocating the floodbank(s) through the chute of the Taieri River.	No progress was made toward achieving this target over the period.	

Activity 3 Conduct an information meeting for landholders within the Taieri flood protection scheme area to explain the function and operation of the scheme.	Staff met with Henley residents on 24 October 2013 to discuss matters including an explanation of the function and operation of the scheme. A wider information meeting was held in April 2014.
Activity 4 Inspect, operate and maintain scheme assets in accordance with the scheme Asset Management Plan and Operations Manual.	Scheme assets were inspected and maintained in accordance with the Operations and Maintenance manual. Contractors were engaged to undertake more robust repairs to a damaged section of floodbank on the western shore of Lake Waihola during this reporting period. This involved excavating material locally and using it to plug holes in a number of sections along the floodbank. A longer term options paper is being prepared for this floodbank. Contour channel bridge abutments were cleared of debris as necessary. Routine maintenance tasks such as night shooting for rabbits on the floodbanks, was undertaken during this reporting period.

Objective 6 West Taieri Drainage Scheme Manage land drainage for West Taieri by constructing, renewing, replacing, altering, operating and maintaining West Taieri Drainage Scheme land drainage works.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Report twice yearly to the Scheme Liaison Committee on scheme performance, activities and work programme.	A meeting of the West Taieri Liaison Committee took place in February. The meeting considered a variety of technical and financial reports related to scheme operations.	
Activity 2		

Г

Activity 2 Inspect, operate and maintain scheme assets in accordance with the scheme Asset Management Plan and Operations Manual.	Scheme assets were inspected and maintained in accordance with the Operations and Maintenance manual. Both the mechanical drain cleaning programme and drain spray programme were undertaken during the period. Approximately 140 km of drain inverts was sprayed to ensure optimum hydrological function. Aerial spraying of willows on the Waipori delta was completed and willow trimming at the Chute was undertaken during the year.
Activity 3 Replace Bridge Number 3 on the Main Drain.	No progress has been made this reporting period.

#### Objective 7 East Taieri Drainage Scheme

Manage land drainage for East Taieri by constructing, renewing, replacing, altering, operating and maintaining East Taieri Drainage Scheme land drainage works.

Key Activities	Achievement to 30 June 2014	
Activity 1 Inspect, operate and maintain scheme assets in accordance with the scheme Asset Management Plan and Operations Manual.	Scheme assets were inspected and maintained in accordance with the Operations and Maintenance manual. The mechanical drain cleaning and drain invert spray programmes were completed and approximately 127km of drain invert was sprayed. All outfall structures and flap gates were inspected and maintained as necessary.	

Objective 8 Tokomairiro Drainage Scheme Manage land drainage for the Tokomairiro flood plain by constructing, renewing, replacing, altering, operating and maintaining Tokomairiro Drainage Scheme land drainage works.		
Key Activities Achievement to 30 June 2014		
Activity 1 Inspect and maintain the Tokomairiro Drainage Scheme land drainage works.	Scheme assets were inspected and maintained in accordance with the Operations and maintenance manual. The drain spray programme and the pest plant programme were both completed during the year.	
	Scheme Levels of Service are currently being developed as part of the Asset Management Planning work currently being undertaken.	

#### Estimated and Actual Costs

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Alexandra flood protection	117	90	(27)
Leith flood protection	4,751	5,868	1,117
Lower Clutha flood & drainage	1,076	1,309	233
Lower Taieri flood protection	485	567	82
West Taieri drainage	571	384	(187)
East Taieri drainage	298	324	26
Tokomairiro drainage	43	71	28
Total	7,341	8,613	1,272

## Estimated and Actual Revenue

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Alexandra flood protection	93	89	4
Leith flood protection	104	75	29
Lower Clutha flood & drainage	134	124	10
Lower Taieri flood protection	1	1	0
West Taieri drainage	(89)	56	(145)
East Taieri drainage	4	3	1
Total	247	348	(101)

# **Rivers and Waterway Management**

## What we want to achieve

Level of Service – Ensure waters can flow without undue obstruction.	
Measure 1 Number of inspections of rivers.	
Target Measures of Success	Actual Measure at 30 June 2014
Complete annual inspections on all rivers specified in the annual plan, and undertake maintenance work on those rivers as necessary.	Routine annual inspections were carried out on rivers during the period. Maintenance identified during these inspections was actioned accordingly, predominantly debris dams and in channel blockages.
Undertake inspections and maintenance work on the rivers specified in the annual plan, as necessary following a flood event or on receipt of a complaint.	Inspections were carried out after all flood events during the year. A number of maintenance requirements were identified and actioned accordingly. These included removal of trees in the waterway, debris dam removal, boulder trap clearing where relevant and some in-stream works to put rivers back into their original channels after the high flows. A number of complaints about rivers were responded to during the year. Most were about debris dams or willow growth / pest plants. Many complaints responded to revolved around river bank erosion or gravel aggradation. In these
	instances, staff provided education and advice on the options available to landowners wishing to deal with such matters.

