Council Meeting - 26 September 2018 Attachments

8.1. Minutes	2
8.1.1. Public minutes - 15 August 2018	2
11.1. Annual Report	9
11.1.1. Annual Report 2017-2018	9
11.3. Peninsula Bus Service - Hearing Panel recommendations	134
11.3.1. RPTP Addendum - Peninsula Route Variation - August 2018 - Draft	134
11.3.2. All submissions received	141
11.4. The Good Water Project	201
11.4.1. Good Water Project Final Report	201
11.4.2. ORC Good Water Project: The Survey Excl. Lifestyle Block	234
11.4.3. Environmental Desktop Risk Assessments - Sept 2018	290
12.1. Plan Review and Change Process	297
12.1.1. Presentation to Council 26 September 2018 PDF	297
12.1.2. Summary of NPSFM	315



Minutes of an ordinary meeting of Council held in the Council Chambers at Philip Laing House, Dunedin on Wednesday 15 August 2018, commencing at 1:30pm

Membership

Cr Stephen Woodhead (Chairperson)

Cr Gretchen Robertson (Deputy Chairperson)

Cr Graeme Bell

Cr Doug Brown

Cr Michael Deaker

Cr Carmen Hope

Cr Trevor Kempton

Cr Michael Laws

Cr Ella Lawton

Cr Sam Neill Cr Andrew Noone

Cr Bryan Scott

Welcome

Cr Woodhead welcomed Councillors, members of the public, media and staff to the meeting.

1. APOLOGIES

Resolution

That the apologies for Cr Robertson be accepted.

Moved: Cr Woodhead Seconded: Cr Hope

CARRIED

2. LEAVE OF ABSENCE

No Leave of Absence was advised.

3. ATTENDANCE

Sarah Gardner (Chief Executive)

Nick Donnelly (Director Corporate Services)

Tanya Winter (Director Policy, Planning and Resource Management)

Sian Sutton (Director Stakeholder Engagement)

Gavin Palmer (Director Engineering, Hazards and Science)

Scott MacLean (Director Environmental Monitoring and Operations)

(Director People and Safety) Sally Giddens

(Executive Officer) Ian McCabe (Committee Secretary) Lauren McDonald

4. CONFIRMATION OF AGENDA

The agenda was confirmed as tabled.

5. CONFLICT OF INTEREST

No conflicts of interest were advised.

6. PUBLIC FORUM

No public forum was held.

7. PRESENTATIONS

No presentations were held.

8. CONFIRMATION OF MINUTES

Resolution

That the minutes of the (public portion of the) Council meeting held on 27 June 2018 be received and confirmed as a true and accurate record.

Moved: Cr Neill Seconded: Cr Noone

CARRIED

9. ACTIONS (Status report on the resolutions of Council)

No current items for action.

10. CHAIRPERSON'S AND CHIEF EXECUTIVE'S REPORTS

10.1. Chairperson's Report

Cr Woodhead highlighted areas of his report, such as: ORC involvement with "Connecting Dunedin"; Cr Lawton's appointment to the Queenstown Transport Governance Group, and the meeting with North Otago Irrigation Company (NOIC) shareholders.

Discussion was held on the aquifer boundaries detailed in the Water Plan following discussions with NOIC. Ms Winter was requested to check the boundary details as notified in 2014.

Mrs Gardner advised the representation on the Connecting Dunedin group and confirmed a Terms of Reference would be brought back to Council for approval.

Cr Laws left the meeting at 01:54 pm.

Resolution

That the Chairperson's and Chief Executive's reports be received.

Moved: Cr Woodhead Seconded: Cr Hope

CARRIED

10.2. Chief Executive's Report

The report provided information on the meetings attended by the Chief Executive during the period mid-June to mid-August. Discussion held on the following sections of the report:

<u>The Proposed Air Operations Plan that would control aviation assets during an event.</u>

Mrs Gardner advised that the Chief Executives Group (CEG) have requested further information on the operations plan to ensure effective use of resources, management of fuel supplies etc during the recovery from an event.

<u>Regional Council Chief Executives' Meeting - Offsetting for the National Policy work</u>

Mrs Gardner was requested to provide a report back to clarify ORC stance for offsetting (in relation to the principles in the Regional Policy Statement).

Cr Laws returned to the meeting at 01:56 pm.

Manuherikia Data Sharing Meetings

Requests were made for:

- A report to the September committee on the primary allocation number of 3.2 cumecs in the Water Plan. The paper to provide how this allocation number was decided, the rationale and the implications of this as a stand-alone target and how it fits within the Regional Water Plan. Mrs Gardner and Mrs Winter confirmed the report would be provided.
- Provision of the Environment Court decision from 2003 and how this was being
 used in the minimum flow setting. Mrs Gardner advised this information would be
 circulated in advance of the committee meeting.
- A timeline for the review of the water plan, together with the timing as compared to the Cardrona and Manuherikia minimum flow setting in regard to notification. Mrs Gardner confirmed she would provide this information.

Resolution.

That the Chairperson's and Chief Executive's reports be received.

Moved: Cr Woodhead Seconded: Cr Hope

CARRIED

11. MATTERS FOR COUNCIL DECISION

11.1. Representation Review 2018

Mr McCabe, Executive Officer confirmed that a workshop on representation review 2018 was held on 1 August with councillors. He advised the tabled report outlined the representation arrangement options for consideration and sought endorsement of a preferred option by Council for public consultation.

Discussion was held on public awareness of meeting dates/locations and understanding of and access to the representation review material. It was agreed for the Representative Review Report (as tabled), with the Council's preferred option and attachments be available via a link on the ORC website.

Cr Deaker left the meeting at 02:33 pm.

Cr Deaker returned to the meeting at 02:35 pm.

Resolution

That Council:

- 1) **Receives** this report.
- 2) **Adopts** the following recommended representation proposal pursuant to section 19I of the Local Electoral Act 2001 for consultation purposes:
 - (a) That Otago Regional Council shall comprise twelve (12) members elected from four (4) regional constituencies.
 - (b) That the proposed names, number of members to be elected by electors from each constituency and boundaries of each constituency shall be as follows:
 - (i) One (1) member representing the **Moeraki constituency** comprising the Otago portion of Waitaki District territorial area, being part of the Ahuriri and Corriedale wards, and the entirety of the Oamaru ward and Waihemo ward.
 - (ii) Three (3) members representing the **Dunstan constituency** comprising the Central Otago District and Queenstown Lakes District territorial areas.
 - (iii) Two (2) members representing the **Molyneux constituency** comprising the Clutha District territorial area and the Mosgiel-Taieri and Strath-Taieri community board areas located within the Dunedin City territorial area.
 - (iv) Six (6) members representing the **Dunedin constituency** comprising central Dunedin and the Waikoutiti Coast, West Harbour, Otago Peninsula and Saddle Hill community board areas located within the Dunedin City territorial area.
 - (c) The population that each member will represent is as follows:

Constituency	Population	Councillors	Ratio	%
Moeraki	20,400	1	20,400	+9.19%
Dunstan	57,400	3	19,133	+2.41%
Molyneux	35,600	2	17,800	-4.73%
Dunedin	110,800	6	18,467	-1.16%
Total	224,200	12	18,683	

- 3) **Notes** that a public notice outlining the recommended representation proposal will be made no later than 22 August 2018.
- 4) **Notes** that the submission period will close no later than 28 September 2018.
- 5) **Notes** that the committee to hear submissions on the recommended representation proposal will consist of all councillors on a date yet to be determined, but likely to coincide with the October 2018 committee round.

Moved: Cr Deaker Seconded: Cr Hope

CARRIED

11.2. Elected Members Remuneration 2018/2019

The report provided the The Local Government Members (2018/19) (Local Authorities) Determination 2018 on the annual review of elected member's remuneration, which took effect on 1 July 2018.

Resolution

- a. That this report be received.
- **b.** That Council notes the Determination from the Authority and increase in remuneration from 1 July 2018.
- **c.** That Council notes the attached Expenses, Reimbursements and Allowances Policy which was adopted in August 2017.

Moved: Cr Noone Seconded: Cr Scott

CARRIED

12. MATTERS FOR NOTING

Nil

13. REPORT BACK FROM COUNCILLORS

A feedback report, authored by Crs Woodhead, Lawton and Hope was tabled on the Local Government New Zealand Conference and Tour, held 15-17 July. The attending councillors summarised the report detail to the meeting.

Cr Laws left the meeting at 03:04 pm.

Cr Bell advised that the Cardrona community were still concerned about ORC have an upper and lower Cardrona separate in the plan change. The community want a single Cardona catchment for the plan change.

Cr Scott - attended the Civil contractors on behalf of council with award going to the SouthRoad for their erosion project.

Cr Noone attended wallaby discussion along with Cr Bell in Kurow. Also in attendance was the Maniatoto Pest Company and local farmers. Feedback from the meetings was farmers concern that the wallaby incursion in Otago was being taken seriously by Environment Canterbury.

Cr Deaker - attended the ORC Lake Snow technical workshop on 8 August, which was well attended by agencies, QLDC, and universities.

Cr Lawton:

28 June – Luggate Community Association. They want to learn more about the current and future monitoring of Luggate Creek.

3 July – Dunstan Ward meeting with QLDC – Mayor Jim Boult and CE Mike Theelan for an update on Queenstown Lakes

5-6 July – Glenorchy Community Association. Pre-Kinloch meeting, update re Dart and Reece. Then Kinloch Community meeting and site visits with the ORC team.

12-14 July – LGNZ Tour

15-17 July – LGNZ Conference

6 August – Upper Clutha Water Group, Urban Water Workshop. Discussion on urban water issues for Roys Bay and Upper Clutha Lakes Trust support to fill gaps in identified project work.

7 August – Kingston Community Association about gravel and weed in Kingston Creek.

8 August – Lake Snow technical workshop

14 August – Million Meters, Sustainable Business Network. Met with Sian Sutton and Scott MacLean (with Georgina Hart)to discuss how Millions Meters could support improved water quality in the Otago Region.

Cr Laws returned to the meeting at 03:19 pm.

14. NOTICES OF MOTION

No Notices of Motion were advised.

15. RECOMMENDATIONS ADOPTED AT COMMITTEE MEETINGS HELD ON 1-2 AUGUST 2018

15.1. Recommendations of the Policy Committee

Resolution

Recommendations of the Policy Committee held on 1 August 2018 for adoption.

Moved: Cr Laws Seconded: Cr Hope

CARRIED

15.2. Recommendations of the Regulatory Committee

Resolution

Recommendations of the Regulatory Committee held on 1 August 2018 for adoption.

Moved: Cr Scott Seconded: Cr Neill

CARRIED

15.3. Recommendations of the Communications Committee - 2 August 2018

Resolution

Recommendations of the Communications Committee held on 2 August 2018 for adoption.

Moved: Cr Bell Seconded: Cr Deaker

CARRIED

15.4. Recommendations of the Technical Committee

Resolution

Recommendations of the Technical Committee held on 1 August 2018 for adoption.

Moved: Cr Noone Seconded: Cr Lawton

CARRIED

15.5. Recommendations of the Public Portion of the Finance and Corporate Committee

Resolution

Recommendations of the public portion of the Finance and Corporate Committee held on 2 August 2018 for adoption.

Moved: Cr Brown Seconded: Cr Noone

CARRIED

16. RESOLUTION TO EXCLUDE THE PUBLIC

Resolution

That the public be excluded from the following parts of the proceedings of this meeting, namely:

Leith Flood Protection Scheme - Financial Delegation Section 48(1)(a); Section 7(2)(h); 7(2)(j); 7(2)(j)

I also move that Dr Palmer be permitted to remain at this meeting, after the public has been excluded, because of their knowledge of the Leith Flood Protection Scheme programme. This knowledge, which will be of assistance in relation to the matter to be discussed, is relevant to that matter because of contractual details.

Moved: Cr Woodhead Seconded: Cr Hope

CARRIED

The meeting resumed in public session on the motion of Crs Woodhead and Hope.

17. CLOSURE

The meeting was declared closed at 03:40 pm.

Chairperson

Annual Report

For the Period

1 July 2017 to 30 June 2018

Table of Contents

Vision Statement, Goals and Measurements	3
Statement of Compliance	7
Development of Maori Capacity to Contribute to Decision Making	
Port Otago Limited	
Introduction to Service & Financial Statements	9
Key for Significant Activities Achievement	10
Significant Activities	11
Environment	11
Community	25
Regulatory	
Flood Protection & Control Works	34
Safety and Hazards	43
Transport	47
Financial Statements	52
Notes to the Financial Statements	61
Other Disclosures	111
Directory	123
Office & Depot Locations & Contact Telephone Numbers	124
Independent Auditors' Report	125

Vision Statement, Goals and Measurements

VISION: For our Future - A prosperous and sustainable future for Otago.

Goal One

To achieve:
Active resource
stewardship

Measurement

Optimal water use – efficiency, irrigation

Sustainable land use and water quality

Ethical mineral use

Evidence-based decision making

Effective enforcement of plans, consents and rules

Goal Two

To achieve:
Active regional
partnerships

Measurement

Active and regular engagement with stakeholders

A well connected ORC working closely with stakeholders and partners

Strong connections with the Territorial Local Authorities and Ngai Tahu in the region

Partnerships and common projects with nearby regions, e.g. Southland, West Coast and Canterbury

Goal Three

To achieve: Realisation of new opportunities

Measurement

An active programme of enablement by ORC around new resource opportunities

Active interest of private sector parties in opportunities in the region

Active collaboration with regional TLAs and Ngai Tahu on opportunity identification and advancement

Goal Four

To achieve: The emergence of a "Brand Otago"

Measurement

A growing distinctiveness associated with Otago both domestically and internationally

Association in the public mind of Otago with quality – products, experiences, lifestyle, etc

Ultimately, that premium value is attached to things "Otago"



Cr Stephen Woodhead Chairperson

Overview from the Chairman and Chief Executive



Sarah Gardner Chief Executive

Statement of Compliance

In accordance with Part 3 of Schedule 10, Clause 34 of the Local Government Act 2002, the Council and management of the Otago Regional Council confirm that all the statutory requirements in relation to the Annual Report have been complied with.

Stephen Woodhead **Chairperson**

Sarah Gardner Chief Executive

Development of Maori Capacity to Contribute to Decision Making

Council has in place a "Memorandum of Understanding and Protocol between Otago Regional Council, Te Rünanga o Ngäi Tahu and Käi Tahu ki Otago for Effective Consultation and Liaison". The memorandum and protocol were first established in 2001, and are reviewed and updated as appropriate.

Te Rünanga o Ngäi Tahu is the tribal representative body of Ngäi Tahu Whänui, a body corporate established 24 April 1996. The takiwä (area) of Ngäi Tahu Whänui includes the entire area of Otago Region.

It is the acknowledged practice of Te Rünanga o Ngäi Tahu that consultation in the first instance is with the Papatipu Rünanga. In the Otago Region there are four Papatipu Rünanga being:

- Te Rünanga Moeraki;
- Kati Huirapa Rünanga ki Puketeraki;
- Te Rünanga o Ötäkou; and
- Hokonui Rünaka.

Council has statutory responsibilities to consult with Iwi and Maori on relevant management issues in the region and to take into account the principles of the Treaty of Waitangi. These obligations are primarily under the RMA 1991, the Ngäi Tahu Claims Settlement Act 1998, the Ngäi Tahu Claims Settlement (Resource Management Consent Notification) Regulations 1999, the Biosecurity Act 1993, and the Local Government Act 2002.

Consultation is required on the development, review and implementation of the Council's regulatory plans, policies and strategies under the LGA, RMA and Biosecurity Act. For such plans, policies and strategies, consultation and building of knowledge is mutually supported and facilitated through specific consultancy agreements between the Council and Käi Tahu ki Otago Limited.

Meetings are held each year with representatives from the four Papatipu Rünanga, Te Rünanga o Ngäi Tahu, and Te Ao Marama, and discussions include Council's work programmes and plans.

Consent approvals and other regulatory permissions, wherever required by statute or plans, when impacting Iwi / Maori interests and understandings, will involve consultation with Iwi / Maori.

Port Otago Limited

The Council is the 100% shareholder of Port Otago Limited. The Council views its shareholding role as one of trustee for the people of Otago, a position widely supported throughout the region.

Each year Port Otago Limited produces a Statement of Corporate Intent, which is then formally approved by Council. As its owner, the Council does not participate in the management and operation of the company; this is left in the care of the Directors of Port Otago Limited and its management. Port Otago Limited reports to Council on a six monthly basis its performance results for the period. The results of Port Otago Limited for the year ended 30 June 2018 have been incorporated into the Group results included within these financial statements.

Introduction to Service & Financial Statements

The financial statements on pages 52 to 110 report the results of the Otago Regional Council as a separate entity and the consolidated results of the group comprising the Council and Port Otago Limited.

Group Activities

The Council's Group activities are reported on pages 11 to 51. These pages contain performance information including levels of service, targeted and actual measures of achievement along with funding impact statements.

Performance measures are those identified in the 2017/18 Annual Plan. The funding impact statements identify the costs and funding associated with each activity.

Matters affecting the quality of performance achieved include:

(a) Preparation of Regional Plans

Quality processes include consultation with the public and affected parties, peer review, and compliance with requirements of relevant legislation.

(b) Preparation of Internal Reports

Internal reports are prepared by suitably qualified and experienced staff. Significant reports are subject to peer review process/consultation review.

(c) Capital Works

Capital works are constructed to design specifications. Inspections of works are undertaken by suitably qualified and experienced engineers.

(d) Maintenance Works

Maintenance works are undertaken by employees or by contract under the supervision of suitably qualified and experienced engineers and monitored thereafter in accordance with the maintenance programme.

Group Activity Funding Impact Statements

Expenditure

Operating expenditure includes costs directly attributable to an activity such as payments to staff and suppliers and finance costs, and charges for the consumption of internal resources (e.g. motor vehicles, computer and hydrology services). A share of Council's overhead costs is allocated on the basis of direct salary cost incurred on the activity.

Capital expenditure relating to assets utilised within the group activity is also included.

Sources of Funding

The sources of funding activity expenditure are as follows:

General Rates – The general rate including a uniform annual general charge (UAGC), is a charge on all rateable properties in the Otago region.

Targeted Rates – Targeted rates have been set for the following activities of Council:

- Flood protection schemes in Lower Clutha, Lower Taieri and Dunedin Urban areas.
- Drainage schemes in West Taieri, East Taieri, Lower Clutha and Tokomairiro.
- Rating Districts for maintenance and enhancement works of waterways within each of the territorial districts.
- Transport for the public transport service in the Dunedin metropolitan and Queenstown areas.
- Rural water quality, to assist achieving water quality targets.
- Dairy inspection to visit every dairy farm for compliance with permitted and prohibited activity rules.
- Wilding trees to support voluntary groups working to control this pest plant.

Subsidies and Grants – Central government subsidies and grants are received for particular functions performed by the Council.

Fees and Charges – Charges for services performed are made in accordance with Council policy, and rentals are charged where Council property is leased to external parties.

Reserves – Funding is provided from rating district reserves for related activities, and from general reserves where the expenditure generates a public benefit.

Fines, Infringement Fees and Other Receipts – Fines and infringement fees are charged in accordance with the Schedule of Fees and Charges set out in the Council Long Term Plan / Annual Plan. Also included is an allocation of corporate revenue including dividends from Port Otago Limited and interest and investment income.

Key for Significant Activities Achievement (pages 11 to 51)

Target has been achieved
Target is in progress, or partially achieved.
Target has not been achieved.
Target start time deferred to a later date.

Significant Activities

Environment

Water Quality

Level of service – Maintain or improve water quality		Achieved
Measure:	State of the Environment monitoring.	
Performance target:	Monitor to assess that water quality that meets thresholds set out in the Regional Plan: Water continues to be met.	
Result:	Monitoring is on-going. A 5-year state and trends report has been prepared and will be presented to Council early in the 2018/19 financial year. The State of the Environment monitoring network was reviewed. Following the Long Term Plan consultation, new sites will be added to the network from the next financial year.	

Water quality thresholds for surface water have been set in Schedule 15 of the Regional Plan: Water.

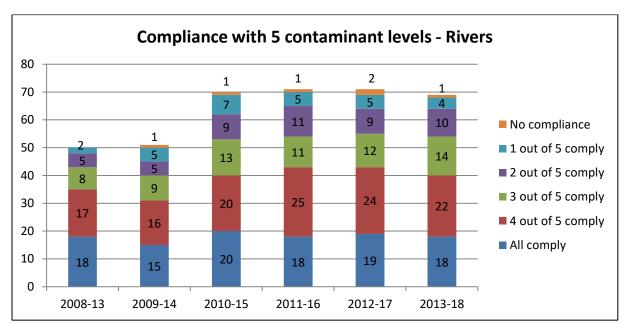
The contaminants measured for rivers are:

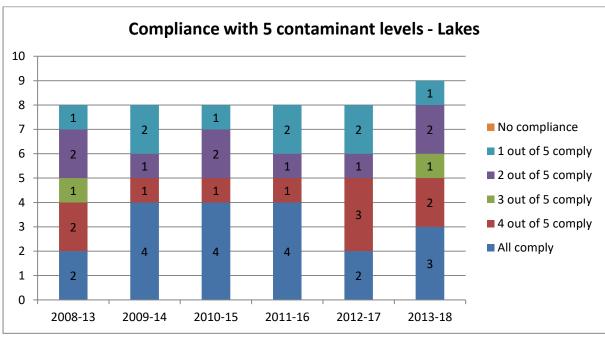
- Nitrite-nitrate nitrogen
- Dissolved reactive phosphorous
- Ammoniacal nitrogen
- Ecoli
- Turbidity

The contaminants measured for lakes are:

- Total nitrogen
- Total phosphorous
- Ammoniacal nitrogen
- Ecoli
- Turbidity

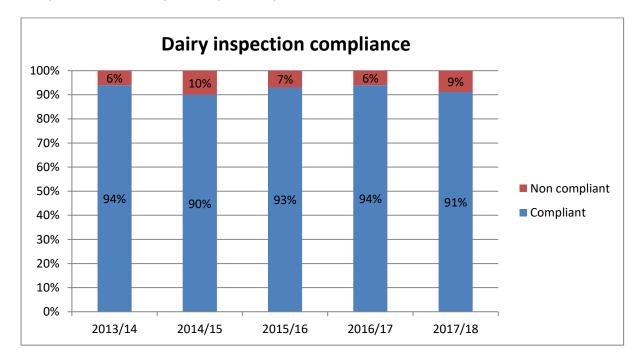
For rivers, water quality is measured as a five year 80th percentile (when flow is at or below median flow), and lakes are measured as a five year 80th percentile, at State of Environment monitoring sites. The results from our monitoring for the last five reporting periods are shown below. Monitoring results for the 2018 year will be reported on at the year end.





Level of service – Maintain or improve water quality		Achieved
Measure:	Dairy inspection and other farm monitoring.	
Performance target:	Using a risk-based approach, 148 dairy farms will be visited on at least two occasions each and assessed for compliance with prohibited activity rules.	
Result:	The target was exceeded with 158 dairy farm inspections completed with 14 registering a level of non-compliance.	

Compliance results compared to previous years are as follows:



Specific areas of work:

1. Undertake preliminary consultation on a plan change to address human sewage, including on-site treatment system discharges on water quality.

The Council commenced consultation on options at a stakeholder workshop in June 2018.

Planning for further consultation with stakeholders on preferred management options in October-November 2018 was also completed. Wider public consultation will be undertaken as part of the full Water Plan review process.



2. Undertake preliminary consultation to address the effects of stormwater discharges on water quality.

The Council commenced consultation on options at a stakeholder workshop in June 2018.

Planning for further consultation with stakeholders on preferred management options in October-November 2018 was also completed. Wider public consultation will be undertaken as part of the full Water Plan review process.



Other initiatives undertaken to promote water quality include:

- Regular communication of key messages through ORC's quarterly newsletter "Waterlines, monthly e-newsletter "On-Stream", social media, and targeted advertising/editorial.
- Liaison with industry and groups including Dairy NZ, Beef and Lamb, dairy working groups, forestry, catchment groups, and individuals.
- An urban water quality strategy has been adopted, and an implementation plan is being developed.

Water Quantity

Level of service – Water is managed to meet the needs of the Otago community		Achieved	
Measure:	Sustainable environmental flows and allocation limits set on rivers levels, streams, and groundwater resources.		
Performance target:		ork for setting minimum flows / vels for the following catchments: Fraser River Bannockburn/Shepherds Creek Manuherikia	
Result:	Reporting has started for the Upper Clutha, Fraser River, Bannock Burn / Sheppards Creek and Low Burn but will be completed in 2018/19 financial year due to focus put on plan changes seeking to set minimum flows for priority catchments in Otago (currently Upper Cardrona River, Arrow River and Manuherikia River).		

Measure:	Sustainable environmental flows and allocation limits set on rivers levels, streams, and groundwater resources.	
Performance target:	Monitor compliance with set minimum flows/environmental levels.	
Result:	Compliance levels for all rivers have been monitored during the period for all rivers with set minimum flow levels. During the months of Jan/Feb 2018, all rivers had gone below their set minimum flow levels due to the adverse dry weather conditions. All consent holders within these catchment locations had been notified about their consenting condition for abstractions, and catchment groups informed prior to rostering.	
	Forecasting work on drought conditions and river levels supported early communications to water users and helped manage the resource.	

Specific areas of work:

1. Commence and complete plan changes for minimum flows, allocation regimes and aquifer regimes (work will take multiple years from commencement to completion).

Lindis	The plan change was appealed by the Lindis Catchment group and a further 15 parties joined the appeal under RMA S274. Mediation proved to be unsuccessful. The Environment Court has agreed that the parties proceed to a combined hearing for both the minimum. flow plan change and a resource consent application to replace	•
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	existing Deemed Permits in the catchment. The Environment Court hearing is scheduled for November 2018.	
Cardrona	The Cardrona Minimum Flow plan change has been split with the Upper Cardrona now bundled up with a broader Plan Change that seeks to set minimum flows for priority catchments in Otago. The reason for applying this new approach is to improve the efficiency of Council's plan change processes. Economic and Social assessments are underway.	•
	The technical work to assist with the development of environmental flows and limits for the Lower Cardrona and Wanaka Basin Aquifer is ongoing.	
Waikouaiti River	Deferred to 2018-19 following a review of work priorities and completion of the Waikouaiti Estuary study.	•
Ettrick	This project is now not intended to commence until the 2018/19 financial year.	•
Manuherikia	This plan change is now part of the Priority Catchments Minimum Flow Plan Change. Community consultation has been undertaken to provide an update on the plan change process with catchments being brought into one, and a discussion on the science technical work. Work continues on technical inputs for the plan change.	
Clutha	First round of consultation meetings was initiated and completed within the timeframes. The feedback summary has been made available to the public. Further technical work was also undertaken to identify ecological,	
	recreational and natural character values.	
Arrow	This is now part of the Priority Catchments Minimum Flow Plan Change. Consultation with the community and stakeholders has been undertaken and drafting of the plan change for notification underway. All technical work has been completed.	

Other initiatives undertaken to manage water quantity include:

- 40 groups of water users who are looking to replace their mining privileges have had one meeting with ORC staff. A second round of meetings has been had with a number of those groups and a third round of meetings has commenced.
- Information about permit configuration and historic water use is provided on request.
- Staff gave a paper about deemed permits at a Law Society Conference in Queenstown in October.
- A water users guide has been created and is actively being used in communications with permit holders.

Air

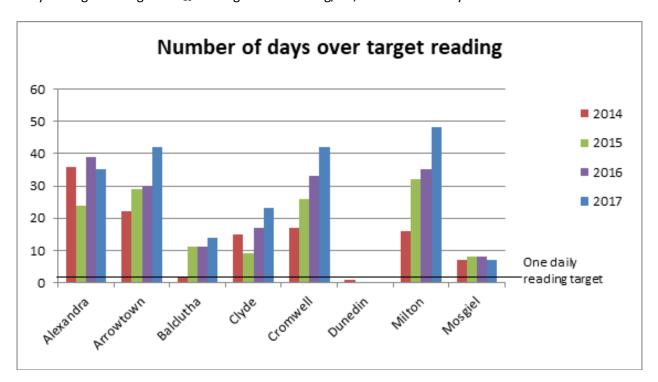
	Level of service – Improve air quality	Achieved
Measure:	Ambient (PM_{10}) air quality in targeted towns.	
Performance target:	Monitor air quality to assess compliance with the NES requirement of no more than one daily average reading of PM_{10} per annum to be higher than 50 micrograms per cubic metre (50 mg/m ³).	
Result:	Monitoring has been performed for FY17/18.	

Ambient air quality has been monitored for the winter of 2017 (April to September) in the following targeted towns:

- Alexandra
- Arrowtown
- Balclutha
- Clyde
- Cromwell

- Dunedin
- Milton
- Mosgiel
- Palmerston

The requirement of no more than one daily above 50 mg/m³ was not achieved in any location expect for Dunedin, which had no readings above 50 mg/m³. The graph below shows the number of days where the daily average reading of PM₁₀ was higher than 50 mg/m³, for the last four years.



Report 11.3.2017 Air Quality Results presented to the technical committee on 29 November provides commentary about the results for the 2017 winter period.

Specific areas of work:

1. Support through funding, the installation of clean heating appliances in targeted towns (Airzone 1 and Milton)

Support is provided as applications are received. 15 clean heating appliances were installed during the period resulting in a total of 51 for the year. An additional \$13,000 has been provided to the Cosy Homes Trust for administering the Milton pilot project. Breakdown of appliances installed: Alexandra 16, Cromwell 13, Milton 13, Arrowtown 3, Clyde 1, Milton - Cosy Homes Trust 5



Other initiatives completed:

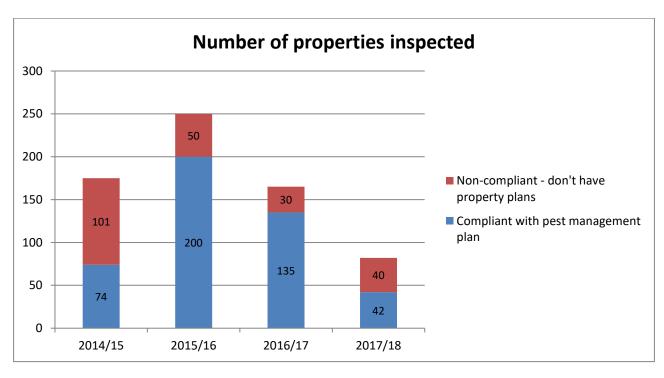
A new air quality strategy was adopted by Council in June 2018, after community consultation. It lays out the foundation for ORC's future air quality programme. A detailed implementation plan is under preparation

Land

Level of se	Level of service – Require control of pest animals and pest plants	
Measure:	Level of rabbit populations in rabbit prone areas.	
Performance target:	Non-compliance of rabbit numbers over MAL3 will be followed up, to ensure property management plans are in place to reduce rabbit numbers.	
Result:	Scoping inspections were undertaken on approximately 100 properties throughout Otago covering more than 50,000ha's.	
	During this reporting period MAL3 inspections were scaled back to accommodate the release of RHDV1 K5. As such numerous inspections were focused on scoping the K5 release.	

The graph below shows the number of properties inspected and level of compliance.

82 inspections involved a request to view the property management plan, with 40 of those inspections resulting in a non-compliant assessment and request to either complete of amend a property plans.

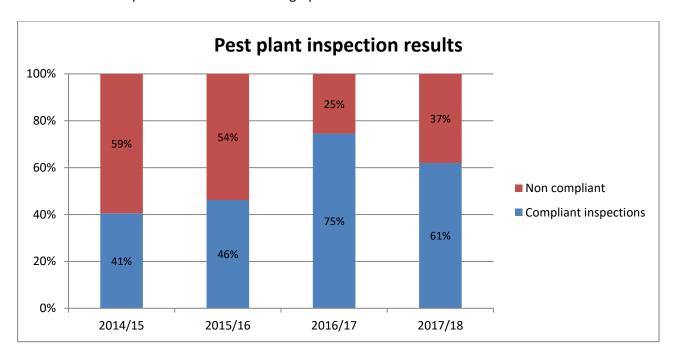


Level of so	Level of service – Require control of pest animals and pest plants		
Measure:	Level of pest plants found at known sites.		
Performance target: Non-compliance of pest plants will be followed up, to ensure control works to remove pest plants have been undertaken.			
Result:	Enforcement was ongoing with non-compliance resulting in follow up action consistent with the Regional Pest Management Strategy.		

During the period plant inspections included the following:

	2017/18	2016/17	2015/16	2014/15
Bomarea	498	472	447	153
Old Man's Beard	1,918	3,390	1,140	499
Contorta	-	12	61	14
Cape Ivy	29			
Boneseed	32			
Nassela Tussock	30			
African Lovegrass	14			
Total number of properties inspected	2,521	3,874	1,648	666

Results of these inspections are shown in the graph below.



Specific areas of work:

1. Prepare a new Pest Management Plan for Otago.

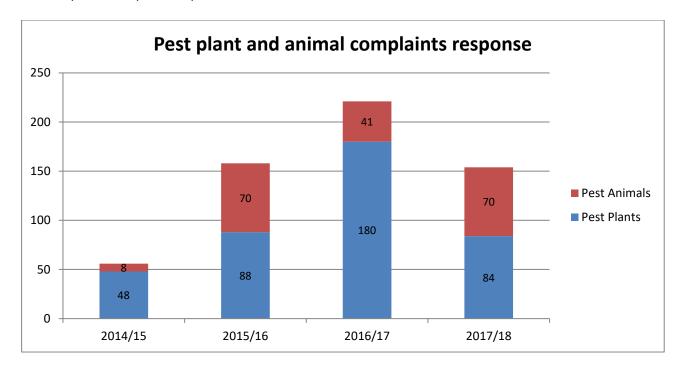
Substantive progress was made on completing a Pest Management Plan. As at 30 June some additional cost benefit analysis was commissioned with an expectation that the Plan would be ready for public notification in September 2018.



Other initiatives undertaken include:

- An educational campaign is being developed for rabbit management, so the community can understand responsibilities and options.
- New resources for pest plants being developed as needed.
- Regular meetings held with the Wakatipu, Dunstan and Wanaka groups, with LINZ and NIWA representation re lagarosiphon.
- Wetlands compliance work is ahead of schedule.
- Drafting of outcomes and issues is in progress towards the development of a Biodiversity Strategy.
- Discussions held with Environment Canterbury staff on how to minimise the numbers of wallabies coming across the Waitaki dams and establishing on the south bank.
- Website reporting developed to enable the public to report wallaby sightings and their location.
- Campaign developed to link with the release of the K5 virus (in March).

Staff responded to pest complaints as follows:



Complaints received related to the following:

	2017/18	2016/17	2015/16	2014/15
Pest plants	84	180	88	48
Rabbits	53	21	41	7
Wallabies	14	19	25	1
Rooks	-	1	2	-
Possums	3	-	2	-
Total	154	221	158	56

All complaints have been followed up where a breach of the Pest Management Plan has been identified.

Rivers & Waterway Management

Level of s	ervice – Ensure waters can flow without obstruction	Achieved
Measure:	Time taken to investigate and action reported blockages.	
Performance target:	Investigate all reported blockages obstructing scheduled rivers within 10 working days and action appropriately.	
Results:	Dunedin: all known Dunedin City river blockages have been addressed.	
	Clutha: all known Clutha river blockages have been addressed.	
Central: removed fallen tree from Thompsons Creek, Omakau. No other issues within central rivers.		
	Wakatipu: no reported blockages in the Queenstown rivers during this reporting period.	
	Wanaka: no reported blockages in the Wanaka area rivers during this period.	
	Waitaki: all known North Otago river blockages have been addressed.	

Specific areas of work:

1. Implement the developed River Morphology and Riparian Management Plans.

Dunedin	Implementation of the Strath Taieri River Morphology and Riparian Management Plan is in progress.	
Pomahaka	Implementation of the Pomahaka River Morphology and Riparian Management Plan is in progress.	
Cardrona	Cardrona River draft Morphology and Riparian Management Plan completed. <i>For better integration, this work</i> is being aligned with other projects, such as the setting of a minimum flow, currently on going on the Cardrona River catchment.	•
Kakanui, Shag, Waianakarua	Implementation of the Kakanui River Morphology and Riparian Management Plan on going. The Shag River and Waianakarua River Morphology and Riparian Management Plans have been completed and their implementation is now on going.	

2. Develop a strategy for the management of the Lindsay Creek erosion hazard.

Deferred to next financial year (2018/19). Delays are due to commitment to other projects not initially included in the 2017/18 Annual Plan and to responses to large flood events (July 2017 and November 2017 Roxburgh debris flow).



3. Develop a strategy for the management of the Waitati River flood and erosion hazard.

Deferred to next financial year (2018/19). Delays are due to commitment to other projects not initially included in the 2017/18 Annual Plan and to response to large flood events (July 2017 and November 2017 Roxburgh debris flow).



Other initiatives undertaken include:

- In response to the July 2017 flood event, localised river work (such as channel clearing and debris removal) have been completed.
- In the Dart/Rees delta areas, bank erosion has necessitated urgent works to be carried out by QLDC in order to arrest erosion of the Glenorchy-Kinloch Road in places. Concerns by residents who rely on the Glenorchy-Kinloch Road about the danger posed to the road by the rivers were also raised (and submissions were made in the 2018-28 Long Term Plan). Council investigated the concerns and in response is planning to start, in July 2018, a new three-year plan to investigate, manage and adapt to the natural hazards posed by the Rees and Dart Rivers. This will also include small scale and short-term bank protection work to be undertaken by the Council.

Environmental Incident Response

Level of service – Council will be ready and able to respond to all environmental incidents		
Measure:	Time taken to respond.	
Performance target: Acknowledge and assess the necessary actions of reported incidents within 0.5 hours of receipt.		
Result:	A total of 1,913 incidents responded to within 0.5 hours for the period 1 July 2017 to 30 June 2018.	

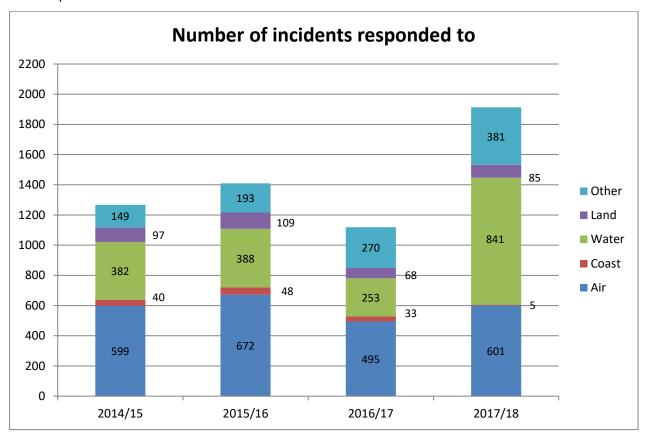
Specific areas of work:

1. Continue to work with Otago territorial authorities to develop a central contaminated sites database for regional use.

A contaminated sites database continues to be developed as more data is collected and	
assessed. The content of the database's information was captured on file as at 30 June	
2018.	



Staff responded to incidents as follows:



Funding Impact Statement - Environment

Funding Impact Statement for the year ended 30 June 2018.

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Long Term Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding					
General rates, uniform annual general charge &					
rate penalties	3,935	4,188	2,962	3,318	2,763
Targeted rates (other than a targeted rate for water supply)	3,140	3,139	2,671	2,445	2,037
Subsidies & grants for operating purpose	1,193	1,200	12	1,140	13
Fees, charges and targeted rates for water supply	7	570	959	1	939
Internal charges & overheads recovered	244	217	785	216	766
Local authorities fuel tax, fines, infringement fees & other receipts	6,186	6,481	5,194	5,624	4,930
Total operating funding (A)	14,705	15,795	12,583	12,744	11,448
Applications of operating funding					
Payments to staff & suppliers	10,556	11,392	8,181	8,406	7,843
Finance costs	1	-	-		-
Internal charges & overheads applied	5,416	5,938	5,087	5,026	4,474
Other operating funding applications	-	-	-	-	-
Total applications of operating funding (B)	15,973	17,330	13,268	13,432	12,317
Surplus (deficit) of operating funding (A-B)	(1,268)	(1,535)	(685)	(688)	(869)
Sources of capital funding				•	
Subsidies & grants for capital expenditure	-	-	-		-
Development and financial contributions	-	-	-	_	-
Increase (decrease) in debt	-	-	-	-	-
Gross proceeds from sale of assets	-	-	-	_	-
Lump sum contributions	-	-	-	_	-
Other dedicated capital funding	-	-	-	-	-
Total sources of capital funding (C)	-	-	-	-	-
Application of capital funding					
Capital expenditure:					
- to meet additional demand	-	-	-	-	-
- to improve the level of service	200	35	-	171	-
- to replace existing assets	142	201	156	102	214
Increase (decrease) in reserves	(1,610)	(1,771)	(841)	(961)	(1,083)
Increase (decrease) of investments	-		<u>-</u>		
Total applications of capital funding (D)	(1,268)	(1,535)	(685)	(688)	(869)
Surplus (deficit) of capital funding (C-D)	1,268	1,535	685	688	869

The accompanying notes form part of these financial statements.

Community

Democracy, Public Information and Awareness

Level of service – Effective, open and transparent democratic council processes			
Measure: Completion of statutory public accountability processes.			
Performance target:	get: Complete all planning and reporting within statutory timeframes and requirements.		
Result:	The Long Term Plan 2018-28, including the Annual Plan 2018/19, was adopted by Council on 27 June 2018.		
	The June 2017 Annual Report was completed within statutory timeframes and approved by Council on 27 September 2017.		

Level of service – Provide information to enable the public to be informed of council and committee meetings.		
Measure:	Time for making meeting agendas available to the public.	
Performance target:	All meeting agendas to be available at least two working days prior to each meeting.	
Result:	Eight committee rounds and eight council meetings were held in 2017/18. Agendas were available at least 2 working days prior to the meetings.	

Specific areas of work:

1. Hold at least two meetings each year with Iwi representatives.

Iwi meetings were held during May and June and attended by senior Council leadership.

The meetings included:

• 24 May – Minimum flow discussion with iwi

• 5 June – Mana to Mana meeting

• 22 June – Consultation with iwi around minimum flow plan change

• 25 June – Te Roopu Taiao Hui.

In addition to the Iwi meetings, three Te Roopu Taiao meetings have been held, including Waitangi Day celebrations held at Te Rau Aroha Marae, followed by a joint Otago/Southland Te Roopu Taiao in Invercargill.

2. Respond to issues, activities and queries on matters that require a regional perspective or impact on regional resource management functions.

While TLA application activity has been relatively quiet over winter, the Skyline and Balmoral appeals have continued to generate work but are now in their respective end games working towards resolution. ORC has appealed the recent stage 1 QLDC PDP and also joining 37 appeals as an s274 party. This will constitute a significant body of work. The DCC decision on its 2GP looms later in the year and may also involve ORC in an appeal process. Lastly the National Planning standards will require a response from ORC and require some resourcing.



Other initiatives undertaken for our community include:

- Information shared via messages fielded on social media channels; Otago Regional Council Facebook, Otago Regional Council Bus Services Dunedin Facebook, Orbus Queenstown Facebook, Civil Defence and Emergency Management Otago Facebook, Otago Regional Council twitter.
- 112 media releases distributed.
- Waterlines newsletter and On-Stream e-newsletter regularly sent to rural landholders.
- Pamphlet updates included Clean Heat, Clean Air, and monitoring resource consents.
- Communications campaign on Dunedin bus changes, and on the new bus services in Queenstown
- Public information sessions on diverse subjects including flood schemes, minimum flows and Roxburgh debris flows.
- Video and advertorial content developed and published, sharing information subjects including rabbit management, Old Man's Beard and water quantity.
- Work undertaken on the development of the 2018-28 Draft Long Term Plan, including distribution of a consultation document to all properties in Otago and a roadshow through all Districts.
- Funding contributions to the Otago Rescue Helicopter.
- Administration of EMaR/LAWA on behalf of the National Office.

Funding Impact Statement – Community

Funding Impact Statement for the year ended 30 June 2018.

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Long Term Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding					
General rates, uniform annual general charge					
& rate penalties	1,556	1,582	1,471	1,486	1,430
Targeted rates (other than a targeted rate for	_,		_,,	_,	
water supply)	_	_	_	_	145
Subsidies & grants for operating purpose	129	-	-	79	-
Fees, charges and targeted rates for water	123			,,	
supply	_	131	207	1	134
Internal charges & overheads recovered	15	-	-	49	-
Local authorities fuel tax, fines, infringement	13				
fees & other receipts	2,455	2,546	2,451	2,623	2,482
rees a other rescipts	2,433	2,340	2,431	2,023	2,482
Total operating funding (A)	4,155	4,259	4,129	4,238	4,191
Applications of operating funding					
Payments to staff & suppliers	3,245	3,530	3,016	3,181	3,189
Finance costs	-	-	-	-	-
Internal charges & overheads applied	1,450	1,465	1,113	1,398	1,007
Other operating funding applications	-	7	-	-	-
Total applications of operating funding (B)	4,695	5,002	4,129	4,579	4,196
Surplus (deficit) of operating funding (A-B)	(540)	(743)	-	(341)	(5)
	(5.5)	(2.10)			
Sources of capital funding					
Subsidies & grants for capital expenditure	-	-	-	_	-
Development and financial contributions	-	-	-	-	-
Increase (decrease) in debt	-	-	-	-	-
Gross proceeds from sale of assets	-	-	-	-	-
Lump sum contributions	-	-	-	-	-
Other dedicated capital funding	-	-	-	=	-
Total sources of capital funding (C)	-	-	-	-	-
Application of capital funding					
Capital expenditure:					
- to meet additional demand	_	-	-	_	-
- to improve the level of service	5	-	-	3	-
- to replace existing assets	-	-	-	141	-
Increase (decrease) in reserves	(545)	(743)	-	(485)	(5)
Increase (decrease) of investments		-	-	-	-
Total applications of capital funding (D)	(540)	(743)	-	(341)	(5)
Surplus (deficit) of capital funding (C-D)	540	743	-	341	5
Funding balance ((A-B) + (C-D))	-	-	_	-	_

The accompanying notes form part of these financial statements.