#### Measure 2

Difference between actual and target profiles for surface of Shotover River delta.

Target Measures of Success	Actual Measure at 30 June 2014
Surface of Shotover River delta is consistent with the target profile.	A full cross-section survey of the Shotover delta was undertaken in April. The difference between the actual and target profiles within the Stage 1 area has grown (on average) by approximately 300m since the last survey in May 2012, placing the actual profile further above the target profile. Conversely the left bank near the Kawarau River confluence has retreated by approximately 120m (the fairway width has widened due to bank erosion).

Objective 1 To manage the risk to Lake Wakatipu communities of flooding associated with the Shotover River Delta and its interaction with the Kawarau River.	
Key Activities	Achievement to 30 June 2014
<b>Activity 1</b> Manage the target surface profile and vegetation cover on the Shotover River Delta through targeted gravel extraction.	Council staff directed extraction by three consent holders over the period. Total volume extracted over the period is estimated to be 40,000 cubic metres.
Activity 2 Inspect and maintain the Shotover Delta training line and Queenstown Lakes District Council's wastewater disposal field revetment.	junction that occurred early in the period) took place during the year.
	Repairs to the training line (placement of a bulk fill weighting blanket to address foundation seepage) were undertaken.

Objective 2 To inform and support decision making on the need, benefits and effects of activities that
serve a river management purpose or might affect habitat protection, flood protection,
structure disturbance and the protection of property.

Key Activities	Achievement to 30 June 2014
Activity 1 Undertake a repeat survey of the Shag and Waianakarua Rivers and report on trends and changes in river morphology.	The repeat surveys of the Shag and Waianakarua rivers have been completed. Reports were completed, describing recent and long term changes in channel morphology.
Activity 2 Prepare and consult communities on river form.	The findings of a report describing changes in the channel morphology of the Kakanui and Kauru rivers were presented at a public meeting in September in Maheno, which was attended by approximately 30 people.
	A separate meeting was held with asset management staff from Waitaki District Council to present the findings of the same report.
	A working group is being established to help create a river management plan for this catchment.

Objective 3	To evaluate erosion protection works required from the inspection and monitoring	
	undertaken jointly with Contact Energy Ltd, as required under the conditions of resource	
consents for the Clyde and Roxburgh dams and the Hawea River control structure.		

Key Activities	Achievement to 30 June 2014
Activity 1 With Contact Energy Ltd, evaluate erosion protection works required from an inspection undertaken jointly with Contact Energy Ltd, as required under the conditions of resource consents, for the Clyde and Roxburgh dams and the Hawea River control structure.	A joint inspection by Council and Contact Energy Limited staff of the Hawea River and Clutha River from Clyde to Alexandra took place during the period. The inspection concluded that no erosion protection works are required.

Project	Actual to 30 June 2014	Estimated to 30 June 2014	Variance ()=
	\$000s	\$000s	Unfavourable
Clutha SRD	212	178	(34)
Central Otago SRD	161	172	11
Dunedin SRD	194	187	(7)
Wakatipu SRD	101	175	74
Wanaka SRD	101	116	15
Waitaki SRD	136	106	(30)
Shotover Delta SRD	48	72	24
River Monitoring	78	82	4
Total	1,031	1,088	57

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
River Monitoring	31	53	(22)
Total	31	53	(22)

# Biosecurity

# What we want to achieve

Level of Service – Adequate control of pest animals and pest plants.		
Measure 1 Level of rabbit populations in rabbit prone areas.		
Target Measure of Success	Actual Measure at 30 June 2014	
Achieve MAL 3 rabbit population or have approved property management plans in operation, to comply with the Regional Pest Management Strategy by June 2014.	213 properties, covering approximately 18,380 ha have been inspected for compliance.	
	A number of properties have various levels of non compliance resulting in approximately 185 rabbit control programmes being requested from landowners. The high number reflects the number of smaller properties within the area under inspection.	
	A number of properties in Otago are now achieving Modified McLean Scale (MMS) MAL3, or less due to implementation of their Rabbit Control Programme (RCP). Some properties are still implementing multi-year programmes in a rotational manner to allow farming activities to be incorporated into their rabbit control activities.	
	Where work is being carried out but the entire property is not at or below MAL3, requests have been made for amended control plans to ensure that landholders continue to implement a programme in a timely and effective manner.	
<ul> <li>Measure 2</li> <li>Levels of pest plants found at known sites for the following:</li> <li>Nassella Tussock</li> <li>Bomarea</li> <li>Boneseed</li> <li>Spartina</li> <li>Gorse and Broom</li> <li>Old Man's Beard</li> <li>Lagarosiphon</li> </ul>		
Target Measure of Success	Actual Measure at 30 June 2014	
<ul> <li>80% of properties inspected show a decrease in the levels of pest plant infestations found, through control works undertaken by the land occupier.</li> <li>Nassella Tussock</li> <li>Bomarea</li> <li>Boneseed</li> <li>Spartina</li> </ul>	Work undertaken during the year included the following: <b>Nassella Tussock</b> – inspections have been carried out in the Cardrona Valley and Roxburgh areas. Indications are that this programme needs to be continued to ensure gains made to date are maintained, and that levels of infestation are reduced over time. Other sites monitored indicate that levels of infestation are being maintained at or below previous levels. <b>Bomarea</b> – all known sites have been inspected. Of the 338	
<ul><li>Gorse and Broom</li><li>Old Man's Beard</li></ul>	inspections undertaken, 87 were re-inspected due to non compliance. On re-inspection, 70% were found to be	

Lagarosiphon	compliance, 29% were graded as minor non compliant, and one property was still found to be major non compliant. Enforcement action is being considered.
	<b>Boneseed</b> – inspections around Dunedin have been completed, with 22 properties inspected. 60% of properties were found to be compliant, 36% with minor non compliance and one found with major non compliance. This location will require long term monitoring and control.
	<b>Spartina</b> – all species in the Karitane, Pleasant River and Waikouaiti River estuarine areas in East Otago were monitored and controlled as part of the annual control programme. There was a marked decrease in the level of plant found compared to the previous year.
	<b>Gorse &amp; Broom</b> – 53 landowners in the Earnscleugh block of the Gorse and Broom Free Area were visited. Four properties had no gorse or broom, 46 had minor infestations and are being controlled, and three had an increase, but control is being undertaken.
	<b>Old Man's Beard</b> – inspections concentrated on areas of known previous non compliance. 125 property inspections found 37 properties to be compliant, 68 had minor non compliance and 20 had major non compliance. 52 non compliant properties were revisited, and all were found to be compliant. Further re-inspections are to take place.
	<b>Lagarosiphon</b> – monitoring has been completed for the year. One third of Lake Wanaka was inspected, and all areas showed good compliance. There is some concern about an infestation in the Kawarau River. A clump of lagarosiphon was removed from Lake Wakatipu, believed to have come from the Kawarau River. Follow up work will be undertaken.

Objective 1 Implement Pest Management Strategy through education, advisory and inspections.	
Key Activities	Achievement to 30 June 2014
Activity 1 Inspect and report on rabbit and rook populations in Otago, and report on areas of risk including MAL being exceeded. Where possible, Council will eradicate identified rooks and rookeries through recognised control methods.	A MAL inspection program has been undertaken, ensuring at risk or "prone" areas are receiving priority. Where appropriate, Council has actively promoted landholder's collective action to ensure correct implementation of Rule 5.2.4(e) which requires control programs to be compatible or jointly undertaken where lack of a barrier exists. This has required notices of direction to be issued in a small number of cases.
	The quality of rabbit control programs being submitted has improved through the implementation of new procedures to supply landholder with better information of Council's requirements.