Regulatory

Policy Development

Specific areas of work:

1. Address any appeals made on the Regional Policy Statement and make operative.

Most appeal points have been addressed through mediation. The court has signed off 15 consent orders, and four consent orders are with the court, regarding:

- Chapter 3: natural resources
- Policy 5.3.1: Rural activities
- Implementation and Glossary
- Introduction (including changes to the Kāi Tahu section, agreed between Waitaha and Ngāi Tahu)

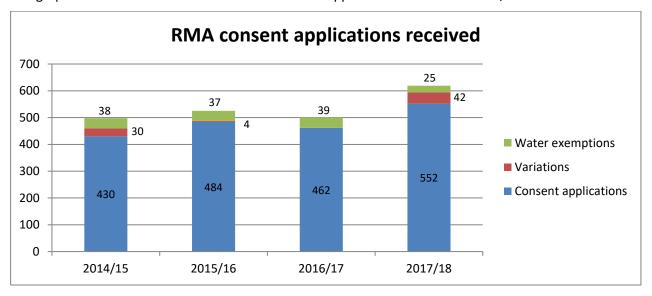
Two appeal points regarding Mining and Ports went to an Environment Court hearing in February 2018. The Court is yet to release its decisions and has not indicated when it might do this

The policy team is working towards making the agreed RPS sections operative, anticipating that the issues that have gone to Environment Court hearing may be the subject of further appeals.

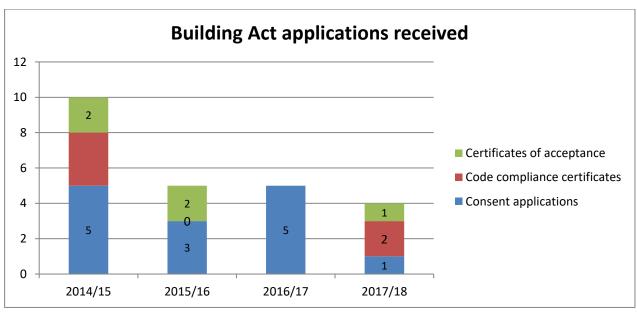
Consents & Compliance

Level of service – Process resource consent applications in a timely manner.		
Measure:	RMA and Building Act statutory time frames.	
Performance target: 100% of consents are processed within the statutory timeframes.		
Result:	All consents processed within statutory time.	

The graph below shows the number of RMA consent applications received in 2017/18.



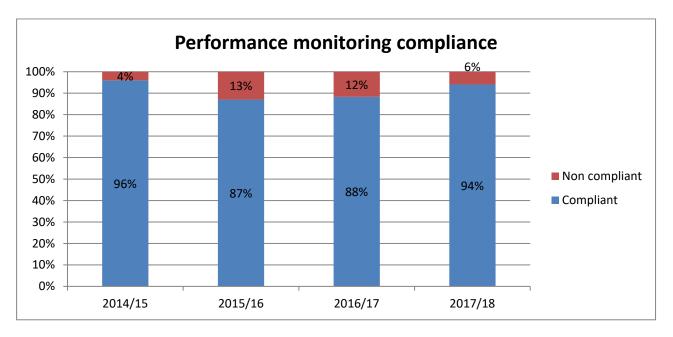
The graph below shows the number of Building Act applications received.



Level of service – Ensure consent conditions for the use of Otago's air, water and coastal resources are complied with		
Measure:	Performance monitoring returns show compliance with consent conditions.	
Performance target:	100% of performance monitoring data received will be assessed for compliance with consent conditions.	
Result:	A significant portion of the performance monitoring data was assessed for compliance against consent conditions.	

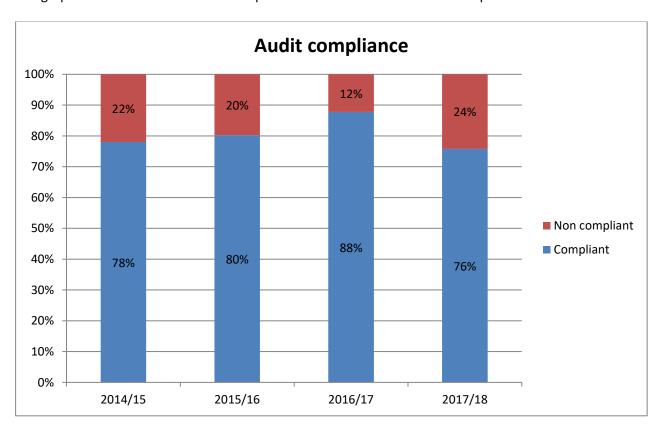
8092 performance monitoring returns were assessed during the 2017/18 financial year (2016/17: 5,336 returns; 2015/16: 4,086 returns; 2014/15: 3,616 returns). The level of returns is high due to significant work being completed in respect of water metering returns.

The graph below shows the level of compliance with consent conditions in respect of performance monitoring returns.



777 audits were undertaken during the 2017/18 financial year (2016/17: 744 audits; 2015/16: 1,099 audits; 2014/15: 420 audits).

The graph below shows the level of compliance with consent conditions in respect of audits undertaken:



Measure:	Enforcement of non-compliance found through audits and performance monitoring returns.	
Performance target:	All non-compliance found (grade 4 and 5) will be followed up and enforced in accordance with Council procedures.	
Result:	123 instances of non-compliance from audits and performance monitoring over the 2017/18 financial year. Recommendations for enforcement action have been made where appropriate.	

Compliance monitoring enforcement action undertaken to date compared to previous years was as follows:

	2017/18	2016/17	2015/16	2014/15
Infringement notices	24	40	14	19
Prosecutions authorised	6	14	3	6
Abatement notices	12			

Specific areas of work

1. Review consents for a catchment, subcatchment or aquifer within two months of a minimum flow or water quality standard being operational to assess water allocation.

Waiwera completed with no others required during the financial year.	
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Harbour Management

Level of service – Safe recreational use and navigation for all users of the Otago harbour		
Measure:	Respond to harbour incidents in a timely manner.	
Performance target:	Respond within one hour of notification from Harbour Control.	
Result:	LEDA MAERSK went aground 10th June off Port Chalmers. HM informed and witnessed incident. TAIC investigation opened. No other incidents to report	

Level of service – Council will be ready to respond to oil spills and ensure restoration.		Achieved
Measure:	Respond to oil spills in a timely manner.	
Performance target: Respond within 1.5 hours of notification.		
Result:	Nine marine pollution events were reported for the year. These events did not require a tier 2 response.	

Specific areas of work:

1. Hold one desk top and one field exercise for marine oil incident response.

A desktop exercise was held on 23 May involving EMO staff, Communications staff from Civil Defence and liaison with Environment Southland.

2. Draft a scoping document and consult on harbour bylaws for Otago.

The draft Harbour Bylaws were completed with consultation programmed from 20 July 2018.



Funding Impact Statement – Regulatory

Funding Impact Statement for the year ended 30 June 2018.

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Long Term Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding					
General rates, uniform annual general					
charge & rate penalties	391	490	364	273	416
Targeted rates (other than a targeted rate					
for water supply)	-	-	-	-	217
Subsidies & grants for operating purpose	72	55	35	71	35
Fees, charges and targeted rates for water					
supply	1,490	2,356	2,474	1,482	2,387
Internal charges & overheads recovered	3	98	131	4	131
Local authorities fuel tax, fines, infringement					
fees & other receipts	686	685	646	659	815
Total operating funding (A)	2,642	3,684	3,650	2,489	4,001
	2,042	3,084	3,030	2,403	4,001
Applications of operating funding					
Payments to staff & suppliers	2,227	1,846	1,887	2,172	2,364
Finance costs	-	-	-	-	-
Internal charges & overheads applied	1,676	1,720	1,666	1,530	1,691
Other operating funding applications	-	-	-	-	-
Total applications of operating funding (B)	3,903	3,565	3,553	3,702	4,055
Surplus (deficit) of operating funding (A-B)	(1,261)	119	97	(1,213)	(54)
Sources of capital funding					
Subsidies & grants for capital expenditure		-	-	-	-
Development and financial contributions	_	_	_	_	_
Increase (decrease) in debt		_		-	-
Gross proceeds from sale of assets	_	_	-	-	-
Lump sum contributions	_	_	-	-	-
Other dedicated capital funding		-	-	-	-
Total sources of capital funding (C)	-	-	-	-	-
Application of capital funding					
Capital expenditure:					
- to meet additional demand	-	_	-	-	_
- to improve the level of service	8	-	-	_	_
- to replace existing assets	-	-	-	-	77
Increase (decrease) in reserves	(1,269)	119	97	(1,213)	(131)
Increase (decrease) of investments	-	-	-	· · · · · · · · · · · · · · · · · · ·	-
Total applications of capital funding (D)	(1,261)	119	97	(1,213)	(54)
Surplus (deficit) of capital funding (C-D)	1,261	(119)	(97)	1,213	54
Funding balance ((A-B) + (C-D))	-,	(113)	(31)	-,	

Flood Protection & Control Works

Alexandra flood protection

	uce the flood risk to people and property by maintaining, repairing newing flood protection works to agreed standards	Achieved
Measure:	Respond to flood events or damage.	
Performance target:	Flood damage identified, prioritised and repaired.	
Result:	No flood events in this period.	
Measure:	Maintain and renew flood mitigation works to ensure design standards are met.	
Performance target:	Contain all floods up to 142.75m (above mean sea level) at Alexandra Bridge with 0.5m freeboard, corresponding with a flood flow of approximately 4,350 m³/s and being equivalent to the greatest recorded flood (in 1878) but with the Lake Hawea control gates closed.	
Result:	133.68 m highest for period - No flood events during the period. Highest level reached was 142.27 m on 19 November 1999.	
Measure:	Maintain and renew flood mitigation works to ensure design standards are met.	
Performance target:	Pump capacity will be available 320 out of 365 days per annum*.	
Result:	The Alexandra Linger & Die Pumping Station had reduced pump capacity (33.3%), or the equivalent of one pump out for 70 days, during the reporting year. This included:	
	 Pump 1 out for overhaul from 8 March to 26 April Pump 2 out for overhaul from 26 March to 16 May 	

^{*}Planned maintenance on pumps will require the pump to be out of service during the maintenance period, timing of which will be managed through risk assessment.

Pump 3 out for overhaul from 16 May to 31 May 2018

Specific areas of work:

1. Undertake total overhaul of the three Linger and Die pumps.

21 Office take total overhaul of the times imperant bis pamps	
Overhaul completed	

Leith flood protection

Level of service – Reduce the flood risk to people and property by maintaining flood protection works to agreed standards.		
Measure:	By 2019/20, increase capacity to 171 m³/s (measured at St David Street footbridge). Represents 1 in 100 year flood with freeboard.	
Performance target:	Undertake works between Union Street and Leith Street (including Leith Street bridge and the ITS building/bend).	
Result:	Works have been progressed during the reporting year. Problems associated with asbestos and noise from the site slowed progress. All asbestos contaminated material has been removed. In addition, the site was shut down during the end of year examination period to reduce noise.	
Measure:	By 2019/20, increase capacity to 171 m ³ /s (measured at St David Street footbridge). Represents 1 in 100 year flood with freeboard.	
Performance target:	Complete investigations and design works at Dundas Street bridge.	
Result:	While this program of work has and will continue to run behind initial estimated target dates, good progress has been made on investigations, physical modelling, and completion of detailed design work.	•

Lower Clutha flood and drainage

Level of service – Reduce the flood risk to people and property by maintaining, repairing and renewing flood protection works to agreed standards.			
Measure:	Respond to flood events or damage.		
Performance target:	Flood damage identified, prioritised and repaired.		
Result: No flood events in this period.			

Measure:	Maintain and renew flood mitigation works to ensure design standards are met.		
Performance target:	No flooding of Barnego in all flows up to 2,850 m ³ /s, Kaitangata, Inch Clutha and Paretai up to 4,000 m ³ /s, and Balclutha up to 5,400 m ³ /s (all flows measured at Balclutha) based on past observed floods.		
Result:	No flooding occurred during the year with the highest recorded flow being 861 cumecs.		

Measure: Respond to events or damage. Performance target: Damage identified, prioritised and repaired. Result: No flood damage to drainage works for the period. A slump up drain from the Kaitangata Pumping Station has still not been	
Result: No flood damage to drainage works for the period. A slump up drain from the Kaitangata Pumping Station has still not been	
drain from the Kaitangata Pumping Station has still not been	
repaired from a last year, still waiting for contractor with log reach excavator to provide price.	•

Measure:	Maintain and renew drainage works to ensure design standards are met.	
Performance target:	Provide drainage modulus of 7.5mm per day pumped drainage capacity for Matau District, 9mm per day for Inch Clutha, and 10mm per day for Paretai District.	
Result:	Target achieved.	

Measure:	Maintain and renew drainage works to ensure design standards are met.	
Performance target:	Pump capacity will be available at each station 320 out of 365 days per annum.*	
Result:	Target achieved.	

^{*}Planned maintenance on pumps will require the pump to be out of service during the maintenance period, timing of which will be managed through risk assessment.

Specific areas of work:

1. Complete altering the drainage infrastructure of Lake Tuakitoto/Robsons Lagoon to improve wetland ecosystem values.

Extensive consultation with Stakeholders was undertaken.	Resource consents have been
applied for and tenders for construction invited.	



2. Construct the improvements to the Koau right floodbank at Factory Road (Paretai) that reduce the risk of floodbank failure at that location.

Detailed design completed, and consent application lodged for this improvement work. Construction has been deferred to the latter half of the 2018/19 financial year



Lower Taieri flood protection

Level of service – Reduce the flood risk to people and property by maintaining, repairing and renewing flood protection works to agreed standards.		Achieved
Measure:	Respond to flood events or damage.	
Performance target:	Flood damage identified, prioritised and repaired.	
Result:	Flood damaged from the July 2017 flood was quickly assessed and prioritised. In some instances, repairs from this flood where ongoing for a number of months. Risks where managed including urgent and temporary repairs. Further works are being implemented through the 2018/27 LTP.	

Measure:	Maintain and renew flood mitigation works to ensure design standards are met.	
Performance target:	No flooding of the East Taieri upper ponding area from Taieri River flows up to 800 m³/s or Silver Stream flows up to 160 m³/s.*	
Result:	No flooding occurred in the Upper Ponding area arising from the Taieri River and Silver Stream flows.	

^{*}Taieri River flows measured at Outram, Silver Stream flows measured at Gordon Road), being equivalent to the 1980 flood, nominally a 100 year event.

Measure:	Maintain and renew flood mitigation works to ensure design standards are met.	
Performance target:	No flooding of the East Taieri lower ponding area from Taieri River flows up to 2,500 m ³ /s or Silver Stream flows up to 260 m ³ /s.	
Result:	No flooding occurred in the Lower Ponding area arising from the Taieri River and Silver Stream flows.	

Measure:	Maintain and renew flood mitigation works to ensure design standards are met.	
Performance target:	No flooding of West Taieri from Taieri River flows up to 2,500 m ³ /s.	
Result:	No flooding occurred in the West Taieri scheme from Taieri River flows. All flows contained within design scheme specifications.	

Measure:	Maintain and renew flood mitigation works to ensure design standards are met.	
Performance target:	No flooding of Mosgiel from Sliver Stream flows up to 260 m ³ /s.	
Result:	No Flooding in the Mosgiel area from the Silver stream this period.	

Specific areas of work:

1. Undertake design and obtain approvals and consents (if required), for constructing new upper/lower pond link spillways or the alternative option of relocating the floodbank(s) through the chute of the Taieri River.

This work was delayed due to the July 2017 flood. It will be informed by a 'scheme hydraulic performance investigation' that has programmed in the new financial year.



West Taieri drainage

Level of service – Improve the productive capability of land by maintaining, repairing and renewing land drainage works to agreed standards		Achieved
Measure:	Respond to events or damage.	
Performance target:	Damage identified, prioritised and repaired.	
Result:	Flood damaged from the July 2017 flood was quickly assessed and prioritised. In some instances, repairs from July 2017 flood where ongoing for a number of months. Risks where being managed with urgent and temporary repairs having been completed. Further works are being implemented in the new financial year.	

	Maintain and renew drainage works to ensure design standards are met.	
	Provide drainage modulus of 10mm per day pumped drainage capacity.	
Result:	The drainage moduli was provided over the period.	

Measure:	Maintain and renew drainage works to ensure design standards are met.	
Performance target:	Pump capacity for Waipori, Ascog and Henley will be available 320 out of 365 days per annum*.	
Result:	The target was missed by 4 days for the Waipori Pump Station. The Station capacity was reduced by 25% during this period, with no effect to land drainage. The target was achieved for Ascot and Henley.	•

^{*}Planned maintenance on pumps will require the pump to be out of service during the maintenance period, timing of which will be managed through risk assessment.

East Taieri drainage

Level of service –Improve the productive capability of land by maintaining, repairing and renewing land drainage works to agreed standards			
Measure:	Measure: Respond to events or damage.		
Performance target:	erformance target: Damage identified, prioritised and repaired.		
Result:	Flood damaged from the July 2017 flood was quickly assessed and prioritised. In some instances, repairs from July 2017 flood where ongoing for a number of months. Risks where being managed with urgent and temporary repairs having been completed. Further works are being implemented in the new financial year.		
Measure:	Maintain and renew drainage works to ensure design standards are met.		
Performance target:	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.		
Result:	Drainage moduli has been provided for throughout the period. A temporary pump was installed at Silverstream to compensate for a leakage from the discharge pipe.		

Measure:	Maintain and renew drainage works to ensure design standards are met.	
Performance target:	Pump capacity will be available 320 days out of 365 days per annum.*	
Result:	East Taieri – the target was not met due to the unplanned shutdown of Silverstream Pump duty pump 1 to mitigate risks of seepage from the discharge pipe. Options to repair the problem were progressed. In addition, a portable pump was installed to help compensate. The target was met for the Scroggs and Mill Creek Pumping Stations.	

^{*}Planned maintenance on pumps will require the pump to be out of service during the maintenance period, timing of which will be managed through risk assessment.

Specific areas of work:

1. Undertake design and consenting (if required), of drainage improvements for the upper pond.

Preliminary options review complete. Further investigation and design to be undertaken through the 2018-28 LTP.



Tokomairiro drainage

Level of service –Improve the productive capability of land by maintaining, repairing and renewing land drainage works to agreed standards			
Measure: Respond to events or damage.			
Performance target:	Damage identified, prioritised and repaired.		
Result:	Flood damaged from the July 2017 flood was quickly assessed and prioritised. In some instances, repairs from July 2017 flood where ongoing for a number of months. Risks where being managed with urgent and temporary repairs having been completed. Further works are being implemented in the new financial year.		

Measure:	Existing land drainage works perform to agreed standards, and drainage works are monitored and maintained to agreed standards.	
Performance target:	The drains and channel flow paths within the scheme are maintained to ensure hydraulic capacity.	
Result:	Flood damaged from the July 2017 flood was quickly assessed and prioritised. In some instances, repairs from July 2017 flood where ongoing for a number of months. Risks where being managed with urgent and temporary repairs having been completed. Further works are being implemented in the new financial year.	

Shotover River Delta

Level of service –Ensure waters can flow without undue obstruction		
Measure: Difference between actual and target profiles for surface.		
Performance target: Surface of Shotover river delta is consistent with the target profile.		
Result:	Cross section survey results received in January. Analysis of the current delta surface and report completed. Shotover Delta is a case study for the GeoTerm project which will be completed in August 2018. The tools from this project will help manage the delta in relation to the target profile.	

Funding Impact Statement – Flood Protection & Control Works

Funding Impact Statement for the year ended 30 June 2018.

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Long Term Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding					
General rates, uniform annual general charge &					
rate penalties	187	245	91	75	86
Targeted rates (other than a targeted rate for					
water supply)	3,866	3,852	4,211	3,678	3,955
Subsidies & grants for operating purpose	-		-	-	-
Fees, charges and targeted rates for water					
supply	97	273	195	14	176
Internal charges & overheads recovered	-		-	-	-
Local authorities fuel tax, fines, infringement					
fees & other receipts	540	617	394	386	488
1000 G 001101 10001pt0	340	017	334	300	700
Total operating funding (A)	4,690	4,987	4,891	4,153	4,705
Applications of operating funding					
Payments to staff & suppliers	3,365	2,055	2,096	1,698	1,993
Finance costs	-	-	-	-	-
Internal charges & overheads applied	993	849	879	909	901
Other operating funding applications	-	-	-	-	-
Total applications of operating funding (B)	4,358	2,904	2,975	2,607	2,894
	•	-		•	
Surplus (deficit) of operating funding (A-B)	332	2,083	1,916	1,546	1,811
Sources of capital funding					
Subsidies & grants for capital expenditure	-	-	-	-	-
Development and financial contributions	-	-	-	-	-
Increase (decrease) in debt	-	-	-	-	-
Gross proceeds from sale of assets	743	-	-	-	620
Lump sum contributions	-	-	-	-	-
Other dedicated capital funding	-	-	-	-	-
Total sources of capital funding (C)	743	-	-	-	620
Application of capital funding					
Capital expenditure:					
- to meet additional demand	-	-	-	-	-
- to improve the level of service	3,587	2,777	2,408	1,620	4,990
- to replace existing assets	8	982	672	256	425
Increase (decrease) in reserves	(2,520)	(1,676)	(1,164)	(330)	(2,984)
Increase (decrease) of investments	-	-	-	<u> </u>	-
Total applications of capital funding (D)	1,075	2,083	1,916	1,546	2,431
Surplus (deficit) of capital funding (C-D)	(332)	(2,083)	(1,916)	(1,546)	(1,811)
Funding balance ((A-B) + (C-D))	-	(=,000)	_,\\	(=,0 ·o _j	(2,022)

Safety and Hazards

Emergency Management

Level of service – Be ready and able to respond to civil defence emergencies, assist with recovery after such events, and to co-ordinate and promote reduction through group strategies and plans		
Measure:	Timeliness in response to a civil defence event/emergency.	
Performance target:	The Group Emergency Co-ordinating Centre can be fully operational within one hour of activation.	
Result:	Phillip Lang House is being completed and the Regional Group Emergency Coordination Centre (GECC) will operate from it. Until then Stafford Street and/or the Dunedin City Council Bunker can be stood up as an Emergency Co-ordinating Centre.	
Measure:	Timeliness in response to a civil defence event/emergency.	
Performance target:	A Group CDEM Controller is available 24/7, 365 days a year.	
Result:	There are currently four nominated Group Controllers in place. Three are fully qualified and one yet to complete training. Additional support mechanisms have been put in place as approved (May 2018) by the Joint Committee.	

Specific areas of work:

1. Lead the review and development of the 2017-22 Otago CDEM Group Plan.

The Otago CDEM Group Plan has not yet been approved for notification by the Central Emergency Group or the Joint Committee.	
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2. Complete the development of the Group Risk Reduction Strategy and implement it.

Risk reduction is an important component of the work Emergency Management Otago undertakes. The Otago Risk Register provides the basis and direction for activity in this area and as a living document, new risks are added to the register as they are identified. Activities in the risk reduction area are defined in the Otago Group Plan 2018 – 2028 and in the annual Business Plan.

3. Ensure that dam safety and dam failure plans are incorporated into community planning activities.

Dam safety is a key issue within the development of Community Response Plans where a dam forms part of that community's infrastructure. As new plans are developed, dams are identified and appropriate information on flood and/or dam failure evacuation zones are defined and included.	
As at 30 June 2018 not all communities with dams have a Community Response Plan.	

Natural hazards

Level of service – Work proactively with communities to improve understanding of the risks posed by natural hazards so that informed decisions and responses can be made.		
Measure:	Information to be available.	
Performance target: Provide natural hazards information to the public via an effective web based Otago Natural Hazards database.		
Result:	Following a comprehensive review of information displayed in the Natural Hazards Database and supporting information in 2017, areas identified as needing attention have now been worked on. Updates on the database continue to progress. The Coastal Hazards, Landslides, Alluvial Fan and Seismic layers have been updated and successfully uploaded to the NHDB. The Flooding, Storm Surge and Tsunami layers are now up to date and ready for upload to the database	

Level of service – Provision of accurate and timely flood warnings.				
Measure:	Measure: Warnings of flood events when alarm status is reached.			
Performance target: Provide rainfall and river flow information to the public when flood levels reach alarm status.				
Result:	Rainfall and flow information has been disseminated to the public mainly through the Waterinfo website. The Waterinfo website has been upgraded to make it more user friendly. One major flood event (July 2017) and several smaller events (including two ex-tropical cyclones (Fehi and Gita) were responded to this year. The July 2017 event required a large response.			

Specific areas of work:

1. Undertake a joint ORC/QLDC flood awareness campaign in Queenstown, Wanaka, Glenorchy and Kingston.

Campaign completed at the end of October/early November 2017. Visits were made to businesses in Queenstown and Wanaka CBD in addition to drop in sessions. Visits were undertaken in association with CDEM.



2. Work with the Dunedin City Council on the South Dunedin Future programme.

South Dunedin Future programme scope, roles, and next steps in this project being defined with discussions with DCC. Technical workshop with DCC planned in July. Flood forecasting tool developed and being tested during heavy rainfall events. ORC participation to NZ SeaRise programme on-going and will inform the South Dunedin Future programme next steps.



3. Report on the location and characteristics of known geological faults in Otago.

This project has been deferred to next financial year once GNS Science has completed the investigation on faults in the CODC, QLDC and CDC areas. The purpose of this project is to report on findings from work done or being done by GNS. The GNS work has delayed and will be completed around August/September 2018.



Funding Impact Statement – Safety and Hazards

Funding Impact Statement for the year ended 30 June 2018.

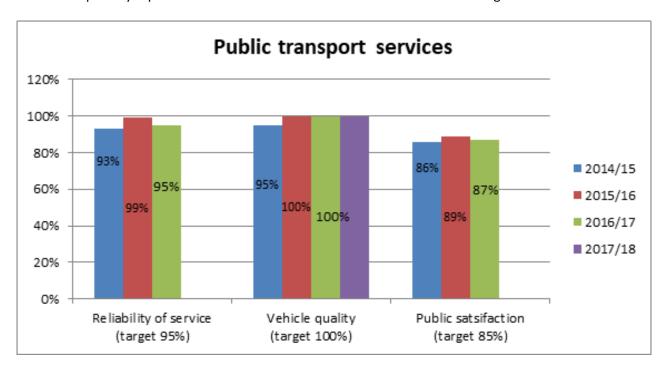
	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Long Term Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding					
General rates, uniform annual general charge &					
rate penalties	485	505	773	783	718
Targeted rates (other than a targeted rate for water supply)	2,371	2,412	-	-	-
Subsidies & grants for operating purpose	-	-	-	-	-
Fees, charges and targeted rates for water supply	-	-	-	-	-
Internal charges & overheads recovered	-	-	-	-	-
Local authorities fuel tax, fines, infringement fees & other receipts	779	755	1,400	1,590	1,361
Total operating funding (A)	3,635	3,672	2,173	2,373	2,079
Applications of operating funding					
Payments to staff & suppliers	2,338	2,193	1,151	1,716	1,116
Finance costs	-	-	-	-	-
Internal charges & overheads applied	1,856	1,540	1,020	883	961
Other operating funding applications	-	-	-	-	-
Total applications of operating funding (B)	4,194	3,733	2,171	2,599	2,077
Surplus (deficit) of operating funding (A-B)	(559)	(61)	2	(226)	2
Sources of capital funding					
Subsidies & grants for capital expenditure	-	-	-	-	-
Development and financial contributions	-	-	-	-	-
Increase (decrease) in debt	-	-	-	-	-
Gross proceeds from sale of assets	-	-	-	-	-
Lump sum contributions	-	-	-	-	-
Other dedicated capital funding	-	-	-	-	-
Total sources of capital funding (C)	-	-	-	-	-
Application of capital funding					
Capital expenditure:					
- to meet additional demand	-	-	-	-	-
- to improve the level of service	9	-	-	34	-
- to replace existing assets	-	-	-	1	-
Increase (decrease) in reserves	(568)	(61)	2	(261)	2
Increase (decrease) of investments	-	-	-	-	-
Total applications of capital funding (D)	(559)	(61)	2	(226)	2
Surplus (deficit) of capital funding (C-D)	559	61	(2)	226	(2)
Funding balance ((A-B) + (C-D))	-	-	-	-	-

Transport

Regional transport planning & public passenger transport

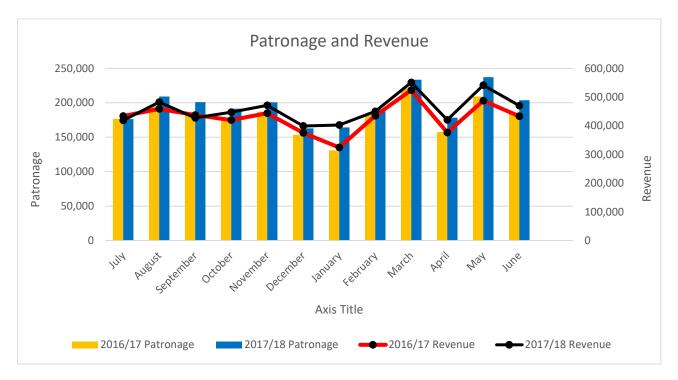
Level of service – Pr	rovide passenger transport services that meet community need.	Achieved
Measure:	Reliability of service.	
Performance target:	95% of services monitored depart from the terminus on time.	
Result:	Dunedin - The annual survey (which includes the measurement of the Service Departure time) was not completed in time to report at year end and will be reported in the first quarter of the 2018/19 financial year.	
Result:	Queenstown - The annual survey (which includes the measurement of the Service Departure time) was not completed in time to report at year end and will be reported in the first quarter of the 2018/19 financial year.	
Measure:	Vehicle quality.	
Performance target:	100% of vehicles (PTOM contracts) comply with Regional Passenger Transport Plan Vehicle Quality standards.	
Result:	Dunedin - 100% of vehicles comply with the Vehicle Quality Standards outlined in the Regional Public Transport Plan.	
Result:	Queenstown - 100% of vehicles comply with the Vehicle Quality Standards outlined in the Regional Public Transport Plan.	
Measure:	Public satisfaction.	
Performance target:	Surveys to show at least 85% of bus users are satisfied with overall standard of service.	
Result:	Dunedin - The annual survey was not completed in time to report at year end and will be reported in the first quarter of the 2018/19 financial year.	
Result:	Queenstown - The annual survey was not completed in time to report at year end and will be reported in the first quarter of the 2018/19 financial year.	

The graph below will be updated to show the reliability and satisfaction survey results for the 2017/18 year. This will be publicly reported to the 17 October 2018 Council Committee meeting round.



Measure:	Patronage growth.	
Performance target:	In Dunedin, maintain patronage In Wakatipu, 8% growth.	
Result:	Dunedin - Patronage growth of 8% achieved for the Financial Year.	
Result:	Queenstown - Patronage growth of 153% achieved since December after the new network commenced.	

Dunedin Passenger Transport: The graph below shows revenue and patronage for the 2017/2018 compared to the previous year 2016/2017. Seasonality is reflected in the figures, whilst 2018 data continues to outperform 2017, tracking at a premium of around 10-11%.

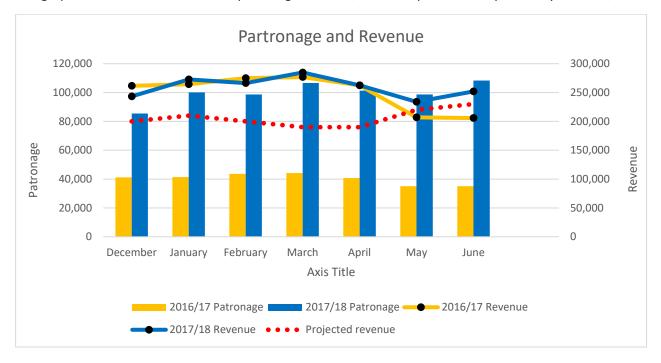


Wakatipu Public Transport

The new Wakatipu Public Transport Network was launched on 20 November 2017. The initial patronage uptake was encouraging with a 107% lift in December compared to the same month last year. This trend continued over the financial year showing a 153% increase compared to the same time last year.

After an initial and expected drop in revenue with the introduction of the flat fares actual revenue recovered and tracked closer to the year-end target.

The graph below shows revenue and patronage for 2017/2018 compared to the previous year 2016/2017.



Specific areas of work:

1. Complete the construction of a central bus hub in Dunedin.

Construction contract tender has been received, costs exceed the budget allocation. Council have approved its share of the cost increase, at year end seeking NZTA approval for its component of cost which has subsequently been approved. The project is now on track for completion of construction component late November 2018.



2. Complete the implementation of a replacement ticketing system.

System design and build is underway. Anticipate being operational in Queenstown and Dunedin in late 2018 / early 2019.



Funding Impact Statement – Transport

Funding Impact Statement for the year ended 30 June 2018.

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Long Term Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding					
General rates, uniform annual general					
charge & rate penalties	266	266	185	190	166
Targeted rates (other than a targeted rate					
for water supply)	4,260	4,232	3,688	3,493	3,482
Subsidies & grants for operating purpose	9,500	10,671	6,485	7,180	7,223
Fees, charges and targeted rates for water				.,	- ,
supply	_	97	32	_	24
Internal charges & overheads recovered	_		-	-	-
Local authorities fuel tax, fines, infringement					
fees & other receipts	6,776	7,315	560	2,269	541
rees & other receipts	0,770	7,313	300	2,203	341
Total operating funding (A)	20,802	22,581	10,950	13,132	11,436
Applications of operating funding					
Payments to staff & suppliers	20,104	24,132	11,369	13,259	12,824
Finance costs	-	-	-	-	-
Internal charges & overheads applied	699	618	330	699	291
Other operating funding applications	-	-	-	-	-
	20.002	24.750	44.600	42.050	12.115
Total applications of operating funding (B)	20,803	24,750	11,699	13,958	13,115
Surplus (deficit) of operating funding (A-B)	(1)	(2,169)	(749)	(826)	(1,679)
Sources of capital funding					
Subsidies & grants for capital expenditure	-	-	-	-	-
Development and financial contributions	_	-	_	-	_
Increase (decrease) in debt	_	-	-	_	_
Gross proceeds from sale of assets	_	-	-	-	-
Lump sum contributions	_	-	-	-	-
Other dedicated capital funding	-	-	-	-	-
Total sources of capital funding (C)	-	-	-	-	-
Application of capital funding					
Capital expenditure:		•			
- to meet additional demand	_	-	-	_	-
- to improve the level of service	1,865	426	-	333	-
- to replace existing assets	-	-	-	4	-
Increase (decrease) in reserves	(1,856)	(2,595)	(749)	(1,163)	(1,679)
Increase (decrease) of investments	-		-	-	<u> </u>
Total applications of capital funding (D)	(1)	(2,169)	(749)	(826)	(1,679)
Surplus (deficit) of capital funding (C-D)	1	2,169	749	826	1,679
Funding balance ((A-B) + (C-D))	-	-	_	-	-

Financial Statements

Funding Impact Statement for the Year Ended 30 June 2018 (Whole of Council)

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Sources of operating funding				
General rates, uniform annual general charge & rate				
penalties	7,570	7,275	6,567	5,800
Targeted rates (other than a targeted rate for water supply)		12.625	0.616	0.924
Cubaidias & grants for anarating numaca	13,636	13,635	9,616	9,824
Subsidies & grants for operating purpose	10,893 1,594	11,926	8,471	7,271
Fees, charges and targeted rates for water supply		3,426	1,497	3,660
Interest & dividends from investments	10,069	10,512	9,142	9,550
Local authorities fuel tax, fines, infringement fees & other receipts	8,656	9,140	5,027	2,122
Total operating funding (A)	52,418	55,914	40,320	38,227
Applications of operating funding				
Payments to staff & suppliers	54,097	55,555	40,114	37,316
Finance costs	3	138	-	73
Other operating funding applications	-	52	-	53
Total applications of operating funding (B)	54,100	55,745	40,114	37,442
Surplus (deficit) of operating funding (A-B)	(1,682)	169	206	785
Sources of capital funding				
Subsidies & grants for capital expenditure	-	-	-	-
Development and financial contributions	-	-	-	-
Increase (decrease) in debt	-	-	-	-
Gross proceeds from sale of assets	928	-	176	620
Lump sum contributions	-	-	-	
Other dedicated capital funding	-	-	-	
Total sources of capital funding (C)	928	-	176	620
Application of capital funding				
Capital expenditure:				
- to meet additional demand	-	-	-	
- to improve the level of service	7,308	3,548	3,360	4,990
- to replace existing assets	403	3,281	1,212	2,089
Increase (decrease) in reserves	(8,465)	(6,660)	(4,190)	(5,674)
Increase (decrease) of investments	-	-	-	-
Total applications of capital funding (D)	(754)	169	382	1,405
Surplus (deficit) of capital funding (C-D)	1,682	(169)	(206)	(785)
Funding balance ((A-B) + (C-D))	_	_	_	_

Reconciliation of Whole of Council Funding Impact Statement to Statement of Comprehensive Revenue and Expense for the Year Ended 30 June 2018

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000	Annual Plan 2016/17 \$000
Surplus/(deficit) of Operating Funding in Funding				
Impact Statement	(1,682)	169	206	(2,073)
Add/(deduct)				
Increase in the fair value of investment property	312	333	40	313
Increase in the fair value of investment portfolio	1,529	-	936	-
Profit/(Loss) on disposal of assets	(90)	-	20	-
Depreciation and amortisation	(2,082)	(2,014)	(1,937)	(1,761)
Write-off of property plant and equipment work in progress	(929)	-	(30)	-
Other	(8)	119	(177)	89
Surplus/(deficit) before taxation in Statement of Comprehensive Revenue and Expense	(2,950)	(1,393)	(942)	(3,432)

Schedule of Capital Expenditure

	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000
Flood Protection and Control Works			
Alexandra flood	-	-	87
East Taieri drainage	-	117	1
Leith flood protection	3,445	2,553	1,781
Lower Clutha flood and drainage	132	755	5
Lower Taieri flood protection	10	20	-
Tokomairiro	-	45	-
West Taieri drainage	6	268	2
Civil Defence Emergency Management			
Website development	-	-	15
Computers & plant	9	-	20
Environmental			
Air monitoring	70	35	
Water Monitoring sites	240	186	258
Pest management	27	15	15
Compliance monitoring	-	-	-
Transport			
Dunedin/Wakatipu	1,760	-	310
Stock truck effluent disposal sites	95	426	26
Corporate			
Property	1,079	300	328
Cars and station wagons	312	360	771
Computers & software	508	1,675	947
Plant	5	25	4
Sundry	13	50	2
Total	7,711	6,830	4,572

Statement of Comprehensive Revenue and Expense for the Year Ended 30 June 2018

	Notes	Council 2018 \$000	Council Budget \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Revenue from non-exchange transactions						
Rates revenue	3	20,908	20,910	15,963	20,883	15,940
Grant revenue and subsidies		10,893	11,926	8,471	10,893	8,471
Other revenue	3	7,473	9,611	3,490	7,473	3,490
Revenue from exchange transactions						
Dividends	2	9,000	9,000	7,800	-	-
Interest and investment revenue		1,069	1,511	1,342	1,069	1,502
Other revenue	3	3,076	2,955	3,112	99,189	87,038
Total revenue		52,419	55,913	40,178	139,507	116,441
Expenditure						
Employee benefits expense	22	(15,542)	(16,011)	(12 <i>,</i> 856)	(47,549)	(43,474)
Depreciation and amortisation expense	11	(2,083)	(2,014)	(1,936)	(11,306)	(10,600)
Finance costs	15	-	(2)	-	(2,926)	(2,834)
Other expenses	19	(39,495)	(39,612)	(27,133)	(62,947)	(45,826)
Total operating expenditure		(57,119)	(57,639)	(41,925)	(124,728)	(102,734)
Share of surplus from equity accounted joint ventures		-	-	-	205	80
Other gains/(losses)	4	1,750	333	805	24,913	20,715
Surplus/(deficit) before tax		(2,950)	(1,393)	(942)	39,897	34,502
Income tax benefit/(expense)	18	101	-	101	(8,130)	(4,402)
Surplus/(deficit) for the year		(2,849)	(1,393)	(841)	31,767	30,100
Other comprehensive revenue and expenses						
Items that may be reclassified to surplus/(deficit):						
Available-for-sale financial assets:						
Revaluation gain/(loss) – shares in subsidiary	2	49,471	10,000	20,798	-	-
Available for sale financial asset gains reclassified to surplus/(deficit) during the year		-	-	-	-	-
Cashflow hedges:						
Unrealised movement in hedging interest rate swaps		-	-	-	(333)	946
Income tax relating to components of other comprehensive revenue and expenses		-	_	_		
Total other comprehensive revenue and						
expense		49,471	10,000	20,798	(333)	946
Total comprehensive revenue and expense		46,622	8,607	19,957	31,434	31,046

Statement of Financial Position as at 30 June 2018

		Council 2018	Council Budget	Council 2017	Group 2018	Group 2017
	Notes	\$000	\$000	\$000	\$000	\$000
Current assets						
Cash and cash equivalents		8,125	3,765	4,433	8,377	4,958
Trade and other receivables	12	8,709	3,286	3,568	25,380	16,554
Property held for sale	8	214	1,284	1,093	214	3,238
Investment property inventories	9	-	-	-	31,190	25,696
Other financial assets	5	40,311	41,198	54,057	40,311	54,057
Other financial instrument		-	-	-	-	32
Other current assets		231	207	261	1,539	1,457
Total current assets		57,590	49,740	63,412	107,011	105,992
Non-current assets			-	-		
Shares in subsidiary	2	488,508	438,239	439,037	-	-
Joint ventures accounted for using the equity						
method	27	_	-	-	1,631	1,427
Other financial assets	5	-	-	-	13	33
Derivative financial instruments		-	-	-	-	253
Property, plant and equipment	6	90,212	93,922	86,313	299,417	267,764
Intangible assets	10	2,724	3,357	2,066	7,875	7,495
Investment property	7	11,137	11,431	10,825	328,927	313,262
Deferred tax asset	18	98	98	98	-	-
Total non-current assets		592,679	547,047	538,339	637,863	590,234
Total assets		650,269	596,787	601,751	744,874	696,226
Current liabilities						
Trade and other payables	13	9,019	4,134	7,159	18,072	14,530
Provisions		-	-	-	2,433	-
Employee entitlements	14	1,701	1,483	1,665	6,685	6,561
Other financial instruments	31	-	-	-	437	648
Tax payable		-	-	-	4,812	1,750
Total current liabilities		10,720	5,617	8,824	32,439	23,489
Non-current liabilities						
Employee entitlements	14	_	-	-	910	932
Borrowings	15	_	_	-	77,635	68,420
Deferred tax liabilities	18	_	-	-	14,305	15,620
Other financial instruments	31	-	-	-	571	185
Total non-current liabilities		-	-	-	93,421	85,157
Total liabilities		10,720	5,617	8,824	125,860	108,646
Net assets		639,549	591,170	592,927	619,014	587,580
Equity		,	, -	,	,	,
Reserves	16	509,050	457,424	459,378	251,634	230,274
Public equity	17(a)	130,499	133,746	133,549	367,380	357,306
Total equity	=: \%/	639,549	591,170	592,927	619,014	587,580

56

Statement of Changes in Net Assets/Equity for the Year ended 30 June 2018

			тот	AL COUNCIL 201	8			TOTAL GROUP 2018				
	Notes	Opening Balance 1 July 2017 \$000	Other Comprehensive Revenue and Expense \$000	Transfers In \$000	Transfers Out \$000	Closing Balance 30 June 2018 \$000	Opening Balance 1 July 2017 \$000	Other Comprehensive Revenue and Expense \$000	Transfers In \$000	Transfers Out \$000	Closing Balance 30 June 2018 \$000	
Equity												
General Rate Equity		71,846	(2,849)	40,396	(39,464)	69,929	295,603	31,767	40,396	(60,956)	306,810	
Targeted Rate Equity		61,703	-	36,359	(37,492)	60,570	61,703	-	36,359	(37,492)	60,570	
Total Public Equity		133,549	(2,849)	76,755	(76,956)	130,499	357,306	31,767	76,755	(98,448)	367,380	
Reserves:												
Asset Replacement Reserve		5,820	-	1,730	(1,480)	6,070	5,820	-	1,730	(1,480)	6,070	
Asset Revaluation Reserve		8,764	-	312	-	9,076	199,091	-	21,804	-	220,895	
Available for Sale Revaluation Reserve		419,037	49,471	-	-	468,508	-	-	-	-	-	
Building Reserve		13,614	-	498	(864)	13,248	13,614	-	498	(864)	13,248	
Emergency Response Reserve		4,033	-	149	-	4,182	4,033	-	149	-	4,182	
Hedging Reserve		-					(394)	(333)	-	-	(727)	
Water Management Reserve		1,427	-	45	(433)	1,039	1,427	-	45	(433)	1,039	
Kuriwao Endowment Reserve		6,361	-	351	(280)	6,432	6,361	-	351	(280)	6,432	
Environmental Enhancement Reserve		322	-	270	(97)	495	322		270	(97)	495	
Total Reserves		459,378	49,471	3,355	(3,154)	509,050	230,274	(333)	24,847	(3,154)	251,634	
Total Equity and Reserves		592,927	46,622	80,110	(80,110)	639,549	587,580	31,434	101,602	(101,602)	619,014	

5/

Statement of Changes in Net Assets/Equity for the Year ended 30 June 2017

			тот	AL COUNCIL 201	7			TOTAL GROUP 2017				
	Notes	Opening Balance 1 July 2016 \$000	Other Comprehensive Revenue and Expense \$000	Transfers In \$000	Transfers Out \$000	Closing Balance 30 June 2017 \$000	Opening Balance 1 July 2016 \$000	Other Comprehensive Revenue and Expense \$000	Transfers In \$000	Transfers Out \$000	Closing Balance 30 June 2017 \$000	
Equity												
General Rate Equity		72,956	(841)	23,792	(24,061)	71,846	285,641	30,100	23,792	(43,930)	295,603	
Targeted Rate Equity		64,249	-	18,499	(21,045)	61,703	64,249	-	18,499	(21,045)	61,703	
Total Public Equity		137,205	(841)	42,291	(45,106)	133,549	349,890	30,100	42,291	(64,975)	357,306	
Reserves:												
Asset Replacement Reserve		5,987	-	1,908	(2,075)	5,820	5,987	-	1,908	(2,075)	5,820	
Asset Revaluation Reserve		8,724	-	40	-	8,764	179,182	-	19,909	_	199,091	
Available for Sale Revaluation Reserve		398,239	20,798	-	-	419,037	-	-	-	-	-	
Building Reserve		10,997	-	2,988	(371)	13,614	10,997	-	2,988	(371)	13,614	
Emergency Response Reserve		3,891	-	142	-	4,033	3,891	-	142	-	4,033	
Hedging Reserve		-	-	-	-	-	(1,340)	946	-	-	(394)	
Water Management Reserve		1,433	-	52	(58)	1,427	1,433	-	52	(58)	1,427	
Kuriwao Endowment Reserve		6,271	-	343	(253)	6,361	6,271	-	343	(253)	6,361	
Environmental Enhancement Reserve		223	<u>-</u>	339	(240)	322	223		339	(240)	322	
Total Reserves		435,765	20,798	5,812	(2,997)	459,378	206,644	946	25,681	(2,997)	230,274	
Total Equity and Reserves		572,970	19,957	48,103	(48,103)	592,927	556,534	31,046	67,972	(67,972)	587,580	

Cash Flow Statement for the Year ended 30 June 2018

		Council 2018	Council Budget	Council 2017	Group 2018	Group 2017
	Notes	\$000	\$000	\$000	\$000	\$000
Cash flows from operating activities		•	•	•		•
Receipts from non-exchange transactions						
Receipts from customers		19,191	30,521	15,802	91,557	15,977
Grant income and subsidies		10,893	11,926	8,471	+	8,471
		10,695	11,920	0,471	10,893	0,471
Other receipts		-	-	-	-	
Receipts from exchange transactions						
Interest and investment income		1,069	1,511	1,342	1,080	1,502
Rental income		1,051	1,002	1,051	15,185	15,713
Subvention payment		101	-	101	-	-
Dividends		9,000	9,000	7,800	-	-
Other receipts		6,060	1,959	5,513	6,060	72,348
Payments to suppliers and employees		(52,744)	(55,274)	(36,557)	(105,148)	(83,919)
Interest and other costs of finance paid			(2)	-	(2,550)	(2,450)
Income tax received/(paid)		_	(-/	_	(6,254)	(6,073)
Donations Donations		(350)	(350)	(350)	(350)	(350)
Net cash inflow/(outflow) from operating		, ,	,			, ,
activities		(5,729)	293	3,173	10,473	21,219
Cash flows from investing activities						
Interest capitalised		-	-	_	(373)	(462)
Proceeds from sale of property, plant and						
equipment		1,124	-	169	1,542	420
Proceeds from sale of intangible assets		-	-	7		7
Sale of held for sale assets		879	-	-	879	-
Sale of investment property		-	-	-	25,735	7,153
Advances (to)/from subsidiaries		-	-	-	737	298
Proceeds from other financial assets		15,275	15,000	3,077	15,275	3,077
Purchase of/improvements to investment						
property		_	-	_	(15,500)	(19,328)
Purchase of other financial assets		-	-	-	-	
Purchase of property in development		_	-	-	-	(1,435)
Purchase of property, plant and equipment		(6,739)	(5,210)	(3,762)	(43,466)	(14,492)
Purchase of intangible assets		(1,118)	(1,620)	(771)	(1,118)	(1,307)
Repayment of lease improvements		-			(-//	155
Net cash inflow/(outflow) from investing						
activities		9,421	8,170	(1,280)	(16,269)	(25,914)
Cash flows from financing activities						
Proceeds from borrowings		-	-	_	20,965	20,650
Repayment of borrowings		-	-	-	(11,750)	(14,630)
Net cash inflow/(outflow) from financing activities		_	_	-	9,215	6,020
			_		3,213	0,020
Net increase/(decrease) in cash and cash equivalents		3,692	8,463	1,893	3,419	1,325
Cash and cash equivalents at the beginning of					-	•
the financial year		4,433	(4,698)	2,540	4,958	3,633
Cash and cash equivalents at the end of the						
financial year		8,125	3,765	4,433	8,377	4,958

For the purpose of the Statement of Cash Flows, cash and cash equivalents include cash on hand and in banks and investments in money market instruments, net of outstanding bank overdrafts.