	-	sts and shooting ent population of		-
Activity 2 Respond to complaints about boundary control of pest plants and animals within 10 working days, and where necessary, require control plans to be developed within 30 working days of response or as defined by Council policies.	Complaints rece as follows: Pest Plants Rabbits <b>Total</b>	eived were respo <b>2013/14</b> 69 13 <b>82</b>	onded within 10 <b>2012/13</b> 74 9 <b>83</b>	0 working days <b>2011/12</b> 84 6 <b>90</b>
Activity 3 Promote public awareness through field days and publications, encouraging landholders/community groups to identify the presence of animal and pest plants, and to advocate fresh water pest control.	areas, at Lake H flat. All four fie informed of bes effective primar	were held during Hayes (2 field da Id days were wel st practice rabbing y control option orking together	iys), Queensbe Il attended. Pa t controls, sele , secondary cor	rry and Hawea articipants were acting the most ntrol, follow up
Activity 4 Provide to Council an annual compliance report for the previous year by 31 October on the effectiveness of implementing the Regional Pest Management Strategy.		on the effective lan have been rting.	•	-
<b>Activity 5</b> Continue to undertake rabbit control trials in association with Landcare Research.	months. Due to some a fourth year of tr	ol trials were car nomalies in the rial work will be Results to date a	effectiveness carried out to c	of the trials, a develop a more

<b>Objective 2</b>	Establish environmentally acceptable and cost effective biological control agents for pests in
	Otago.

Key Activities	Achievement to 30 June 2014
Activity 1 Monitor and report on the establishment, spread and persistence of the biological control agents in Otago.	One sample of 12 cadavers was sent to Landcare Research. All showed positive for RHD, and this is currently being type assessed. The sample was from areas of Hawea to Alexandra.
Activity 2 Undertake RHD biannual sampling to determine the effectiveness of RHD as a biocontrol tool.	As RhD bi-annual sampling was carried out in the 2012/13 financial year, no RhD sampling was required in the 2013/14 year.

# Objective 3 Undertake enforcement actions on landowners for the control of plant and animal pests to comply with the Pest Management Strategy.

Key Activities	Achievement to 30 June 2014
Activity 1	Two notices of direction were issued on land occupiers during
Undertake enforcement action where there	the year. Both notices required rabbits on the properties to be
is a failure by land occupiers to meet their	destroyed.
obligations under the Regional Pest	(2012/13: 2 prosecutions were authorised; 2011/12: 23 notices
Management Strategy.	of direction issued)

Г

Objective 4 Carry out rabbit control work that is cost effective and beneficial for Otago land occupiers, and undertake AHB work that is cost effective and provides a commercial return to the Council.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Contract work is carried out in accordance with current level technical and safety requirements.	A total of 344 rabbit control contracts (ranging from very small ground jobs to large aerial jobs) were completed during the year. All were completed successfully and to best practice, legal and safety standards.	
	(2012/13: 110 contracts completed; 2011/12: 26 contracts completed).	
	15 TBfree NZ contracts were carried out in accordance with current level technical and safety requirements.	
	(2012/13: 13 AHB contracts completed; 2011/12: 9 AHB contracts completed).	
	One private possum contract has commenced.	
	(2012/13: 1 possum contract completed; 2011/12: Nil).	
Activity 2 Commercial returns to be achieved on contracts entered into.	In total, positive returns were achieved on contracts entered into.	

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Strategy implementation	790	699	(91)
Biological control of pests	11	61	50
Pest Mgmt Plan Review	23	0	(23)
<b>Regional Services contracts</b>	1,193	1,322	129
Total	2,017	2,082	65

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Strategy implementation	7	80	(73)
<b>Regional Services contracts</b>	1,278	1,400	(122)
Total	1,285	1,480	(195)

# **Environmental Incident Response**

## What we want to achieve

Level of Service – Council will be ready to respond to all environmental incidents including oil spills, and ensure restoration as required.			g oil spills, and	
<b>Measure 1</b> Respond to incidents in a timely manner.				
Target Measure of Success	Actual Measu	re at 30 June 2014		
Respond to incidents throughout the region within 0.5 hours of receipt of notice.	Council responded to all incidents within 0.5 hours of receipt during the year as follows:			
		2013/14	2012/13	2011/12
	Air	674	618	540
	Coast	64	37	44
	Land	96	62	65
	Water	414	403	309
	Other	157	136	115
	Total	1,405	1,256	1,073
Respond to reported marine oil spills in accordance with the Otago Marine Oil Spill Contingency Plan, and where possible, within 1.5 hours of receiving the report.	a full maritim	riod 20 marine oil e response was n mmediately.	-	•

Objective 1 Respond to environmental incidents, including oil spills in the Otago area.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Hold one desk top and one field exercise per year for marine oil and pollution, and one equipment training day involving the use of pollution equipment, vehicles and people.	One marine oil spill equipment exercise, and one marine oil spill exercise, involving the deployment of gear were held in March 2014. No environmental pollution equipment or field exercises were held during the year.	
Activity 2 Operate a 24 hour incidents hotline throughout Otago.	Council continued to operate a 24 hour pollution hotline response system.	