The following terms are used in the Statement of Cash Flows:

- operating activities are the principal revenue producing activities of the Group and other activities that are not investing or financing activities;
- investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents; and
- financing activities are activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.

(a) Reconciliation of Cash and Cash Equivalents

For the purposes of the cash flow statement, cash and cash equivalents includes cash on hand and in bank and deposits in money market instruments, net of outstanding bank overdrafts. Cash and cash equivalents at the end of the financial year as shown in the Cash Flow Statements is reconciled to the related items in the Statement of Financial Position as follows:

	Council	Council	Group	Group
	2018	2017	2018	2017
	\$000	\$000	\$000	\$000
Cash and cash equivalents:				
Cash at bank and on hand	6,125	4,433	6,377	4,958
Term deposits with maturities less than 3 months	2,000	-	2,000	-
	8,125	4,433	8,377	4,958

The carrying value of cash at bank and term deposits with maturities less than three months approximate their fair value.

(b) Reconciliation of Surplus for the Year to Net Cash Flows from Operating Activities

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Surplus/(deficit) for the year	(2,849)	(841)	31,767	30,100
Add/(less) non-cash items:				
Depreciation and amortisation	2,083	1,936	11,306	10,599
(Gain)/loss on sale of property, plant and equipment	90	(20)	82	(54)
Write off of intangible assets	-	(30)	-	(30)
Provision for doubtful debts	11	(71)	11	(72)
(Gain)/loss on revaluation of investment property	(312)	(40)	(21,804)	(19,909)
Loss/(gain) on disposal of investment property	-	-	(1,641)	(34)
Net change in fair value of derivative financial instruments	-	-	-	30
Net change in fair value of financial instruments	(1,529)	(936)	(1,529)	(936)
Non-current employee entitlements	-	-	-	(487)
Share of surpluses retained by joint ventures	-	-	(205)	(80)
Gain on sale of available for sale investments	-	-	-	-
Deferred tax	-	101	(1,185)	(2,107)
Write-off of property plant and equipment work in progress	-	-	-	
	343	99	(14,965)	17,020
Movement in working capital:				
Trade and other receivables	(5,152)	(270)	(8,449)	(1,124)
Inventories	-	-	(112)	20
Other current assets	30	(54)	30	(54)
Trade and other payables	1,863	3,025	2,840	3,808
Provisions	-		2,433	
Employee entitlements	36	182	102	804
Income tax	-	-	2,922	479
Movement in working capital items classified as investing activities	-	191	(6,095)	266
	(3,223)	3,074	(6,329)	4,199
Net cash inflow/(outflow) from operating activities	(5,729)	3,173	10,473	21,219

Notes to the Financial Statements For the Year ended 30 June 2018

1. Statement of Accounting Policies

Reporting Entity

The Council is a regional local authority governed by the Local Government Act 2002.

The Council Group (Group) consists of the Council and its subsidiary Port Otago Limited (100% owned). The Port Otago Limited Group consists of Port Otago Limited, its subsidiaries, associates and joint ventures.

The primary objective of the Council is to provide goods or services for the community or social benefit rather than making a financial return. The principal activities of the Group entities are described in Note 27. Accordingly, the Council has designated itself and the Group as public benefit entities for financial reporting purposes.

The Financial Statements of Council are for the year ended 30 June 2018 and were authorised for issue by Council on 26 September 2018.

Statement of Compliance

The financial statements have been prepared in accordance with the requirements of the Local Government Act 2002: Part 6, Section 98 and Part 3 of Schedule 10, which includes the requirement to comply with New Zealand generally accepted accounting practice (NZ GAAP).

The financial statements comply with Public Benefit Entity Public Sector (PBE (PS)) standards. The financial statements have been prepared in accordance with Tier 1 PBE standards.

Basis of Preparation

The financial statements have been prepared on the basis of historical cost, except for the revaluation of certain non-current assets and financial instruments (including derivative financial instruments). Cost is based on the fair values of the consideration given in exchange for assets.

The financial statements are presented in thousands of New Zealand dollars. New Zealand dollars are the Council's and Group's functional currency.

Accounting policies are selected and applied in a manner which ensures that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events is reported.

All foreign currency transactions during the financial year are brought to account using the exchange rate in effect at the date of the transaction. Foreign currency monetary items at reporting date are translated at the exchange rate existing at reporting date. Exchange differences are recognised in the surplus/(deficit) in the period in which they arise.

The financial statements are stated exclusive of GST, except for receivables and payables in the Statement of Financial Position which are recognised inclusive of GST. The GST component of cash flows arising from investing and financing activities which is recoverable from, or payable to, the taxation authority is classified as operating cash flows in the Cash Flow Statement.

The budget amounts in these financial statements are for Council only and are those approved by the Council in the Long Term Plan / Annual Plan and have been prepared using accounting policies that are consistent with those adopted by the Council for the preparation of the financial statements.

Adoption of New and Revised Standard and Interpretations

There have been no new accounting standards adopted in the current financial year.

Standards and interpretations issued and not yet adopted

Council has not yet assessed the impact of the following new standards and interpretations that are on issue, which have yet to be adopted:

- 2016 omnibus amendments to PBE (PS) standards
- PBE IPSAS 34: Separate Financial Statements
- PBE IPSAS 35: Consolidated Financial Statements
- PBE IPSAS 36: Investment in Associates and Joint Ventures
- PBE IPSAS 37: Joint Arrangements
- PBE IPSAS 39: Employee Benefits
- PBE FRS 48: Service Performance Reports

Council expects to adopt the above standards in the period in which they become mandatory. Council anticipates that the above standards are not expected to have a material impact on the financial statements in the period of initial application, however a detailed assessment has yet to be performed.

Principles of Consolidation

The consolidated financial statements are prepared by combining the financial statements of all the entities that comprise the Group, being the Council entity and its controlled entities as defined in PBE *IPSAS 6 Consolidated and Separate Financial Statements*. A list of controlled entities appears in Note 27 to the financial statements. Consistent accounting policies are employed in the preparation and presentation of the consolidated financial statements.

On acquisition, the assets, liabilities and contingent liabilities of a controlled entity are measured at their fair values at the date of acquisition. Any excess of the cost of acquisition over the fair values of the identifiable net assets acquired is recognised as goodwill. If, after reassessment, the fair value of the identifiable net assets acquired exceeds the cost of acquisition, the deficiency is credited to profit and loss in the period of acquisition.

The interest of minority shareholders is stated at the minority's proportion of the fair values of the assets and liabilities recognised.

The consolidated financial statements include the information and results of each controlled entity from the date on which the Council obtains control and until such time as the Council ceases to control the entity.

In preparing the consolidated financial statements, all inter-company balances and transactions, and unrealised profits arising within the Group are eliminated in full.

Accounting Policies

Accounting policies that summarise the measurement basis used and are relevant to the understanding of the financial statements are provided throughout the accompanying notes.

The accounting policies adopted have been applied consistently throughout the periods presented in these financial statements.

Critical Estimates and Assumptions and Judgements

In preparing these financial statements the Council has made estimates, assumptions and judgements concerning the future. These estimates, assumptions and judgements may differ from the subsequent actual results. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations or future events that are believed to be reasonable under the circumstances. The estimates, assumptions and judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are disclosed below:

Estimate of Fair Value of Investment Property – refer to Note 7

Estimate of fair value of shares in subsidiary – refer to Note 2

Property, Plant and Equipment – refer to Note 6

Classification of Property – refer to Note 7

2. Shares in Subsidiary and Dividend Income

Port Otago Limited is a 100% subsidiary of the Council.

Recognition and measurement

The Council's investment in Port Otago Limited is carried at fair value in the Council entity's financial statements. At each balance date the Council obtains an annual valuation of the Council's shareholding in its subsidiary Port Otago Limited. The Port Otago group consists of Port Otago Limited, its subsidiaries, associates and joint ventures.

The annual valuation is determined by an independent firm of chartered accountants and business advisors.

In assessing the valuation, the valuers adopt methodologies appropriate for the components of the Port Otago Limited group, employing the discounted cashflow methodology for Port Otago port operations and net tangible assets approach for Chalmers Properties Limited. Changes in forecast cashflows and property values and other factors that the fair value assessment is based on may result in the fair value of the shares in the subsidiary being different from previous estimates. The fair value is a level 3 fair value measurement as the valuation technique includes inputs that are not based on observable market data (unobservable inputs).

Significant Assumptions Used in Determining Fair Value of Financial Assets and Financial Liabilities

The valuation for the shares in Port Otago Limited is a combination of a discounted cashflow and assets approach based on information provided by the entity and investment property valuations. The fair value of the shares in subsidiaries at 30 June 2018 was based on cashflows discounted using a weighted average cost of capital of 7.6% (2017: 7.3%), terminal growth rate 2% (2017: 2%) and discount for lack of marketability 5% (2017: 5%).

Sensitivity to WACC

- A decrease of 0.5% in WACC to 6.8% would result in a \$25.4m increase in fair value
- An increase of 0.5% in WACC to 7.8% would result in a \$21.0m decrease in fair value

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Balance at beginning of year	439,037	418,239	-	_
Gain/(loss) recognised in other Comprehensive Revenue and Expense	49,471	20,798	-	-
Balance at end of year	488,508	439,037	-	-

Related party transactions

During the year the following receipts / (payments) were made from/(to) Port Otago Limited:

	Council 2018 \$000	Council 2017 \$000
Dividend payment made to Council	9,000	7,800
Harbour Control Centre and other costs	(65)	(60)
Other expenses	86	88

3. Revenue

Recognition and measurement

Revenue is recognised to the extent that it is probable that the economic benefits or service potential will flow to the group and the revenue can be reliably measured, regardless of when the payment is being made.

Revenue from exchange transactions

Dividend income is recognised when the right to receive payment is established, being the declaration date of the dividend.

Interest revenue is recognised on a time proportionate basis using the effective interest method.

Revenue from port services is recognised in the accounting period in which the actual service is provided to the customer.

Revenue from the rendering of services including relating to contracts and consent application that are in progress at balance date is recognised by reference to the stage of completion of the transaction at balance date, based on the actual service provided as a percentage of the total services to be provided.

Rental income from operating leases is recognised on a straight line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised as an expense on a straight-line basis over the lease term.

Fees and charges are recognised as income when supplies and services have been rendered. Fees received from the following activities are recognised as revenue from exchange transactions: resource consent processing, pest animal contract work, grazing leases and licenses, enforcement work, dividends, interest and rental income.

All other fee income is recognised as revenue from non-exchange transactions.

Revenue from non-exchange transactions

Rates revenue is recognised as income when levied.

Grants and subsidies are recognised upon entitlement as conditions pertaining to eligible expenditure have been fulfilled.

Other fee income from non-exchange transactions is recognised when the supplies and services have been rendered.

Rates Revenue

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Rates revenue comprises:					
General rates		7,272	6,347	7,247	6,324
Targeted rates		13,636	9,616	13,636	9,616
		20,908	15,963	20,883	15,940

Council levies general rates for those functions that are assessed as providing benefits to all ratepayers within each of the constituent districts and city, and levies targeted rates where functions benefit a defined group of ratepayers.

Other Revenue

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Revenue from exchange transactions					
Port revenue		-	-	80,666	67,670
Consents and regulatory fees		1,893	1,596	1,893	1,596
Regional services revenue		132	465	132	465
Investment property rental income		663	658	16,110	15,419
Other property rental income		388	393	388	1,888
		3,076	3,112	99,189	87,038
Revenue from non-exchange transactions					
Consents and regulatory fees		240	230	240	230
Other activity fees and charges		7,233	3,260	7,233	3,260
		7,473	3,490	7,473	3,490

4. Other Gains/(Losses)

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Unrealised net change in value of investment					
property and property in development	7	312	40	21,804	19,691
Gain/(loss) on disposal of investment property		-	-	-	34
Impairment and impairment reversals of property					
in development	9	-	-	-	894
Gain/(loss) on disposal of property, plant & equipment		(91)	20	1,580	54
Net change in fair value of financial assets carried					
at fair value through surplus or deficit		1,529	936	1,529	936
Impairment of held for sale assets	8	-	(191)	-	(864)
Net foreign exchange gain/(loss)		-	-	-	-
Net change in fair value of derivative financial instruments classified at fair value through surplus or deficit (interest rate swaps)		-	-	-	(30)
Gain/(loss) on future value of investment property sale		-	-	-	
Gain/(loss) on available for sale assets		-	-	-	-
		1,750	805	24,913	20,715
Gains		1,841	1,043	25,004	21,626
Losses		(91)	(238)	(91)	(911)

Gains or losses on the sale of investment property and property, plant and equipment are recognised when an unconditional contract is in place and it is probable that the Group will receive the consideration due and significant risks and rewards of ownership of assets have been transferred to the buyer.

5. Other Financial Assets

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Held for trading – carried at fair value				
Current:				
Managed funds – cash (i)	1,173	1,625	1,173	1,625
Managed funds – bonds (i)(ii)	9,163	10,931	9,163	10,931
Managed funds – equities (i)	10,975	7,301	10,975	7,301
	21,311	19,857	21,311	19,857
Loans and receivables carried at amortised cost				
Current:				
Short-term deposits with maturities of 4-12 months	19,000	34,200	19,000	34,200
Non-current:				
Prepaid lease costs	-	-	13	33
	19,000	34,200	19,013	34,233
	40,311	54,057	40,324	54,090
Disclosed in the financial statements as:				
Current	40,311	54,057	40,311	54,057
Non-current	-	-	13	33
	40,311	54,057	40,324	54,090

Other financial Assets are classified on initial recognition at fair value through surplus of deficit or loans and receivables.

Loans and Receivables at Amortised Cost

Loans and receivables are subsequently measured at amortised cost using the effective interest rate method.

Financial Assets at Fair Value through Surplus of Deficit

Financial assets are classified as financial assets at fair value through surplus or deficit where the financial asset:

- Has been acquired principally for the purpose of selling in the near future;
- Is a part of an identified portfolio of financial instruments that the Council and Group manages together and has a recent actual pattern of short-term profit-taking; or
- Is a derivative that is not designated and effective as a hedging instrument.

Financial assets at fair value through surplus or deficit are stated at fair value, with any resultant gain or loss recognised in the Statement of Comprehensive Revenue and Expense. The net gain or loss is recognised in the Statement of Comprehensive Revenue and Expense and incorporates any dividend or interest earned on the financial asset. Fair value is determined in the manner described later in this note.

- (i) The Council and Group have classified their managed funds held for trading. The Group holds a portfolio of floating and fixed interest deposits, bonds and equity securities that is managed externally. This classification has been determined as all assets within this category are available for trading at any point. Financial assets held for trading purposes are classified as current assets and are stated at fair value, with any resultant gain or loss recognised in the surplus/(deficit).
- (ii) The Group holds fixed interest bonds via its managed fund portfolio, the maturity dates range between 2017–2028.

Fair Value

The fair values of financial assets and financial liabilities are determined as follows:

Level 1 – the fair value of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets is determined with reference to quoted market prices. Financial assets in this category include managed fund equities and shares in listed companies.

Level 2 – the fair value of other financial assets and financial liabilities (excluding derivative instruments) is determined in accordance with generally accepted pricing models based on discounted cash flow analysis using prices from observable current market transactions and dealer quotes for similar instruments.

Level 3 – fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

		cou	INCIL			GROUP					
	Level 1 \$000	Level 2 \$000	Level 3 \$000	Total \$000	Level 1 \$000	Level 2 \$000	Level 3 \$000	Total \$000			
2018											
Financial assets at FVTPL:											
Other financial assets	3,183	18,128	-	21,311	3,183	18,128	-	21,311			
2017											
Financial assets at FVTPL:											
Other financial assets	1,689	17,262	906	19,857	1,689	17,262	906	19,857			

6. Property Plant and Equipment

COUNCIL ONLY 2018

	Cost 1 July 2017 \$000	Additions \$000	Disposals \$000	Transfers \$000	Transfers to Held for sale assets \$000	Cost 30 June 2018 \$000	Accumulated Depreciation & Impairment Charges 1 July 2017 \$000	Depreciation Expense \$000	Accumulated Depreciation Reversed on Disposal \$000	Transfers \$000	Accumulated Depreciation & Impairment Charges 30 June 2018 \$000	Book Value 30 June 2018 \$000
Council operational assets												
Land	12,545	-	-	-	-	12,545	-	-	-	-	-	12,545
Endowment land	1,495	-	-	-	-	1,495	-	-	-	-	-	1,495
Buildings	6,107	71	-	17	-	6,195	(1,041)	(173)	-	(7)	(1,221)	4,974
Plant and vehicles	7,073	1,206	(289)	(17)	-	7,973	(4,489)	(697)	148	7	(5,031)	2,942
Capital work in progress	290	998	-	-	-	1,288	-	-	-	-	-	1,288
Total operational assets	27,510	2,275	(289)	-	-	29,495	(5,530)	(870)	148	-	(6,252)	23,244
Council infrastructural assets												
Floodbanks	27,560	-	-	-	-	27,560	-	-	-	-	-	27,560
Protection works	8,249	-	-	722	-	8,971	-	-	-	-	-	8,971
Structures	34,327	-	-	4,997	-	39,324	(15,910)	(708)	-	-	(16,618)	22,706
Drains	3,288	-	-	-	-	3,288	-	-	-	-	-	3,288
Bridges	1,531	-	-	-	-	1,531	(971)	(45)	-	-	(1,016)	515
Culverts	1,267	-	-	-	-	1,267	-	-	-	-	-	1,267
Capital work in progress	4,993	4,316	(929)	(5,719)	-	2,661	-	-	-	-	-	2,148
Total infrastructural assets	81,215	4,316	(929)	-	-	84,602	(16,881)	(753)	-	-	(17,634)	66,968
Total Council property, plant and equipment	108,725	6,591	(1,218)	-	-	114,097	(22,411)	(1,623)	148	-	(23,886)	90,212

Council infrastructural assets represent Flood protection and Control Works as defined in the Local Government (Financial Reporting and Prudence) Regulations 2014. All infrastructure assets acquired during the year were constructed by Council. There were no infrastructural assets transferred to the Council from external entities.

6. Property Plant and Equipment

COUNCIL ONLY 2017

	Cost 1 July 2016 \$000	Additions \$000	Disposals \$000	Transfers out of Work in Progress \$000	Transfers to Held for sale assets \$000	Cost 30 June 2017 \$000	Accumulated Depreciation & Impairment Charges 1 July 2016 \$000	Depreciation Expense \$000	Accumulated Depreciation Reversed on Disposal \$000	Transfers to Held for sale assets \$000	Accumulated Depreciation & Impairment Charges 30 June 2015 \$000	Book Value 30 June 2017 \$000
Council operational assets												
Land	12,545	-	-	-	-	12,545	-	-	-	-	-	12,545
Endowment land	1,495	-	-	-	-	1,495	-	-	-	-	-	1,495
Buildings	6,161	35	(89)	-	-	6,107	(914)	(173)	45	-	(1,042)	5,065
Plant and vehicles	6,630	1,288	(883)	38	-	7,073	(4,717)	(557)	785	-	(4,489)	2,584
Capital work in progress	43	285	-	(38)	-	290	-	-	-	_	-	290
Total operational assets	26,874	1,608	(972)	-	-	27,510	(5,631)	(730)	830	-	(5,531)	21,979
Council infrastructural assets												
Floodbanks	27,560	-	-	-	-	27,560	-	-	-	-	-	27,560
Protection works	8,249	-	-	-	-	8,249	-	-	-	-	-	8,249
Structures	34,236	90	(5)	6	-	34,327	(15,247)	(663)	-	-	(15,910)	18,417
Drains	3,288	-	-	-	-	3,288	-	-	-	-	-	3,288
Bridges	1,542	-	(11)	-	-	1,531	(935)	(45)	9	-	(971)	560
Culverts	1,267	-	-	-	-	1,267	-	-	-	_	_	1,267
Capital work in progress	2,935	2,064	-	(6)	-	4,993	-	-	-	-	-	4,993
Total infrastructural assets	79,077	2,154	(16)	-	-	81,215	(16,182)	(708)	9	-	(16,881)	64,334
Total Council property, plant and equipment	105,951	3,762	(988)	-	-	108,725	(21,813)	(1,438)	839	-	(22,412)	86,313

Council infrastructural assets represent Flood protection and Control Works as defined in the Local Government (Financial Reporting and Prudence) Regulations 2014. All infrastructure assets acquired during the year were constructed by Council. There were no infrastructural assets transferred to the Council from external entities.

GROUP - 2018

GROUP – 2018			1				Accumulated		•				Accumulated	1
	Cost 1 July 2017 \$000	Additions \$000	Disposals \$000	Transfers \$000	Transfers to held for sale \$000	Cost 30 June 2018 \$000	Depreciation & Impairment Charges 1 July 2017 \$000	Impairment Losses Charged in Profit or Loss \$000	Depreciation Expense \$000	Accumulated Depreciation Reversed on Disposal \$000	Transfers to held for sale \$000	Transfers \$000	Depreciation & Impairment Charges 30 June 2018 \$000	Book Value 30 June 2018 \$000
Operational assets														
Land – Council	12,545	-	-	-	-	12,545	-	-	-	-	-	-	-	12,545
Endowment land – Council	1,495	-	-	-	-	1,495	-	-	-	-	-	-	-	1,495
Buildings – Council	6,107	71	-	17	-	6,195	(1,042)	-	(173)	-	-	(7)	(1,221)	4,974
Plant and vehicles - Council	7,073	1,206	(289)	(17)	-	7,973	(4,489)	-	(697)	148	-	7	(5,031)	2,942
Capital work in progress - Council	290	998	-	_	-	1,288	-	-	_	-	-	-	-	1,288
Land – Port	34,342	949	-	-	-	35,291	-	-	-	-	-	-	-	35,291
Buildings and improvements – Port	67,734	2,608	(43)	-	-	70,299	(18,841)	-	(2,548)	43	-	-	(21,346)	48,953
Wharves and berths	C1 402	766	_		_	62.250	(10.016)		/1 [[]				(20.471)	44 707
dredging – Port Plant, equipment and	61,492	700	-	-	-	62,258	(18,916)	-	(1,555)	-	-	-	(20,471)	41,787
vehicles – Port	102,096	6,427	(2,575)		-	105,948	(50,141)	-	(4,520)	2,506	-	-	(52,155)	53,794
Capital work in progress – Port	3,685	25,695	-	-	-	29,380	-	-	-	-	-	-	-	29,380
Total operational assets	296,859	38,720	(2,907)		-	332,672	(93,428)	-	(9,493)	2,697	_	-	(100,224)	232,449
Council infra- structural assets		,	(=,====				(,,			_,			(,,	
Floodbanks	27,560	-	-	-	-	27,560	-	-	-	-	-	-	-	27,560
Protection works	8,249	-	-	722	-	8,971	-	-	-	-	-	-	-	8,971
Structures	34,327	-	-	4,997	-	39,324	(15,910)	-	(708)	-	-	-	(16,618)	22,706
Drains	3,288	-	-	-	-	3,288	-	-	-	-	-	-	-	3,288
Bridges	1,531	-	-	-	-	1,531	(971)	-	(45)	-	-	-	(1,016)	515
Culverts Capital work in	1,267	-	-	-	-	1,267	-	-	-	-	-	-	-	1,267
progress – Council	4,993	4,316	(929)	(5,719)	-	2,661	-	-	-	-	-	-	-	2,661
Total infrastructural assets	81,215	4,316	(929)	-	-	84,602	(16,881)	-	(753)	-	-	-	(17,634)	66,968
Total Group property, plant and equipment	378,074	43,036	(3,836)	-	-	417,274	(110,309)	-	(10,246)	2,697	-	-	(117,858)	299,417

GROUP - 2017

GROUP – 2017	1			1		1			1	1	1			1
	Cost 1 July 2016 \$000	Additions \$000	Disposals \$000	Transfers \$000	Transfers to held for sale \$000	Cost 30 June 2017 \$000	Accumulate d Depreciation and Impairment Charges 1 July 2016 \$000	Impairment Losses Charged in Profit or Loss \$000	Depreciation Expense \$000	Accumulated Depreciation Reversed on Disposal \$000	Transfers to held for sale \$000	Transfers \$000	Accumulate d Depreciation and Impairment Charges 30 June 2017 \$000	Book Value 30 June 2017 \$000
Operational assets														
Land – Council	12,545	-	-	-	-	12,545	-	-	-	-	-	-	-	12,545
Endowment land – Council	1,495	-	-	-	-	1,495	-	-	-	-	-	-	-	1,495
Buildings – Council	6,161	35	(89)	-	-	6,107	(914)	-	(173)	45	-	-	(1,042)	5,065
Plant and vehicles - Council	6,630	1,288	(883)	38	-	7,073	(4,717)	-	(557)	785	-	-	(4,489)	2,584
Capital work in progress - Council	43	285	-	(38)	-	290	-		-	-	-	_	-	290
Land – Port Buildings and	34,342	-	-	-	-	34,342	-	-	-	-	-	-	-	34,342
improvements – Port Wharves and berths	63,274	-	-	4,460	-	67,734	(16,732)	-	(2,109)	-	-	-	(18,841)	48,893
dredging – Port Plant, equipment and	61,320	-	-	172	-	61,492	(17,366)	-	(1,550)	-	-	-	(18,916)	42,576
vehicles – Port	93,232	-	(2,607)	11,471	-	102,096	(47,953)	-	(4,404)	2,216	-	-	(50,141)	51,955
Capital work in progress – Port	9,066	10,722	-	(16,103)	-	3,685	-	-	-	-	-	-	-	3,685
Total operational assets	288,108	12,330	(3,579)	-	-	296,859	(87,682)	-	(8,793)	3,046	-	-	(93,428)	203,430
Council infrastructural assets														
Floodbanks	27,560	-	-	-	-	27,560	-	-	-	-	-	-	-	27,560
Protection works	8,249	-	-	-	-	8,249	-	-	-	-	-	-	-	8,249
Structures	34,236	90	(5)	6	-	34,327	(15,247)	-	(663)	-	-	-	(15,910)	18,417
Drains	3,288	-	-	-	-	3,288	-	-	-	-	-	-	-	3,288
Bridges	1,542	-	(11)	-	-	1,531	(935)	-	(45)	9	-	-	(971)	560
Culverts	1,267	-	-	-	-	1,267	-	-	-	-	-	-	-	1,267
Capital work in progress – Council	2,935	2,064	-	(6)	-	4,993	-	-	-	-	-	-	-	4,993
Total infrastructural assets	79,077	2,154	(16)	-	-	81,215	(16,182)	-	(708)	9	-	-	(16,881)	64,334
Total Group property, plant and equipment	367,185	14,484	(3,595)	-	_	378,074	(103,864)	-	(9,501)	3,415	-	-	(110,309)	267,764

72

Property, Plant & Equipment

Property, plant and equipment consist of:

Operational Assets

Operational assets include:

- Council owned land, endowment land, buildings, and plant and vehicles; and
- Port owned land, buildings and improvements, wharves and berths dredging, and plant, equipment and vehicles.

Infrastructural Assets

Infrastructural assets deliver benefits direct to the community and are associated with major flood protection and land drainage schemes. Infrastructural assets include floodbanks, protection works, structures, drains, bridges, culverts, bus hubs and shelters.

Restricted Assets

Endowment land is vested in the Council by the Otago Regional Council (Kuriwao Endowment Lands) Act. The Act restricts disposition of this land to freeholding initiated by lessees.

(a) Cost

Land and Buildings are recorded at cost or deemed cost less accumulated depreciation and any accumulated impairment losses.

Other property, plant and equipment is recorded at cost less accumulated depreciation and any accumulated impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the assets. Where an asset is acquired for no cost, or for a nominal cost, it is recognised at fair value at the date of acquisition. When significant, interest costs incurred during the period required to construct an item of property, plant and equipment are capitalised as part of the asset's total cost.

(b) Depreciation

Operational assets with the exception of land, are depreciated on a straight-line basis to write-off the cost of the asset to its estimated residual value over its estimated useful life.

Infrastructural assets including floodbanks, protection works and drains and culverts are constructions or excavations of natural materials on the land and have substantially the same characteristics as land, in that they are considered to have unlimited useful lives and in the absence of natural events, these assets are not subject to ongoing obsolescence or deterioration of service performance, and are not subject to depreciation. Other infrastructural assets are depreciated on a straight-line basis to write off the cost of the asset to its estimated residual values over its estimated useful life.

Expenditure incurred to maintain these assets at full operating capability is charged to the surplus/(deficit) in the year incurred.

The following estimated useful lives are used in the calculation of depreciation:

Asset	Life
Operational Assets	
Buildings – Council	10-50 years
Plant and vehicles – Council	3-20 years
Buildings and improvements – Port	10-50 years
Wharves – Port	15-70 years
Vessels and Floating Plant – Port	5-30 years
Plant, equipment and vehicles - Port	3-30 years

Asset	Life
Infrastructural Assets	
Floodbanks	Unlimited
Protection works	Unlimited
Drains	Unlimited
Culverts	Unlimited
Structures	8-100 years
Bridges	33-100 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period.

(c) Disposal

An item of property, plant and equipment is derecognised upon disposal or recognised as impaired when no future economic benefits are expected to arise from the continued use of the asset.

Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the surplus/(deficit) in the period the asset is derecognised.

Critical judgements and assumptions

(a) Council and Group

The Council owns a number of properties that are held for service delivery objectives as part of the Council's various flood protection schemes. The receipt of market-based rental from these properties is incidental to holding these properties. These properties are accounted for as property, plant and equipment.

(b) Group only

Port Otago Limited owns a number of properties that are classified and accounted for as property, plant and equipment rather than investment property if the property is held to meet the strategic purposes of the port, or to form part of buffer zones to port activity, or to assist the provision of port services, or to promote or encourage the import or export of goods through the port.

Impairment

At each reporting date, the Council and Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, the Council and Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. An impairment loss is recognised in the surplus or deficit whenever the carrying amount of the asset or its cash-generating unit exceeds its recoverable amount.

Useful lives and residual values

At each balance date, the Group reviews the useful lives and residual values of its property, plant and equipment. Assessing the appropriateness of useful lives and residual value estimates of property, plant and equipment requires the Group to consider a number of factors such as the physical condition of the asset, expected period of use of the asset by the Group, and expected disposal proceeds from the future sale of the asset.

An incorrect estimate of the useful life of residual value will impact on the depreciable amount of an asset, therefore impacting on the depreciation expense recognised in the surplus/(deficit), and carrying amount of the asset in the Statement of Financial Position. The Group minimises the risk of this estimation uncertainty by physical inspection of assets, asset replacement programmes and analysis of prior asset sales. The Group has not made significant changes to past assumptions concerning useful lives and residual values.

7. Investment Property

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Balance at beginning of year	10,825	10,785	313,262	284,110
Acquisitions	-	-	-	-
Subsequent capital expenditure	-	-	645	9,415
Interest capitalised	-	-	-	182
Disposals	-	-	(3,710)	(155)
Net movement in incentives	-	-	124	546
Net movement in prepaid leasing costs	-	-	88	(38)
Transfer to property held for sale	-	-	-	(487)
Transfer to investment property inventories	-	-	(11,659)	-
Transfer from investment property inventories	-	-	7,854	-
Net gain/(loss) from fair value adjustments	312	40	22,323	19,689
Balance at end of year	11,137	10,825	328,927	313,262

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Valuation analysis				
Valued at 30 June balance date as determined by:				
Jones Lang LaSalle	-	-	85,050	74,855
Colliers International	-	-	232,740	85,117
CBRE Limited	-	-	-	142,465
Tay and Tay Limited	11,137	10,825	11,137	10,825
	11,137	10,825	328,927	313,262

Investment property is property held to earn rentals and/or for capital appreciation. Investment property is measured initially at cost and subsequently at fair value. Gains or losses arising from changes in the fair value of investment property are reported in the surplus/(deficit) in the period in which they arise.

Subsequent expenditure is charged to the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The fair value of investment property reflects the Director's assessment of the highest and best use of each property and amongst other things, rental income, from current leases and assumptions about rental income from future leases in light of current market conditions. The fair value also reflects the cash outflows that could be expected in respect of the property.

No depreciation or amortisation is provided for on investment properties. However, for tax purposes, depreciation is claimed on building fit-out and a deferred tax liability is recognised where the building component of the registered building exceeds the tax book value of the building. The deferred tax liability is capped at the amount of depreciation that has been claimed on each building. Gains or losses on the disposal of investment properties are recognised in the surplus/(deficit) in the period in which the risks and rewards of the investment property have been fully transferred to the purchaser.

Borrowing costs are capitalised if they are directly attributable to the acquisition or construction of a qualifying property. Capitalisation of borrowing costs will continue until the asset is substantially ready for its intended use. The rate at which borrowing costs are capitalised is determined by reference to the weighted average borrowing costs and the average level of borrowings.

Critical Judgements

Fair value of property portfolio assets (includes investment property, property held for sale and property in development)

The fair value of the Council's and Group's investment property at 30 June 2018 requires estimation and judgement and has been arrived at on the basis of valuations carried out at that date by independent registered valuers who conform with the New Zealand Property Institute Practice Standards. The valuers have extensive market knowledge in the types of investment properties owned by the Council and Group.

The fair value was determined using valuation techniques via a combination of the following approaches:

- Direct Capitalisation: The subject property rental is divided by a market derived capitalisation rate to assess the
 market value of the asset. Further adjustments are then made to the market value to reflect under or over
 renting, additional revenue and required capital expenditure.
- Discounted Cash Flow: Discounted cash flow projections for the subject property are based on estimates of future cash flows, supported by the terms of any existing lease and by external evidence such as market rents for similar properties in the same location and condition, and using discount rates that reflect current market assessments of the uncertainty in the amount and timing of the cash flows.
- Sales Comparison: The subject property is related at a rate per square metre as a means of comparing evidence.
 In applying this approach a number of factors are taken into account such as but not limited to, size, location, zoning, contour, access, development potential / end use, availability of services, profile and exposure, current use of surrounding properties, geotechnical and topographical constraints.

Significant inputs used together with the impact on fair value of a change in inputs:

	Range of signific	uncil ant unobservable outs	Group Range of significant unobservable inputs	
Market capitalisation rate (%) (i)	6.07%	6.72%	5.0%	6.5%
Market rental (\$ per Sqm) (ii)	\$41	\$133	\$8	\$307
Discount Rate (%) (iii)	8.5%	8.5%	7.0%	17.5%
Rental growth rate (%) (iv)	2%	2%	1.0%	3.5%
Terminal capitalisation rate (%) (v)	5.75%	7%	5.0%	8.5%
Profit and risk rate (vi)	N/A	N/A	20.0%	17.5%
Development sell down period (years) (vii)	N/A	N/A	5	5

- (i) The capitalisation rate applied to the market rental to assess a property's value, determined through similar transactions taking into account location, weighted average lease term, size and quality of the property.
- (ii) The valuer assessment of the net market income which a property is expected to achieve under a new arm's length leasing transaction.
- (iii) The rate applied to future cash flows relating transactional evidence from similar properties.
- (iv) The rate applied to the market rental over the future cash flow projection.
- (v) The rate used to assess the terminal value of the property.
- (vi) The rate provides an allowance for the risks and uncertainties associated with similar activities in conjunction with current market conditions.
- (vii) The length of time in years anticipated to complete the sell down of developed land.

8. Property held for sale

	Note	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Balance at beginning of year		1,093	1,284	3,238	3,330
Transfer from (to) investment property	7	-	-	-	487
Transfer from property plant and equipment		-	-	-	-
Transfer (to) property in development	9	-	-	-	(927)
Subsequent capital expenditure		-	-	-	1,212
Unrealised change in value of property held					
for sale		-	(191)	-	(864)
Disposals		(879)	-	(3,024)	-
Balance at end of year		214	1,093	214	3,238
Disclosed in the Financial Statements as:					
Current		214	1,093	214	3,238
Non-current		-	-	-	-
		214	1,093	214	3,238

Property classified as held for sale is measured at:

- Fair value for items transferred from investment property, and
- Fair value less estimated costs of disposal, measured at time of transfer, for items transferred from property, plant and equipment.

Property is classified as held for sale if the carrying amount will be recovered through a sales transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the property is available for immediate sale in its present state. There must also be an expectation of completing the sale within one year from the date of classification. Property is not depreciated nor amortised while it is classified as held for sale.

Group:

Sale of 130 Portsmouth Drive, Dunedin

In March 2018, the settlement for the sale of 130 Portsmouth Drive was completed. This property represented the property held for sale at the previous year end.

9. Investment Property Inventories

	Note	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Balance at beginning of year		-	-	25,696	20,618
Transfer (to) from investment property	7	-	-	11,659	-
Transfer (to) from property held for sale	8			-	927
Transfer to investment property				(7,854)	
Acquisitions		-	-	2,714	-
Disposals		-	-	(16,263)	(5,322)
Subsequent capital expenditure		-	-	15,633	8,412
Interest capitalised		-	-	162	167
Impairment and impairment reversals		-	-	(557)	894
Balance at end of year		-	-	31,190	25,696

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Comprising				
Developed land for sale	-	-	8,230	18,844
Units and warehouse developments	-	-	2,408	6,852
Land in development	-	-	20,552	-
	-	-	31,190	25,696

Transfers from investment property to investment property inventories occur when there is a change in use evidenced by the commencement of a development with a view to sale. Future development stages that have not yet commenced and are being held for capital appreciation are accounted for in investment property.

Investment property inventories are accounted for as inventory and initially recognised at deemed cost represented by the fair value at the time of commencement of the development. Further costs directly incurred through development activities are capitalised to the cost of the investment property inventories.

Investment property inventories are valued annually and are measured at the lower of cost and fair value. Where costs exceed the fair value of the investment property inventories the resulting impairments are included in the Income Statement in the period in which they arise.

Developed land for sale

The \$8.2 million carrying value of developed land at balance date reflects the cost of the 6.8 hectares (Group share: 4.8 hectares) remaining developed land. In their June 2018 valuation, Jones Lang LaSalle stated a net realisable value of \$17.0 million (Group share: \$12.0 million).

At the previous balance date, the \$18.8 million carrying value of developed land reflected the cost of the 14.3 hectares (Group share: 11.6 hectares) on hand. In their June 2017 valuation, Colliers stated a net realisable value of \$26.6 million (Group share: \$21.6 million) for the remaining developed land on hand.

Units and warehouse developments in progress

During the year the Group completed the development of six units at 680-780 Arthur Porter Drive, Te Rapa and the development of two warehouses at 520 and 560 Arthur Porter Drive, Te Rapa. With formal agreements to lease in place for the six units and the warehouse at 520 Arthur Porter Drive, these properties have been transferred to investment property. The warehouse at 560 Arthur Porter Drive remains in investment property inventories pending the negotiation of an agreement to lease.

Land in development

During the year the Group commenced development of a further stage of the industrial subdivision at Te Rapa in Hamilton. Upon completion, the development activity will yield a further 21.4 hectares of developed land held for sale (Group share: 20.2 hectares). In their June 2018 valuation, Jones Lang LaSalle stated a net realisable of \$22.9 million (Group share: \$20.6 million) for the land in development. There was no land in development at the previous balance date.

Refer to Note 7 for fair value disclosures associated with property in development.

10. Intangible Assets

	Council Computer Software \$000	Council Total \$000	Group Computer Software \$000	Group Resource Consents \$000	Group Total \$000
Gross carrying amount					
Balance at 30 June 2016	3,704	3,704	9,339	5,480	14,819
Additions	952	952	1,347	141	1,488
Capital WIP additions	337	337	337	-	337
Capital WIP write off	(30)	(30)	(30)	-	(30)
Transfer to complete asset	(487)	(487)	(487)	-	(487)
Disposals	(68)	(68)	(68)	-	(68)
Balance at 30 June 2017	4,408	4,408	10,438	5,621	16,059
Additions	453	453	687	20	707
Capital WIP additions	908	908	908	-	908
Capital WIP write off	-	-	-	-	
Transfer to complete asset	(243)	(243)	(243)	-	(243)
Disposals	-	-	-	-	
Balance at 30 June 2018	5,526	5,526	11,790	5,641	17,431
Accumulated amortisation and impairment					
Balance 30 June 2016	(1,905)	(1,905)	(6,960)	(622)	(7,582)
Amortisation expense	(498)	(498)	(751)	(292)	(1,043)
Disposals	61	61	61	-	61
Balance 30 June 2017	(2,342)	(2,342)	(7,650)	(914)	(8,564)
Amortisation expense	(460)	(460)	(732)	(260)	(992)
Disposals	-	-	-	-	-
Balance at 30 June 2018	(2,802)	(2,802)	(8,382)	(1,174)	(9,556)
Net book value					
As at 30 June 2018	2,724	2,724	3,408	4,467	7,875
As at 30 June 2017	2,066	2,066	2,788	4,707	7,495

The cost of acquiring an intangible asset is amortised from the date the asset is ready for use on a straight-line basis over the periods of expected benefit.