Activity 3				
Undertake enforcement actions where	Infringement not	tices were issu	ed for the fol	lowing offences
effects on the environment have occurred.	during the year:			0
		2013/14	2012/13	2011/12
	Discharges:			
	- to air	15	10	9
	- to land	2	2	3
	Disturbing:			
	- bed of river	2	4	2
	Other	4	1	0
	Total	23	17	14
	Prosecutions wer	e initiated for t	he following of	fences:
		2013/14	2012/13	2011/12
	Discharges:			
	- to air	3	0	0
	- to land	2	3	5
	Disturbing:			
	- bed of river	2	0	4
	Other	0	1	0
	Total	7	4	9
	Three abatemer advertising signa and an earth emb	ge in the com	mon marine a	
	(2012/13: 2 abat	ement notices;	2011/12: 1 aba	tement notice).
	One enforcemen contaminants to search warrant w material with res	land where i vas executed, a	t may enter with the second seco	water, and one aining evidential
	(2012/13 and 201	11/12: Nil).		

Objective	2 Reduce risks to the environment by investigating and managing priority contaminated sites in
	Otago.

Key Activities	Achievement to 30 June 2014
Activity 1 Register the findings of a contaminated site investigation with the appropriate TLA for inclusion on the Land Information Memoranda (LIM) within one month of completing the investigation.	During the year, five site investigations were received. Assessments were completed, and results provided to the site owner, and relevant TLA's, all within one month of receiving the investigations. Five underground petroleum storage system removal reports and three groundwater investigations by oil industry companies were received. Assessments were completed and results provided to the relevant parties for all but one case within one month of receiving the investigations. In one case, dialogue with the oil company and TLA continues re the adequacy of the investigation and remediation.

Activity 2 Respond to information about potentially contaminated sites within 15 working days of receiving the information and undertake initial hazard assessment within 30 working days.	No information about potentially contaminated sites was received during the year.
Activity 3 Undertake investigations on selected high risk industrial sites to determine if further detailed investigations into contamination issues by the landowner are required.	No high risk industrial sites were selected for investigation during the year.
Activity 4 All new high ranking contaminated sites to implement management strategies for restoration within one year.	No new high ranking contaminated sites were identified during the reporting period. Physical remediation was completed at a former timber treatment site in Oamaru, and this site is now suitable for recreational land use. Remedial works were completed at a closed landfill in the
	Clutha district. Remediation options for a property in Dunedin have been identified, and initial discussions held regarding remedial options for a former gasworks site.

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Environmental incidents	627	545	(82)
Contaminated sites	143	86	(57)
Total	770	631	(139)

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Environmental incidents	50	80	(30)
Contaminated sites	71	25	46
Total	121	105	16

# Natural Hazards

#### What we want to achieve

Level of Service – Provision of adequate and timely information, policy and regulatory framework on natural hazards to enable communities to make informed decisions about the risks associated with those hazards. Measure 1 Information to be available on Natural Hazards in Otago. **Target Measure of Success** Actual Measure at 30 June 2014 Provide natural hazards information to the Presentations to real estate and law firms, consultants, and public via the web based Otago Natural others continued during the year, to help increase awareness Hazards Database. of natural hazards in Otago, and how information can be accessed through the database. The database is used regularly as a tool by ORC to assist in interactions with the public. Between July 2013 and June 2014, the average number of users accessing the database per week was 36, with approximately 58 separate visits per week.

#### Level of Service – Provision of accurate and timely flood warnings.

#### Measure 1

Warnings of flood events in a timely manner to potentially affected parties.

Target Measure of Success		Actual Measure at 30 June 2014
		Three significant flood events were responded to with information passed to the public, media and TLA's.

Objective 1 Gather and publish information on natural hazards to enable communities to make informed decisions about the risks associated with those hazards.		
Key Activities     Achievement to 30 June 2014		
Activity 1 Collate and report on currently available information on seismic risks in Dunedin, Wanaka, and the Alexandra and Wakatipu Basins.	A series of information gathering sessions were held with geological hazards staff at Environment Canterbury and Greater Wellington Regional Council, GNS Science, and consultants and territorial authorities, in both Canterbury and Otago. The sessions helped determine what sort of information should be collated, and how this could best be utilised by territorial authorities and other agencies.	

Activity 2 Assist Otago's territorial authorities to integrate natural hazards information into District Plans.	A joint ORC / DCC project to incorporate natural hazards provisions into the Dunedin City District Plan made considerable progress. A series of technical reports were prepared, assessing flood, liquefaction, landslide and coastal hazards. This information will help inform a land-use planning response which aims to reduce the vulnerability of communities to natural hazards. The joint ORC/DCC staff working group led a series of 12 community consultation sessions, commencing in June 2014. These sessions summarised ORC's assessment of hazards, the DCC's proposed planning response, and explained the links between these two components. More than 400 people attended these sessions, and a significant amount of feedback and additional information has been received. Discussions were also held with planning staff from the Central Otago, Waitaki and Clutha district council's regarding work which has been completed, or is underway to assess natural hazards, and how this information could be incorporated into their District Plan review processes.	
Activity 3 Improve the availability of natural hazards information through the Otago Natural Hazards Database, and integrate lifelines and hazards related resource consents information into the database.	<ul> <li>Changes to the format of the database home page were made to:</li> <li>Provide easier access to the database,</li> <li>Explain how to overcome difficulties with its functionality;</li> <li>Explain important information that users should be aware of; and</li> <li>Link to the series of reports completed as part of a project to incorporate natural hazards provisions into the Dunedin City District Plan.</li> <li>Initial work was undertaken to improve the functionality of the database, and enable additional information (including lifelines and hazards related resource consent information) to be provided.</li> </ul>	

Objective 2 Provide policy and regulatory methods to address impacts of climate-induced hazards on community health, safety and wellbeing.		
Key Activities     Achievement to 30 June 2014		
Activity 1 Prepare a consultation draft of objectives, policies and regional rules to address natural hazards that will be used to assist the Regional Policy Statement.	This project is now being undertaken as part of the review of the Regional Policy Statement.	

Objective 3 Advocate good decision making on Resource Management Act approvals and plan changes where natural hazards are a relevant consideration.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Submit on publicly notified Resource Management Act approvals and plan changes where natural hazards are a relevant consideration.	Submissions were made on nine publicly notified RMA approvals in relation to a range of natural hazards including land instability / rockfall, seismic hazard, alluvial fan hazard, flooding, and coastal hazards (storm surge and tsunami). A submission was made on Local Government New Zealand's Managing Natural Hazards in New Zealand discussion document, advocating for good leadership using a principles-based approach to risk management, making better use of information already available and collaborating with communities to achieve safe and affordable solutions to these risks.	

# Objective 4 Ensure integrity of Council owned flood mitigation works is not compromised by activities on adjacent land.

Key Activities	Achievement to 30 June 2014
Activity 1 Make decisions on applications for approvals under the Otago Flood Protection Management Bylaw within 15 working days of receiving the application.	14 applications for Bylaw Approval were received during the period. Decisions on six were processed within 15 working days, six were not processed within 15 working days and two applications were withdrawn.

п

Objective 5 Mitigate the effects of flooding through the provision of warnings and information on actual and expected rainfall and river levels.		
Key Activities	Achievement to 30 June 2014	
<b>Activity 1</b> Operate a 24 hour Flood Management and Response System throughout the year.	Council continued to operate a 24 hour flood management and response system during the period.	
Activity 2 Develop and implement flood forecasting models, utilising appropriate software packages.	Work is ongoing with continual maintenance and improvement of flood models.	

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Natural hazards information	649	754	105
Regional Plan Hazards	0	171	171
Response to issues	18	13	(5)
Flood event management	472	457	(15)
Total	1,139	1,395	256

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Natural hazards information	1	6	(5)
Total	1	6	(5)

# **Emergency Management**

# What we want to achieve

Level of Service – Be ready to respond to civil defence emergencies and assist with recovery after such events.		
Measures Timeliness in response to a civil defence event / emergency.		
Target Measure of Success	Actual Measure at 30 June 2014	
The Group Emergency Co-ordination Centre (GECC) can be fully operational within one hour of activation.	The GECC was in a state of readiness to be activated at all times.	
Respond immediately upon notification of a civil defence event / emergency.	There were no notifications or test notifications during the period.	