Computer Software

Computer software assets are stated at cost, less accumulated amortisation and impairment. The amortisation periods range from 1 to 5 years.

Resource Consents

For resource consents the amortisation periods range from 3 to 25 years. Where the periods of expected benefit or recoverable values have diminished, due to technological change or market conditions, amortisation is accelerated or the carrying value is written down.

Resource consents relate to the granting of the Next Generation consents which will allow Port Otago Limited to deepen to 15 metres and widen the channel in Otago Harbour so larger ships will be able to call at Port Chalmers. Consents were granted in January 2013 and were activated in March 2015. Amortisation of the carrying amounts commenced on the activation of the consents and will be amortised over the life of the consents which is either 3 years or 20 years. An additional 25-year consent was granted in June 2017 to undertake maintenance dredging and disposal of dredge spoil.

Impairment

At each reporting date, the Council and Group reviews the carrying amounts of intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, the Council and Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

11. Schedule of Depreciation and Amortisation

		Council 2018	Council 2017	Group 2018	Group 2017
	Notes	\$000	\$000	\$000	\$000
Depreciation of property, plant and equipment	6	1,623	1,438	10,246	9,501
Amortisation of intangible assets	10	460	498	992	1,043
Amortisation of leasing costs		-	-	68	56
		2,083	1,936	11,306	10,600

Depreciation and Amortisation by Activity (Council Only)

	Notes	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000	Long Term Plan 2016/17 \$000
Environment		276	160	196	161
Community		37	-	3	-
Regulatory		100	119	99	96
Flood Protection & Control Works		729	720	681	792
Safety and Hazards		20	8	13	2
Transport		10	7	7	-
Corporate		911	1,000	937	926
		2,083	2,014	1,936	1,977

12. Trade & Other Receivables

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Trade and other receivables from exchange transactions				
Trade receivables (i)	-	-	16,671	11,193
Provision for doubtful debts	-	-	-	-
	-	-	16,671	11,193
Sundry accruals	314	592	314	2,385
Goods and Services Tax receivable	1,031	433	1,031	433
	1,345	1,025	18,016	14,011
Trade and other receivables from non- exchange transactions				
Trade receivables (i)	3,510	1,312	3,510	1,312
Provision for doubtful debts	(83)	(102)	(83)	(102)
	3,427	1,210	3,427	1,210
Accrued Income	3,937	1,333	3,937	1,333
Goods and Services Tax receivable	-	-	-	-
	7,364	2,543	7,364	2,543
Disclosed in the financial statements as:				
¤ Current	8,709	3,568	25,380	16,554
Non-current	-	-	-	-
	8,709	3,568	25,380	16,554

⁽i) Trade receivables are non-interest bearing and generally on monthly terms.

Trade and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as 'loans and receivables'. Loans and receivables are measured at amortised cost using the effective interest method less impairment.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for doubtful debts is established when there is objective evidence that the Council or Group will not be able to collect all amounts due according to the original terms of the receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The amount of the provision is expensed in the surplus/(deficit).

13. Trade & Other Payables

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Trade payables for Exchange transactions (i)	6,335	5,928	14,612	12,338
Other accrued charges	2,684	1,231	3,458	1,792
Property deposits received	-	-	2	400
	9,019	7,159	18,072	14,530

(i) The average credit period on purchases is 30 days.

Trade payables and other accounts payable are recognised when the Council and Group becomes obliged to make future payments resulting from the purchase of goods and services. Trade and other payables are initially recognised at fair value and are subsequently measured at amortised cost, using the effective interest method.

14. Employee Entitlements

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Accrued salary and wages	396	417	1,514	1,753
Annual leave	1,283	1,226	5,035	4,682
Long service leave	-	-	837	839
Retiring allowances	22	22	95	115
Sick leave	-	-	114	104
	1,701	1,665	7,595	7,493
Disclosed in the financial statements as:				
Current	1,701	1,665	6,685	6,561
Non-current	-	-	910	932
	1,701	1,665	7,595	7,493

Provision is made for benefits accruing to employees in respect of wages and salaries, annual leave, long service leave, and sick leave when it is probable that settlement will be required and they are capable of being measured reliably.

Provisions made in respect of employee benefits expected to be settled within 12 months, are measured at their nominal values using the remuneration rate expected to apply at the time of settlement.

Provisions made in respect of employee benefits which are not expected to be settled within 12 months are measured as the present value of the estimated future cash outflows to be made by the Council and Group in respect of services provided by employees up to reporting date.

15. Borrowings and Finance Costs

15 (a) Borrowings

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Secured – at amortised cost				
Bank borrowings	-	-	77,635	68,420
	-	-	77,635	68,420
Analysed as:				
Current	-	-	-	-
Non-current	-	-	77,635	68,420
	-	-	77,635	68,420

Borrowings are recognised initially at fair value. Subsequent to initial recognition, borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the Income Statement over the period of the borrowings, using the effective interest method.

The carrying amount of borrowings reflects fair value as the borrowing finance rates approximate market rates.

The Group has a \$90 million (2017: \$80 million) committed facility with ANZ Bank New Zealand Limited. The Group may draw funding for terms ranging from call to the termination of the agreement, which is 31 December 2020.

The security for advances is a cross guarantee between Port Otago Limited and Chalmers Properties Limited in favour of the lender, general security agreement over the assets of the Group and registered first-ranking mortgages over land.

15 (b) Finance Costs

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Interest on loans		-	-	3,299	3,296
Capitalised borrowing costs		-	-	(373)	(462)
		-	-	2,926	2,834

Borrowing costs directly attributable to the acquisition and/or construction of property, plant and equipment and long term investment property development projects are capitalised as part of the cost of those assets. Other borrowing costs are expensed in the period in which they are incurred.

84

16. Reserves

COUNCIL	Available for Sale Revaluation Reserve \$000	Asset Replace- ment Reserve \$000	Emergency Response Reserve \$000	Kuriwao Endowment Reserve \$000	Asset Revaluation Reserve \$000	Water Manage- ment Reserve \$000	Building Reserve \$000	Environmental Enhancement Reserve	Total Reserves \$000
Opening balance at 1 July 2016	398,239	5,987	3,891	6,271	8,724	1,433	10,997	223	435,765
Transfers in:									
Transfers from general rate equity	-	1,693	-	117	-	-	2,500	325	4,635
Interest received	-	215	142	226	-	52	488	14	1,137
Revaluation gain	20,798	-	-	-	40	-	-	-	20,838
	20,798	1,908	142	343	40	52	2,988	339	26,610
Transfers out:									
Transfers to general rate equity	-	(2,075)	-	(3)	-	(58)	(371)	(240)	(2,747)
Transfers to targeted rate equity	-	-	-	(250)	-	-	-	-	(250)
	-	(2,075)	=	(253)	-	(58)	(371)	(240)	(2,997)
Closing balances 30 June 2017	419,037	5,820	4,033	6,361	8,764	1,427	13,614	322	459,378
Transfers in:									
Transfers from general rate equity	-	1,510	-	118	-	-	-	250	1,878
Interest received	-	220	149	233	-	45	498	20	1,165
Revaluation gain	49,471	-	-	-	312	-	-	-	49,783
	49,471	1,730	149	351	312	45	498	270	52,826
Transfers out:									
Transfers to general rate equity	-	(1,480)	-	(30)	-	(433)	(864)	(97)	(2,904)
Transfers to targeted rate equity	-	-	-	(250)	-	-	-	-	(250)
	-	(1,480)	-	(280)	-	(433)	(864)	(97)	(3,154)
Closing balances 30 June 2018	468,508	6,070	4,182	6,432	9,076	1,039	13,248	495	509,050

GROUP	Available for Sale Revaluation Reserve \$000	Asset Replace- ment Reserve \$000	Emergency Response Reserve \$000	Kuriwao Endowment Reserve \$000	Asset Revaluation Reserve \$000	Water Management Reserve \$000	Building Reserve \$000	Environmental Enhancement Reserve	Hedging Reserve \$000	Total Reserves \$000
Opening balances at 1 July 2016	-	5,987	3,891	6,271	179,182	1,433	10,997	223	(1,340)	206,644
Transfers in:										
Transfers from general rate equity	-	1,693	-	117	-	-	2,500	325	-	4,635
Interest received	-	215	142	226	-	52	488	14	-	1,137
Revaluation gain	-	-	-	-	19,909	-	-	-	-	19,909
Change in fair value of interest rate										
swaps	-	-	-	-	-	-	-	-	946	946
	-	1,908	142	343	19,909	52	2,988	339	946	26,627
Transfers out:										
Transfers to general rate equity	-	(2,075)	-	(3)	-	(58)	(371)	(240)	-	(2,747)
Transfers to targeted rate equity	-	-	-	(250)	-	-	-	-	-	(250)
Deferred tax arising on fair value movement	-	-	-	-	-	-	-	-	-	-
	-	(2,075)	-	(253)	-	(58)	(371)	(240)	-	(2,997)
Closing balances 30 June 2017	-	5,820	4,033	6,361	199,091	1,427	13,614	322	(394)	230,274
Transfers in:										
Transfers from general rate equity	-	1,510	-	118	-	-	-	250	-	1,878
Interest received	-	220	149	233	-	45	498	20	-	1,165
Revaluation gain	-	-	-	-	21,804	-	-	-	-	21,804
Change in fair value of interest rate										
swaps	-	-	-	-	-	-	-	-	(333)	(333)
	_	1,730	149	351	21,804	45	498	270	(333)	24,514
Transfers out:	-									
Transfers to general rate equity	-	(1,480)	-	(30)	-	(433)	(864)	(97)	-	(2,904)
Transfers to targeted rate equity	-	-	-	(250)	-	· -	-	-	-	(250)
Deferred tax arising on fair value										
movement	-	-	-	-	-	-	-	-	-	-
Realised on sale of assets	-	-	-	-	-	-	-	-	-	-
	-	(1,480)	-	(280)	-	(433)	(864)	(97)	-	(3,154)
Closing balances 30 June 2018	-	6,070	4,182	6,432	220,895	1,039	13,248	495	(727)	251,634

Restricted & Council Created Reserves

Restricted reserves are a component of equity generally representing a particular use to which various parts of equity have been assigned. Reserves may be legally restricted or created by the Council.

Restricted reserves are those subject to specific conditions accepted as binding by the Council and which may not be revised by the Council without reference to the Courts or a third party. Transfers from these reserves may be made only for certain specified purposes or when certain specified conditions are met.

Also included in restricted reserves are reserves restricted by Council decision. The Council may alter them without references to any third party or the Courts. Transfers to and from these reserves are at the discretion of the Council.

Available-for-Sale Revaluation Reserve

The available-for-sale revaluation reserve arises on the revaluation of the shares in subsidiary (Council only) and shares in listed companies (Group).

Asset Replacement Reserve

This reserve represents funds held for the replacement of Council operational assets.

Emergency Response Reserve

This reserve is separately funded to enable Council to respond appropriately to emergency situations.

Kuriwao Endowment Reserve - Restricted

This reserve represents the accumulation of net income from Kuriwao Endowment land less any distribution of that income. The reserve is available to fund works for the benefit of the Lower Clutha District.

Asset Revaluation Reserve

This reserve arises on the revaluation of investment property.

Water Management Reserve

The purpose of this reserve is to provide funding for water management initiatives in Otago.

Hedging Reserve

This reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments relating to interest payments that have not yet occurred.

Building Reserve

The purpose of this reserve is to set aside funding for a new head office for the Council.

Environmental Enhancement Reserve

The purpose of this reserve is to provide funding for the maintenance or enhancement of areas of the natural environment within the Otago region.

17 (a) Public Equity

	Council 2018	Council 2017	Group 2018	Group 2017
	\$000	\$000	\$000	\$000
Public Equity – General Rates	7000	Ţ.C.C	7000	7000
Balance at beginning of year	71,846	72,956	295,603	285,641
Net surplus		(841)		30,100
•	(2,849)	(641)	31,767	30,100
Transfers in				
Transfer from Public Equity Targeted Rates	37,492	21,045	37,492	21,045
Kuriwao endowment reserve	30	3	30	3
Asset replacement reserve	1,480	2,075	1,480	2,075
Asset revaluation reserve		-	-	-
Water Management Reserve	433	58	433	58
Environmental Enhancement Reserve	97	240	97	240
Building Reserve	864 40,396	371 23,792	864 40,396	371 23,792
	40,330	23,732	40,350	25,752
Transfer out	(26.122)	(40.0.50)	(20.100)	16001=1
Transfer to Public Equity Targeted Rates	(36,109)	(18,249)	(36,109)	(18,249)
Kuriwao endowment reserve	(351)	(343)	(351)	(343)
Asset replacement reserve	(1,730)	(1,908)	(1,730)	(1,908)
Emergency response reserve Asset revaluation reserve	(149)	(142)	(149)	(142)
	(312)	(40)	(21,804)	(19,909)
Water management reserve	(45)	(52)	(45)	(52)
Building Reserve	(498)	(2,988)	(498)	(2,988)
Environmental Enhancement Reserve	(270)	(339)	(270)	(339)
Available-for-sale asset gains reclassified to surplus/- (deficit)	-	-		_
(44.00.0)	(39,464)	(24,061)	(60,956)	(43,930)
Balance at end of year	69,929	71,846	306,810	295,603
	03,323	7 2,040	300,010	233,003
Public Equity - Targeted Rates				
Balance at beginning of year	61,703	64,249	61,703	64,249
Transfers in				
Transfer from Public Equity General Rates	36,109	18,249	36,109	18,249
Kuriwao endowment reserve	250	250	250	250
	36,359	18,499	36,359	18,499
Transfers out				
Transfer to Public Equity General Rates	(37,492)	(21,045)	(37,492)	(21,045)
	(37,492)	(21,045)	(37,492)	(21,045)
Balance at end of year – refer note 17 (b)	60,570	61,703	60,570	61,703
Total Public Equity				
Balance at beginning of year	133,549	137,205	357,306	349,890
Net surplus Transfers	(2,849) (201)	(841) (2,815)	31,767 (21,693)	30,100 -
				257 222
Balance at end of year	130,499	133,549	367,380	357,306

Equity is the community's interest in the Council and Group and is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into a number of reserves.

Reserves are a component of equity generally representing a particular use to which various parts of equity have been assigned. Reserves may be legally restricted or created by Council.

17 (b) Public Equity Targeted Rates - Reserve Movements

		Council and	Group - 2018			Council and	Group – 2017	
	Opening balance 1 July 2017 \$000	Transfers in \$000	Transfers out \$000	Closing balance 30 June 2018 \$000	Opening balance 1 July 2016 \$000	Transfers in \$000	Transfers out \$000	Closing balance 30 June 2017 \$000
Targeted Rating District Equity								
River Management Reserves								
Central Otago River Management	398	316	(327)	387	321	314	(237)	398
Clutha River Management	157	271	(316)	112	163	272	(278)	157
Dunedin River Management	1,955	217	(404)	1,768	2,017	220	(282)	1,955
Queenstown River Management	707	178	(132)	753	636	224	(153)	707
Waitaki River Management	6	405	(268)	143	(30)	351	(315)	6
Wanaka River Management	423	186	(104)	505	366	181	(124)	423
Shotover Delta Flood Mitigation	(67)	152	(28)	57	(270)	252	(49)	(67)
Stoney Creek	138	5	-	143	133	5	-	138
Flood and Drainage scheme reserves								
Alexandra Flood Protection	438	111	(243)	306	661	37	(260)	438
East Taieri Drainage	582	446	(642)	386	489	424	(331)	582
Leith Flood Protection	(9,423)	2,134	(4,636)	(11,925)	(7,890)	1,388	(2,921)	(9,423)
Lower Clutha Flood and Drainage	142	1,027	(1,318)	(149)	226	999	(1,083)	142
Lower Taieri Flood Protection	1,008	741	(689)	1,060	753	704	(449)	1,008
Lower Waitaki Flood Protection	(19)	126	(124)	(17)	(8)	145	(156)	(19)
Tokomairiro Drainage	155	100	(100)	155	145	83	(73)	155
West Taieri Drainage	(1,016)	597	(1,158)	(1,577)	(1,053)	578	(541)	(1,016)
Other Reserves								
Clean Heat Clean Air	413	14	(77)	350	487	16	(90)	413
Dunedin Transport Services	4,779	13,991	(15,840)	2,930	5,423	10,860	(11,504)	4,779
Queenstown Transport Services	(35)	6,642	(6,524)	83	61	265	(361)	(35)
Rural Water Quality	(54)	1,232	(894)	284	(52)	863	(865)	(54)
Dairy Monitoring	(75)	177	(77)	25	(39)	128	(164)	(75)
Wilding Pines	-	197	(260)	(63)	-	100	(100)	-
Emergency Management	-	2,440	(2,580)	(140)				
Infrastructural Assets	61,091	4,654	(751)	64,994	61,710	90	(709)	61,091
	61,703	36,359	(37,492)	60,570	64,249	18,499	(21,045)	61,703

River Management Reserves

Targeted rating is used to fund river management works across the city and districts within Otago.

Flood and Drainage Scheme Reserves

Targeted rating is used to fund the costs associated with maintaining the level of flood and drainage protection provided by these schemes.

Transport Reserves

Targeted rating is used in Dunedin and Queenstown to fund the Council's costs associated with the provision of bus services.

Clean Heat Clear Air Reserve

The purpose of this reserve is to fund costs associated with the provision of funding associated with the improvement of insulation and heating in homes located within the targeted rating district.

Schedule of Internal Borrowing for Public Equity Targeted Rates - Reserve

Council 2018	Amount borrowed as at 30 June 2017 \$000	Funds borrowed during the year \$000	Funds repaid during the year \$000	Interest charged \$000	Amount borrowed as at 30 June 2018 \$000
Flood Protection and Control Works	10,365	6,280	(3,480)	430	13,595
Environment	54	1,156	(1,428)	(3)	(221)
Community	19	122	(125)	1	17
Regulatory	75	76	(177)	1	(25)
Safety & Hazards	-	2,576	(2,438)	2	140
Transport	35	6,524	(6,642)	-	(83)
	10,548	16,734	(14,290)	431	13,423

Council 2017	Amount borrowed as at 30 June 2016 \$000	Funds borrowed during the year \$000	Funds repaid during the year \$000	Interest charged \$000	Amount borrowed as at 30 June 2017 \$000
Flood protection and control works	9,213	2,824	(1,874)	344	10,507
Environment	82	1,175	(1,212)	2	47
Community	8	154	(144)	1	19
Regulatory	39	160	(126)	2	75
Transport	(61)	361	(265)	-	35
	9,281	4,674	(3,621)	349	10,683

18. Income Taxes

Income Tax Recognised in Statement of Comprehensive Revenue and Expense

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Income tax (expense)/benefit comprises:					
Current year – current tax		-	-	(9,179)	(6,509)
Current year – deferred tax		98	98	1,185	2,107
Prior period adjustment current tax		3	3	(136)	-
Prior period adjustment deferred tax		-	-	-	-
Income tax (expense)/benefit reported in the					
Statement of Comprehensive Revenue and					
Expense		101	101	(8,130)	(4,402)
The prima facie income tax expense on pre-tax					
accounting surplus reconciles to the income tax					
expense in the financial statements as follows:					
Surplus/(deficit) before income tax		(2,950)	(942)	39,897	34,502
Imputation credits		-	-	-	50
		(2,950)	(942)	39,897	34,552
Income tax expense (credit) calculated at 28%		(826)	(264)	11,171	9,675
Non-deductible expenses		15,895	11,637	15,962	11,734
Non-assessable income		(12,647)	(9,290)	(13,127)	(9,302)
Unrealised change in investment property		-	-	(6,066)	(4,835)
Deferred tax expense relating to the origination					
and reversal of temporary differences		-	-	54	(2,750)
Prior period adjustment		(3)	-	136	(70)
Imputation credits utilised		(2,520)	(2,184)	-	(50)
Income tax expense (credit)		(101)	(101)	8,130	4,402

Council entered into an agreement for the Council to transfer 2017 tax year losses to its subsidiary Port Otago Limited. In conjunction with the tax loss transfer of \$259,279 (2017 tax year: \$260,730), by way of a tax loss offset, Port Otago Limited made a subvention payment of \$100,831 (2017 tax year: \$101,395) to the Council.

The tax expense represents the sum of the tax currently payable and deferred tax, except to the extent that it relates to items recognised directly in equity, in which case the tax expense is also recognised in equity.

Current tax payable is based on taxable profit for the period. Taxable profit differs from net surplus/(deficit) before tax as reported in the Statement of Comprehensive Revenue and Expense because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Council's and Group's liability for current tax is calculated using tax rates that have been enacted by the balance sheet date.

Deferred Tax Balances Comprise:

Taxable and deductible temporary differences arising from the following:

COUNCIL 2018	Council Opening Balance \$000	Council Charged to Surplus/(Deficit) \$000	Council Charged to other Comprehensive Revenue & Expense \$000	Council Closing Balance \$000
Gross deferred tax asset:				
Tax losses	98	-	-	98
	98	-	-	98

COUNCIL 2017	Council Opening Balance \$000	Council Charged to Surplus/(Deficit) \$000	Council Charged to other Comprehensive Revenue & Expense \$000	Council Closing Balance \$000
Gross deferred tax asset:				
Tax losses	98	-	-	98
	98	-	-	98

GROUP 2018	Group Opening Balance \$000	Group Charged to Surplus/(Deficit) \$000	Group Charged to other Comprehensive Revenue & Expense \$000	Group Closing Balance \$000
Gross deferred tax liability:				
Other financial assets	(168)	17	(130)	(281)
Property, plant and equipment	13,122	7	-	13,129
Investment property	4,426	(409)	-	4,017
Other	(1,760)	(800)	-	(2,560)
	15,620	(1,185)	(130)	14,305

GROUP 2017	Group Opening Balance \$000	Group Charged to Surplus/(Deficit) \$000	Group Charged to other Comprehensive Revenue & Expense \$000	Group Closing Balance \$000
Gross deferred tax liability:				
Other financial assets	(496)	(41)	369	(168)
Property, plant and equipment	13,525	(402)	-	13,122
Investment property	6,024	(1,598)	-	4,426
Other	(1,694)	(66)	-	(1,760)
	17,359	(2,107)	369	15,620

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised.

Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the tax profit nor the accounting profit.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period(s) when the asset and liability giving rise to them are realised or settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by reporting date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Council and Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Current and deferred tax is recognised as an expense or income in the surplus/(deficit), except when it relates to items credited or debited directly to equity, in which case the deferred tax is also recognised directly in equity.

Imputation Credit Account Balances

	Group	Group
	2018	2017
	\$000	\$000
Balance at end of year	36,581	30,856

Imputation credit balances available directly and indirectly to the Council through subsidiaries are \$36,679,000 as at 30 June 2018, and \$30,954,000 as at 30 June 2017.

19. Other expenses

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Net bad and doubtful debts		11	(20)	13	(71)
Donations		350	350	441	413
Operating lease rental expenses: - Minimum lease payments		147	90	147	90
Operating expenses of investment properties		-	-	967	961
Company Directors' remuneration		-	-	327	331
Purchased materials and services		37,633	26,328	56,817	41,232
Fuel and electricity		425	355	3,306	2,840
Write-off of property plant and equipment work in progress		929	30	929	30
		39,495	27,133	62,947	45,826

20. Remuneration (Council Only)

Employee Staffing Levels

The number of all employees, employed by the Council on the last day of the financial year was as follows:

	Number of Employees 30 June 2018	Number of Employees 30 June 2017
Full-time employees	165	151
Full-time equivalent number of other employees	11.8	11.2

Council regards one full-time equivalent as an employee who works 37.5 hours weekly.

Employee Remuneration

The following table classifies the number of all employees employed on the last day of the financial year into remuneration bands, calculated as the total annual remuneration (including the value of non-financial benefits) being received as at the last day of the financial year.

Total Annual Remuneration	Number of Employees 30 June 2018	Total Annual Remuneration	Number of Employees 30 June 2017
Less than \$60,000	33	Less than \$60,000	35
\$60,000 to \$79,999	70	\$60,000 to \$79,999	62
\$80,000 to \$99,999	49	\$80,000 to \$99,999	39
\$100,000 to \$119,999	11	\$100,000 to \$119,999	11
\$120,000 to \$139,999	10	\$120,000 to \$139,999	14
\$140,000 to \$199,999	6	\$140,000 to \$319,999	5
\$200,000 to \$279,999	3	-	-
	182		166

Chief Executive Remuneration

The Chief Executive of the Council is appointed under Section 42 of the Local Government Act 2002.

Sarah Gardner commenced employment as Chief Executive on 29 January 2018. During the period to 30 June 2018 the Chief Executive received salary payments amounting to \$104,653 (2017: \$NIL) and the total cost including fringe benefit tax of the remuneration package received during that period is calculated at \$120,735 (2017: \$NIL).

Peter Bodeker was employed as Chief Executive from 1 July 2017 until 17 November 2017. During that period, the Chief Executive received salary payments of \$109,481 (2017: \$280,342), and the total cost including fringe benefit tax of the remuneration package received during that period is calculated at \$122,013 (2017: \$312,292).

Elected Representatives' Remuneration

The following tables disclose the total annual remuneration (including the value of non-financial benefits) received by or payable to the Chairperson and other Councillors of the Council.

Council remuneration 2018

Councillor	Months in term	Meetings attended / eligible meetings ¹	Remuneration	Meeting fees	Allowances and mileage	Other	Total
Stephen Woodhead				1000		53.151	100
(Chairperson)	12	48/67	121,541	-	-	9,423	130,964
Gretchen Robertson	12						
(Deputy Chairperson)		62/67	67,676	1,641	943	193	70,453
Graeme Bell	12	51/67	48,340	-	3,572	142	52,054
Douglas Brown	12	66/67	55,591	-	6,170	688	62,449
Michael Deaker	12	56/67	55,591	-	1,750	-	57,341
Carmen Hope	12	66/67	48,340	-	7,676	270	56,286
Trevor Kempton	12	52/67	55,591	-	855	-	56,446
Michael Laws	12	49/67	48,340	-	7,941	166	56,447
Ella Lawton	12	63/67	48,340	1,313	14,368	3,198	67,219
Sam Neill	12	57/67	48,340	-	1,578	-	49,918
Andrew Noone	12	49/67	55,591	3,440	855	-	59,886
Bryan Scott	12	64/67	55,591	-	855	-	56,446
			708,872	6,394	46,563	14,080	775,909

Council remuneration 2017

Councillor	Months in term	Meetings attended / eligible meetings ¹	Remuneration	Meeting fees	Allowances and mileage	Other	Total
Stephen Woodhead							
(Chairperson)	12	46/46	118,031	-	193	9,106	127,330
Gretchen Robertson							
(Deputy Chairperson)	12	46/46	66,283	4,450	697	72	71,502
Graeme Bell	12	48/49	47,715	-	6,694	946	55,355
Douglas Brown	12	43/46	52,459	-	6,579	516	59,554
Louise Croot	3	13/13	13,894	-	250	-	14,144
Michael Deaker	12	39/46	52,459	-	500	-	52,959
Gerrard Eckhoff	3	13/13	13,894	-	1,865	67	15,826
Carmen Hope	9	33/33	33,821	-	2,724	255	36,800
Gary Kelliher	3	13/13	13,894	253	1,977	-	16,124
Trevor Kempton	12	45/49	55,585	6,700	500	-	62,785
Michael Laws	9	31/33	33,821	-	4,926	-	38,747
Ella Lawton	1	1/1	914	-	-	-	914
Margaret Lawton	6	12/33	21,746	-	2,814	-	24,560
Sam Neill	12	36/46	49,799	-	667	-	50,466
Andrew Noone	9	31/33	33,903	250	430	-	34,583
Bryan Scott	12	46/46	54,589	317	500	-	55,406
David Shepherd	9	9/13	15,978	-	3,074	-	19,052
			678,785	11,970	34,390	10,962	736,107

Eligible meetings include attendance at Council, Committee and RTC meetings.

Severance Payments

For the year ended 30 June 2018, the Council made one severance payment of \$6,500 (2017: one payment of \$15,000).

21. Key Management Personnel Compensation

The compensation of the Councillors, Chief Executive and Directors of the Council, and of the Directors and other senior management of the Port Otago Limited Group was as follows:

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Management personnel				
Short-term employee benefits	1,398	1,256	4,524	3,750
Post-employment benefits	-	-	-	-
	1,398	1,256	4,524	3,750
Full-time equivalent number of key management personnel	7	7	15	15
Governing personnel				
Councillors remuneration	776	723	776	723
Directors' fees	-	-	327	331
	776	723	1,103	1,054

22. Employee Benefits Expense

	Notes	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Salaries and wages		14,571	12,281	45,096	41,490
Defined contribution plans		661	560	2,143	1,969
Termination benefits		310	15	310	15
		15,542	12,856	47,549	43,474

Superannuation Schemes

Recognition and measurement

Contributions to defined contribution superannuation schemes are expensed when incurred.

Superannuation scheme contingent liability

The Council is a participating employer in the Defined Benefit Plan Contributors Scheme ("the scheme"), which is managed by the Board of Trustees of the National Provident Fund. The scheme is a multi-employer defined benefit scheme. Insufficient information is available to use defined benefit accounting as it is not possible to determine from the terms of the Scheme the extent to which the surplus/deficit will affect future contributions by individual employers, as there is no prescribed basis for allocation. The Scheme is therefore accounted for as a defined contribution scheme. If the other participating employers ceased to participate in the scheme, the Council could be responsible for any deficit of the scheme. Similarly, if a number of employers ceased to participate in the scheme, the Council could be responsible for an increased share of any deficit.

The Actuary of the scheme recommended previously that the employer contributions be suspended with effect from 1 April 2011. In the latest report, the Actuary recommended employer contributions remain suspended.

As at 31 March 2018, the scheme had a past service surplus of \$6.6 million (6.1% of the liabilities), (as at 31 March 2017: \$8.0 million). This amount is exclusive of Specified Superannuation Contribution Withholding Tax. This surplus was calculated using a discount rate equal to the expected return on the assets, but otherwise the assumptions and methodology were consistent with the requirements of PBE IPSAS 25.

23. Subsequent Events

On 4 September 2018 the Directors of Port Otago Limited declared a final dividend of \$0.5 million for the year ended 30 June 2018. As the final dividend was approved after balance date, the financial effect of the dividend payable of \$0.5 million has not been recognised in the Balance Sheet.

24. Commitments for Expenditure

Capital Expenditure Commitment

At 30 June 2018 the Group had commitments for capital expenditure of \$9.61million (2017: \$32.0 million). Included in the above amounts are Council commitments of \$0.30 million (2017: \$5.62 million) relating to property, plant and equipment acquisitions and contracts for capital expenditure.

Included within Group capital commitments is capital expenditure of \$9.31 million (2017: \$26.32 million) relating to purchases and refurbishment of port assets and investment property.

Lease Commitments

Finance lease liabilities and non-cancellable operating lease commitments are disclosed in Note 26 to the financial statements.

25. Contingent Liabilities & Contingent Assets

Council Only

Consistent with the nature of the Council's activities, the Council is involved in Environment, High and District Court proceedings resulting from decisions made by the Council as a planning and consenting authority under the Resource Management Act.

The Council has been advised of potential claims in relation to the issue of resource consents. The Council does not expect any material uninsured liability to arise from these potential claims, (2017: \$Nil).

Group

There are no contingent liabilities at 30 June 2018 (30 June 2017: nil) other than those arising in the normal course of business.

26. Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Council and/or Group as Lessor

Amounts due from lessees under finance leases are recorded as receivables at the amount of the net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the leases.

Rental income from operating leases is recognised on a straight line basis over the term of the relevant lease.

Council and/or Group as Lessee

Assets held under finance leases are recognised at their fair value or, if lower, at amounts equal to the present value of the minimum lease payments, each determined at the inception of the lease. The corresponding liability to the lessor is included in the Statement of Financial Position as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income, unless they are directly attributable to qualifying assets, in which case they are capitalised.

Rentals payable under operating leases are charged to income on a straight line basis over the term of the relevant lease.

Lease Incentives

Benefits received and receivable as an incentive to enter into an operating lease are also spread on a straight line basis over the lease term.

Disclosures for lessees

Leasing Arrangements

Operating leases relate to property, vehicles and equipment leases. All operating lease contracts contain market review clauses in the event that the Council/Group exercises its option to renew. The Council/Group does not have an option to purchase the leased asset at the expiry of the lease period.

Non-cancellable Operating Lease Payments

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Not longer than 1 year	272	33	642	470
Longer than 1 year and not longer than 5 years	546	34	879	663
Longer than 5 years	-	-	434	465
	818	67	1,955	1,598

Disclosures for Lessor

Leasing Arrangements

Leases are classified at their inception as either operating or finance leases based on the economic substance of the agreement so as to reflect the risks and rewards incidental to ownership. Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. The Group has determined that it retains all significant risks and rewards of ownership of the commercial property leases and has therefore classified the leases as operating leases. Property leased out under operating leases is included in investment property and property, plant and equipment in the Balance Sheet.

Finance Lease Receivable

	Group Minimun Lease Pa	n Future	Group only Present Value of Minimum Futur Lease Receivables		
	2018 2017 \$000s \$000s		2018 \$000s	2017 \$000s	
Not longer than 1 year	-	-	-	-	
Longer than 1 year and not longer than 5 years	-	-	-	-	
Longer than 5 years	-	-	-	-	
Minimum future lease payments	-	-	-	-	
Less unearned finance income		-	-	-	
Present value of minimum lease payments	-	-	-	-	
Disclosed in the financial statements as:					
Current	-	-	-	-	
Non-current		-	-	-	
	-	-	-	-	

Finance lease receivables relate to the Group for the funding of tenant improvements to an investment property.

Operating Lease Commitments as Lessor

The Group has entered into commercial property leases. These non-cancellable leases have remaining non-cancellable lease terms of up to 21 years.

Future minimum rentals receivable under non-cancellable operating leases as at 30 June are as follows:

GROUP	2018 \$000	2017 \$000
Rentals receivable		
Within one year	20,315	20,417
After one year but not more than five years	66,551	64,852
More than five years	104,452	103,774
Minimum future lease receivable	191,318	189,043

27. Subsidiaries, Associates and Joint Ventures

		Ownershi	p Interest
	Country of Incorporation	2018	2017
		%	%
Council – Otago Regional Council	New Zealand	-	-
Subsidiaries – Port Otago Limited	New Zealand	100	100

Otago Regional Council is the head entity within the consolidated group. Port Otago Limited holds the Group's interest in the other subsidiaries, associates and joint ventures detailed below.

The principal activities of the entities are:

		Ownership Interest	
	Principal activities	2018 %	2017 %
Subsidiaries			
Chalmers Properties Limited	Property investment	100	100
Te Rapa Gateway Limited	Property investment	100	100
South Freight Limited	Transport investment	100	100
Fiordland Pilot Services Limited	Shipping services	100	100
Joint Ventures and Associates			
Harbourcold Dunedin	Cold store operation	50	50
Hamilton Porter JV	Property investment	66.7	66.7
Hamilton Porter JV Company Limited	Property trustee (non-trading)	66.7	66.7
ICON Logistics Limited	Container transport and warehousing services	50	50

Subsidiaries

Subsidiaries are entities that are controlled, either directly or indirectly, by the Council. The results of subsidiaries acquired or disposed of during the period are included in the consolidated surplus/(deficit) from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Joint Ventures

Joint ventures are contractual arrangements with other parties in which the Group has several liability in respect of costs and liabilities.

Joint ventures are joint arrangements with other parties in which the Group has several liabilities in respect of costs and joint and several in respect of liabilities. The Group's share of the assets, liabilities, revenues and expenses of joint ventures is incorporated into the Group's financial statements on a line-by-line basis.

The financial statements include the relevant interest in each joint venture's assets and liabilities at 30 June 2018 along with the share of trading for the relevant period.

With the exception of the investments in Icon Logistics Limited which is accounted for in the Group financial statements using the equity method, as this reflects the substance of the economic reality of the Group's interest in the joint venture controlled entity.

All companies in the Group have 30 June balance dates.

Joint ventures accounted for using the equity method

	Note	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Balance at beginning of year		-	-	1,427	1,475
Share of profit from joint ventures recognised in the Statement of Comprehensive Revenue					
and Expenses		-	-	204	80
Distributions from joint venture		-	-	-	(128)
Balance at end of year		-	-	1,631	1,427

The Group has a 50% shareholding in Icon Logistics Limited (2017: 50%). Icon Logistics limited is allowed for using the equity method due to this better reflecting the substance of the economic reality of the Group's interest in the joint controlled entity Icon Logistics Limited. Harbour Logistics Limited holds the remaining 50% shareholding in Icon Logistics Limited.

Jointly Controlled Entities

Interests in jointly controlled entities are reported in the financial statements by including the consolidated Group's share of assets employed in the joint ventures, the share of liabilities incurred in relation to the joint ventures and the share of any expenses incurred in relation to the joint ventures in their respective classification categories.

In certain circumstances, interests in jointly controlled entities are reported in the financial statements using the equity method of where the Group considers this better reflects the substance of the economic reality of the Group's interest in the joint controlled entity.

Summarised financial information of jointly controlled entities:

	Group 2018 \$000	Group 2017 \$000
Current assets	10,080	9,668
Non-current assets	1,270	6,887
	11,350	16,555
Current liabilities	(1007)	(2,652)
Non-current liabilities	-	-
	(1,007)	(2,652)
Net assets	10,343	13,903

Any capital commitments and contingent liabilities arising from the Group's interests in joint ventures are disclosed in Notes 24 and 25 respectively.

28. Related Party Disclosures

Counci

Otago Regional Council is the ultimate parent of the Group and controls one entity, being Port Otago Limited including its subsidiaries, associates and joint ventures.

During the year Councillors and key management, as part of a normal customer relationship, were involved in minor arm's length transactions with the Council, such as the payment of rates.

Councillor Trevor Kempton is a director of Delta Utility Services Limited, Councillor Andrew Noone is a director of Orokonui Ecosanctuary Limited.

In the ordinary course of business and during the financial period covered by this report, services valued at \$13,786 were purchased from Delta Utility Services Limited (2017: \$16,068), and services valued at \$10,000 were provided from Orokonui Ecosanctuary Limited (2017: \$225).

As at June 2018 the amount owed to Delta Utility Services Limited was \$NIL (2017:\$9,303) and the amount owed to Orokonui Ecosanctuary Limited was \$10,000 (2017 \$NIL).

Group

Transactions with Harbourcold Dunedin

Port Otago Limited has a 50% interest in Harbourcold Dunedin. Harbourcold Dunedin is a tenant and purchaser of materials and services from Port Otago Limited. The amount received from Harbourcold Dunedin during 2018 for property rentals and the purchase of materials and services was \$715,996 (2017: \$643,900) with \$6,672 receivable at year end (2017: \$4,467). No dividend was received by Port Otago Limited from Harbourcold Dunedin during 2018 (2017: \$30,000).

Transactions with Icon Logistics Limited

Port Otago Limited has a 50% interest in Icon Logistics Limited through its wholly owned subsidiary, South Freight Limited. Icon Logistics Limited is a tenant and purchaser of services from Port Otago Limited. The amount received from Icon Logistics Limited during 2018 for property rentals and sale of services was \$106,209 (2016: \$87,705) with \$8,385 receivable at year end (2017: \$1,359).

Icon Logistics Limited also provides transport services to Port Otago Limited. The amount paid to Icon Logistics Limited during 2018 for the supply of transport services was \$958,964 (2017: \$81,051) with \$121,367 payable at year end (2017: \$8,814).

Transactions with Hamilton Porter JV

Hamilton Porter JV reimburses Te Rapa Gateway Limited for its share of general operating costs and development costs invoiced . At balance date the amount owing to Te Rapa Gateway Limited was \$35,873 (2017: \$16,103).

In May 2018 Te Rapa Gateway Limited acquired from Hamilton Porter JV, the land of the JV that was being developed within stage 3 of the industrial subdivision. Compensation of \$8,140,720 for the land acquired, was based upon a negotiated price of \$140m2 for the anticpated 58,148m2 of developed land for sale expected to be yielded from the JV land in the development.

Chalmers Properties Limited provides accounting and administration services to Hamilton Porter JV for which \$10,000 (2016: \$5,000) was charged. At balance date the amount owing to Chalmers Properties Limited was \$12,000 (2016: \$5,000)

There were no other transactions with related parties.

Transactions Eliminated on Consolidation

Related party transactions and outstanding balances with other entities in a group are disclosed in an entity's financial statements. Intra-group related party transactions and outstanding balances are eliminated in the preparation of consolidated financial statements of the group.

29. Remuneration of Auditors

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Audit fees for financial statement audit	117	114	117	114
Audit fees for audit of Long Term Plan	65	-	65	-
Other services	8	-	8	-
Fees for tax and advisory services - Council	7	8	7	8
Fees for tax compliance and advisory services – entities not audited by Deloitte	-	-	65	135
	197	122	262	257
Audit fees to other auditors for audit of financial statements of group entities	-	-	136	134
	-	-	136	134
	197	122	398	391

The auditor for and on behalf of the Controller and Auditor-General, of the Otago Regional Council, is Deloitte, and of the Port Otago Limited Group is Audit New Zealand.

30. Explanation of Major Variances from Budget

Statement of Comprehensive Revenue and Expenses

The total comprehensive revenue and expense of \$46.622 million comprises a deficit for the year of \$2.849 million and a revaluation gain of \$49.471 million.

Deficit for the year

The deficit of \$2.849 million is \$1.456 million more than the budgeted deficit of \$1.393 million.

The prime cause of the higher than budgeted deficit for the year relates to revenue being \$1.976 million less than budgeted. This is mainly due to projects where the level of revenue is dependent upon the level of expenditure, and where the activity and expenditure level is lower than budgeted, causing a lower than budgeted revenue level.

Revaluation Gain

The revaluation gain of \$49.471 million reflects the gain on the revaluation of the Council's shareholding in the Port Otago Limited group at 30 June 2018 and exceeds the gain of \$10.000 million provided for in the budget by \$39.471 million.

The budgeted increase is a nominal estimate only, as the major factors contributing to the valuation are not able to be forecast with any significant degree of accuracy. The quantum of the gain does not impact directly on the operations of the Council during the year.

Statement of Financial Position

Total Assets

Total assets at \$650.269 million exceeds the budgeted amount of \$596.787 million by \$53.482 million.

The major factor in this variance is the valuation of the Council shareholding in Port Otago Limited at 30 June 2018 of \$488.508 million, exceeding the budgeted amount of \$438.239 million by \$50.269 million.

Cash and cash equivalents and other financial assets with a combined amount of \$48.436 million are \$3.473 million up on the budget of \$44.963 million.

This variance is primarily due to a higher level of funds held at the beginning of the 2017/18 year than assumed in the budget.

Trade and other receivables at \$8.709 million are up \$5.423 million on the budget of \$3.286 million. This variance is largely due to receivables related to the transport activity, and in particular NZTA subsidy claims and receivables associated with the Electronic Ticketing System consortium.

Property Plant and Equipment at \$90.212 million is \$3.710 million less than the budgeted amount of \$93.922 million.

Actual capital expenditure during the year of \$7.711 million was \$0.881 million more than the budgeted amount of \$6.830 million, with the remainder of the variance primarily due to the opening balance of property plant and equipment being less than was anticipated in the annual plan budget.

Equity

Public equity and reserves at \$639.549 million exceed the budgeted amount of \$591.170 million by \$48.379 million.

The major factor in the variance is the Available for Sale revaluation reserve which records the accumulated revaluation gains on the annual revaluations of the Council's shareholding in Port Otago Limited. The budgeted balance of the reserve at 30 June 2018 was \$418.239 million, whereas the actual balance is \$468.508 million, a variance of \$50.269 million. This variance comprises a favourable budget variance on the June 2018 revaluation of \$39.471 million and a favourable variance in the opening balance position of \$10.798 million.

31. Financial Instruments

Financial Risk Management Objectives

The Council has established a Treasury Management Policy which combines the Local Government Act 2002 requirement for local authorities to adopt a Liability Management Policy and an Investment Policy. These provide a framework for prudent debt management and the management of financial resources in an efficient and effective way.

The Council and Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

Significant Accounting Policies

Financial assets and financial liabilities are recognised in the Council's or Group's Statement of Financial Position when the Council and/or Group becomes a party to contractual provisions of the instrument.

Investments are recognised and derecognised on trade date where purchase or sale of an investment is under a contract whose terms require delivery of the investment within the timeframe established by the market concerned, and are initially measured at fair value, net of transaction costs, except for those financial assets classified as fair value through surplus or deficit which are initially valued at fair value.

Financial Assets are classified into the following specified categories: financial assets 'at fair value through surplus or deficit', 'available-for-sale' financial assets, and 'loans and receivables'. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

Impairment of Financial Assets

Financial assets, other than those at fair value through surplus or deficit, are assessed for indicators of impairment at each reporting date. Financial assets are impaired where there is objective evidence that as a result of one or more events that occurred after the initial recognition of the financial asset the estimated future cash flows of the investment have been impacted. For financial assets carried at amortised cost, the amount of the impairment is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate.