Objective 1 Act as the administering authority for the Otago CDEM Group and the Co-ordinating Executive Group (CEG)	
Key Activities	Achievement to 30 June 2014
Activity 1 Provide CDEM Group Office services in accordance with the memorandum of understanding between the Otago Regional Council and the CEG.	Administration support in arranging meetings, agendas and workshop sessions was provided.
Activity 2 Maintain the Otago CDEM Group website containing relevant and up to date information about civil defence and emergency management in the Otago CDEM Group area.	information. CDEM meeting and training opportunities were

Objective 2 Ensu	e continuous operational capability of the Group Emergency Co-ordination Centre
(GEC	) through the provision of appropriate resources and regular testing of readiness.

Key Activities	Achievement to 30 June 2014
<b>Activity 1</b> Maintain the GECC in a state of operational readiness at all times.	Operational readiness was maintained throughout the period.

Activity 2 Monitor Group skills and capability through participation in national and Group exercises.	No Exercises were held during period. Staff attended the National Exercise Governance meeting which confirmed the National 10 year CDEM exercise programme.
Activity 3 Test the Group Warning System at least once.	The Group warning system was tested as part of the national warning system testing on 4 November 2013, 4 March and 15 June 2014.

Objective 3 Ensure that the local response to emergencies is co-ordinated across the Otago CDEM area, and that a national response is appropriately supported.	
Key Activities Achievement to 30 June 2014	
Activity 1 In the event of an emergency, activate and operate the GECC in accordance with the	No activation response was required during the period.

operations manual.

Objective 4 Undertake projects and participate in activities as determined through work programmes of the Otago CDEM Group.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Support the work programmes of the Otago CDEM Group Reduction Committee, Readiness and Response Committee, Recovery Committee and the Welfare Advisory Group.	Completed and gained CDEM Group adoption of the Group Emergency Welfare Plan.	
Activity 2 With the Territorial Authorities, implement the Otago CDEM Group Risk Reduction Strategy.	The draft Risk Reduction Plan was refined by the Risk Reduction committee. Background and supporting information was prepared for a workshop to further develop the draft Plan.	
<b>Activity 3</b> Manage the Group's lifelines study.	Project planning was completed, a project consultant selected, briefings with lifeline utilities held, and initial lifeline utilities workshop organised. A series of workshops were held to identify interdependencies, and work on rating the criticality of assets has been undertaken.	

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Emergency Management	295	378	83
Total	295	378	83

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Emergency Management	0	55	(55)
Total	0	55	(55)

# Dam Safety

## What we want to achieve

Level of Service – Reduce the risks to people and property that are associated with the safety of dams.	
Measures Compliance with Building Act 2004, and Building Regulations.	
Target Measure of Success	Actual Measure at 30 June 2014
All large dams in Otago, Southland and West Coast are managed by their owners in accordance with the dam safety scheme set out in the Building Act 2004 and the Building (Dam Safety) Regulations 2008 (once Central Government finalises regulations).	The scheme was expected to become operative on 1 July 2014 (having been delayed twice by the government). In March the government advised that the scheme had been delayed until 31 March 2015 and then on 25 June advised it had been further delayed until 1 July 2015.
All known dams constructed in Otago after 1 July 1992 comply with the building code (Building Regulations 1992).	Refer Activity 2 and 3 below.
All known large dams constructed in Southland and West Coast after 1 July 2008 comply with the building code (Building Regulations 1992).	Refer Activity 2 and 3 below.

# What we achieved to 30 June 2014

Objective 1 Dams in Otago, Southland and West Coast comply with the building and safety standards prescribed in the Building Act 2004.

Key Activities	Achievement to 30 June 2014
Activity 1 Maintain a register of all known dams in Otago containing information on location, depth, storage volume and compliance status under the Building Act 2004.	A register was maintained. Work continued on developing the content of the register in consultation with other regional councils.
Activity 2 Undertake Building Act functions for dams in Otago, Southland and West Coast in accordance with the quality standards and timeframes prescribed in the Act.	During the year five applications for building consents and four certificates of acceptance from Otago, and two applications for building consents from the West Coast were received. Five building consents and one certificate of acceptance were granted.

Activity 3 Investigate dams in Otago likely to be non- compliant with the building code and take enforcement action where necessary.	Eight Notices to Fix were issued with respect to earth embankment dams in Otago. Four Notices required the dam's owners to make an application for a certificate of acceptance for the construction of the dams, two were to undertake building work to address non compliance with the Building Act 2004 and regulations under that Act, one was to remove building work, and one was to provide a report to Council on the remedial work required to ensure the dam is compliant
	with the Building Act 2004, and regulations under that Act.