Derivative Financial Instruments

The Council and Group enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risk, including foreign exchange forward contracts and interest rate swaps.

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured to their fair value at each balance date. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The Group designates hedges of highly probable forecast transactions as cash flow hedges. Changes in the fair value of derivatives qualifying as cash flow hedges are recognised in other comprehensive revenue and expense and transferred to the cash flow hedge reserve in equity. The ineffective component of the fair value changes on the hedging instrument is recorded directly in the surplus/(deficit).

When a hedging instrument expires or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the surplus/(deficit). When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the surplus or deficit. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the surplus/(deficit).

For qualifying hedge relationships, the Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objective. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in cash flows of hedged items.

The net differential paid or received on interest rate swaps is recognised as a component of interest expense over the period of the swap agreement.

A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

Fair Value

The group carries interest rate derivatives (derivative financial instruments) at fair value. The fair value of interest rate swaps is the estimated amount that the Group would receive or pay to terminate the swap at the reporting date, taking into account current interest rates. These instruments are included in Level 2 of the fair value measurement hierarchy. Interest rate derivative fair values are valued and are calculated using a discounted cash flow model using FRA rates provided by ANZ Bank New Zealand Limited based on the reporting date of 30 June 2018.

		COUNCIL				GROUP			
	Level 1 \$000	Level 2 \$000	Level 3 \$000	Total \$000	Level 1 \$000	Level 2 \$000	Level 3 \$000	Total \$000	
2018									
Financial liabilities at FVTPL:									
Other financial instruments	-	-	-	-	-	-	-	-	
2017									
Financial liabilities at FVTPL:									
Other financial instruments	-	-	-	-	-	-	-	-	

Categories of Financial Instruments

COUNCIL 2018	Loans and Receivables \$000	Fair Value Through Surplus or Deficit – Held for Trading \$000	Fair Value Through Other Comprehensive Revenue and Expense \$000	Financial Liabilities at Amortised Cost \$000	Total \$000
Financial Assets					
Cash and cash equivalents	8,125	-	-	-	8,125
Trade and other receivables (note 12)	8,709	-	-	-	8,709
Other financial assets (note 5)	19,000	21,311	-	-	40,311
Shares in subsidiary	-	-	488,508	-	488,508
	35,834	21,311	488,508	-	545,653
Financial Liabilities					
Trade and other payables (note 13)	-	-	-	9,019	9,019
	-	-	-	9,019	9,019

COUNCIL 2017	Loans and Receivables \$000	Fair Value Through Surplus or Deficit – Held for Trading \$000	Fair Value Through Other Comprehensive Revenue and Expense \$000	Financial Liabilities at Amortised Cost \$000	Total \$000
Financial Assets					
Cash and cash equivalents	4,433	-	-	-	4,433
Trade and other receivables (note 12)	3,568	-	-	-	3,568
Other financial assets (note 5)	34,200	19,857	-	-	54,057
Shares in subsidiary	-	-	439,037	-	439,037
	42,116	19,857	439,037	-	501,095
Financial Liabilities					
Trade and other payables (note 13)	-	-	-	7,159	7,159
	-	-	-	7,159	7,159

GROUP 2018	Loans and Receivables \$000	Fair Value Through Surplus or Deficit – Held for Trading \$000	Fair Value Through Other Comprehensive Revenue & Expense \$000	Financial Liabilities at Amortised Cost \$000	Total \$000
Financial Assets					
Cash and cash equivalents	8,377	-	-	-	8,377
Trade and other receivables (note 12)	25,380	-	-	-	25,380
Other financial assets (note 5)	19,013	21,311	-	-	40,324
Other financial instruments	-	-	-	-	-
	52,770	21,311	-	-	74,081
Financial Liabilities					
Other financial instruments	-	1,008	-	-	1,008
Trade and other payables (note 13)	-	-	-	18,072	18,072
Borrowings (secured) (note 15)	-	-	-	77,635	77,635
	-	1,008	-	95,707	96,715

GROUP 2017	Loans and Receivables \$000	Fair Value Through Surplus or Deficit – Held for Trading \$000	Fair Value Through Other Comprehensive Revenue & Expense \$000	Financial Liabilities at Amortised Cost \$000	Total \$000
Financial Assets					
Cash and cash equivalents	4,958	-	-	-	4,958
Trade and other receivables (note 12)	16,571	-	-	-	16,571
Other financial assets (note 5)	34,233	19,857	-	-	54,090
Other financial instruments	-	286	-	-	286
	55,762	20,143	-	-	75,905
Financial Liabilities					
Other financial instruments	-	833	-		833
Trade and other payables (note 13)	-	-	-	14,537	14,537
Borrowings (secured) (note 15)	-	-	-	68,420	68,420
	-	833	-	82,957	83,790

Market Risk

The Group's activities expose it primarily to the financial risks of changes in market prices of other financial assets (principally Managed Funds - Equities and Shares in Listed Companies), foreign currency exchange rates and interest rates.

There has been no change during the year to the group exposure to market risks or the manner in which it manages and measures the risk.

(a) Currency Risk

Currency risk is the risk that the fair value of a financial instrument will fluctuate due to changes in foreign exchange rates. The Group is exposed to currency risk in relation to the purchase of certain capital items denominated in foreign currencies. Foreign currency forward purchase contracts are used to manage the Group's exposure to movements in exchange rates on foreign currency denominated liabilities and purchase commitments. The Council is exposed to currency risk in relation to the investments denominated in foreign currencies forming part of the managed fund portfolio. The policy governing Managed Funds places restrictions on the currencies in which the fund manager may invest, and the amount of exposure to any one currency.

Amount of exposure to currency risk

The Group's exposure to foreign currency risk for each class of financial instruments is as follows:

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Managed funds	3,333	1,870	3,333	1,870
	3,333	1,870	3,333	1,870

The only significant sensitivity the group has in relation to changes in foreign currency relates to the Council's Managed funds. The carrying value of investments in equity securities held in AUD, USD and Euro denominated currency may fluctuate with changes in the exchange rate between the New Zealand dollar and the foreign currency.

A favourable movement of 10% in the exchange rates at 30 June 2018 would have the impact of increasing the carrying value of the Managed funds, and the Council surplus, by \$370,000 (2017: \$208,000), and an unfavourable movement of 10% would impact unfavourably to the extent of \$303,000 (2017: \$170,000).

(b) Interest Rate Risk

The Council and Group is exposed to interest rate risk as it borrows funds at floating interest rates. The risk is managed by the use of floating-to-fixed interest rate swaps contracts. These swaps have the economic effect of converting borrowings from floating rate to fixed rates.

Under interest rate swap contracts, the Group agrees to exchange the difference between fixed and floating rate interest amounts calculated on agreed notional principal amounts. Such contracts enable the Group to mitigate the risk of changing interest rates on borrowings. The fair value of interest rate swaps are based on market values of equivalent instruments at the reporting date.

The Council is also exposed to interest rate risk to the extent that it holds funds on demand, at call or in floating interest rate instruments as part of cash and cash equivalent balances and the managed funds portfolio.

The policy governing management of the managed funds places restrictions on how the funds may be invested, and the amount of exposure to interest rates from funds held at call and on a floating rate basis. Council invests surplus funds with Council approved financial institutions, and holds sufficient funds on call as part of its cash management procedures.

The following table discloses the impact of a movement of plus and minus 100 basis points in interest rates applicable to those instruments.

Sensitivity to Interest Rate Risk

		20	18		2017				
GROUP	Profit -100bps \$000	Other Equity -100bps \$000	Profit +100bps \$000	Other Equity +100bps \$000	Profit -100bps \$000	Other Equity -100bps \$000	Profit +100bps \$000	Other Equity +100bps \$000	
Financial Liabilities									
Borrowings	776	-	(776)	-	684	-	(684)	-	
Derivatives – hedge accounted	-	(2,821)	-	572	-	(2,927)	-	1,480	
Derivatives – non-hedge accounted	-	-	-	-	-	-	-	-	
Total sensitivity to interest rate risk	776	(2,821)	(776)	572	684	(2,927)	(684)	1,480	

Equity Price Risk

Equity price risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate as a result of changes in market prices. The Group is exposed to equity securities price risk on its investments held in publicly traded securities.

The following information discloses the Group's exposure and sensitivity to equity price risk.

Exposure to Equity Price Risk

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Financial Assets				
Other financial assets	10,974	7,301	10,974	7,301
Exposure to equity price risk	10,974	7,301	10,974	7,301

Sensitivity to Equity Price Risk

COUNCIL and GROUP		2018				2017			
	-10% Profit \$000	-10% Other Equity \$000	+10% Profit \$000	+10% Other Equity \$000	-10% Profit \$000	-10% Other Equity \$000	+10% Profit \$000	+10% Other Equity \$000	
Financial Assets									
Other financial assets	(1,097)	-	1,097	-	(730)	-	730	-	
Total sensitivity equity price risk	(1,097)	-	1,097	_	(730)	_	730	-	

The sensitivity analysis shows the impact a movement of plus or minus 10% in the price of equities would have on the fair value of the equities.

Credit Risk

Credit risk refers to the risk that a counter party will default on its contractual obligations resulting in financial loss to the Group.

The Council has no significant concentrations of credit risk arising from trade receivables, as it has a large number of credit customers, mainly ratepayers, and Council has powers under the Local Government (Rating) Act 2002 to recover outstanding debts from ratepayers.

Council trade and other receivables mainly arise from the Council's statutory functions, therefore there are no procedures in place to monitor or report the credit quality of debtors and other receivables with reference to internal or external credit ratings.

The Council Treasury Management Policy details the objectives, policies and restrictions for management of the fund. The policy includes the key objective of capital preservation, placing restrictions on the exposure to credit risk.

The Group is predominantly exposed to credit risk arising from a small number of shipping line and warehouse clients comprising the majority amount of subsidiary trade receivables. Regular monitoring of trade receivables is undertaken to ensure that the credit exposure remains within the Group's normal trading terms of trade.

The carrying amount of financial assets recorded in the financial statements, net of any allowance for impairment, represents the Group's maximum exposure to credit risk without taking account of the value of any collateral obtained.

The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with credit-ratings assigned by international credit rating agencies.

Maximum Exposure to Credit Risk

The Group's maximum exposure for each class of financial instrument is as follows:

	Council 2018 \$000	Council 2017 \$000	Group 2018 \$000	Group 2017 \$000
Cash at bank and term deposits	27,125	38,633	27,377	39,158
Trade and other receivables	8,709	3,483	25,380	16,470
Managed funds (Note 5)	21,311	19,857	21,311	19,857
Finance leases	-	-	-	-
Shares in listed companies	-	-	-	-
Shares in subsidiary	488,508	439,037	-	-
	545,653	501,010	74,068	75,485

Liquidity Risk Management

Liquidity risk is the risk that the Group will encounter difficulty in raising liquid funds to meet commitments as they fall due. Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through adequate committed credit facilities, and the ability to close out market positions.

The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

109

Contractual Maturity Analysis of Financial Instruments

The following contractual maturity information analyses the Group's financial instruments into the relevant grouping based on the remaining period at balance date to the contractual maturity date. Future interest payments on floating rate debt are based on the floating rate of the instrument at balance date. The amounts disclosed are the contractual undiscounted cash flows.

		C	OUNCIL 20	18			C	OUNCIL 20	17	
	Weighted			Ageing of	Cash Flows	Weighted			Ageing of (ash Flows
	Average Effective Interest Rate	Carrying Amount \$000	Contractual Cash Flows \$000	Less Than 1 Year \$000	1 Year or Greater \$000	Average Effective Interest Rate	Carrying Amount \$000	Contractual Cash Flows \$000	Less Than 1 Year \$000	1 Year or Greater \$000
Financial Assets										
Cash and cash equivalents										
Cash and call deposits		8,125	8,125	8,125	-	0.10	4,433	4,433	4,433	-
Trade and other receivables	-	8,709	8,709	8,709	-	-	3,568	3,568	3,568	-
Other financial assets										
Term deposits	3.53	19,000	19,148	19,148	-	3.71	34,200	34,707	34,707	-
Managed fund:										
Cash and call deposits		1,173	1,173	1,173	-	-	1,625	1,625	1,625	-
Fixed interest securities	5.11	9,163	10,219	3,691	6,528	5.39	10,931	12,420	3,223	9,197
Equity securities	-	10,975	10,975	10,975	-	-	7,301	7,301	7,301	-
Shares in subsidiary	-	488,508	488,508	-	488,508	-	439,037	439,037	-	439,037
Total financial assets	-	545,653	546,857	51,821	495,036		501,095	503,091	54,857	448,234
Financial liabilities										
Trade and other payables	-	(9,022)	(9,022)	(9,022)	-	-	(7,159)	(7,159)	(7,159)	-
Total financial liabilities	-	(9,022)	(9,022)	(9,022)	-	-	(7,159)	(7,159)	(7,159)	-

	Rate	\$000	\$000	\$000	\$000	Rate	\$000	\$000	\$000	\$000
Financial Assets										
Cash and cash equivalents										
Cash and call deposits	-	8,377	8,377	8,377	-	0.10	4,958	4,958	4,958	-
Trade and other receivables	-	25,380	25,380	25,380	-	-	16,470	16,470	16,470	
Other financial assets										
Short term deposits	3.53	19,000	19,148	19,148	-	3.71	34,200	34,707	34,707	-
Managed fund:										
Cash and call deposits	-	1,173	1,173	1,173	-	-	1,625	1,625	1,625	-
Fixed interest securities	5.11	9,163	10,219	3,691	6,528	5.39	10,931	12,420	3,223	9,197
Equity securities	-	10,975	10,975	10,975	-	-	7,301	7,301	7,301	-
Other items:										
Finance leases	-	-	-	-	-	-	-	-	-	-
Total financial assets		74,068	75,272	68,744	6,528		75,485	77,481	68,284	9,197
Financial liabilities										
Trade and other payables	-	(17,973)	(17,973)	(17,973)	-	-	(10,645)	(10,645)	(10,645)	-

(31,565)

(50,046)

(508)

Ageing of Cash Flows

1 Year or

Greater

(53,660)

(54,256)

(596)

Less Than

1 Year

GROUP 2017

Contractual

Cash Flows

(78,390)

1,693

(87,342)

Ageing of Cash Flows

1 Year or

Greater

(65,163)

(65,047)

116

Less Than

1 Year

(13,227)

1,577

(22,295)

Weighted

Average

Effective

Interest

4

Carrying

Amount

(68,420)

(79,639)

(574)

GROUP 2018

Contractual

Cash Flows

(85,225)

(1,104)

(104,302)

Weighted

Average

Effective

Interest

4.0%

Carrying

Amount

(77,635)

(1,008)

(96,616)

Borrowings (secured)

Other financial instruments

Total financial liabilities

Other Disclosures

Local Government (Financial Reporting and Prudence) Regulations 2014

Annual Report Disclosure Statement for year ending 30 June 2018

Purpose of this statement

The purpose of this statement is to disclose the Council's financial performance in relation to various benchmarks to enable the assessment of whether the Council is prudently managing its revenues, expenses, assets, liabilities, and general financial dealings.

The Council is required to include this statement in its Annual Report in accordance with the Local Government (Financial Reporting and Prudence) Regulations 2014 (the **regulations**). Refer to the regulations for more information, including definitions of some of the terms used in this statement.

Rates affordability benchmark

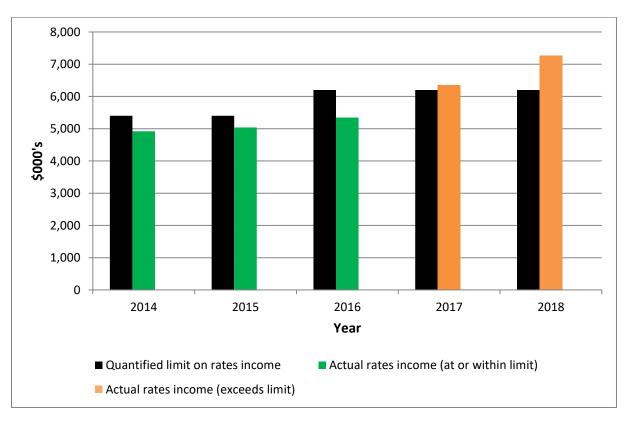
The Council meets the rates affordability benchmark if—

- its actual rates income equals or is less than each quantified limit on rates; and
- its actual rates increases equal or are less than each quantified limit on rates increases.

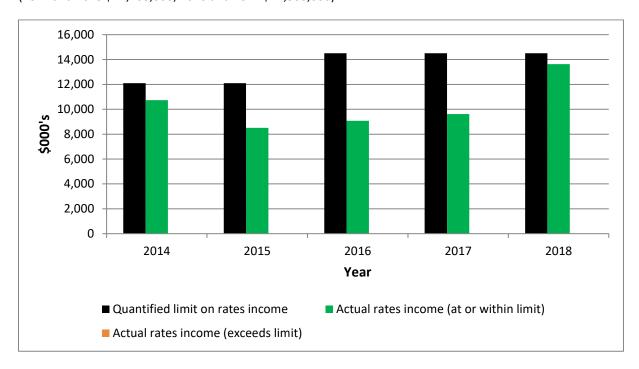
The Council specifies separate quantified limits for general rates and for targeted rates.

Rates (income) affordability

The following graph compares the Council's actual general rates income with a quantified limit on general rates contained in the financial strategy included in the Council's Long Term Plan. The quantified limit is \$6,200,000 (2014 and 2015 \$5,400,000, 2016 and 2017 \$6,200,000)

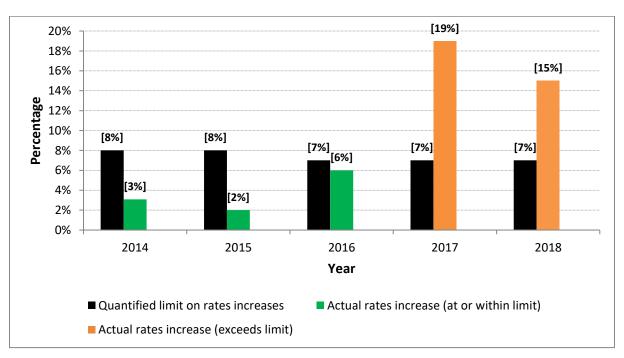


The following graph compares the Council's actual targeted rates income with a quantified limit on targeted rates contained in the financial strategy included in the Council's Long Term Plan. The quantified limit is \$14,500,000 (2014 and 2015 \$12,100,000, 2016 and 2017 \$14,500,000).

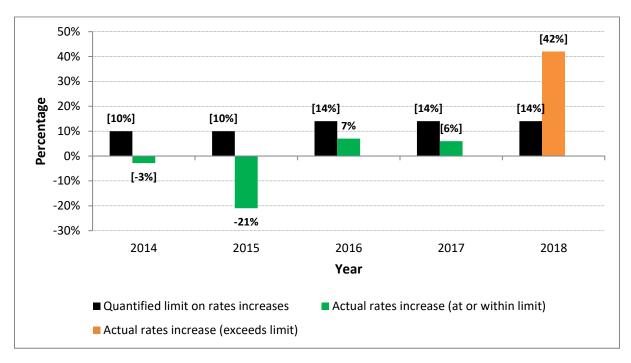


Rates (increases) affordability

The following graph compares the Council's actual general rates increases with a quantified limit on general rates increases included in the financial strategy included in the Council's Long Term Plan. The quantified limit is an increase of 7% per annum, (2014 and 2015 8%, 2016 and 2017 7%).



The following graph compares the Council's actual targeted rates increases with a quantified limit on targeted rates increases included in the financial strategy included in the Council's Long Term Plan. The quantified limit is an increase of 14% per annum (2014 and 2015 10%, 2016 and 2017 14%).



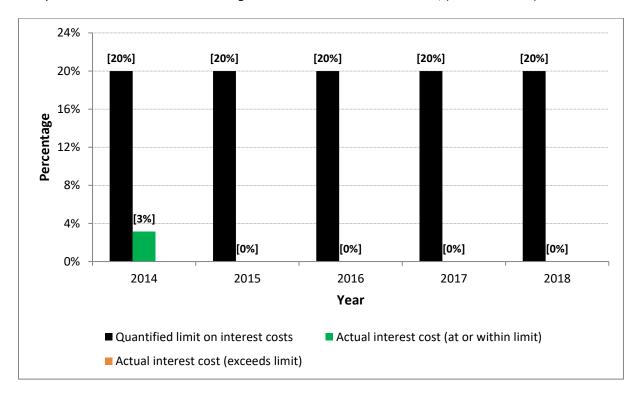
Debt affordability benchmark

The Council meets the debt affordability benchmark if its actual borrowing is within each quantified limit on borrowing.

The Council specifies the quantified limit on borrowing as being the interest cost on borrowing as a percentage of rates income.

The following graph compares the Council's actual interest costs as a percentage of borrowing with a quantified limit specified in the financial strategy included in the Council's Long Term Plan.

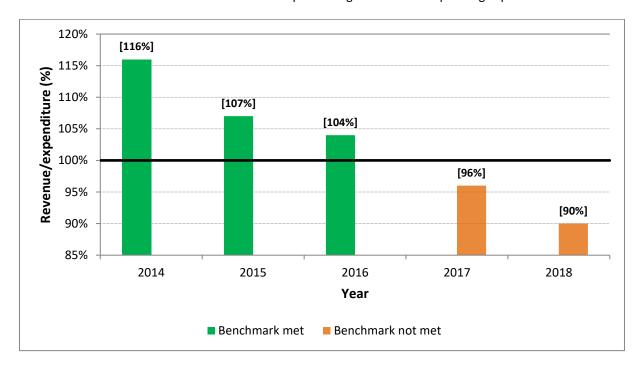
The quantified limit is interest costs being a maximum of 20% of rates income, (2014-2017 20%).



Balanced budget benchmark

The following graph displays the Council's revenue (excluding development contributions, financial contributions, vested assets, gains on derivative financial instruments, and revaluations of property, plant, or equipment) as a proportion of operating expenses (excluding losses on derivative financial instruments and revaluations of property, plant, or equipment).

The Council meets this benchmark if its revenue equals or is greater than its operating expenses.

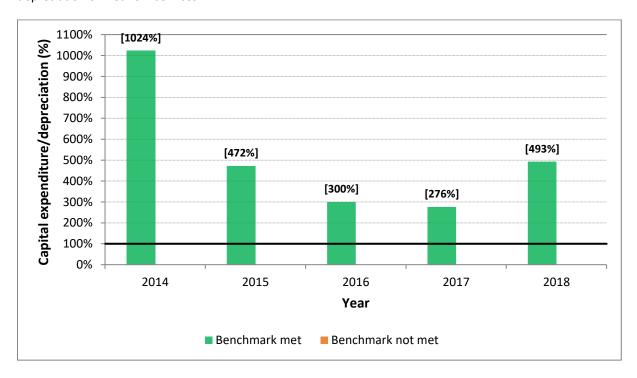


Essential services benchmark

The following graph displays the Council's capital expenditure on network services as a proportion of depreciation on network services.

The Council's network services comprise flood protection and control works.

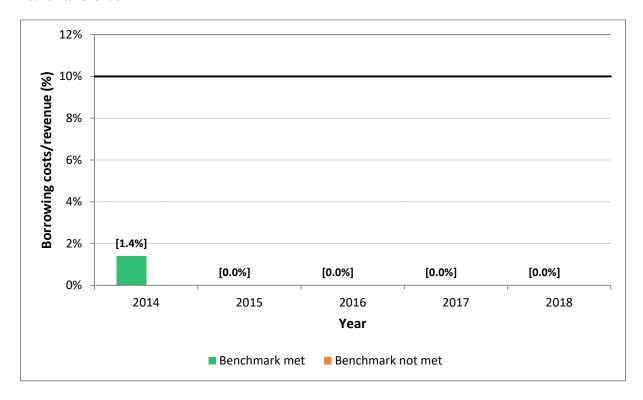
The Council meets this benchmark if its capital expenditure on network services equals or is greater than depreciation on network services.



Debt servicing benchmark

The following graph displays the Council's borrowing costs as a proportion of revenue (excluding development contributions, financial contributions, vested assets, gains on derivative financial instruments, and revaluations of property, plant, or equipment).

Because Statistics New Zealand projects the Council's population will grow more slowly than the national population growth rate, Council meets the debt servicing benchmark if its borrowing costs equal or are less than 10% of its revenue.

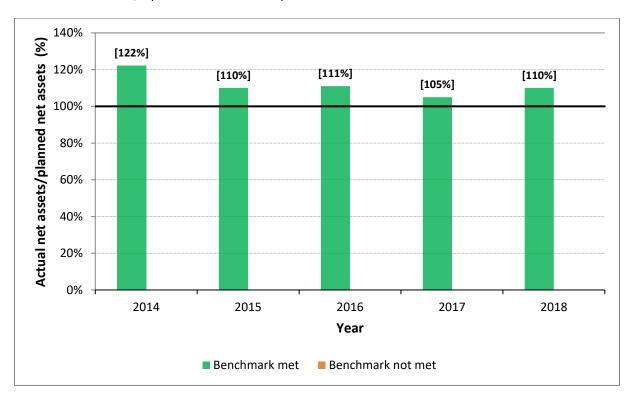


Debt control benchmark

The following graph displays the Council's actual net debt as a proportion of planned net debt. In this statement, net debt means financial liabilities less financial assets (excluding trade and other receivables).

The Council meets the debt control benchmark if its actual net debt equals or is less than its planned net debt.

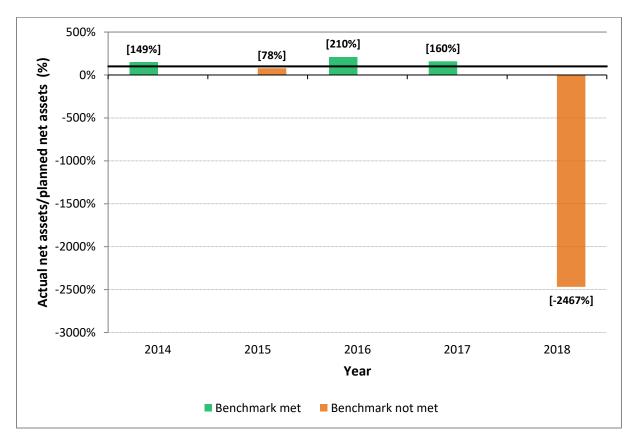
During the period 2013/14 to 2017/18, Council had budgeted net assets rather than net debt. For Council, the debt control benchmark is met if its actual net assets (financial assets, excluding trade and other receivables), less financial liabilities, equals or is more than its planned net assets.



Operations control benchmark

This graph displays the Council's actual net cash flow from operations as a proportion of its planned net cash flow from operations.

The Council meets the operations control benchmark if its actual net cash flow from operations equals or is greater than its planned net cash flow from operations.



Additional information or comment

Rates affordability benchmarks - General Rates

The Rates (Income) affordability graph for general rates shows the quantified limit was exceeded in 2017 and 2018. The quantified limit included in the Long Term Plan was \$6,200,000 and the actual amount of revenue was \$6,347,000 in 2017 and \$7,272,000 in 2018. The Annual Plans for 2016/17 and 2017/18 budgeted for general rates of \$6,300,000 and \$7,275,000 respectively.

The Rates (increases) affordability graph for general rates shows the quantified limit was exceeded in 2017 and 2018. The quantified limit included in the Long Term Plan was an increase of 7% in 2017 and 2018, and the actual amount of the increase was 19% in 2017 and 15% in 2018.

The Annual Plan 2016/17 provided for additional general rate funded expenditure, including additional expenditure in the Emergency Management, Natural Hazards and Rural Water Quality activities, compared to that reflected the Long Term Plan, with an associated increase in the general rate requirement. The Annual Plan also reflected an increase in the general rate contribution to flood and drainage schemes over that provided for in the Long Term Plan and in the previous year's Annual Plan due to an increase in the assessed level of public benefit arising from those schemes.

The Annual Plan 2017/18 provided for additional general rate funded expenditure, primarily in the Environmental activity area and specifically associated with the water programmes.

Rates affordability benchmarks - Targeted Rates

The Rates (increases) affordability graph for targeted rates shows a 42% increase in targeted rates in the 2018 year, compared with the quantified limit of 14%. The Annual Plan 2017/18 provided for a new rate to fund Civil Defence and Emergency Management which accounted for 60% of the increase over the quantified limit. The Annual Plan also provided for significant increases in rating levels for areas of increased activity and expenditure, with Dunedin Transport and Rural Water Quality being significant increases.

The Rates (increases) affordability graph for targeted rates shows a 21% decrease in targeted rates in the 2015 year, due to the decrease in the Forsyth Barr Stadium rate of 21% from the previous year.

Balanced budget benchmark

The balanced budget benchmark graph shows that in 2018 and 2017, Council's revenue was less than operating expenses.

The Council is required to ensure that estimated revenue is sufficient to cover estimated operating costs unless Council resolves that in any particular year, it is financially prudent to fund a portion of operating costs from other sources, including reserve funds.

In the 2017 year, Council resolved to fund costs associated with particular activities from reserve funds, including funding from the general reserve for regional economic development, research and development, biodiversity restoration and stock truck effluent disposal sites and transport reserves for developmental transport activity.

In the 2018 year, Council again resolved to fund costs associated with particular activities from reserves, with the activities most affected being the Environmental, Community and Transport activities.

Operations Control benchmark

The Operations Control benchmark graph shows the actual net cash flow from operations as a percentage of the planned net cash flow from operations.

In the 2018 year, the actual net cash flow from operations was a net outflow of \$6,936,000 compared to the planned net inflow of \$293,000. The major cause of this variance is associated with a lower revenue level than budgeted and an increased level of receivables than budgeted, concentrated on receivables from a small number of major organisations associated with transport projects.

In the 2015 year the actual net cash flow from operations was 78% of the planned amount.

The planned amount included subsidy income in relation to capital expenditure. Capital expenditure incurred and associated subsidy receipts were less than the level planned, significantly contributing to the lower than planned cash flow from operations. The overall net cash inflow for the 2015 year, including investing activities, amounted to \$317,000.

Additional information or comment

Rates Revenue

The rating base information in the table below is as at the preceding 30 June to the financial year shown in the table, and comprises the rating base for the region as a whole.

Otago Region	Rating Base Information for the year ended 30 June 2018	Rating Base Information For the year ended 30 June 2017
Total number of rating units	114,877	114,623
Total capital value of rating units	\$64,627,242,852	\$59,284,372,350
Total land value of rating units	\$31,979,722,850	\$29,391,227,950

Insurance of Assets

The total carrying value of all assets of the Council as at 30 June 2018 that are covered by insurance contracts amounts to \$14.794 million (2017: \$14.416 million) and the maximum amount to which they are insured is \$49.991 million (2017: \$50.043 million).

The total value of all assets of the Council as at 30 June 2018 that are self-insured amounts to \$88.290 million (2017: \$85.881 million).

Included in the value of self-insured assets are flood protection and drainage infrastructural assets of \$61.135 million (2017: \$58.967 million), land of \$24.464 million (2017: \$24.563 million), transport infrastructural assets of \$0.495 million (2017: \$0.285 million) and software licences of \$2.196 million (2017: \$2.066 million).

Flood protection and drainage infrastructural assets include floodbanks, protection works and drains and culverts. Assets of this nature are constructions or excavations of natural materials on the land, and have substantially the same characteristics of land, in that they are considered to have unlimited useful lives.

The Council does not maintain separate self-insurance funds, and considers that the level of reserve funds held is sufficient for the purpose of self-insuring assets that are not covered by insurance contracts.

As at 30 June 2018 the Council had not entered into any financial risk sharing arrangement for any assets held (2017: \$Nil).

Directory

Otago Regional Council

Chairperson	S Woodhead
Deputy Chairperson	G Robertson
Regional Councillors	G Bell
	D Brown
	M Deaker
	C Hope
	T Kempton
	M Laws
	E Lawton
	S Neill
	A Noone
	B Scott

Otago Regional Council Executive Staff

Chief Executive	.S Gardner
Director Corporate Services and Chief Financial Officer	. N Donnelly
Director Policy Planning & Resource Management	.T Winter
Director Engineering, Hazards & Science	.G Palmer
Director Environmental Monitoring & Operations	.S MacLean
Director Stakeholder Engagement	.S Sutton
Director People and Capability	.S Giddens

Otago Regional Council

Bankers	Bank of New Zealand
Auditors	Deloitte Limited on behalf of the Auditor-General, Wellington
Solicitors	Ross Dowling Marquet & Griffin PO Box 1144, Dunedin

Port Otago Limited

Chairman	D Faulkner
Deputy Chairman	P Rea
Directors	
	T Gibson
	J Harvey (retired)
	P Heslin
	E Johnson
Chief Executive	K Winders

Office & Depot Locations & Contact Telephone Numbers

Principal Office

Regional House, 70 Stafford Street, Private Bag 1954, Dunedin Website: www.orc.govt.nz

Ph: (03) 474 0827 Fax: (03) 479 0015 Pollution hotline (0800) 800 033 Toll free phone: (0800) 474 082

Council Chambers, Level 2 Phillip Laing House 144 Rattray Street, Dunedin

Regional Offices & Depots

Alexandra Office

William Fraser Building
Dunorling Street, PO Box 44
Alexandra

Ph: (03) 448 8063 Fax: (03) 448 6112

Balclutha Depot

Hasborough Place,
Balclutha

Ph: (03) 418 2031 Fax: (03) 418 2031

Oamaru Depot

32 Ribble Street Oamaru Ph: 0800 474 082

Taieri Depot

172 Dukes Road North East Taieri Ph: (03) 474 0827 **Cromwell Depot**

14 Rogers Street Cromwell Ph: (03) 445 0122

Palmerston Depot

54 Tiverton Street Palmerston Ph: 0800 474 082

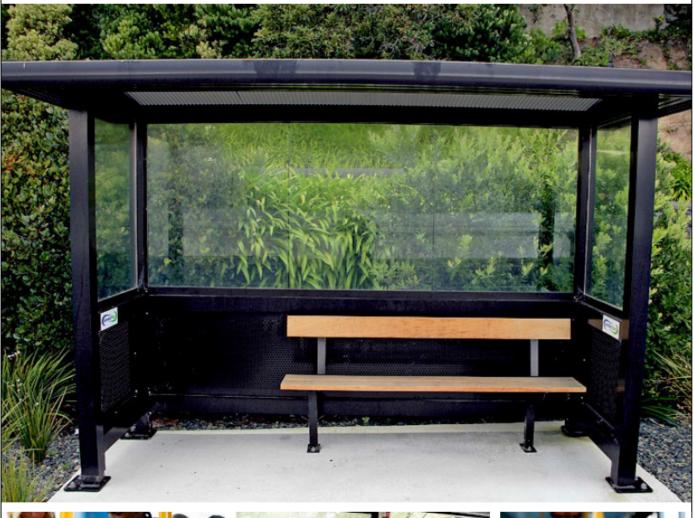
Wanaka Depot

185 Riverbank Road Wanaka Ph: 0800 474 082



Independent Auditors' Report











The Otago Regional Council Public Transport Plan 2014

Addendum:

DRAFT Peninsula Route Variation



OTAGO REGIONAL COUNCIL
REGIONAL PUBLIC TRANSPORT PLAN OTAGO 2014
ADDENDUM PENINSULA ROUTE VARIATION
AUGUST 2018

Table of Contents

1.0		About This Addendum	1
2.0		An amendment of Unit 1 Peninsula Route Services	3
	2.1	Amendment 1	
3.0		Conclusion	5



OTAGO REGIONAL COUNCIL
REGIONAL PUBLIC TRANSPORT PLAN OTAGO 2014
ADDENDUM PENINSULA ROUTE VARIATION
AUGUST 2018

1.0 About This Addendum

The Otago Regional Public Transport Plan 2014 (RPTP) sets out the priorities and needs for public transport services and infrastructure in Otago.

The amendments set out in this Addendum address:

• Community desire to provide for a non-standard timing of a service and a variation to the route for two services.

Table 1: Amendments to the Regional Public Transport Plan

Amendment	Heading	Refer to RPTP
2	Unit 1 Route Map	Page 112 - 113

OTAGO REGIONAL COUNCIL
REGIONAL PUBLIC TRANSPORT PLAN OTAGO 2014
ADDENDUM PENINSULA ROUTE VARIATION
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2.0 An amendment of Unit 1 Peninsula Route Services

The following amendment to the Regional Public Transport Plan provides for the Number 11 Peninsula bus service to vary;

- the standard timing so that the 7.57am scheduled service leaves 10 minutes earlier at 7.47am, and
- the route on the 7.47am(new) inward service is to depart from the standard route on Portobello Rd, travelling along Marne St, Somerville St, and Musselburgh Rise and connecting to the standard route on Andersons Bay Road. and
- the 3.08pm(new) outward service is to depart from the standard route on Andersons Bay Road travelling along Musselburgh Rise, Somerville St and Marne St connecting to the standard route on Portobello Rd.

2.1 Amendment 1

RPTP Reference: Appendix 5, Figure 13

REPLACEMENT MAP

See Page 2

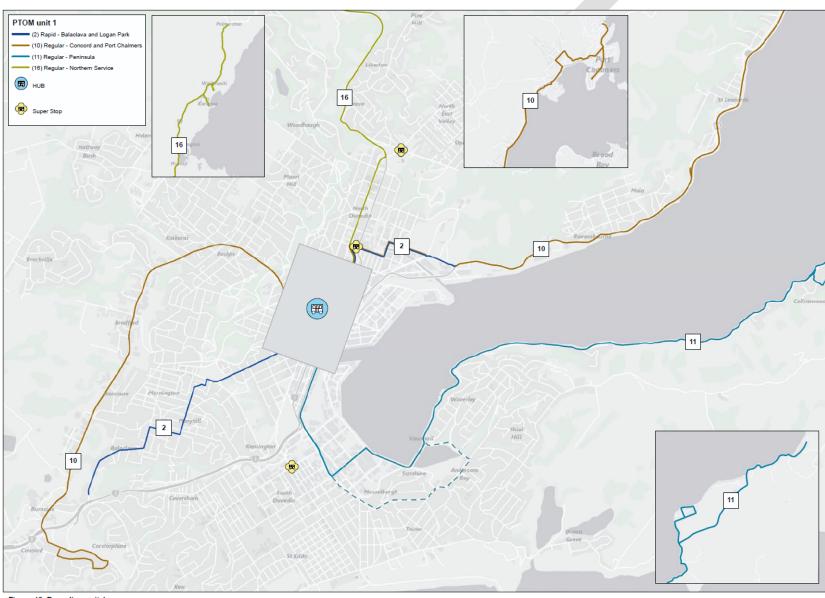


Figure 13. Dunedin - unit 1

3.0 Conclusion

The amendments as outlined in this Addendum will remove consistent timing between the scheduling of the service in the morning and a different route to be undertaken twice daily. The amendment responds to the Community's desire to provide for a timing variation for one service and a route variation for two services only.

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from your

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Name: Ben Cowershank

Ph:

Do you support the proposed changes? V Yes

/ Yes No

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

Name: Bal Well

Ph: 4761348

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you

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Name: Bruce Bond

Ph. 476155

Do you support the proposed changes? VYes

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

Name: BRUCK MITIODH Ph.: OZI S65 820

Do you support the proposed changes? (Yes)

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

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Name: Collect Bond

Ph: M761.55

Do you support the proposed changes? L imes Ves

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Please tell us-your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you

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Name:

Ph:

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Yes

Do you support the proposed changes?

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Name: DAVID ROSERTED

Ph: 0279787078

Do you support the proposed changes? Yes

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We want from thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

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Name: FIONA PICKERING

Ph:

021 059999

(Yes) Do you support the proposed changes? ∀́. (

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If so, please ensure you have included your phone number above.



Submission on the Proposed Peninsula Bus Route

Table of Contents		
1	Reconsideration of Policy 5 of the Regional Long Term Plan (RLTP)	2
2	Provision of Bus Services for School Children	3
3	Ensuring Better Bus Services for all Commuters	4
4	Review of the Public Transport Operating Model (PTOM)	4
Sumr	mary of Submission	5

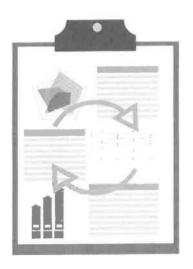


Reconsideration of Policy 5 of the Regional Long Term Plan (RLTP)

Generation Zero Dunedin supports the ORC reconsidering Policy 5 of the RLTP in the interest of providing better public transport services for students around Dunedin. As implied in the clause (a) of policy 5, it is permissible for students to use the general public transport system as a way to commute to and from school, so long as there is sufficient services provided that allow them to make that journey. We believe the proposed changes will allow the ORC to better provide the services needed to get pupils on the Peninsula to school on time. Furthermore, these changes will reduce the distance walker and danger presently burdened on pupils using the service to make their journey to and from school. Generation Zero further supports the proposed changes in so far as they better align with policy 5 (b):

"(b) some pupils may have a short walk from the bus stop to their school, and vice versa".1

However, we believe that the provision of public transport services that allow for students to journey directly to school in a timely fashion is ultimately preferable. Generation Zero believes that the ORC should in the next revision of the RLTP, consider whether policy 5 is congruent with the purpose of providing good-quality local public services. Specifically, whether the provision of separate bus routes for students would be more "efficient;



¹ Otago and Southland Regional Land Transport Committee. (June 2015). 'Otago Southland Regional Land Transport Plans 2015 - 2021',, Otago Regional Council, https://www.orc.govt.nz/media/3622/otago-southland-regional-land-transport-plans-2015-2021-june-15.pdf, p. 7

effective; and; appropriate to present and anticipated future circumstances."² As, where competing needs of commuters become apparent, such as in this case, it would be prudent to inquire whether it would be possible if the two groups would be better served by two different services.



Provision of Bus Services for School Children

Generation Zero Dunedin requests that the ORC consider providing an affordable and separate bus service for school children around Dunedin. Whether this is feasible, or whether the ORC maintains that students should be treated as regular commuters in the Dunedin public transport system it is important for the ORC to ensure that local services are provided that allow for pupils to get to school on the bus safely, affordably, and in a timely manner. Portobello to Tahuna Intermediate school bus service was, before it was curtailed, a popular service; vital to those students who used it. If private school bus routes like this are not commercially viable, the ORC should consider a subsided service specifically for school children.

A good example of bus services that are specifically provided for students can be found in Gisborne.³ There students can commute to school for \$1 per ride, making getting to school easy and affordable for families. Generation Zero supports the ORC enquiring into the feasibility of holding such a service in Dunedin.



² Local Government Act 2002, s 10 (2) Purpose of Local Government

³ Gisborne District Council, http://www.gdc.govt.nz/school-bus-waka-kura/



Ensuring Better Bus Services for all Commuters

Generation Zero Dunedin requests that the ORC recognise the potential impact this change will have on commuters -- other than students -- who use the Peninsula service. For example, those using the Peninsula service from east of Midland Rd will face an increased journey time and may have to walk farther to their closest bus stop. Those commuters who are travelling to this city may also find their service becoming more crowded as pupils begin to fill the service.

Generation Zero submits that where possible all commuters are provided able to access public transport within a reasonable walking distance, and we ask that the ORC work with the DCC to ensure that there is adequate provision of seating and

shelter at all bus stops along the route. Furthermore, Generation Zero submits that the route be monitored to ensure that the service does not become crowded. We ask this for the purpose of ensuring that the impact to the journey of other commuters is mitigated.





Review of the Public Transport Operating Model (PTOM)

Generation Zero Dunedin supports the ORC lobbying central government to review the PTOM, and to explore more effective models of public transport governance. This could include, whether it would be more efficient to allow regional councils to own public transport operators, whether the contracting of units is leading to the best provision of local services, and whether delegation of public transport governance to a territorial authority should be possible.





Summary of Submission



Generation Zero Dunedin supports the ORC reconsidering Policy 5 of the RLTP in the interest of providing better public transport services for students around Dunedin.



Generation Zero Dunedin requests that the ORC consider providing an affordable and separate bus service for school children around Dunedin.



Generation Zero Dunedin requests that the ORC recognise the potential impact this change will have on commuters — other than students — who use the Peninsula service. Furthermore, we submit that the impact to their journey is mitigated.



Generation Zero Dunedin supports the ORC lobbying central government to review the PTOM, and to explore more effective models of public transport governance. 0

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

Name: Hanna Gebrelaul Steel

- Ph:

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658665100

Do you support the proposed changes? Yes

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Name: Hankey Dodol

Ph. 022 1228521

Do you support the proposed changes? Yes

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Please tell us ypur thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. 2 Do you support the proposed changes? Name:

We want to hear from you!

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Name: Carmie Leabett

Ph: 02 | 2930753

Do you support the proposed changes?

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Name: JAN Suc 77

Ph: 4780559

Do you support the proposed changes? Ves

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

Name: Kothina Reid

Ph: 0211599428

Do you support the proposed changes? V Yes

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Ph. 087274

Name: KEN MC PONEKK

Do you support the proposed changes? V Yes

We want to hear from you

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

Name: Kim Lorry

Pr. 021 2644060

Do you support the proposed changes? V Yes

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Yes most definitely at orbent our son pas to catch this buses a dies is busy main read so any changes making getting to a from school easier is a plet to us a of school students.

Would you like to be heard at hearings held 10th and 11th September?

If so, please ensure you have included your phone number above.

98 DLE LEDIED We want from the art from your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

Name: AManda Evans

Do you support the proposed changes?