Objective 2 No dam in Otago is defined as dangerous dam under the Building Act 2004.		
Key Activities Achievement to 30 June 2014		
Activity 1 Work with owners of dams in Otago to implement Council's policy on dangerous dams.	The policy is not yet operative as the necessary supporting regulations have not been promulgated by the government.	

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance ( ) = Unfavourable
Dam Safety	393	368	(25)
Total	393	368	(25)

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Dam Safety	195	295	(100)
Total	195	295	(100)

# Transport

## What we want to achieve

Level of Service – Provide an appropriate level and quality of passenger transport services in Dunedin.			
Measure 1 Continuity and reliability of bus services.			
Target Measures of Success	Actual Measure at 30 June 2014		
95% of contracted bus services to arrive/depart within three minutes of the scheduled timetable.	A survey was undertaken which showed 94% of trips taken were on time, 1% of trips were early, and 5% of trips were late.		
Measure 2 Affordability of services.			
Target Measures of Success	Actual Measure at 30 June 2014		
Fare revenue to cover 50% of the cost of running the Dunedin network services.	The farebox recovery for the year was 50% across the Dunedin network.		
Measure 3 Patronage growth.			
Target Measures of Success	Actual Measure at 30 June 2014		
Patronage will grow by 3% per annum in Dunedin.	Patronage was down 0.78% compared to the same period in 2012/13. The loss of passengers on the Corstorphine service was the significant contributing factor to this decline in patronage.		

# What we achieved to 30 June 2014

Ē

Objective 1 Monitor and review the effectiveness of the Regional Land Transport Strategy, the Regional Land Transport Programme, and the Regional Public Transport Plan.			
Key Activities	Achievement to 30 June 2014		
Activity 1 Amend the Regional Public Transport Plan 2012 to give effect to changes to the Land Transport Management Act and provide for application of the new public transport operating model in that Act.	Work on a draft Regional Public Transport Plan is substantively complete and will be publicly notified in July 2014.		
Activity 2 Respond promptly to an requests to vary the Regional Land Transport Programme.	Council received one application to vary the programme in respect of Dunedin cycleways, which was processed promptly and approved by New Zealand Transport Agency.		

Objective 2 Maintain public transport networks in urban Dunedin and the Wakatipu Basin.			
Key Activities     Achievement to 30 June 2014			
Activity 1 Complete a review of the Dunedin bus network and bus stops, and an implementation plan for achieving the optimum network.	Significant progress has been made on the network review, with proposed routes and frequencies out for public consultation through the draft Regional Public Transport Plan in July 2014. The bus stop review will commence after the Regional Public Transport Plan is adopted by Council.		
Activity 2 Undertake a review of the fare structure, fare concessions and a range of ticketing products for the Dunedin public transport network.	The draft fare structure will be consulted on as part of the Regional Public Transport Plan in early 2014/15. Sensitivity testing on the proposed new structure continues and a decision on the final structure will occur later this year. Fare concessions and ticketing products will receive further investigation on completion of the fare structure decisions and annual planning process.		
<b>Activity 3</b> Reconfigure the Corstorphine bus service on renewal of its contract.	Negotiations have commenced with the operator to implement changes to the Corstorphine Services prior to the scheduled contract expiry date.		
Activity 4 Install ten or more new bus shelters in the Dunedin area.	Due to the delay in the network review a consolidated programme for the 2013/14 and 2014/15 allocation has commenced. Public consultation is underway and DCC are currently obtaining the necessary statutory approvals. Shelters will be installed in the 2014/15 financial year.		
Activity 5 Provide necessary technology infrastructure to support passenger transport services in the Wakatipu Basin.	A ticketing system is contracted for the Wakatipu Basin with preparations being made for a replacement system before existing contracts expire.		
<b>Activity 6</b> Maintain ticketing data for the public passenger transport networks.	Ticketing data has been maintained.		

Objective 3 Register commercial public transport services operating within and between Otago centres.		
Key Activities	Achievement to 30 June 2014	
Activity 1 Process all applications for registration of 'exempt' public transport services, including variations, within statutory processes and timeframes.	No applications were received during the year.	

Activity 2	
Maintain a register of public services on	No new registrations were received during the year.
line.	

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Transport Planning	769	431	(338)
Public Passenger Transport	7,980	8,175	195
Total	8,749	8,606	143

Project	Actual to 30 June 2014 \$000s	Estimated to 30 June 2014 \$000s	Variance () = Unfavourable
Transport Planning	460	244	216
Public Passenger Transport	4,832	4,052	780
Total	5,292	4,296	996