뭐:

Name: Edith Labor

Ph. 476-0082

Do you support the proposed changes? X Yes No

Safer for the school Kids ; Less interence for the motorists

We want to hear from you!

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

649 Ph: 03 454 LINSON Name:

Do you support the proposed changes? Yes

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This will be very helpful to the Concerned

We want to hear from you!

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

Name:

Ph:

Do you support the proposed changes? V Yes

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

Name: Many

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Yes Do you support the proposed changes?

Name: Male Ingre

Ph: 02102739061

Do you support the proposed changes? V Yes

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

Name: Malk + OWWA Ph. 02/2793787 We want to hear from your

Do you support the proposed changes?

Ph:

021 2793786

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Yes

Name: Form () Olls

Ph: 14761348

Do you support the proposed changes?

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018, Name: Chrick Power

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Do you support the proposed changes?

If so, please ensure you have included your phone number above.

Name: Rackel Bonch

Ph: 0212545802

Do you support the proposed changes? Yes

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Name: Keperca Cannera

02129202 Ph:

8 Do you support the proposed changes? V Yes

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Name:

Coloert Boown

Ph: 0221026462

Do you support the proposed changes?

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Yes

Name: ROGER / ALISON GREEN Ph: 45 44 880

Do you support the proposed changes? Ves No

AS POSSIBLE 2 2000 PLEASE MCTION AS

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. Name: Ross Wht + bacm

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0274323599

Do you support the proposed changes? V Yes

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you?

Name: Row Rall

Do you support the proposed changes?
 Yes

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We want to hear from you!

Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

Name: Ryan Adams

Do you support the proposed changes? ~ Yes

Ph: 0274144606

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018. We want to hear from you!

Name: Stort EDDIE

Ph: 4780 559

Do you support the proposed changes? V Yes

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Would you like to be heard at hearings held 10th and 11th September?

If so, please ensure you have included your phone number above.

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Ph: 476 1069

Do you support the proposed changes?

Yes

Were candot the know ranke toe charged back to include the Museum Reserve Stop.

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Name: Therese Sharma

Ph: 0273896264

Do you support the proposed changes? VYes

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Please tell us your thoughts below, tear off, and Freepost it back to us by: 5pm 24th August 2018.

Name: VENCULGUE Shulled

Ph: 022 0475937

Do you support the proposed changes? Ves

Would you like to be heard at hearings held 10th and 11th September? If so, please ensure you have included your phone number above.



Peninsula Date of Contribution	Peninsula bus change Date of Login (Screen Contribution name)	Do you support the proposed	Would you like to be heard at	18-Jan-2018 Do you have any other thoughts on the proposed changes?
Aug 24 18 09:38:14 am	Janine Chrichton	Changes?	hearings? Yes 12:00	Owners, ie: Nga Tahu/Tainui own Go Bus, are responsible and accountable for cancelled service, NO service. I would like to see DCC/ORC stop allowing these companies to hide under Council umbrella and be held accountable and responsible! These company's have "public complaints" insurances and should be made accountable through the court system. Complaining to Council about shortages in services, no services is a waste of time. Ours and yours. Stop hiding accountability and responsibility from the owners? And the providers? Thanks.
Aug 13 18 09:45:01 pm	Louis Whitburn	<u>0</u>	Yes 12:30	-Main issue is that it is completely at odds with the network principal of public transport planning. A part of an ORC email (released under the OIA) puts it well: "I think there is a real danger of making changes to the principles of the RPTP in isolation without having consideration to the impact to the wider network and the far greater number of users elsewhere". The problem is that if we start allowing a variation here then other communities will start wanting variations to their service and we will just end up with the same mess we had before PTOM and the recent changes. We can still see this with the 5/6 service - an A,B,C,D and E variation on just one route. That being said I understand that there are issues with the current situation, I just don't think that this is the best way of rectifying these issues. Some examples of potentially better options are outlined below. -Could investigate making all services depart 10 minutes earlier? Could the issue be resolved when bus hu
Aug 16 18 09:57:57 am	Jason Graham	Yes	Yes 12:45	You should consider making the 'alternative route' become the 'normal' #18 route as it would be used much more (more patrons) than the current route via the Edgar Centre. Hardly anyone gets on or off at the Edgar Centre / Turners bus stops, whereas many people would get on or off the bus via Musselburgh; and the few who do use these stops only has a 7 minute 'short walk' from Musselburgh Rise or Andy Bay Rd (Liquorland).

Aug 16 18	Rebecca Shaw	Yes	Yes 13:00	The bus needs to go right down to Harrington Point. There are many services on the route and the two that
110.21.02 all				need to go all the way down there don t.
Aug 16 18 10:30:18 am	Paul Pope	Yes	Yes 13:30	It needs to happen as quickly as possible
Aug 16 18	slascarides	Yes	Yes	I am really happy that ORC is proposing this simple and sensible amendment that will ensure the service better
10:45:21 am				meets the needs of our community.
Aug 23 18	Fiona Gray	Yes	Yes	As long as it helps to get the children to/from school at a reasonable time and keeps them safe
08:05:41 pm				
Aug 16 18	rquigg	Yes	No	Yes, this is a really significant issue. It is really important that the bus system works for the 'structural' aspects of
12:41:05 pm				our communities, ie school hours, as we aim for a sustainable community.
Aug 16 18	claireg	Yes	No	Yes, if the bus left the Octagon at the end of the day at 3.15 instead of 3.08 then students from 3 secondary
05:11:45 pm				schools could also catch the bus instead of them having to wait until 3.50 to depart.
Aug 18 18	Sandy60	Yes	No	Yes our children should be driven to school by a proper school bus !!!
05:47:53 am				
Aug 23 18	preciouslives	Yes	No	Yes
08:01:32 pm				
Aug 23 18	nielsky	Yes	No	While you are at looking into this line you should reinstate the bus stop at the Otago Museum. Try to take a look
06:40:23 pm				at who is actually using this service! The arrogance with which this has been handled is incredible.
Aug 16 18	GAshton	Yes	No	What are the ORC going to do when the bus is overfill?
07:08:52 pm				
Aug 21 18 05:44:20 pm	TBryant	Yes	No	We need these changes for our kids
Aug 22 18 03:34:16 pm	Rob Wells	Yes	o N	We have a large school, Tahuna Normal Intermediate, that relays on the bus service for Peninsula students. It would be great if this service went past the school.

Very sensible proposals	Very necessary, and efficient.	Very necessary to ensure the safety of peninsula children attending schools in the area of the bus route.	This is obviously an improvement on the current situation and so I feel I have no option and must support this change. I am however still very disappointed that the ORC is refusing to support the children in its community to have safe passage to and from school using the argument that this is not a "sustainable service". Might I remind the council that they are not a business working toward making profit but they are in fact a council providing services to its rate paying community!	This is important for the safety of school students, and the environmental impact of reducing cars on the road.	This is good but why doesn't the ORC just operate school buses from the peninsula to Bayfield, Tahuna and Kings? Like Auckland or Tauranga. Then commuters don't need to be slowed down by these detours. But if ORC is going to be steadfast on refusing to provide school buses then I support these changes and recommend that the council goes a step further to detour to Tahuna and Kings - it's still a fair walk in the rain from this new route to those schools.
°Z	No	No	o Z	o N	O Z
Yes	Yes	Yes	Yes	Yes	Yes
rberesford	Hang.	JasonW	NickyV	ЈоМас	Jerry Pournell
Aug 17 18 08:43:50 am	Aug 18 18 12:46:08 pm	Aug 16 18 11:35:13 am	Aug 16 18 07:28:15 pm	Aug 21 18 10:56:47 am	Aug 18 18 04:51:55 pm

This change goes against the principles of best practice in public transport design, which revolve around providing consistency and legibility for users. If we wish to grow and develop our public transport network, we need to eliminate changes such as the ones proposed – not introduce them.	A different route for one service in each direction once per day provides confusion and uncertainty - a key driver in disengaging potential users.	This is frustrating for existing customers who face a degraded service. It is especially risky for customers that wish to travel outside of their usual route, or are intermittent users. It also presents a bad image to tourists and visitors who have enough challenges working out public transport networks in any city.	On top of that, council wishes to alter the time of one service per day. This means that the service no longer is a clock face service. Rather than users remembering a set number of minutes past the hour, they must now check to r	This change does not support the Tamariki and Rakatahi from Otakou peninsula. All children deserve their right to their education, by not supporting the children and their whanau, ORC show that these children do not matter to the city. We are all New Zealanders and just as importantly most of these children are Manawhenua. How does this support the relationship between Manawhenua and ORC if ORC will not look after our Tamariki and Rakatahi. This country is not big enough to have a need to cut costs, ORC need to look at their budgeting and review. Future Ngai Tahu high achievers in the balance.	These changes will make a huge difference to children and families living on the Peninsula, making travel to	scribor by bus a find in the viable option. These changes need to be completed as soon as possible. This service can be a positive out come to reduce extra car trips on the portobello road and make catching a bus a common thing to do for our young adults.	These changes certainly get Tahuna children closer to the school but what about Kings and Queens children. They still have to walk a significant distance. Would it be possible to have a small bus that meets this bus that	they can get to school on time? The sooner the better!
N O				o Z	No	o Z	N 0	o N
o Z				O Z	Yes	Yes	Yes	Yes
thelogistician				SHemopo	Ness1	Jade Brown	bubandme	Jacqui
Aug 16 18 04:06:23 pm				Aug 16 18 01:21:03 pm	Aug 23 18	Aug 14 18 09:41:13 pm	Aug 16 18 03:03:28 pm	Aug 16 18 02:18:09 pm

The sooner the better	The right decision was made to reinstate this service, thank you	The proposed changes will allow for a bus service for Peninsula school pupils that is efficient, safe, and by reducing traffic, environmentally friendly.	The proposed changes are a definite improvement!	The ORC needs to make a commitment to supporting its communities with effective public transport. This action on the bus service has taken a year of work by the communities to even get to this point. Meanwhile, kids spend hours getting to and from school, and waiting at bus stops. Please just get on with it ORC.	The morning service should start from Harington Point instead of Portobello, and the afternoon service should extend to Harington Point. There are quite a number of children beyond Portobello who will miss out on the benefits of safe transport to school if the route only goes from and ends at Portobello.	The changes will provide a more adequate service for people living on the Peninsula and meet a well demonstrated need for the community which includes school students. People's safety needs are clearly part of transport requirements and should be supported by the Council. Bus routes are a service to the community and the expectation is that they meet community needs. ORC's stubbornness to make minor changes and to ignore and resist community feedback has been very disappointing. The message for ORC: do better planning and consultation to serve community needs.	The change goes back to a bus service that meanders all over the place. A bus service can not be all things to all people. Instead, there should be school bus services, that are designed to get children to various schools, at the time they travel. School children tend to clog the ordinary bus service. We had an experience here in West Harbour, where school bus services were discontinued, the ordinary bus service clogged up, and scores of regular users, abandoned the bus. It still struggles compared to a number of years ago. So, please set up decent school bus services.	The bus should be rerouted to drop the children off to school as close as possible.
N O	N _O	° N	No	o Z	° Z	0 2	O Z	S O
Yes	Yes	Yes	Yes	Yes	Yes	Yes	o Z	Yes
GLuna	Turnbull B	John C Ashton	MizCuthers	Lucy	RachelWesley	Alison Scarth	Ralph-Peter	Telford
Aug 22 18 09:26:07 pm	Aug 18 18 06:39:09 am	Aug 16 18 10:37:00 am	Aug 23 18 06:16:11 pm	Aug 20 18 07:32:16 pm	Aug 16 18 09:53:35 pm	Aug 22 18 03:13:42 pm	Aug 15 18 06:17:15 pm	Aug 16 18 10:55:20 am

Thanks for accommodating safe and sensible transport options so chn can get to school. My concern was for the children who would just stay home if it was too hard/ too far /too wet. They are our vulnerable chn. Thank you	Supporting students to get safely to school is an important part of the infrastructure that I expect as a rate payer Start the bus at otakou, children who live further out than portobello miss out on this bus service	Should have happened much earlier. Initial response from the council was unacceptable. Great to see some thing actually happening. Shore street should be used not marine st Bayfield children on correct side to leave bus easier for bus to exit	Safer and better for School Children and less distance for them to walk especially the children that attend Tahuna Intermediate school	Please use common sense in future. This whole process is time consuming and expensive and could have been avoided with a more pragmatic approach which took the views and needs of the affected communities into account from the outset. Honestly, I am astonished that someone could even consider, let alone implement, a timetable which omits to consider one of the most important user groups.	Please make these changes as quickly as possible. The current situation is highly unsatisfactory and the ORC appears to be addressing community requests for change in z slow and bureaucratic manner.	Personally I can't see why the proposed route can't be run all day, rather than just for the school run times. If you'd done this, then this consultation process would be unnecessary, and it would, for example, make it much easier to reach the doctors and pharmacy on Musselburgh Rise, which large numbers of peninsula folks are signed with.	Perhaps have these buses start from / continue out to Harington Point for school kids / commuters out there as well.	Only to maintain the changes for the future.	Only that this change is well-overdue - with a child soon to be entering High School age in the next few years, and watching the increasing size of the peninsula population (sure to only increase post-road works improvements).
o Z	0 0 Z Z	0 0 Z Z	N O	° Z	o N	0	o N	No No	o Z
Yes	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
JudyHawker	Kerrync Riiki	KelD Webber	lyn patterson	Karencon	Jayne	GotltInfamy	SimonH	Nellie29	LeanneRoss
Aug 16 18 04:31:37 pm	Aug 16 18 02:48:40 pm Aug 18 18	11:39:37 am Aug 13 18 08:15:40 pm Aug 16 18	Aug 17 18 06:29:49 pm	Aug 16 18 10:15:06 pm	Aug 16 18 07:55:43 pm	Aug 16 18 11:29:39 am	Aug 17 18 12:22:04 pm	Aug 17 18 05:08:10 pm	Aug 17 18 09:25:35 am

Nothing different to the plan, just that I think that it is going to be hugely beneficial to everyone. It is good that there is an extended route which is going to be great for the younger children who go to school at that side of town.	None, other than these changes make complete sense and get on with implementing them for Term 4 please.	No. Much better than the current unsatisfactory situation.	No reallyjust super excited an opportunity has arisen.	No look s good	Need this done asap please	Many people in my community have fought tooth and nail for these changes. Don't let them down.	Make the change to help the students see that public transport is a viable and positive alternative to private cars!	Make sure the children i HarwoodandOtako are served. They needto get to and from school	Kids need to be able to get to school on time and with not too far to walk. Whanau well-being should be a top	Just that we will like the propose changes be implemented as soon as possible.	It would be good to implement these changes as soon as possible after the consultation process is finished so that commuters can start to benefit from these changes.	It will help my sons to use the bus to get to school as the times are better	It makes sense to help young children (11+) to independently get to and from school. My son will catch the bus most afternoons once the changes are made.	it is importnat to suppor the students. And the proposed changes are well thought out and accomodate all parties. Nice to see the council standing for its people	It is going to mean school days for peninsula kids are much shorter and we won't have to wait in cold and rain ages for the bus home. thanks
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Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ionaannie	kerengraham	HAbbott	Bridgetcarmody	Lizl	carolla105	Rachael	Shelley	sarah mcd	Keddell	Monica Brummitt	Bernadette Newlands	Lisab	3buskids	justinol	Ariana
Aug 17 18 10:22:31 pm	Aug 16 18 01:00:21 pm	Aug 17 18 02:05:27 pm	Aug 17 18 07:21:20 am	Aug 16 18 04:44:23 pm	Aug 13 18 06:54:55 pm	Aug 24 18 09:49:56 am	Aug 16 18 06:46:42 pm	Aug 23 18 07:55:23 pm	Aug 16 18 01:15:13 pm	Aug 17 18 10:46:59 pm	Aug 16 18 10:04:18 pm	Aug 16 18 08:56:37 pm	Aug 17 18 08:46:52 pm	Aug 16 18 12:45:16 pm	Aug 16 18 01:23:35 pm

It has been very difficult getting my children to and from Tahuna over the last year this will significantly reduce the walk and wait time for these 11-12 yr olds roaming the streets before/after school. Thank you	I would like the new route for all times of the day. Lots of primary kids from Portobello, Broad Baybsnd MacBay travel in after school for clubs. It would be good if the bus leaving Portobello at 3pm also took that route.	I use this bus service and I am happy for any changes that make it usable and safe fot school students. We have to do all we can to encourage public transport. I think it's great that the council has listened to community feedback, and I think it will result in an increase of	I just want my kids to get to school safe and on time! And cheap! I can't afford the high price!	I have three high school children, the bus is essential to us, and the current route and timetable is not managable with school times. I cannot believe this matter took so long to resolve. Thanks Paul Pope.	I believe that school children should have dedicated buses for their use to and from school.	schools. Our peninsula children have to travel some distance to attend these schools and have no other alternative to bus transport unless parents can drive them. (I do not have children at school, by the way) It was ridiculous and unsafe to leave the bus route as proposed. This proposal still leaves Tahuna Intermediate kids walking farther than they did before these "improvements" to the service, but at least it's safer.	I am concerned at the tender process allowed the contractor to deviate from the existing routes and timetable. At different times of the day there are three buses on the peninsula at once. Also they are large buses why run huge buses with 3 passengers???
ON O	o N	8 8 8	N O	o o	0 Z	2	O _N
Yes	Yes	Yes Yes	O Z	Yes	Yes	ב בי	Yes
Shed57	Athrawes	csmith rachel mcdonald	Olivemcrae	Zehavit Selbier	otago9014	Actending	Carverguy
Aug 17 18 09:19:24 am	Aug 16 18 05:50:56 pm	Aug 16 18 12:48:36 pm Aug 16 18 06:40:42 pm	Aug 17 18 07:47:36 am	Aug 16 18 05:15:26 pm Aug 16 18 04:08:29 pm	Aug 16 18 04:19:16 pm	Aug 20 10 11:56:20 am	Aug 16 18 12:26:16 pm

Having Peninsula students in my class I have seen the inconvenience of walking to the McDonalds busstop, mixing with unsavory members of the public, stopping in at fast food outlets, extra financial costs if wet and getting a 2nd bus, and general tiredness of these kids not seen in T1. This is an improvement.	Has taken far too long! Our kids need buses to schools!	Good to see common sense finally prevail on this issue; I wholeheartedly support this (and I don't have any children). Related to the Peninsula service, previously Peninsula bus users were told that it was not possible to invoke changes to the Transport Plan 2014. The process to accommodate Peninsula schoolchildren and this proposed change, clearly indicate it certainly is possible. Why then has ORC not reinstated the bus stop at the Museum for the many clients who work at the Uni, the Poly, and Logan Park HS? The bus turning into Hanover St continues to be a hazardous manoeuvre; catching the 5.08 (when it's on time) is still a challenge for most of us who work until 5 pm. Work with your customers, not against them. They're your business.	For the cafety of affected childente I climpart any change from the current route which will believe and an	school,	Finally some common sense!		Finally some actual action	finally sense prevails	Finally sense prevails	Disgusted that it took so long to negotiate such a small amendment. We pay your wages.	Change s need to happen asap.		but please please include Harwood and Harington Point pick ups!	
O Z	S O	8	Ċ	<u>.</u>	No		N O	N _O	No	No	No		No	
Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes		Yes	
Y Toa	Maz	Maggie Durns	Sean		Kate Dempsey		Dabid	REESEurrection	Macbay mafia	Jayray	Loader8		Nadiaws	
Aug 22 18 04:03:09 pm	Aug 17 18 12:01:03 pm	Aug 15 18 11:32:45 am	Aug 22 18	04:01:20 pm	Aug 16 18	11:20:30 am	Aug 13 18 06:22:19 pm	Aug 16 18 01:43:11 pm	Aug 16 18	Aug 17 18	Aug 14 18	09:36:29 am	Aug 17 18	10:56:01 am

All bus timetables and routes need to be created in response to the needs of customers, such as, and especially, school children. A sensible solution that should be win win for both the school students who will now be able to use the bus for school transport, and an increase in patronage for the ORC.	A bus stop near the Peninsula map would be very useful. Thank you for enhancing this bus service	•											
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Aug 16 18 11:13:03 am Aug 16 18 01:32:32 pm	Aug 16 18 10:39:46 am	Aug 10 10 11:24:20 am Aug 13 18 05:36:44 pm	Aug 14 18 07:44:37 am	Aug 15 18 05:16:15 pm	Aug 16 18 10:25:37 am	Aug 16 18 10:40:14 am	Aug 16 18 10:52:09 am	Aug 16 18 11:03:04 am	Aug 16 18 11:08:58 am	Aug 16 18 11:10:11 am	Aug 16 18 11:16:48 am	Aug 16 18 11:29:35 am	Aug 16 18 11:40:06 am

O N	O N	No	No	o N	No	No	No	No	No	No	No	No	N _o	No	S S
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	en Yes	Yes
hendrydon	shelley88	Joni	Owlthena	rm.egan	Beth	Sutherland	Skokaua	KarenB	lindy marr	Lindy cooper	Edna	SueMcd	jordie	Rhonda Rosengren	Annalobb
Aug 16 18 12:27:47 nm	Aug 16 18 12:29:50 pm	Aug 16 18 01:08:14 pm	Aug 16 18	Aug 16 18 01:46:52 pm	Aug 16 18 02:05:17 pm	Aug 16 18 02:12:07 pm	Aug 16 18 02:13:36 pm	Aug 16 18 02:13:59 pm	Aug 16 18	Aug 16 18 02:39:34 pm	Aug 16 18	Aug 16 18 03:25:23 pm	Aug 16 18 03:49:14 pm	Aug 16 18	Aug 16 18 04:48:40 pm

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TakethebusGus	Kezz	Michelle	Samantha Love	Helenmcdermott	Ashton	Lala	KJPritchard	orc	Vsimes	kathyc	Morris &		Arlo45	cathy rufaut		Mel99		Ged	
Aug 16 18 04:53:33 pm	Aug 16 18 05:04:06 pm	Aug 16 18 06:01:26 pm	Aug 16 18 07:41:47 pm	Aug 16 18 08:05:40 pm	Aug 16 18 08:18:28 pm	Aug 16 18 09:22:53 pm	Aug 16 18 09:26:44 pm	Aug 16 18	09:28:45 pm Aug 16 18	09:44:00 pm Aug 16 18	09:57:09 pm	06:54:42 am	Aug 17 18	07:26:54 am Aug 17 18	08:47:45 am	Aug 17 18	09:21:50 am	Aug 17 18	10:45:50 am

No	No	No	No	No	No	N _O	No	N O	o N	No	o _N	N O	o N	No	ON.
Yes	Yes	Yes	Yes	o Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kelli Lamare	janinehayward	deyell	Lisel	laurakatehenderso	n Cheryls	Courtney	milat	kjs	grahamm	snq	Leana	topni	fpower	Jennie Stevenson	Fleurine
Aug 17 18 01:15:37 pm	Aug 17 18 03:19:45 pm	Aug 18 18 12:26:40 am	Aug 18 18	Aug 19 18	02:31:08 pm Aug 22 18	Aug 22 18	Aug 23 18	07:40:20 pm Aug 23 18	09:31:34 pm Aug 24 18	01:35:13 pm Aug 24 18	01:41:07 pm Aug 16 18	10:30:49 am Aug 16 18	11:20:03 am Aug 16 18	Aug 16 18	04:25:42 pm Aug 16 18 05:48:44 pm

No	No					
Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shirljones	sarah wood	Bill Boyes	Michellea	⊋	Moana	Kitty Brown
Aug 16 18	Aug 16 18 10:22:57 am	Aug 22 18 03:57:48 pm	Aug 18 18 09:36:15 am	Aug 20 18 03:22:52 pm	Aug 16 18 07:41:53 pm	Aug 20 18 09:38:40 am

We have a large school roll would be better if Bus routes came past the school property (still 4 blocks away)

This is a long awaited step in the right direction to provide safer and more efficient transport for peninsula school children.

These changes are very important for families and their kids on the Peninsula accessing their intermediate and high schools in town.

I wish the bus route would go closer to Tahuna but this is certainly better than it was.

Please also make sure these buses extend to Harrington Point, so kids further out on the Peninsula can also access these buses. Submitted feedback to Customer Service by phone 24 August 2018

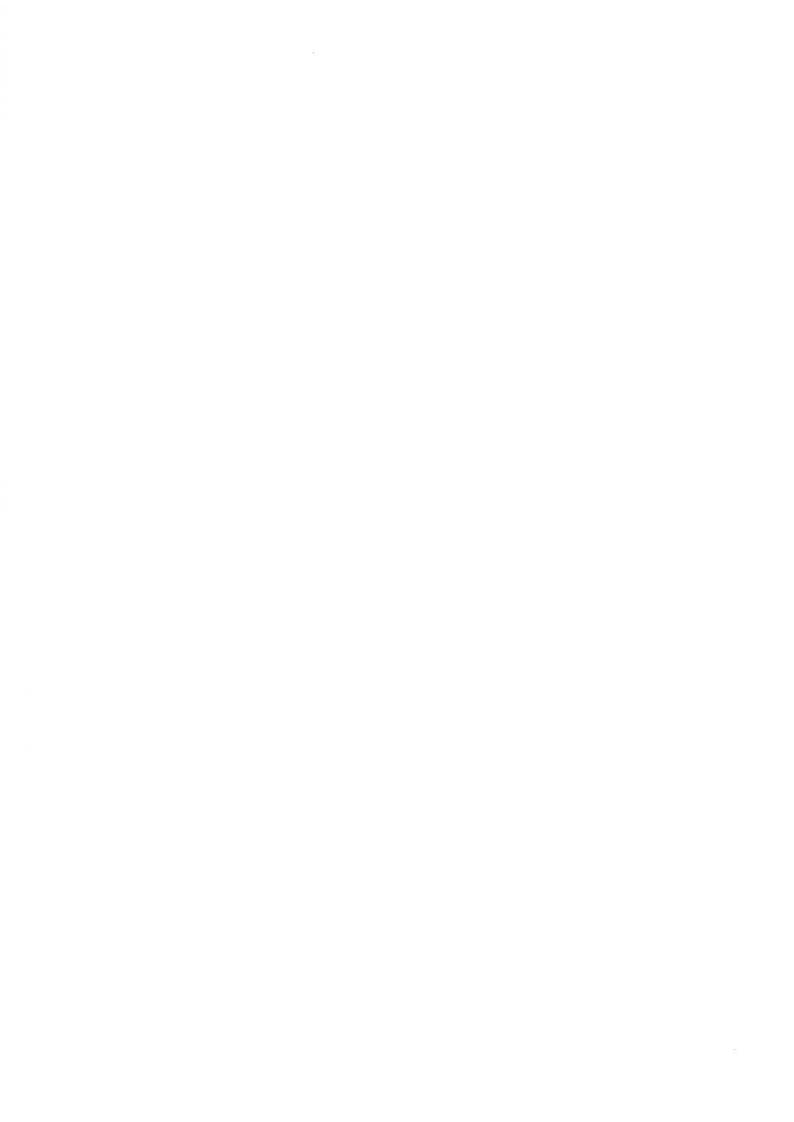
Gisele Lavin - 027 272 4478

Giselle wasn't able to send an official feedback submission slip, Customer Services offered to take down her feedback as notes and let her know that whilst it isn't an official submission, it would still be sent on for consideration.

Gisele is not happy with the way the peninsula bus service is run on Sunday mornings. She catches the bus 2 Sundays each month to the peninsula from Waitati, but currently finds herself having to walk ½ in the cold and dark in the morning as there is no suitable transfer between these two buses in the morning. She would like to see the first peninsula bus service run maybe ½ later so that she could transfer on to it rather than walking in the dark. She mentioned that she is elderly.

She has previously spoken to the drivers on the bus about this issue, but they have directed her to talk to us.

She also mentioned about how 'bad' the bus service to Waitati is, only 3 buses on the weekdays and nothing on the weekend. And suggested that perhaps Julian should take the bus 'there once in a blue moon'.



Submission on the Peninsula Bus Changes on Behalf of the Otago Peninsula Community Board

The Otago Peninsula Community Board supports the proposed changes to the Otago Peninsula Bus Routes. The Board notes that this issue has been a long-standing one since the loss of the dedicated school service when the new contractor took over in 2017.

It has been the determination of the Peninsula Community that their children attending schools in the city should be able to utilise the public transport system like any other commuter using public transport. That is reiterated in 2014 Regional Public Transport Plan (RPTP) which states that school pupils will be able to "access their school of choice" and that "school pupils will use the public transport network for their journey to and from school." The community have never deviated from that view throughout this entire debate.

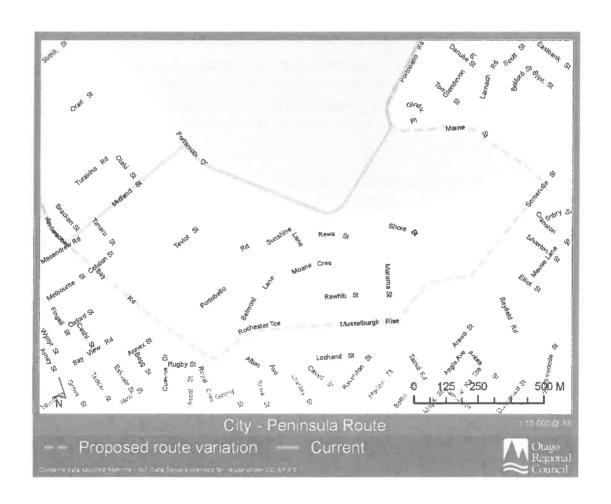
A community requesting change to public transport should not be seen as a negative, but rather a community willing to use the public service and make it even better. What Peninsula residents are asking for is a public transport service that in the words of Regional Council's own 2014 RPTP "supports community well-being and offers personal choice." With a captive market of willing public transport users and a motivated community why would the Otago Regional Council not ensure delivery of a service "to meet that community's travel needs?"

- On the 16th May the Peninsula Community presented the Otago Regional Council with a petition of nearly 1000 signatures supporting the proposed changes.
- On the 13th June Councillors voted in favour of those changes
- On the 27th June Councillors were informed that such changes could only be considered "minor" and that targeted consultation could proceed.
- The Otago Peninsula Community Board welcomes the decision by the ORC to undertake these essential changes to the bus routes and timetable for Otago Peninsula commuters.
- Minor changes are required to the proposal so as not to disadvantage or create genuine hardship for commuters in the communities of Harwood, Harington Point and Otakou. These changes include;
 - Replacing the proposed new 3.08pm service from the city as the Harington Point option instead of the current 2.37pm. This would create greater convenience for school commuters and ensure a better connection between users leaving the city and a higher patronage of school commuters.
 - The proposed change to the 7.47am bus departing Portobello needs to coincide with that bus leaving Harington Point. The ORC route planner

shows the journey from Harington Point to Portobello taking 32 minutes. Therefore the 7.47am bus leaving Portobello should leave 7.15 am as opposed to the current 6.55 am. All Harington Point commuters should be on the same bus into the city, rather than running two separate services.

Finally, the proposed route change covers the issues raised by the Otago Peninsula Community in terms of safety, convenience, stopping points and timing. However, the Board would request that the route be the permanent route for commuters going to and from the Peninsula.

Paul Pope Chairman Otago Peninsula Community Board





A report on the Shag River Good Water Project and its effectiveness with recommended changes for future projects in other catchments.

Prepared by:

Agri Planz Ltd C/- Lyndon Taylor

40 Estuary Crescent Fairfield Dunedin, 9018

12/09/2018



Contents

THE GOOD WATER PROJECT INTRODUCTION	
Otago Regional Council - Project Objectives	
Project Area Description	2
Waterways	2
Property Types	2
Project Methodology	3
ENVIRONMENTAL RISK ASSESSMENT REPORTS	5
The Environmental Risk Assessment Template	5
SUMMARY OF ENVIRONMENTAL RISK ASSESSMENT REPORTS	6
Knowledge	
Knowledge of the Otago Water Plan	
Discharges	7
Discharges from Silage Pits and/or Composting	7
Discharges from Offal Pits	8
Discharges from Farm Landfills	9
Discharges from Effluent Disposal	10
Schedule 16 Discharges	11
Overseer	12
Overseer Nutrient Budget	
Training	
Training of Staff	14
Waterway Management	
Culverts and Bridges	
Stock Access	
Winter Grazing	
Riparian Management	
Stream Cleaning	
Critical Source Areas	21
Proactive Environmental Stewardship	22
Farm Data from initial page of Environmental Risk Assessment	23
Farm Environment Plans	
Irrigation	23
Schedule 16 Water Test	24
Individual Water Quality Tests	24
Project Summary	25



Environi	mental Risk Assessment Summary	25
General	27	
Overall Eff	ectiveness of the Project	28
_	for Future Projects	
The Envi	ironmental Risk Assessment Template	28
The Envi	ironmental Risk Assessment Process	28
Project F	Resources	29
Appendix 1	1	30
Excerpt	from New Zealand Fish Passage Guidelines	30
Figure 1.	Map of catchment area	-
Figure 2.	Property types by number	
Figure 3.	Properties by size.	
Figure 4.	Graph - Knowledge of Otago Water Plan.	
Figure 5.	Graph - Discharges from silage pits.	
Figure 6.	Graph - Discharges from offal pits	
Figure 7.	Graph - Discharges from farm landfills	
Figure 8.	Graph - Discharges from effluent disposal	
Figure 9.	Graph - Schedule 16 discharges.	
Figure 10.	Graph - Overseer usage	
Figure 11.	Graph – Training of staff	
Figure 12.	Graph - Culverts and bridges	
Figure 13.	Graph - Stock access to waterways	
Figure 14.	Graph - Winter grazing	
Figure 15.	Graph - Riparian management.	
Figure 16.	Graph - Stream cleaning.	
Figure 17.	Graph - Critical source areas.	
Figure 18.	Graph - Proactive environmental stewardship.	
Figure 19	Graph - Irrigation type and percentage of area irrigated	

The Good Water Project Introduction

Otago Regional Council - Project Objectives

- To determine how aware landholders and occupiers are of the Otago Regional Water Plan including the extent of their understanding.
- To contact landowners and/or occupiers to discuss the rural water quality rules and ascertain their level of understanding.
- To ascertain how many landowners and/or occupiers have assessed the potential impacts of their activities on water quality.
- To establish whether landowners and/or occupiers have carried out any mitigation measures and/or land use changes to help improve water quality. Outline the actions being taken and what further improvements are being planned.
- To determine how many landowners and/or occupiers have taken water quality samples to test the potential impacts on water quality.
- To identify which landowners and/or occupiers want to seek additional support or have further discussions with ORC on rural water quality.
- To offer and undertake a site inspection to discuss the rules and any areas where they may have concerns. This includes the offer of taking a water quality sample to test their discharge into a river (schedule 16 thresholds).
- To risk rank each property according to the criteria to be provided by ORC.
- To assess the effectiveness of the pilot project and recommend any changes that ORC should consider before commencing future projects in other catchments.

Project Area Description

Waterways

The Good Water Project was carried out within the Shag River catchment. The catchment starts with its headwaters under Kakanui Peak near the saddle of the Pigroot and runs for 89km to the coast at Shag Point.

The main tributaries in the upper catchment are; The Pigroot, Siberia, Shingly, Huntley, Bushy, Coal and Green Valley creeks. The middle area of the catchment has Highlay Creek which starts near Macraes and joins the Deepdell Creek, Cranky Jim's, Happy Valley, Hellene Creeks and Tipperary Creek which joins McKormicks Creek also Sweetwater Creek. In the lower catchment are, the Mount Blue Stream, Allendale Creek, and Muddy Creek, which all drain the true left of the Shag River. There are many other un-named tributaries that make up the catchment.

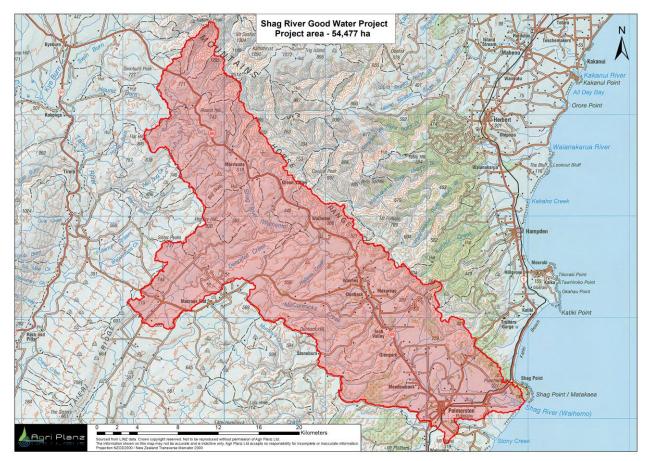


Figure 1. Map of catchment area

Property Types

The catchment is predominantly made up of sheep and beef hill country properties which are run extensively. There are forestry blocks throughout the catchment with Port Blackley being the major landowner with 2 large forests, one in the Morrisons area next to the Shag River and the other on the Horse Range. There are two other main areas of forestry, split up into smaller blocks which are owned by numerous owners including overseas ownership, also a large number of farmers have farm forestry blocks.

In the lower catchment particularly to the north of the Shag River below the township of Dunback and around Palmerston the farmland is rolling to flat pastoral country with more intensive farming systems.

Approximately 500ha of farmland is under irrigation or capable of being irrigated across 10 properties.

Predominantly the catchment is made up of sheep and beef farmers with a few deer farms, one large poultry operation and one recently developed large scale piggery operation, there is very limited dairy grazing and no dairy farms.

Two notable industries within the catchment are the Macraes Gold Mine and Taylor's Limeworks at Dunback.

Project Methodology

The criteria for the project was that all properties over 10 hectares in the Shag River catchment were to be visited. Prior to the commencement of the project the Otago Regional Council sent a letter of introduction and a project outline to all landowners.

This was well received and most landowners were waiting for us to call or were proactive enough to contact us directly to arrange a time for a meeting and inspection.

We have undertaken visits and physical inspections of the majority of properties within the Shag River catchment and have spent time with each landowner to undertake the on-farm environmental risk assessment reports as agreed with the Otago Regional Council. In total only 5 landowners did not wish to participate in the project

At the site visits each property was ranked based on the risk criteria set in the environmental risk assessment template which was provided by the Otago Regional Council and all relevant comments collated.

In total 116 properties were visited. The number of properties visited is different to the number on the list supplied by the Otago Regional Council. This is due to;

- A large number of land parcels being owned by one person or company, as many addresses formed part of a larger farming operations.
- 5 landowners declining to be part of the project.
- Landowners or occupiers that were unable to be contacted for various reasons.

The properties visited are summarised into property types and land areas as follows.

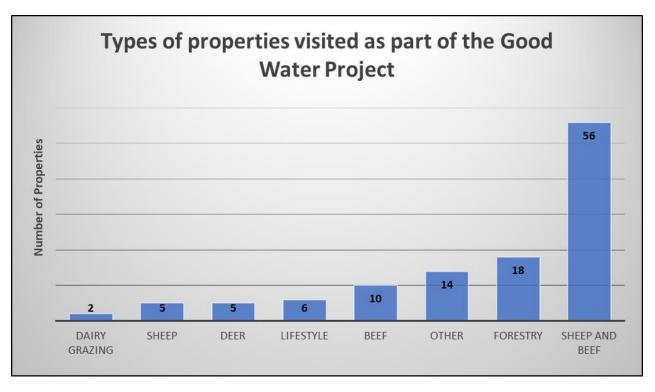


Figure 2. Property types by number.

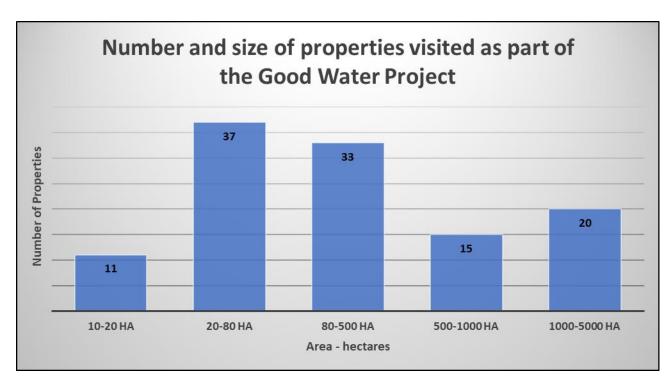


Figure 3. Properties by size.

Environmental Risk Assessment Reports

The Environmental Risk Assessment Template

The Environmental Risk Assessment formed the foundation of the project from which all landowner and property data was collected.

The report consisted of two main sections.

The first section on page 1. of the report contains specific landowner or occupier data such as owner, address and contact details.

It also recorded the following information

- Type of property.
- Land area.
- Irrigation area and type of irrigation.
- Whether effluent was applied on farm.
- The waterways on the property.
- Whether a farm environmental plan had been completed.
- Stock units.
- Class of stock as a % of total stock units.
- Forestry data

The second section of the report focussed on a series of 15 questions and comments where the landowner or occupier and the property was assessed using an environmental risk ranking.

The risk ranking gave a score of;

- 4 for excellence,
- 3 if there was a low risk,
- 2 if there was a medium risk,
- 1 if there was a high risk
- 4 if a question was not applicable to their situation.

Summary of Environmental Risk Assessment Reports

Knowledge

Knowledge of the Otago Water Plan

Only 3.4% of respondents felt that they had an excellent knowledge of the Water Plan for Otago, whereas the same % felt they had no idea of the Water Plan for Otago.

By far the most respondents fell into the low risk category where they felt that they knew enough about the water plan to get by.

Some of the farmers that said 'they knew enough to get by', also mentioned that they know where to go to get information or were able to name regional council staff that they have been in contact with.

All landowners were asked to respond around their level of knowledge as honestly as possible in order to achieve an accurate indication for the project.

This question was a bit subjective in that some landowners had previously received information packs or attended field days around water quality, and while not experts in the plan could rightly say they knew enough to get by.

There were other landowners that may not have seen any information packs or been to any meetings that could also easily claim to know enough to get by, this is because they have an overall general knowledge of what is right and wrong based on what has happened in their local area and throughout New Zealand as a whole around water quality issues which have been widely publicised.

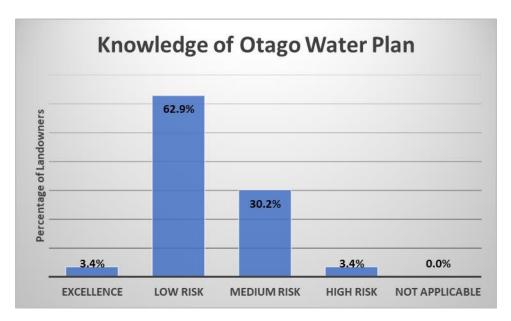


Figure 4. Graph - Knowledge of Otago Water Plan.

Discharges

Discharges from Silage Pits and/or Composting

The use of and discharge from silage pits within the Shag river catchment was an interesting question to ask landowners.

Of all the landowners in the Shag catchment only 6 farmers currently use silage as a supplement.

One farmer has approximately 250 large square bales of lucerne baleage that has been buried for around 7 years and stored as insurance for a dry year.

By far the most respondents had existing old silage pits on farm that have not been used for between anything from 5 to the last 20 years. Old pits were found in locations which were very close to watercourses which when used for silage storage would inevitably have led to silage leachate reaching waterways. Some of the farmers that mentioned they do not use the silage pits any more due to environmental reasons, simply due to leachate entering a waterway.

The advent of wrapped baleage has inevitably had a huge impact on farmers discarding the use of silage pits. In the upper catchment the properties are very extensive and mostly used as run blocks unless the property has an area that supplementary feed can be made from or the farmers have a system where they import the feed.

Wrapped baleage leads onto re-cycling issues, some farmers have recycled wrap in the past but one of the companies that normally carry out collection of the discarded wrap is not doing it currently, due to a supply issue. The question was asked "what do I do with it now?"

All active silage pits viewed had discharges of leachate, and while not bunded posed no risk to any waterway due to the large distances from waterways.

This question was not applicable for 90% of respondents due to either the lack of silage pits on farms or old silage pits that were no longer in use and will not be used again for silage.

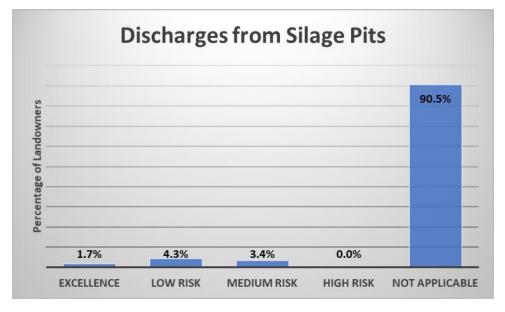


Figure 5. Graph - Discharges from silage pits.

Discharges from Offal Pits

None of the landowners questioned knew or had seen the rules around offal pits, which are found in the Waste Plan, Rule 7.6.5, as a result there were a high number of farmers that did not meet the rules.

Of the landowners that had offal pits on their properties, by far the greatest percentage of respondents, 37.9% complied with the rule and were classed as low risk. While 7.8% may not have complied with the rule at some stage. Only 4% of farms displayed exceptional practice in offal disposal.

Offal pits were not applicable on nearly 40% of the properties predominantly because they were either extensively run properties at the top of the catchment, were forestry or lifestyle blocks or had no need for an offal pit due to their farming operation, eg a beef fattening which does not have many deaths and if an animal died on farm it would be buried in-situ using a front-end loader or similar.

A number of farmers did mention that their offal pit had been audited as part of a quality assurance programme for their meat company.

There were some interesting and concerning landowner comments and practices around offal pits that could potentially lead to a deterioration of water quality.

- If any cattle beast dies it is put in the gorse to feed the pigs which are then shot, so forms part of the feral animal control on the property.
- Usually puts dead sheep in an under runner in an attempt to block it and prevent further erosion.
- The few animals that die on the property are either not seen or are disposed of in an under runner
- Offal from killing a sheep is used in pig traps on the property, if sheep die they are also put in the traps, therefore recycling the sheep.
- A large number of farmers still burn their dead stock in offal pits that are dug with a digger and they are also used as a landfill.
- Offal pits closer than 50m to a waterway.
- Offal pits containing water from runoff or groundwater seepage.
- In some situations, offal holes were situated very close to property boundaries, once again not complying with the rules.

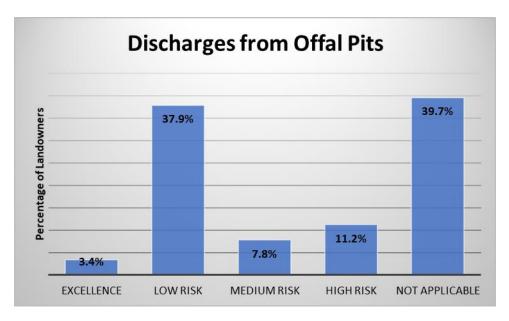


Figure 6. Graph - Discharges from offal pits.

Discharges from Farm Landfills

This question was rated against Rule 7.6.8 of the Waste Plan for Otago.

Farm landfills in the Shag River catchment was an interesting and very diverse topic. There were many landowners that diligently recycled everything on farm and had used the local recycling centre, AgRecovery and Plasbac schemes.

The converse of this is those landowners who continue to use their landfill to dispose of all manner of farm rubbish. Landfills are used for inorganic waste generated on farm such as old fencing wire and timber, plastics such as baleage wrap and bale netting, drench containers and general household rubbish.

Approximately 40% of respondents to this question burn farm waste in their landfill site or at a burn pile on farm.

The landowners that burnt rubbish were classed as a medium risk, where at times they may not comply with the rule because the burning occurred occasionally.

During inspection of various landfill sites, it was found that the majority had no visible leachate that could affect water quality and were situated in a reasonable location and well away from a waterway.

Baleage wrap continues to be an unresolved issue for many farmers and they either;

- Store it on farm
- Recycle it through the Plasbac scheme
- Bury it on farm
- Bury it in under runners
- Burn it on a burn pile or in the landfill site.

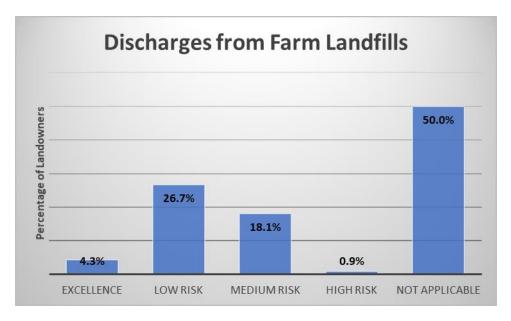


Figure 7. Graph - Discharges from farm landfills.

Discharges from Effluent Disposal

As expected prior to the commencement of this project there was very few properties that had to deal with any farm effluent discharges. One was a calf rearing facility and the other a poultry operation, so for 98% of the respondents this question was not applicable

The poultry operation has manure that is removed from the property following depletion of the flock at 61 weeks and the manure is used on two local farms as a fertiliser product.

The hen manure has been recently tested and had the following nutrients;

TKN Organic N + Ammonia	Р	К	S	Ca	Mg	Organic Carbon	DM
4.07%	1.43%	0.94%	0.2%	7.3%	0.25%	16.2%	58.1%

There was also one property visited where the landowner leases land to the Waitaki District Council. This area is used to irrigate the water from the Palmerston oxidation on Horse Range Road using fixed grid sprinklers. At the time of the landowner visit there was considerable ponding in this area. Any issues there seemed to be well known to the local community and the discharge is covered by a resource consent held by the Waitaki District Council.

A well-known reasonable sized calf rearing facility has also conducted water quality testing. This property has recently changed hands and substantial development is underway. Due to their discharges on farm they will continue to conduct periodical water testing on farm.

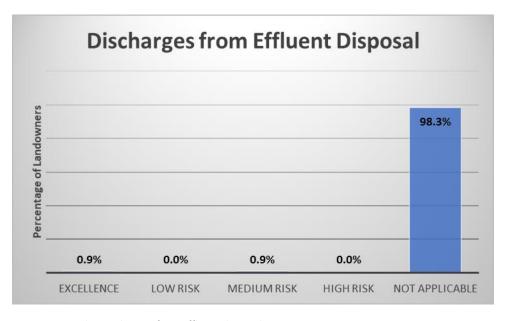


Figure 8. Graph - Discharges from effluent disposal.

Schedule 16 Discharges

The topography and soil types in the Shag River catchment are such that there are minimal drains where schedule 16 discharges could be measured. Only two properties were encountered that had either novaflow or tile drains. Man-made open drains were mainly limited to the alluvial flats below Dunback and Glenpark.

There were very few schedule 16 discharges likely due mainly to the requirement to measure the discharge when the Shag river was at or below its median flow, given that these drains in this circumstance would not be flowing.

Approximately 10% of all respondents were classed as either excellent or low risk when it came to discharges. There were no high-risk responses to this question and 88% of respondents found that this question was not applicable to their situation.

Quite a few landowners discussed household discharges such as septic tank overflows which were predominantly discharges to a paddock near their dwellings.

A number of farmers were concerned about the potential for discharges from the operation of the Macraes gold mine.

The calf rearing facility on Hughes Road has recently changed hands and is undergoing a reasonable amount of development. Their focus is on creating a 'show piece' of the operation and the comment was made by the operations manager that they want the water quality to be 'as good, if not better' leaving the property than what is entering the property. They are conducting regular water testing themselves but this doesn't meet the criteria of schedule 16 discharges.

Numerous other farmers have been keen to do water testing to get an understanding of the water quality on their farm but once again they do not meet the criteria of schedule 16 discharges.

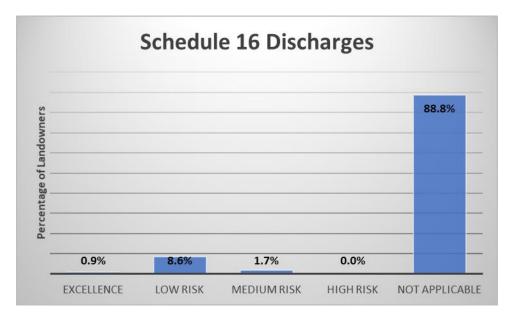


Figure 9. Graph - Schedule 16 discharges.

Overseer

Overseer Nutrient Budget

Overseer is a software application that supports farmers and growers to make informed decisions about their nutrient use on-farm to improve performance and reduce losses to the environment.

Historically it has been used by a number of regional councils throughout New Zealand for regulatory and compliance purposes, but Otago farmers have been in the position of not having to complete an Overseer nutrient budget unless they run a dairy operation or understand it and proactively use it to the advantage of their farming system.

Only seven landowners within the catchment have completed an Overseer nutrient budget, either recently or in the last 2 or 3 years. A number of farmers questioned were expecting to complete the Overseer nutrient budget as part of the Good Water project.

By far the majority of respondents at 71.6% fell into the high-risk category where they had not completed a nutrient budget.

After discussions with the landowners the main reasons for not completing an overseer nutrient budget to date are, partial or total lack of knowledge or understanding, do not see the need if you do soil tests and the fertiliser company recommends what to apply, seeing it being used as a regulatory compliance tool for regional councils and cost of completing it.

Most farmers when questioned about overseer discussed the extensive nature of their property and how little nitrogen fertiliser that they used in their farm management system and that they rely on their fertiliser company to do the soil testing and then give them a fertiliser recommendation based on that.

Quite a few farmers had not heard of Overseer, one farmer had a "predictive" nutrient budget completed by his fertiliser company.

We consider that some work is required to educate farmers on Overseer and the way it can be used to also help their farm management system.

Contributing factors to this view that Overseer was not important to them, could be that, there is very little intensive use of fertiliser and also a lack of dairy cattle within this catchment. Any fertiliser applied on the larger scale properties is put on cultivated or developed paddocks which in general are the rolling ridges bordered by large gullies vegetated with tussocks and native grasses, so any phosphate runoff is very unlikely to reach a waterway and nitrogen applied at low rates is unlikely to be leached to groundwater.

Comments from land owners around Overseer;

- The belief is that the sheep system on farm is low input and low output. Therefore, it doesn't warrant a nutrient budget.
- Have not heard of Overseer, not a computer user so would not know how to use it. Do not use much fertiliser as a rule, soil tests are done to check requirements.
- Did not think it was important for a sheep farmer. Don't use any N based fertilisers on this property.
- Doesn't have one, low intensity, doesn't believe he needs one.
- Haven't heard of Overseer.
- Unaware of Overseer but understands that it will need to be completed in the future.
- Nutrient budget has not been done on farm. Believes it's not necessary in extensive hill country, will not provide any benefits to the farming system.
- Knows about Overseer, it is not for the inept farmer, the average farmer does not have the skill set to do it.

- Never heard of Overseer.
- Doesn't believe there is point of doing this, the farm is extensively run, the majority is uncultivatable and rarely applies fertiliser.
- Nutrient loss is unknown as isn't concerned on what is leaving the property as he believes there is very little moving off farm due to the intensity of the operation.

While there are a large number of landowners that have the above views there are also quite a number that understand that there will be a requirement by 2020 and they will be getting it completed.

One respondent commented that Overseer should be used as a predictive tool by regional councils, to work with farmers for satisfactory outcomes for the farm and community catchment groups as a whole, not used as a regulatory tool.

There are a group of lower catchment farmers that were in the process of having Balance (fertiliser company) come out on farm to go through and complete an Overseer nutrient budget for them as part of the Good Water project.

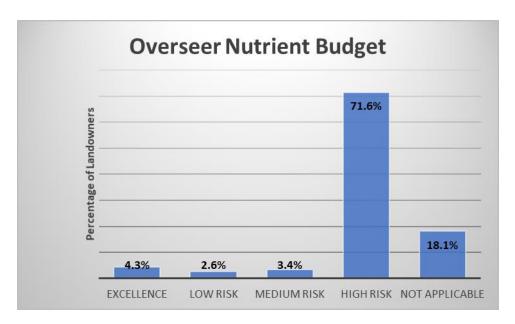


Figure 10. Graph - Overseer usage.

Training

Training of Staff

Only four farms employ permanent staff, the majority of landowners work alone with family members or employ casual staff on an as needs basis. For 75% of respondents their response was, that this question was not applicable.

Landowners do not have any documented training systems around environmental issues that could affect water quality, anything they do is predominantly based on knowledge they carry around with them and this is disseminated to family or casual staff as needed. The few landowners that have completed Farm Environment Plans are mainly farming operations without staff otherwise training would be recorded as potential risks in their plans.

For major work on farms agricultural contractors are used and in general they have their own plans and policies that they work to, such as forestry or spraying contractors.

It is interesting to note that once the staff training question was asked the subject of Health and Safety was raised and for the farmers this is a bigger training issue than having staff trained around water quality issues.



Figure 11. Graph – Training of staff.

Waterway Management

Culverts and Bridges

The whole catchment has many culverts and bridges throughout, culverts being the norm and bridges the exception. The main purpose of these crossing points is for vehicular access to the property as well as when mustering or moving stock. In general livestock while grazing in a paddock will use these crossing points in preference to trying to cross a waterway unless it is dry.

The majority of waterways are ephemeral in a normal season, so stock will normally cross at any point.

The majority of the culverts would be found in the bottom half of the catchment where the soils are heavier and the farms easier rolling to flat farmland.

The headwaters of the Shag catchment have gravel stream beds and the common practice is to have a crossing rather than any bridge or culvert that can be washed out in the floods that occur regularly. These crossings have gravel beds and stock and vehicles do not appear to cause even minor damage to the stream bed.

One culvert /crossing point was viewed where the last flood had totally covered the culvert with well over a metre of gravel that unless you knew it was there it would simply be a crossing.

Some relevant comments from landowners taken from the environmental risk assessments:

- Most of the creeks are dry for about 50% of the time.
- The majority of waterways are dry for 80% of the time so stock can cross in a lot of places and are unlikely to cause damage to the waterways.
- Stock cross at culverts all of the time unless the waterway is dry.
- Culverts are mainly for vehicle access but stock use when wet conditions prevail and there is water in the creek.
- Spent \$50,000 on an access road with culverts in order to harvest the forestry.
- Most crossing points of farms are bridged or culverted, the limited number of crossings that are not bridged/culverted have a gravel base and it is not practical to put one in.
- information was provided from the Department of Conservation on culverts and bridges in relation to fish species, see appendix 1; Excerpt from the New Zealand Fish Passage Guidelines, for structures up to 4 metres.

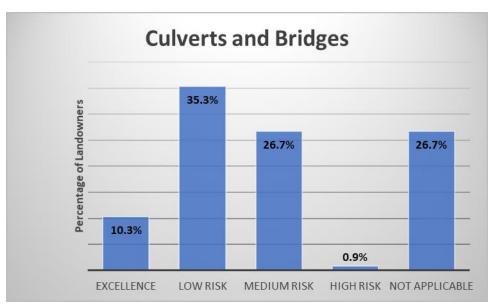


Figure 12. Graph - Culverts and bridges.

Stock Access

The lower reaches of the Shag River are predominantly fenced to exclude livestock.

Flood risk means that most fences are temporary one or two wire electric fences that can be taken down prior to any flood damage or more easily repaired following a flood. Upstream of the township of Dunback the Shag River is fenced in areas that do not historically cause flood damage.

Where the river is fenced further away, in general, sheep are used to graze within these areas. All landowners are aware of the damage that can be caused to the banks of rivers and waterways by livestock in particular cattle.

In the upper catchment all of the tributaries and the Shag River itself have gravelly beds and where stock can access the waterways the general consensus is that whether it is sheep or cattle, they are not causing any damage, due to the extensive stocking rates and the gravel beds. In these areas livestock drinking water is solely from waterways as it is impractical to install reticulated stock water schemes.

Depending on the size of the waterway and catchment in a normal season the majority of waterways would be dry for a considerable period of the year meaning stock could not cause any sedimentation.

The project commenced approximately 3 weeks after the catchment had received around 75 mm of rain in one rainfall event so every waterway, even ones that were normally ephemeral were either running with water or holding water and this was not typical for the catchment.

Where stock water schemes with water troughs for fresh stock water are in place the consensus from the farmers is that the stock will drink from these as a preference than drinking from a waterway.

The reason for this is, that in general the topography of the catchment, means that developed pastures and winter crops are grown on the flat to rolling ridges which throughout the majority of the catchment are 100 - 400 m above the waterways in the gullies. Unless the waterway is a major tributary they will very often run dry.

Throughout the catchment there are numerous springs particularly on the northern side or true left of the Shag River catchment. Where there are no water schemes in place often these are dammed for stock to drink from.

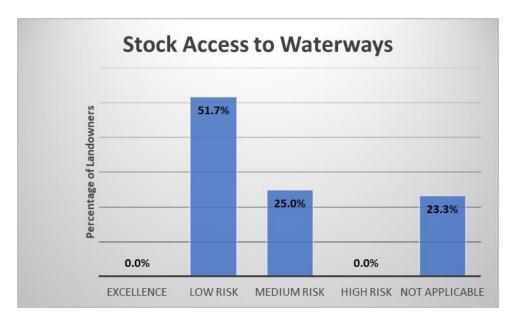


Figure 13. Graph - Stock access to waterways.

Winter Grazing

Nearly half or 49% of the landowners assessed their winter crop grazing as a low risk activity and a further 14% were assessed as having excellent grazing management. For 35 % of landowner's winter grazing was not applicable as they either were lifestyle or forestry blocks or did not plant any winter crops, but ran all grass systems with supplements of baleage or hay. There were no high-risk winter grazing activities recorded in the catchment and only 2% were assessed as a medium risk.

It was very noticeable that the majority of farmers knew how to graze their winter crop paddocks to prevent sediment runoff to waterways, with grazing towards waterways and leaving a buffer between the crop and the waterway.

Swedes, kale and soft turnips are the main crops grown in the Shag river catchment with a limited amount of fodder beet. Within the catchment area there is minimal dairy grazing so large numbers of cows on winter crop does not happen, the largest number of dairy grazers on a property would be around 200 – 300 cattle.

While the fodder beet is break fed in daily strips, the most common practice for other winter crops is to have large breaks, so in general livestock are shifted once every week. This practice prevents intensive pressure on winter crop paddocks and it was common for farmers to remove stock from winter crops to eliminate pugging damage during a wet period.

Direct drilling is used predominantly over conventional cultivation with most farmers realising that it is not only easier for them to do but it also minimises sediment or soil loss from their paddocks especially at crop establishment. Cultivation as part of re-grassing policy is used following the grazing of winter crops as some degree of pugging can occur during winter grazing.

As the majority of landowners are hill country farmers any winter crops they grow are sown on the paddock country that can be worked with a tractor, the plough line in most cases is a large distance from any waterways and the gullies form natural riparian buffers that are predominantly vegetated with native or over sown grass species or tussocks.

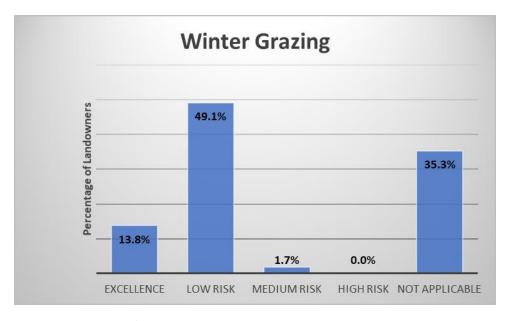


Figure 14. Graph - Winter grazing.

Riparian Management

This section focussed on the fencing and planting of and around waterways.

There were diverse views on planting and fencing of waterways as shown by the responses to this question.

While only 1.7% of landowners had excellent practices around riparian management, 27% of landowners were in the low risk category around planting or fencing of waterways, 38% were a medium risk and 14% high risk while for 19% of landowners this question was not applicable.

Only one property that was visited could be actually classed as being fenced and planted with establishing riparian plantings in two separate areas. There were numerous other areas where stock were excluded from waterways with fencing and some had a combination of this and planting of some native species.

One of the major issues identified with trying to plant along the Shag River margins was the fact that regular floods tended to destroy the plants before they got a chance to become established.

There were a number of landowners that would like to either start or complete riparian management projects on their properties but were hindered by the cost of both fencing and/or purchase of the native species required. Many of these landowners queried whether there were any grants available to assist with these types of projects and who would be the person or organisation to contact around these.

As part of the project findings it appears that any historical fencing close to waterways has been completed for management reasons rather than having been specifically planned as riparian areas.

A large number of properties have pines and other exotic species planted close to waterways that have been in place for many years. With the recent increase in the value of timber there has been a lot of harvesting of these areas within the catchment and there is still a lot remaining.

The activity of logging near waterways appears to be a major factor when it comes to water quality.

There were numerous examples of slash and debris left in and across waterways in areas of farm forestry and also land left exposed by machinery involved in the logging process, particularly skidders and diggers where soil damage was seen close to waterways.

In one small waterway a farmer was advised by the logging company to mitigate sediment loss by installing a screen which was held by two waratahs across the waterway.

There was a definite divide between the landowners that wanted to carry out riparian management activities and those that thought it was a waste of time on their properties, with several questioning the benefit it would have to their farm system.

In many cases when planned riparian areas, that had suitable attributes, were discussed, the creation of a fenced and planted wetland or riparian area would substantially add to improved water quality and also add value to the property. This was a topic of interest for a number of landowners.

Some of the farmers, mainly in the upper catchment, had vegetation on the banks of waterways which consisted of gorse and broom, notably pest species found in the Otago Regional Councils Pest Management Strategy. These plants were doing a job of stabilisation of the banks. These banks are generally unproductive, uncultivatable or unfarmable.

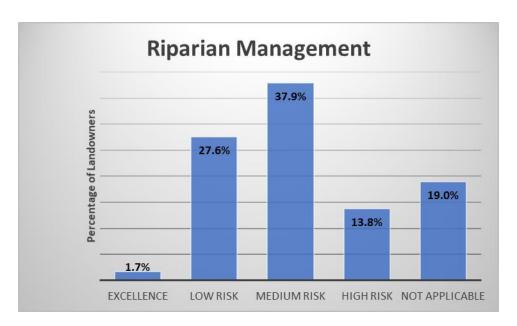


Figure 15. Graph - Riparian management.

Stream Cleaning

For the majority of landowners, 82%, stream cleaning was not an activity that was applicable to their operations. Approximately 5% of landowners fell into the high or medium risk categories for this section of the survey.

There was some evidence of historical stream cleaning and re-alignment of waterways but most landowners have not carried out this task for many years, although in a lot of cases landowners mentioned that the river engineers from the Regional Council had done or were the last ones to carry out or arrange work.

Quite a few landowners asked whether stream cleaning could be done if a waterway was dry, in this case their query was referred to the Otago Regional council. There is a level of knowledge and fear in the farming community, where they are aware of previous legal cases where landowners have faced court action.

The Water Quality on your property – Guidelines for Landowners information pack provided good explanations to the Landowners around the waterways and the management of this issue.

Many landowners bordering the Shag River made comments about the Otago Regional Council river engineers giving them sound advice around what they could do or arranging flood protection work on their properties. Most landowners know to contact the regional council for advice if wanting to work in a waterway with a digger and that a consent is normally required. One landowner in the lower catchment was looking to get a global consent to carry out stream cleaning work.

Willow clearing is an issue that was encountered throughout the catchment. Many farmers are concerned about old and dying willows that are in both the tributaries to and the Shag River itself. These willows have grown very large over the years and are spreading into and across waterways with many limbs falling into the waterways blocking them and causing a hazard in the regular floods.

It was mentioned by many landowners that the regional council needs to sort out these willow trees as they are causing more of an issue when they disintegrate in the waterways.

In the upper catchment the only work carried out in a stream bed with a digger or tractor would be to repair the access way to a crossing that had been scoured out by a recent flood. This work would not normally be in the gravel bed of a waterway but repairing the approaches to the crossing so that farm vehicles can access the whole property. This work causes no damage to the bed of waterways especially as it is normally carried out immediately following a flood.

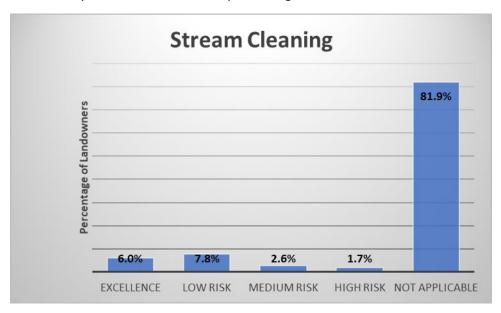


Figure 16. Graph - Stream cleaning.

Critical Source Areas

Critical source areas were mainly viewed as being not applicable, low risk or had excellent management practices around them for 95.7% of the respondents.

Critical source areas were assessed as being smaller, low-lying parts of farms such as gullies and swales where runoff accumulates in high concentration or cattle or sheep yards that were situated close to a waterway and had the potential for nutrients or faecal material to be washed to that waterway in a rainfall event.

In general, the Shag River catchment does not have many critical source areas due in part to the fact that the area is relatively extensive and farmers are applying no or limited fertilisers or at most for some farmers maintenance applications. There wasn't one landowner that had applied capital fertiliser this year. Due to the extensive nature and the normally dry climate, critical source issues were not deemed too big an issue.

The stockyard issue was discussed and many facilities are within close proximity of a waterway. Where stock handling facilities were close to a waterway, farmers agreed that these could be high risk as critical source areas, but when discussed further with them most felt they were a low risk. This was because in most cases yards were either used sporadically, they did not have enough stock for it to be an issue, any runoff slopes away from the waterway. The only potential seen by farmers was during an adverse rainfall event.

Those that had a critical source area have conducted some mitigation strategies such as planting around the fringes to protect against potential runoff and nutrients entering the waterways. Farmers that identified swampy areas in gullies were looking to exclude stock by fencing and then planting with native species.

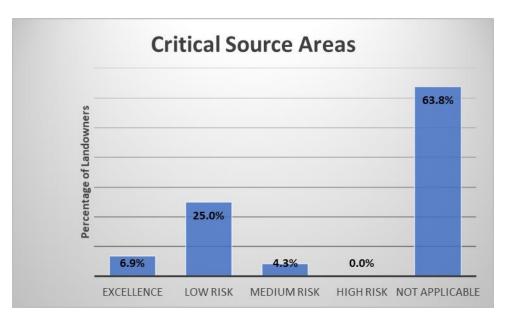


Figure 17. Graph - Critical source areas.

Proactive Environmental Stewardship

This section looked at a combination of the land owners' knowledge of the Water Plan for Otago, whether there were any water quality initiatives undertaken on their farm and if they were active in community water quality projects.

8.6% of landowners thought that because of the above factors they were classed as having a rating of excellence around water quality, 48.3% were assessed as being a low risk where they had a combination of the three factors to some degree, 40.5% were classed as a medium risk where they had limited knowledge of the water plan and or some water quality initiatives that they had undertaken on farm.

Those that were high risk and had no knowledge of the water plan were a definite minority with only around 1% of landowners falling into this category, while nearly 2% found this question not applicable to their situation.

In general, comments received from landowners for this last question are all relatively positive with most people looking after their properties and wanting to leave them in a better state than when they took over, and they are continually looking to improve their property to achieve better water quality.

Several farmers have development plans in place which had a strong environmental focus.

There is also a broader level of understanding environmentally and landowners know what needs to be done to be good custodians of their land and water.

For many there are other issues which have to be addressed before they invest in some of the more expensive water quality initiatives which do not provide any immediate financial return.

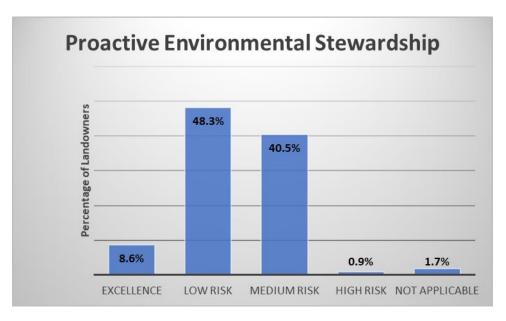


Figure 18. Graph - Proactive environmental stewardship.

Farm Data from initial page of Environmental Risk Assessment

Farm Environment Plans

A Farm Environment Plan is a tool that assists landowners to recognise on-farm environmental risks and set out a programme to manage those risks.

Farm Environment Plans are unique to a property and are used to manage the soil, water and nutrient resources of a farm.

They reflect the local climate and soils, the type of farming operation, and the goals and aspirations of the land user. A Farm Environment Plan is a recorded assessment the environmental risks and land management opportunities and this record results in the development of a personalised, written plan, identifying potential actions to be undertaken, where they might be targeted, and when they will be implemented.

One question that was asked while gathering the farm data on the first page first the environmental risk assessment was, whether the landowner had completed a Farm Environment Plan.

All together there were seven farmers that had completed a Beef and Lamb Level 1 Farm Environment Plan, one of these farmers was starting their level 2 plan shortly.

One farmer had competed a Farm Environment Plan for Merino NZ while another farmer was completing their plan with Merino NZ this winter. Another property had completed a Farm Environment Plan as part of a resource consent to change land use.

This is a very low uptake by the landowners within his catchment to complete farm environment plans. Beef and Lamb NZ have been promoting their farm environment plans now for a number of years by regularly holding workshops in local areas so it is surprising that in todays farming environment there are not more landowners embracing this initiative.

Irrigation

There are 10 farms within the Shag River catchment that use irrigation over a total of approximately 500ha. There are 3 centre pivot irrigators and 2 hard hose guns operating in the catchment, but with by far the majority being K-line systems.

The diagram below shows the percentage of area by type of irrigation.

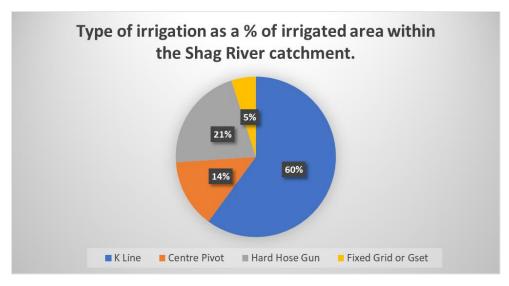


Figure 19. Graph - Irrigation type and percentage of area irrigated.

Schedule 16 Water Test

Of the landowners that participated in this project 30 of them showed an interest in conducting a water quality test taken at some point on their properties.

There are not be many opportunities to take a schedule 16 water quality test on any properties in the Shag River catchment due to the fact that they need to be taken when the Shag River is at or below its median flow and when the river reaches this point the majority of discharge points will not be flowing.

There is a definite interest from landowners to have their water tested from waterways on their properties that are flowing so they can understand what is happening with the water quality on farm.

As a result of this project it would be a recommendation to regularly test the water quality at a number of strategic sites further up the catchment, above the township of Dunback. This information could then be used by the community to measure and monitor what is happening in the catchment as a whole.

Individual Water Quality Tests

As part of the project one of the questions that was asked of landowners and/or occupiers was had they taken water quality samples to test for potential impacts on water quality.

Only six landowners, which is a very small minority of the catchment, had carried out any form of water testing.

Of these six, one had to test the water to check whether the supply was potable for a resource consent for a new dwelling, one was a lifestyle block that did a one-off test and the Waitaki District Council are required to regularly test the water coming from a waterway in their Palmerston landfill.

The other three are farmers, one that has carried out testing regularly on their irrigation dam outlet plus has recently tested other waterways on their property, one was a farmer that was in the Balance Farm Environment awards and the other a calf rearing facility.

Project Summary

The Good Water Project involved landowners with greater than 10 hectares of land within the Shag River catchment and involved an environmental risk assessment of each property.

Landowners and their properties were assessed around their knowledge of the Water Plan for Otago and issues of water quality on their properties.

The project was well received by landowners and had a good overall participation rate.

Environmental Risk Assessment Summary

Of the 15 questions assessed on farm as part of the environmental risk assessment, some were found to be of low risk to water quality in this particular catchment while other areas were a medium or higher risk.

Those areas that were considered a low risk were:

- **Discharges from silage pits**, this was primarily due to properties no longer using old silage pits, preferring now to use baleage instead or a large number of properties that did not have silage pits because of their property type, eg lifestyle blocks.
- **Discharges from effluent disposal**, this is because there are no dairy farms and only 2 farming operations had effluent that this question applied to.
- Schedule 16 discharges, because of the topography and climate found in the Shag River catchment it means that drainage is not an issue and there were only a few properties identified that had either novaflow, tile drains or man-made open drains, meaning there were very few schedule 16 discharges likely, given that these drains in normal circumstance would not be flowing when the Shag river was at or below its median flow.
- **Staff training**, only 4 properties within the whole catchment employed permanent staff, the rest of properties carried out the work themselves or employed casual contractors when required.
- Winter grazing, around 63% of landowners were assessed as being in the low risk or had excellent grazing management practices, while for another 35% of landowners winter grazing did not apply. Most farmers had good knowledge of how to graze winter crops to prevent sediment loss to waterways and the majority now used direct drilling as the main method of crop establishment.
- Critical Source Areas, these areas were mainly assessed as a low risk or no risk activity, due to the
 normally drier climate in the catchment. Where sheep or cattle yards were considered potential
 critical source areas they would only be a concern in adverse rainfall events as most farmers
 advised in normal situations they would not have runoff of contaminants to a waterway due to
 location or the fact they were used sporadically.

The areas that were considered medium risk are:

- **Knowledge of the Otago Water Plan,** overall the 93% of landowners fell into the low or medium risk category where they said they either knew enough to get by or did not know enough. There were the same number of landowners (4) that said they were experts in the plan to those that had their heads in the sand and were a high risk.
- **Stream cleaning**, the majority of landowners either do not carry out any stream cleaning or know the risks if they do, without first obtaining consent, there is a small minority of landowners that pose a risk.
- Culverts and Bridges, culverts and bridges are mainly a medium to low risk activity. Culverts and bridges are in place to provide access for vehicles and stock movement throughout the catchment as well as stock using them while grazing in preference to crossing a waterway. Culverts and bridges are found predominantly in the lower half of the catchment. Waterways in the upper catchment are gravel based and very prone to flood damage caused by the movement of gravels. Landowners use crossings instead and observe that there is very little or no damage from stock or vehicles crossing waterways.
- Stock Access, stock access to waterway is considered a medium to low risk activity in this catchment due mostly to the fact that the climate in a normal season means the majority of waterways are not running and the majority of properties run at low stocking rates due to their extensive nature. Other factors to consider are that most farmers have stock water systems in place and also that it would be impractical to fence off all waterways from livestock.

The areas that were considered higher risk are:

- **Discharges from offal pits**, close to 20% of landowners fell into a high or medium risk category around offal pits. No famers fully knew or had seen the rules from the Waste Plan, Rule 7.6.5. A number of farmers did mention that their offal pit had been audited as part of a quality assurance programme for their meat company.
- **Discharges from a farm Landfill,** the level of knowledge around the rules from the Waste Plan was similar to offal pits, with many landowners carrying out practices that do not meet the rules.
- Overseer Nutrient Budgets, this was a concern in that most landowners fell into a high-risk
 category because they had not completed an Overseer nutrient budget, only six landowners had
 completed Overseer out of the 116 properties visited in the project. As a result of this project many
 landowners commented they would complete one if required, but it was apparent the lack of
 knowledge or that they thought because they were farming an extensive operation that they would
 not need to complete one.
- Riparian Management, fencing and planting of waterways can be considered high risk, because in general there is limited riparian management activity throughout the catchment, those landowners that are considered high risk have extensive properties where it is impractical because of cost and logistics to fence or plant waterways. Other reasons are regular flood damage preventing establishment or having permanent fencing in a flood zone. A number of farmers would carry out riparian management on their properties if there were grants available.

Proactive Environmental Stewardship, this could be considered a higher risk category because
only a few landowners could claim to have an excellent knowledge of the water plan, be
undertaking water quality initiatives on their properties or be active in community water quality
projects. The medium risk category was assessed as having a limited knowledge of the water plan
and some water quality initiatives being undertaken on farm. The low risk category was in between
these two and while most landowners fell into the low or medium risk categories it was a subjective
assessment as to which category they were assessed in.

General Comments

There was a very noticeable lack of use of Farm Environment Plans and Overseer from landowners within this particular catchment.

The question is how does the Otago Regional Council "sell" the idea of Overseer and Farm Environment plans to farmers, on how will it benefit their farming systems. Many landowners see it solely as a regulatory or compliance tool.

There is a fear of non-compliance if landowners do not complete a Farm Environment Plan and/or an Overseer nutrient budget, and then if they do complete these they still may not comply with the requirements of the Water Plan when or if these are used as regulatory tools.

As mentioned in this report we believe that further education is required around the benefits of Overseer and Farm Environment Plans to their farm systems.

There was concerns from a number of farmers about the potential impact that the Macraes Gold Mine could have on water quality in the Shag River both from a loss of contaminants in the settling dams and also what could happen to those dams in a seismic event and the downstream effects that would have.

Most landowners were very happy with the water quality in the Shag River until it gets to Palmerston.

No one knew the rules around offal pits or landfills from the waste plan.

Forestry and farm forestry operations appear to be a high-risk activity that ultimately leads to sedimentation of waterways.

A number of farmers that have their own diggers and do work near waterways so these farmers do pose an inherent risk.

Mycoplasma bovis was considered as a risk during this project and cleaning and disinfection was undertaken by Agri Planz staff on all properties, when on farm. It is prudent to be mindful that farmers are weary of the spread of mycoplasma bovis and biosecurity in general and changes will be required to on farm management systems to enable better on farm biosecurity practices.

These changes to biosecurity should also be taken into consideration when completing Farm Environment Plans.

Health and Safety property hazard risk assessments were made in conjunction with the landowner for every property visited.

Overall Effectiveness of the Project

As a pilot project for the Otago Regional Council we believe that the information gathered from and also disseminated to the landowners in the catchment will be invaluable in providing the direction moving forward for the Water Plan for Otago.

The project was very well received from the vast majority of landowners within the catchment with only five landowners contacted that declined to participate.

From the inception of the project when letters of introduction and the project outline were mailed out to landowners there was very positive feedback. Many landowners made contact by phone or email and others were expecting and looking forward to their visits. The convenor of the Shag River Catchment Group was very interested and helpful. Their property was used as a trial to assess the environmental risk assessment process and how to structure the subsequent visits.

The final assessment of the whole of the data will provide a very clear framework of where the focus for the Otago Regional Council needs to be moving forward. The project has clearly identified where there are issues that need to be addressed and other areas that pose a lesser risk to water quality.

This project is particular to the Shag River catchment and issues identified within this report may not necessarily be the same issues as found in other catchments. This is due particularly to the fact that there are no dairy farms within this catchment and that in general it normally has a very dry climate but also has very with little irrigation when compared to other catchments within the Otago region.

Thoughts for Future Projects

The Environmental Risk Assessment Template

- The environmental risk assessment template could be updated to cater for more farm types and better analysis for scoring, following the ranking process.
- Extra sections could be added to the template eg Fertiliser use which got brought up and discussed when the overseer question was asked or a question for farmers that own diggers.
- There should be a separate template for forestry to reflect the new National Environmental standards.
- A workshop/meeting should be held in conjunction with the relevant Otago Regional council staff to review the environmental risk assessment template for future catchment studies.

The Environmental Risk Assessment Process

- An in-depth pre-visit desktop assessment was supposed to be made for each property. This is not really a practical step in the process as this assessment is best made, on farm during the visit.
- Obtaining all of the landowner contacts was a large task especially when the data is presented with company names, local knowledge was invaluable.
- What do you do with forestry owners in any subsequent projects.
- Schedule 16 water test offer should be a general water quality test offer.
- Farm types and sizes. Is it beneficial to get the landowners less than 20ha?
- In reality there was no real need to get every last landowner as you get to a point in the project and similar responses keep recurring.
- Have a catchment that has a wider range of farming operations and risk factors eg, Dairy, Sheep, Beef, Deer, Cropping, Horticulture, Irrigation, tile and open drains, management of farm dairy effluent.

Project Resources

- The Water Quality on your property Guidelines for Landowners information pack provided very good information and explanations to landowners around the waterways and their management while carrying out this project.
- The booklet "Environmental Considerations for Clean Streams" could be updated with the current rules and used as a valuable resource, as it contains additional information and advice on riparian planting options and suitable species.
- Access to more supplementary information, for example who do I talk to around riparian management at the council or who is the council person that will come out on farm and tell the farmer what he can do and what he needs a consent for.
- A comprehensive list of resources could be added so that landowners can access that information which will assist to make better informed decisions, eg:
 - National Environmental Standards for Plantation Forestry.
 - Deer Industry Environmental Management Code of Practice.

Appendix 1.

Excerpt from New Zealand Fish Passage Guidelines.

2.1 Freshwater fish and fisheries values

There are a wide range of freshwater ecosystems in New Zealand, including rivers, streams, lakes and wetlands. These ecosystems provide key habitats for approximately 50 native freshwater fish species and 10 sports fish species (Goodman et al. 2014).

Many of the native species are only found in New Zealand and, therefore, are of significant biodiversity value both nationally and internationally. Freshwater fish are also highly valued in New Zealand due to their status as taonga and kai for Māori, and their importance for supporting cultural, recreational and commercial fisheries, e.g. for whitebait, eels and trout.

New Zealand's freshwater fish species and habitats are threatened by an increasing number of pressures including greater demand for water, deterioration in water quality, loss and degradation of habitats, impacts of invasive species and reductions in river connectivity. These cumulative pressures and a lack of formal protection have had impacts on our native fish, with 74% now being classified as threatened or at risk (Goodman et al. 2014).

Around one third of New Zealand's native freshwater fish spend some part of their lives at sea, which means they need free access to, from, and within freshwater habitats to successfully complete their life-cycles (McDowall 2000). Others are resident in freshwater their whole lives, but still need to move between habitats within waterways.

Barriers to migration prevent fish from reaching critical habitats required to complete their life-cycles. Blocking or limiting fish movements within and between waterways is, therefore, a significant and ongoing threat to our native and sports fish. For many native fish species, protecting connectivity between habitats is as important as protecting the habitats themselves.

For further details on the key ecological considerations for instream structure design refer to Appendix D.

2.2 Potential adverse effects of instream structures

Instream structures can adversely affect aquatic communities in several ways. This includes disrupting stream processes, altering habitats, and impeding or blocking the movements of organisms. The results are often observed as reductions in fish numbers and changes to species diversity within catchments.



Good Water Project: The Survey Excl. Lifestyle Block

August 2018



Plan Change 6A regulates the quality of water in Otago's rivers, lakes, and wetlands. These regulations place the responsibility on land users to ensure their property complies with the specified water standards. Otago Regional Council (ORC) would like to ascertain whether land users are ready for these regulations to come into effect in 2020, what changes they have made on their property, and identify those who are not ready for the changes and how ORC can best help them. To this, a quantitative survey of n=800 land users in the region was conducted in May 2018. This survey complements previous surveys undertaken in 2015, 2016, and 2017, as well as a qualitative project conducted in 2016, and, combined, these projects help to form a complete picture of the state of readiness across the region. An initial report was provided which detailed the results for all n=800 land users in the region which included a proportionate number of lifestyle block owners. However, when reviewing the results, it was noted that this skew towards lifestyle block owners affected the total results. From this, ORC have requested an additional report which excludes lifestyle block owners. The findings in this report demonstrate results which have been reproportioned to exclude lifestyle block owners from the sample however, as the lifestyle block owner results are still relevant to consider in a wider context, land user profiles and associated points to consider have been included at the end of the report which are based on the initial sample of n=800.

AWARENESS/ KNOWLEDGE

A key aspect of understanding how ready land users are for the regulations to become operative in 2020 is identifying levels of understanding pertaining to specific aspects of the plan. Qualitative findings in 2016 suggested that farmers liked the approach, but needed greater clarity around what was required. Indeed, greater clarity follows greater awareness, therefore looking at levels of awareness amongst land users is imperative to identifying strategies surrounding specific information needs. With this, when looking at the year-on-year data for awareness of the new water quality rules, it is evident that amongst sheep and beef and dairy farmers, this awareness is increasing year on year. Awareness, while higher amongst dairy farmers, showed a significant increase for sheep and beef farmers from 2015 to 2016.

With this increasing awareness, identifying awareness regarding specific elements of the plan helps to indicate levels of clarity amongst land users. Of all land users surveyed in 2018, 60% were aware of the model Overseer and, of those aware, over half (56%) were collecting Overseer information. Twenty three per cent of land users knew what nitrogen leaching zone they were in, and 24% knew their nitrogen leaching rate. Dairy farmers had a higher level of awareness of Overseer and were more likely to collect information for Overseer. Additionally, dairy farmers were more likely to know their nitrogen leaching zone and rate. Sheep and beef farmers were less likely to collect information for Overseer, know their nitrogen leaching zone or know their nitrogen leaching rate.

	Sheep and Beef	Dairy	Horticulture + Viticulture	Deer	Other	NET
Aware of Overseer	60%	89%	33%	62%	37%	60%
Collecting information for Overseer	48%	81%	15%	50%	50%	56%
Know nitrogen leaching zone	16%	49%	10%	15%	18%	23%
Know nitrogen leaching rate	14%	61%	18%	31%	8%	24%

UNDERSTANDING/ENGAGEMENT

Surveys in 2015, 2016, and 2017 looked at identifying the level of understanding land users had regarding the new water quality rules. The 2015 survey, which looked at all land users, showed that 49% of land users had a good (37%) or excellent (12%) understanding of the new water quality rules. The 2016 and 2017 surveys looked only at sheep and beef and dairy farmers; positively, a decrease was noted year on year for sheep and beef and dairy farmers stating "I am not sure of what to do" shifting to "I have a good idea of what to do".

The qualitative work conducted in 2016 identified key points to moving forward as assistance for land users in terms of understanding the reasons behind the plan change and end game, guidance around acceptable standards and expectations, and support and resources specific to their property. Integral to this is to ensure landusers are engaged with the process and understand not only their responsibilities, but also what needs to be done. With this, in 2018 48% of the total sample stated they had a good (35%) or excellent (13%) of their understanding of their responsibilities for ensuring their property complies with water quality rules, with 12% stating they had no understanding.

Similar results are seen for levels of understanding of what land users need to do to ensure their property is fully compliant, with 44% of land users stating they had a good (29%) or excellent (15%) understanding of what they need to do, and 15% stating they had no understanding. Thirty two per cent knew what a reference flow site was, with 62% knowing where their reference flow site was. Engagement and involvement with the process is a crucial aspect of raising these understanding levels. This is evident particularly when looking at the proportion of land users involved in a community catchment group or similar, with 43% of land users involved in a group of this sort. These land users showed higher levels of understanding of both their responsibilities and what they need to do to be fully compliant, with these land users also less likely to state they had no understanding of either of these measures. In addition to having higher levels of awareness, dairy farmers were more likely to have higher levels of understanding of both their responsibilities and what needs to be done; these land users were also more likely to be involved in a community catchment group.

A summary of understanding and engagement measures by land use type is displayed in the following table. Blue figures denote that this land user type is significantly more likely to have given this result, while red means they were significantly less likely.

	Sheep and Beef	Dairy	Horticulture + Viticulture	Deer	Other	NET
Part of a community catchment group (or similar)	42%	63%	33%	38%	22%	43%
Knows what a reference flow site is	36%	35%	28%	23%	20%	32%
Knows where reference flow site is	63%	85%	9%	33%	60%	62%
Good or excellent understanding of responsibilities	44%	69%	33%	62%	35%	48%
Good or excellent understanding of what you need to do to be fully compliant	39%	68%	25%	62%	37%	44%

PREPAREDNESS/ ACTION

The 2016 qualitative work identified that there is a need for a sense of urgency around the deadlines, with farmers so busy that 2020 seems a long way away, but is actually fast approaching. With this, the recommendations connected to the qualitative work were that ORC develops a compliance strategy backed up with education, guidance, resources, and tools. Looking at all land users in 2015, 34% stated they had made most (26%) or all changes (8%) on farm. The subsequent surveys in years 2016 and 2017 only surveyed sheep and beef and dairy farmers with an increase of 14% seen from 2015 to 2016 for sheep and beef and dairy farmers who had made most or all changes on farm (2016, 50% cf. 2015, 36%), this measure stayed consistent year on year between 2016 and 2017. In terms of changes made, across all years fencing was a key mention, however, in 2017, mentions pertaining to more specific elements of on farm changes such as changing fertiliser, effluent system, and water testing were more common amongst sheep and beef and dairy farmers, showing a growing understanding of the actions needed to be taken to become compliant.

In 2018, amongst land users, 28% were conducting regular water quality sampling, with those who were not doing this stating they felt they did not need to. A further 52% of land users had a farm or land management type plan. Dairy farmers were more likely to be conducting regular water quality sampling and have a farm or land management type plan. Sheep and beef farmers were less likely to be conducting regular water quality sampling.

When given a list of mitigation measures, dairy farmers had, on average, completed the most mitigation measures (14.1) with sheep and beef farmers completing the second most mitigation measures (6.3). Deer (5.0) and other land users (3.9) followed, with horticulturalists/viticulturalists (2.4) completing a significantly lower number of the listed mitigation measures. The highest mentioned mitigation measures amongst all land users were maintaining ground cover to avoid erosion (65%), bridges or culverts for stock crossings (64%), uses minimum tillage cultivation(56%) and fenced all permanently flowing waterways (49%).

Eleven per cent of all land users stated they were fully compliant already, with a further 32% stating they were certain they would be fully compliant when 2020 arrives. Dairy farmers (although having the highest levels of awareness and understanding) had the lowest expected level of compliance with only 35% stating they are already compliant or expect to be fully compliant in 2020.

A summary of the preparedness/ action measures by land use type is displayed in the table below. Blue figures denote that this land user type is significantly more likely to have given this result, while red means they were significantly less likely.

	Sheep and Beef	Dairy	Horticulture + Viticulture	Deer	Other	NET
Conducting regular water quality sampling	16%	57%	40%	8%	24%	28%
Has a farm or land management type plan	48%	68%	55%	62%	41%	52%
Average number of mitigation measures completed	6.3	14.1	2.4	5.0	3.9	7.1
Already/ certain I will be compliant in 2020	40%	35%	60%	62%	47%	43%

COMMUNICATION

Communication was a key recommendation off the back of the 2016 qualitative work, with supporting ongoing communication to ensure water quality rules are kept front of mind, strong communication strategies to get key messages out there, and ensuring land users are aware that ORC are serious about compliance identified as integral aspects of the communication strategy for ORC. Positively, when looking at information sources, in 2015 ORC was a primary source of information through the Waterlines newsletter, ORC factsheets, and the ORC Roadshow. It appeared that personal forms of communication were preferred amongst land users, with ORC roadshow, catchment group meetings, and farm visits the most preferred sources of information.

In the 2018 survey, ORC continues to feature strongly as a key information source with ORC publications/ factsheets the most mentioned source of information (54%) followed by the ORC Waterlines newsletter (29%). The top three information sources for land users is displayed in the below table. Blue figures denote that this land user type is significantly more likely to have given this result, while red means they were significantly less likely.

	Sheep and Beef	Dairy	Horticulture + Viticulture	Deer	Other	NET
	ORC Publications/ factsheets 55%	ORC Publications/ factsheets 71%	ORC Publications/ factsheets 45%	ORC Publications/ factsheets 54%	ORC Publications/ factsheets 35%	ORC Publications/ factsheets 54%
Top three information sources	ORC Waterlines Newsletter 28%	Industry support group 45%	ORC Website 33%	ORC Waterlines Newsletter 38%	ORC Waterlines Newsletter 18%	ORC Waterlines Newsletter 29%
	Other farmers ORC Water	ORC Waterlines Newsletter 40%	ORC Waterlines Newsletter 40%	Advertising (Print/ Online) 31%	Other community meetings 16%	Other community meetings 23%

Contents

Summary of Findings	2
Background and Objectives	7
Re-proportioned Results	8
Reading 2018 Findings	9
Previous Research	10
Awareness/ Knowledge	11
Understanding/ Engagement	16
Preparedness/ Action	23
Communication	33
Land-User Profiles	38
Points to Consider	48
Appendix	51

Background and Objectives

Project Background

In 2014 the Otago Regional Council (ORC) implemented Plan Change 6a, which aims to ensure good water quality in rivers, lakes, wetlands, and aquifers. The Water Plan aims to control nutrient contaminants and sediment coming off rural properties into waterways from runoff, leaching, and drains. These regulations place the onus on land users to ensure their property complies with the specified standards. The rules within the Water Plan become operative in 2020, and as part of the Good Water Project, ORC are undertaking research with land users in Otago's rural communities to ascertain if they are ready for the changes, what changes land users have already made to their property, and identify those who are not ready for the changes, and how ORC can best help them. The 2018 survey looks at all land users in the Otago region, with the primary objective to collect data from a range of rural land users in the Otago region around the changes they have made, or will make, on their land to ensure compliance by 2020. In particular, to specifically identify with statistics, how many land users are:

- Testing water quality
- Part of a catchment group
- Keeping Overseer information
- Know their current nitrogen leaching amount
- Know what nitrogen leaching zone they are in
- Undertaking good management practice, and what those are
- What areas of the region have the least knowledge or are undertaking the least actions to protect water

Method

A quantitative survey of n=800 land users in the Otago Region was completed between the 18th of April 2018 and the 28th of May 2018 utilising a mixed-method approach to interviewing. The sample was achieved primarily via Computer Assisted Telephone Interviewing (CATI) (n=746) and was supplemented with an online approach to target those without landlines (n=54). A sample size of n=800 yields a margin of error of +/- 3.46% at the 95% confidence interval. This means that if the observed result on the total sample of n=800 is 50% (point of maximum margin of error), then there is a 95% probability that the true result falls within 46.54% and 53.46%.

Sample Design and Selection

Coverage of all types of land users was identified as an integral part of the research objectives of this project. Therefore, in order to ensure representation of these land users, sample structure was based on the proportions provided by ORC through Agribase. Additionally, consideration was given to ensuring the results were geographically representative of the region. The below sample structure was achieved:

District	Dunedin	Waitaki	Queenstown Lakes	Clutha	Central Otago
Sheep and Beef	15%	27%	18%	27%	34%
Dairy	2%	16%	1%	30%	2%
Lifestyle block (2ha +)	78%	48%	61%	38%	38%
Horticulture	0%	2%	3%	0%	9%
Viticulture	0%	0%	2%	0%	8%
Deer	0%	0%	7%	0%	3%
Other	4%	8%	9%	5%	6%

Re-proportioned Results

The 2018 survey looks at all land users in the Otago region, with the primary objective to collect data from a range of rural land users in the Otago region around the changes they have made, or will make, on their land to ensure compliance by 2020.

To this, the sample was designed to proportionately reflect the composition of land users in the region; as such, 57% of these land users were lifestyle block owners. The initial report identified some key differences between lifestyle block owners and other land users in the region, however it was noted that the presence of lifestyle block owners in the sample did affect the total sample results. As such, ORC requested an additional report which excludes the results for lifestyle block farmers. The following report details the results which exclude lifestyle block farmers from the sample, resulting in a total sample size of n=371. A sample size of n=371 yields a margin of error of +/- 5.09% at the 95% confidence interval. This means that if the observed result on the total sample of n=371 is 50% (point of maximum margin of error), then there is a 95% probability that the true result falls within 44.91% and 55.09%.

The below table demonstrates the sample structure for these results.

District	Dunedin	Waitaki	Queenstown Lakes	Clutha	Central Otago	Total
Sheep and Beef	70%	51%	47%	43%	55%	52%
Dairy	11%	30%	2%	49%	4%	20%
Horticulture/ Viticulture	2%	4%	11%	0%	27%	11%
Deer	0%	0%	18%	0%	4%	4%
Other	17%	15%	22%	9%	10%	13%

As requested, profiles by land use (including lifestyle block owners) have been included in this report. These can be found at the end of the report and are based on differences observed from the total sample of n=800.

Reading 2018 Findings

Level of Understanding needs to be done. The highest proportion of land users had no understanding of their re ensuring their property compiles with water quality rules (29%) or what they need to do to be fully compilian (31%). Thirty six per cent of land users felt they had a good (25%) or excellent (11%) of their understanding of responsibilities for ensuring their property compiles. This lines up with a similar proportion (33%) of land users who had a good (21%) or excellent (12%) understanding of what they need to do to be fully compliant.



Understanding of responsibilities for ensuring property complies with water quality rules

Understanding of what you need to do to be

DEMOGRAPHIC DIFFERENCES

Understanding responsibilities:More likely to have: Excellent, good, or moderate understanding:

101-500ha (excellent, **20%**; good, **37%**) 500+ ha (good, **42%**; moderate, **34%**) 21-30 (good, **33%**), 31-40 (good, **40%**), and 41+ (good, **34%**, moderate, **31%**) years in the industry

Little or no understanding
Less than 10ha (No understanding, 44%)
Less than 10 years in the industry (no understanding, 38%), little understanding (19%)

Understanding what needs to be done: More likely to have:

Excellent, good, or moderate understanding:

101-500ha (excellent, **18%**; good, **39%**) 500+ ha (good, **35%**; moderate, **32%**) 21-30 (good, **29%**), 31-40 (good, **34%**), and 41+ (good, **28%**) years in the industry

Little or no understanding Less than 10ha (No understanding, **45%**) Less than 10 years in the industry (no understanding, **39%**)

Understanding/ Engagement by District The following image shows statistically significant differences by area. There were no statistically significant differences noted for Waitaki and Queenstown-Lakes. Land users located in Central Otago appea a greater engagement and thus a greater understanding while land users in Dunedin appear to be less engaged and have lower levels of understanding. **Central Otago** ence flow site is (29%) ore likely to have a good derstanding (32%) of sponsibilities and a moder derstanding (31%) of what Dunedin Clutha

Total Level Results and Demographic Differences

All results are shown within charts at the total level. Statistically significant demographic differences are also shown under the chart. Significance testing has been applied to subgroup results. Significance testing is used to determine whether the difference between two results is statistically significant or not, i.e., to determine the probability that an observed difference occurred as a result of chance. Significance testing within these pages shows there is a significant difference between the total result and the demographic group identified. Demographic subgroups* included in this are:

Land size:

Less than 10ha: 13%

11ha to 100ha: 26%

101ha to 500ha: 35%

500+ ha: 26%

Tenure in industry:

Less than 10 years: 11%

11 to 20 years: 18%

21 to 30 years: 20%

31 to 40 years: 22%

41+ years: 27%

Area Results

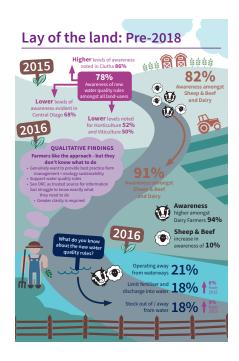
Results are also shown at an area level. Significance testing has been applied to the area results. Any comment on these pages is with regards to a significant difference between the total result and the result for an area. The commentary used to illustrate these differences is described as 'more/less likely'. If there are no statistically significant differences by area for that section, there will be no text.

^{*}These figures exclude lifestyle block farmers.

Previous Research

This research, completed in June 2018, complements the following previously conducted research on this matter undertaken by ORC. A summary of the previously conducted research is provided in the table below:

Year	Audience	Survey content
2015	n=600 All land users	 Investigate the levels of awareness surrounding the new water quality rules and; The success of the stakeholder and communication engagement programme.
2016	n=300 Sheep and Beef Dairy	 Awareness of the changes; Knowledge of the rules; Information required to better understand the rules; Understanding of responsibilities and; Changes already made to property.
2016	Landowners and stakeholders	 Qualitative work assessing perceptions amongst landowners and stakeholders regarding the water plan and ORC approach
2017	n=300 Sheep and Beef Dairy	 Knowledge of the rules; Information required to better understand the rules; Understanding of their responsibilities; Changes already made to their property; Compliance with specific aspects of the plan.



Display of data

Due to the varying audiences surveyed in each survey and the differing questionnaire content, the results from previous research were not able to be directly compared to results for 2018. However, these previous research findings deliver important background and context to the findings of 2018.

As such, these results are presented as a seperate page which precedes each section, delivering relevant background content before reading the 2018 results.

Awareness/ Knowledge

Lay of the land: Pre-2018



Higher levels of awareness noted in Clutha 86%

78%

Awareness of new water quality rules amongst all Land users

Lower levels of awareness evident in Central Otago 68%

Lower levels noted for Horticulture 52% and Viticulture 50%



Awareness of rules amongst Sheep & Beef and Dairy





QUALITATIVE FINDINGS

Farmers like the approach - but they don't know what to do

- Genuinely want to provide best practice farm management + ecology sustainability
- Support water quality rules
- See ORC as trusted source for information but struggle to know exactly what they need to do
 - · Greater clarity is required

Awareness of rules amongst Sheep & Beef

and Dai



Awareness of rules higher amongst

Dairy Farmers **94%**



Sheep & Beef increase in awareness of 10%



Operating away **21%** from waterways

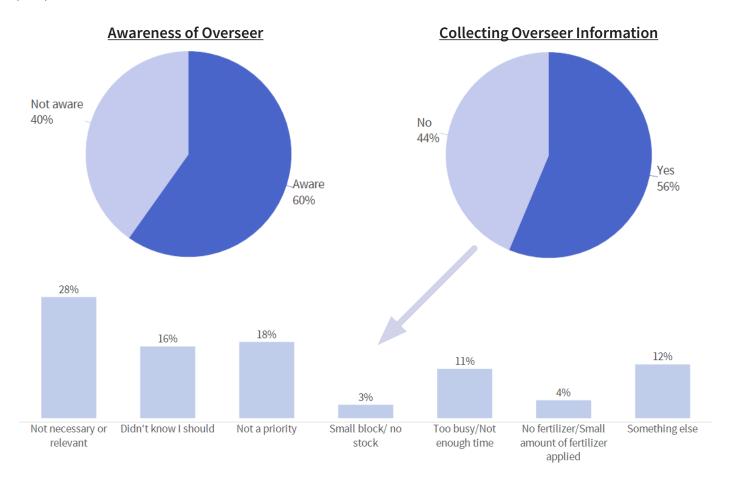
Limit fertiliser and discharge into water 18%

from

Stock out of / away from water 18%

Overseer

Sixty per cent of land users in the region were aware of the model Overseer. Of these, 56% were collecting the information needed to run Overseer. For those who weren't collecting information, the primary reasons behind this was due to a perceived lack of relevance (28%), that they did not know they should (16%), or that it wasn't a priority (18%).



DEMOGRAPHIC DIFFERENCES

More likely to be aware:

101-500ha (78%) 500+ha (74%) 21-30 years in the industry (71%)

Less likely to be aware:

Less than 10ha (30%) 11-100ha (35%) 41+ years in the industry (51%)

More likely to collect information

500+ ha (66%)

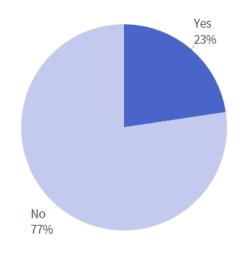
Less likely to collect information

11-100ha (26%) 41+ years in the industry (34%)

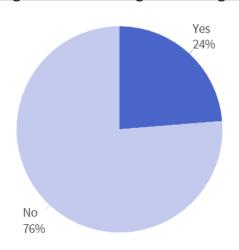
Nitrogen Leaching

Just under a quarter of land users knew what nitrogen leaching zone they were in (23%). Of those who knew which nitrogen leaching zone they were in, 24% knew their annual nitrogen leaching rate. Knowledge of both nitrogen leaching zone and rate was more prevalent amongst those who had larger properties and who had a longer tenure in their industry.

Knowledge of Nitrogen Leaching Zone



Knowledge of Annual Nitrogen Leaching Rate



DEMOGRAPHIC DIFFERENCES

More likely to know Nitrogen Leaching Zone:

101 -500ha (33%)

Less likely to know Nitrogen Leaching Zone:

11-100ha (8%)

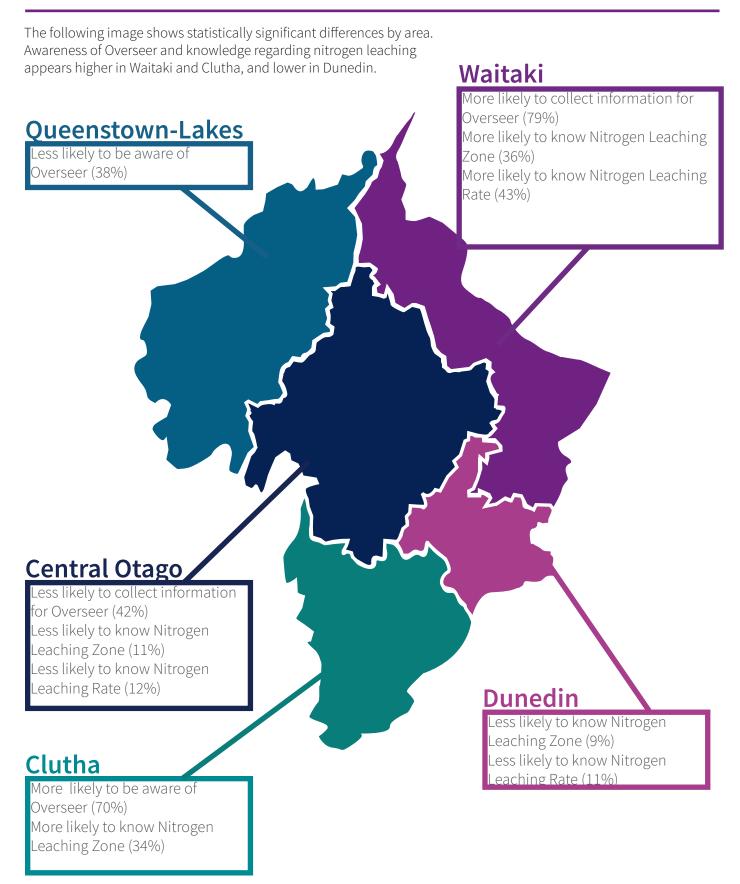
More likely to know Nitrogen Leaching Rate:

101 -500ha (36%) 21-30 years in the industry (33%)

Less likely to know Nitrogen Leaching Rate:

Less than 10ha (11%) 11-100ha **(7%)** 41+ years in the industry (10%)

Awareness/ Knowledge by District



Understanding/ Engagement

Lay of the land: Pre-2018



All land users **49%** have a good **37%** or excellent **12%** understanding of the new water quality rules



Sheep & Beef / Dairy



51% good or excellent

understanding of the new water quality rules



Level of understanding of changes needed

8% "I know exactly what I need to do"

49% "I have a good idea of what I need to do"

32% "I have some idea of what I need to do"

10% "I am not sure what I need to do"

2016



Clarifying expectations:

Recommend ORC clarify expectations for Land users including:

The reasons behind the plan changes; Rules, standards, and expectations; Guidance around acceptable

methods for maintaining contaminant discharge to waterways; Milestones for landowners to work towards.

2017

WHERE TO **FROM HERE QUALITATIVE FINDINGS**



o excellent

understanding of the new water quality rules



understanding of the

Develop support resources:

2017

"I have a 60% good idea of what I need to do"

4% "I am not sure what I need to do"

Land users require assistance to enable them to develop a specific activity plan for their property.

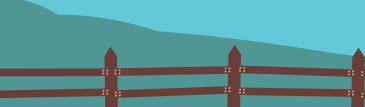
Resources developed might include:

A pocket guide, complete with milestone schedules. Water test kits.

> An online portal where Land users can log their test results.



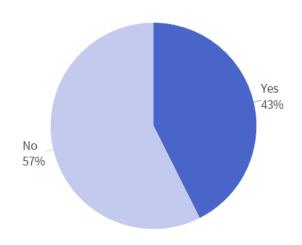




Involvement and Monitoring

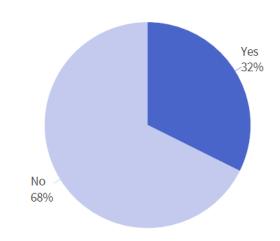
Community Catchment Groups are a key way for land users to engage and collaborate with other land users in their catchment; 43% of land users are involved in a Community Catchment Group. In terms of knowledge of monitoring, 32% knew what a reference flow site was, with 62% of these land users knowing where their reference flow site was located.

Involved with Community Catchment Group

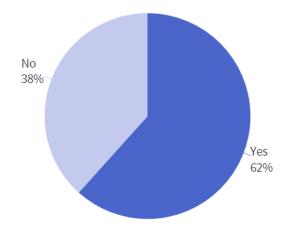


A full list of community catchment groups is included in the appendix.

Knowledge of what a reference flow site is



Knowledge of where reference flow site is



DEMOGRAPHIC DIFFERENCES

More likely to be involved:

500+ ha (58%)

Less likely to be involved:

Less than 10ha (15%) 11-100ha (33%)

More likely to know what a reference flow site is:

500+ ha (44%)

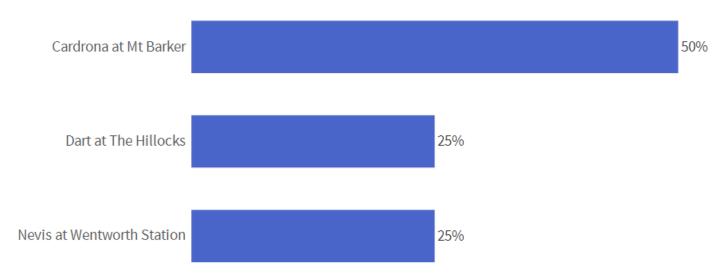
Less likely to know what a reference flow site is:

11-100ha (23%)

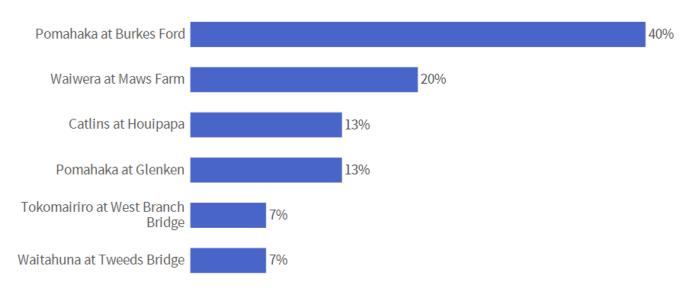
Reference Flow Sites

Land users who knew where their reference flow sites were located were then prompted with a list of reference flow sites relevant to their area. These results are charted below. The varying, and often small, base sizes are provided alongside the charts and need to be taken into account when interpreting the results.

Queenstown-Lakes: Reference Flow Sites (n=4)



Clutha: Reference Flow Sites (n=15)

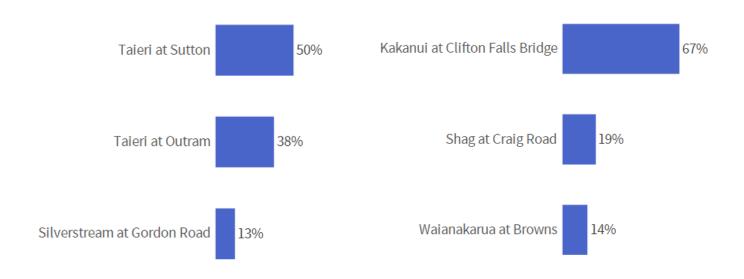


Reference Flow Sites

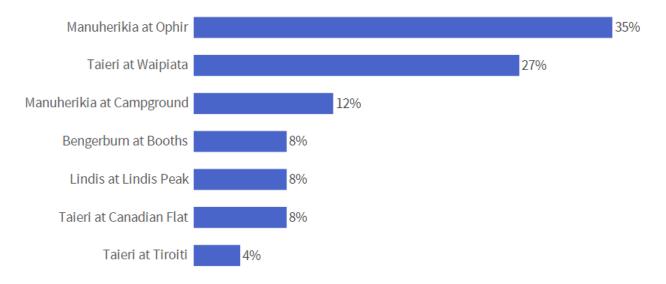
Land users who knew where their reference flow sites were located were then prompted with a list of reference flow sites relevant to their area. These results are charted below. The varying, and often small, base sizes are provided alongside the charts and need to be taken into account when interpreting the results.

Dunedin: Reference Flow Sites (n=8)

Waitaki: Reference Flow Sites (n=21)

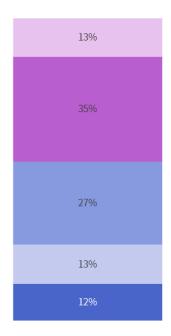


Central Otago: Reference Flow Sites (n=26)

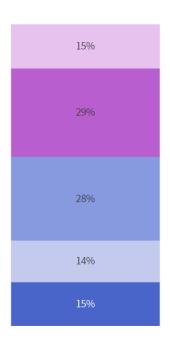


Level of Understanding

Levels of understanding appear similar across both understanding responsibilities and understanding what needs to be done. Forty eight per cent of land users felt they had a good (35%) or excellent (13%) of their understanding of responsibilities for ensuring their property complies. This lines up with a similar proportion (44%) of land users who had a good (29%) or excellent (15%) understanding of what they need to do to be fully compliant.







Understanding of responsibilities for ensuring property complies with water quality rules

Understanding of what you need to do to be fully compliant

DEMOGRAPHIC DIFFERENCES

More likely to have:

Excellent, good, or moderate understanding of responsibilities:

101-500ha (excellent, **19%**) 31-40 years in the industry (good, **48%**)

Little or no understanding of responsibilities:

Less than 10ha (no understanding, **26%**) 11-100ha (no understanding, 21%) Less than 10 years in the industry (little understanding, 28%)

More likely to have:

Excellent, good, or moderate understanding of what to do:

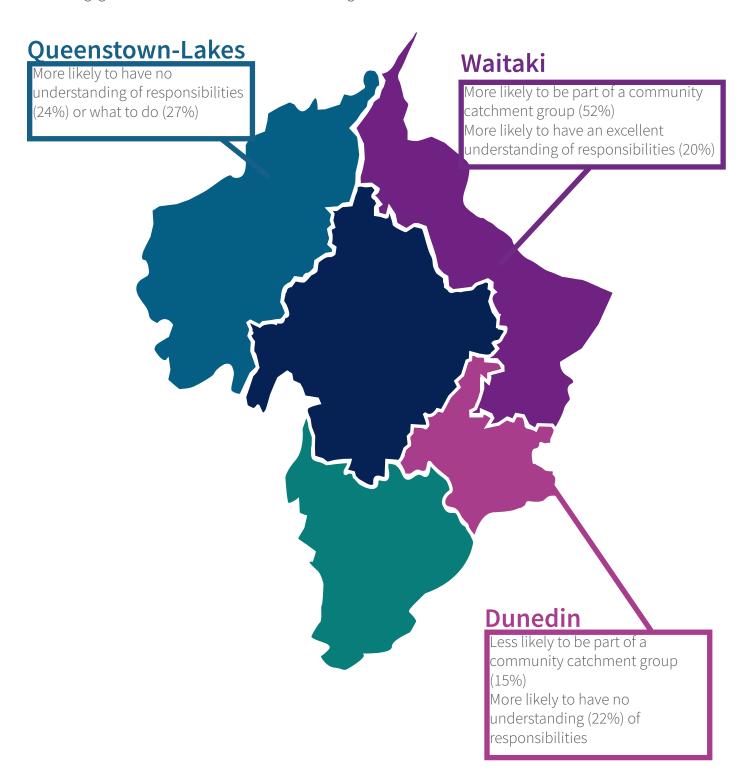
101-500ha (good, **40%**) 31-40 years in the industry (good, 40%)

Little or no understanding of what to do:

Less than 10ha (no understanding, 28%) 11-100ha (no understanding, **27%**)

Understanding/Engagement by District

The following image shows statistically significant differences by area. Land users located in Waitaki appear to have a greater engagement and thus a greater understanding while land users in Dunedin and Queenstown-Lakes appear to be less engaged and have lower levels of understanding.



Preparedness/ Action

Lay of the land: Pre-2018



2015: All land users

All changes made **8%**Most changes made **26%**Some changes made **29%**No changes made **29%**



What changes?

Fencing **61%**Changed irrigation system **9%**Planting **9%**



48%

25%

13%

Guidance Farm visits

Practical assistance





2015

36%

All / most changes made

QUALITATIVE FINDINGS

Develop compliance strategy

How, when, by whom compliance will be monitored

BACKUP

With education, guidance, resource and tools



QUALITATIVE FINDINGS

Get some urgency around the deadlines Farmers have a lot on their plate



50% All / most





Actions taken

Fencing waterways **58%**Changed fertiliser **14%**Changed effluent system **13%**Water testing / monitoring **12%**



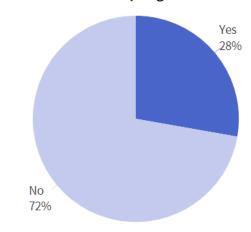
2017 **49%** All/most



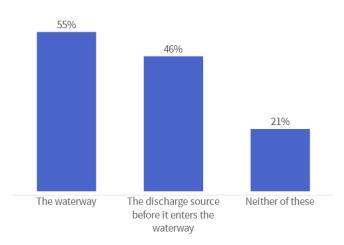
Water Quality Sampling

Twenty eight per cent of land users were conducting regular water quality sampling, with 55% sampling from the waterway itself, 46% from the discharge source, and 21% neither of these. For the 72% of land users who were not conducting regular water quality sampling, over half (60%) felt they didn't need to and 16% had no waterway to sample.

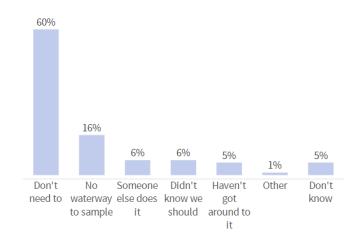
Are you conducting regular water quality sampling?



Where are you sampling from?



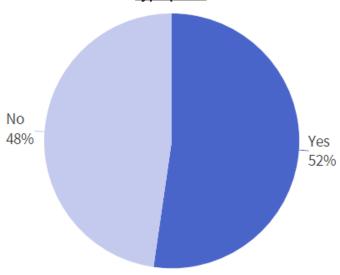
Why are you not conducting regular water quality sampling?



Farm/ Land Management Plan

Fifty two per cent of land users had a farm or land management type plan. Land users with a larger land size were more likely to have a farm or land management type plan (66% cf. total, 52%).

Do you have a farm or land management type plan?



DEMOGRAPHIC DIFFERENCES

More likely to have a farm or land management type plan:

500+ ha (66%)

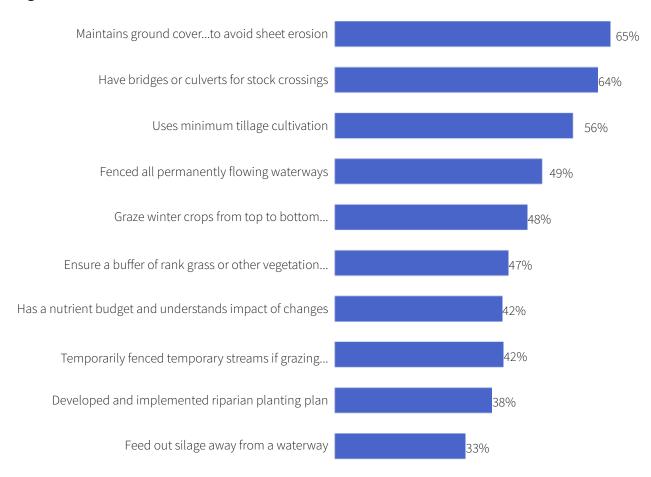
Less likely to have a farm or land management type plan:

> Less than 10ha (33%) 11-100ha (41%)

Mitigation Measures: Top 10

Land users were given a list of mitigation measures, and were asked to identify which of these they had in place on their land to improve water quality. The below chart displays the top 10 of these measures. Maintaining ground cover (65%), bridges or culverts for stock crossings (64%), minimum tillage cultivation (56%), and fencing all permanently flowing waterways (49%) were the top completed mitigation measures taken to date.

Mitigation measures taken to date



DEMOGRAPHIC DIFFERENCES

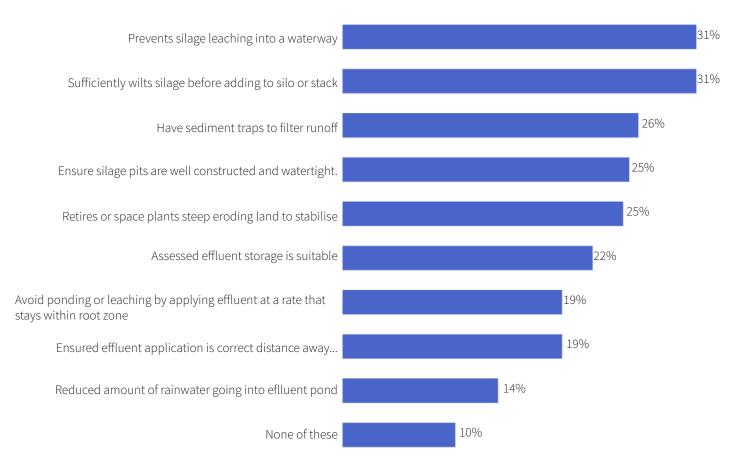
More likely to have undertaken all mitigation measures:

101-500ha

Mitigation Measures

The below chart displays the remaining mitigation measures. The measures with lower levels of completion included reducing the amount of rainwater going into effluent pond (14%), avoiding ponding or leaching by applying effluent at a rate that stays within the root zone (19%), and ensuring effluent is the correct distance away from a waterway (19%). Ten per cent of land users had not undertaken any of the mitigation measures presented in the survey.

Mitigation measures taken to date



DEMOGRAPHIC DIFFERENCES

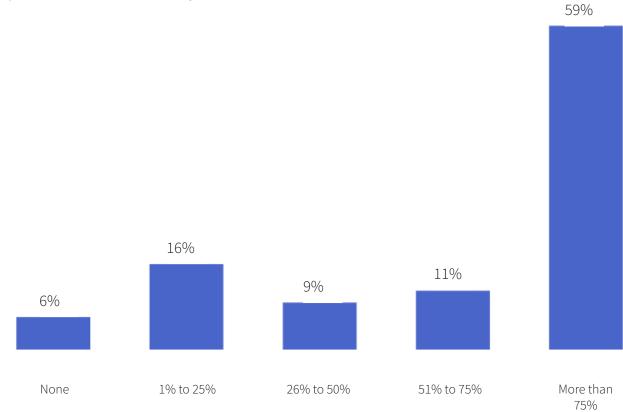
More likely to:

Have done no mitigation measures: Less than 10ha (41%)

Fenced Waterways

Land users who did not indicate they had fenced all of their waterways were asked what proportion of waterways they did have fenced on their property. Most (59%) had fenced more than 75% of their waterways, with 11% stating they had fenced 51%-75% of their waterways. At a lower level, 9% had fenced 26%-50% of their waterways, while 16% had fenced 1%-25%. Six per cent stated they had not fenced any waterways.

Proportion of fenced waterways



DEMOGRAPHIC DIFFERENCES

More likely to have fenced none:

11 - 20 years in the industry: **(14%)**

Less likely to have fenced none:

101-500ha: **(2%)**

More likely to have fenced 1% - 25%

500+ ha: **(30%)**

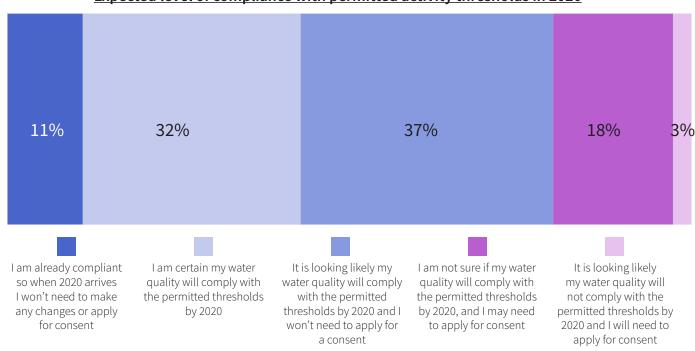
Less likely to have fenced more than 75%

21 - 30 years in the industry **(74%)**

Expected Compliance

Only a small proportion (3%) of land users felt that it was looking likely that they would not comply with the permitted thresholds by 2020, while almost a fifth (18%) were unsure if their water quality would comply. Thirty seven per cent of land users believed it was looking likely they would comply, with 32% stating they were certain they would comply. A further 11% were already compliant. Those stating they are already compliant or that they are certain they would be were more likely to be land users with less than 10ha; these land users were also more likely to have lower levels of awareness, engagement, and knowledge, as seen in previous sections.

Expected level of compliance with permitted activity thresholds in 2020



DEMOGRAPHIC DIFFERENCES

More likely to state "I am already compliant" Less than 10ha: (20%)

More likely to state "It is looking likely my water quality will comply" 500+ ha **(45%)**

More likely to state "it is looking likely my water quality will not comply" 101-500ha (5%)

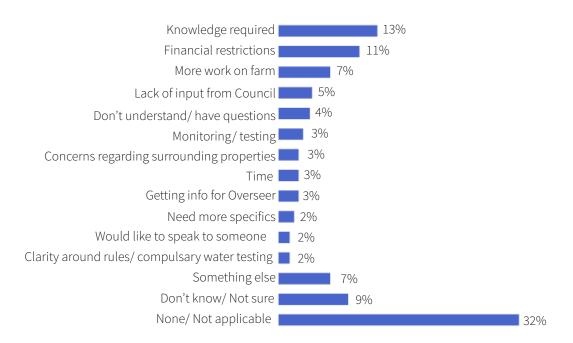
Less likely to state "it is looking likely my water quality will not comply"

> Less than 10 years in the industry (20%) Less than 10ha (20%)

Barriers to Compliance

Land users who did not state they were already compliant were asked what the barriers were to being completely ready for the rules to come into effect. The highest proportion (32%) stated that there were no barriers or that it wasn't applicable, while 13% felt they just needed more knowledge or information. Further to this, other mentions included financial restrictions (11%) and the work required on farm (7%).

Barriers to being completely ready for the rules to come into effect



DEMOGRAPHIC DIFFERENCES

More likely to be mention:

More work on farm:

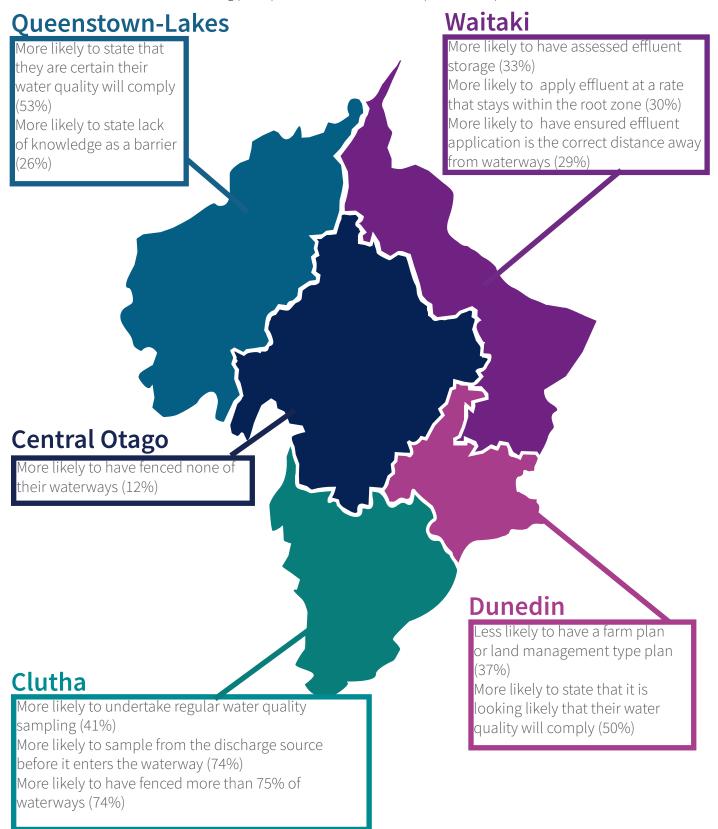
500+ha **(17%)** 21-30 years in the industry **(14%)**

Getting information for Overseer:

500+ ha (7%)

Preparedness/ Action by District

The following image shows statistically significant differences by area. Varying levels of action and preparedness are seen across the districts, with differing perceptions on their levels of expected compliance.



Communication

Lay of the land: Pre-2018



What information do you need to better understand your responsibilities?

All land users

Nothing / understand everything **24%** More specific info 16% General info 14% Fact sheets / pamphlets 10%



Where have you seen info?

79% Newspaper articles Waterlines newsletter 46% **ORC** fact sheets 46% Farm visits 41% **ORC** roadshow 31% Catchment group 29% meeting



2016: Decrease in "More general information required"

₹8%





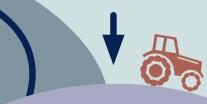
Sheep & Beef

More likely to mention reminders of the rules 6%



Dairy

More likely to mention info about testing 10%



2016: Preferred format?

Printed / 49% hardcopy

Email / 31%



Most useful formats ORC Roadshow 46%

Catchment group 30%

Farm visits 28%

ORC Fact sheets 25%

Where have you seen info?

•					
		DAIRY		SHEEP & BEEF	
	Newspaper articles	U	72%	©	82%
	Farm visits	U	57%	©	38%
	ORC roadshow	U	55%	(1)	27%
	ORC fact sheets	U	50%	**	45%
	Catchment group	T	48%	1	28%
	ORC waterlines	U	46%	**	46%

Where to from here? **QUALITATIVE FINDINGS**

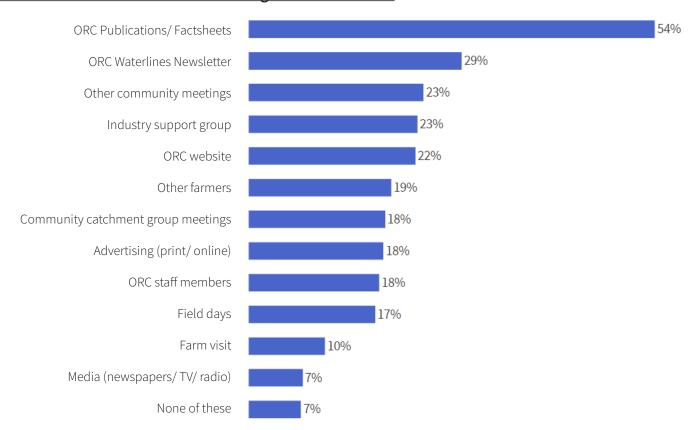
ORC is seen as a trusted source of information. Land users want direct communication from Council on the water quality rules. Multi-layered communication is required to ensure the message is being received.



Information Sources

Land users were asked where, or from whom, they gathered information about their responsibilities for compliance. ORC appears to be a key information source, with top mentions including ORC publications and factsheets (54%) and the ORC Waterlines Newsletter (29%). Seven per cent of land users had used none of these; these were more likely to be land users with a land size of less than 10ha (15% cf. total, 7%).

Where sourced information about changes needed on farm



DEMOGRAPHIC DIFFERENCES

More likely to state:

None of these sources

Less than 10ha (15%)

Other community meetings

21-30 years in the industry (33%)

Industry support group

101-500ha (32%)

500+ha (33%)

ORC Waterlines Newsletter

500+ ha (38%)

41+ years in the industry (38%)

Media

41+ years in the industry (12%)

Field days

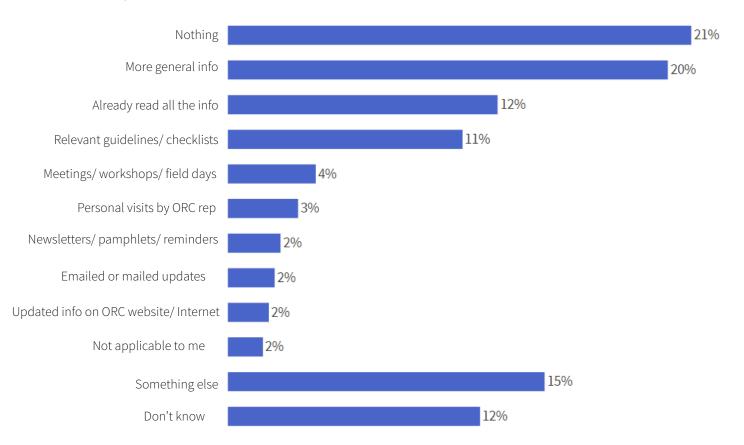
101-500ha (22%)

500+ ha (27%)

Information Required

Under a quarter (21%) of land users felt there was no further information required that would assist them in better understanding what they need to do to comply with the water plan. Twenty per cent required more general information, while 12% stated they had already read all the information. Those who had smaller land sizes (who were more likely to say they had read none of the sources) were also more likely to say that it was not applicable to them (9% cf. total, 2%).

<u>Information required to better understand</u>



DEMOGRAPHIC DIFFERENCES

More likely to say:

Not applicable:

Less than 10ha: (9%) 11-20 years in the industry: **(6%)**

A copy of Plan Change 6A:

Less than 10ha: (3%) Less than 10 years in the industry: (5%)

Emailed or mailed updates:

11-100ha: **(5%)**

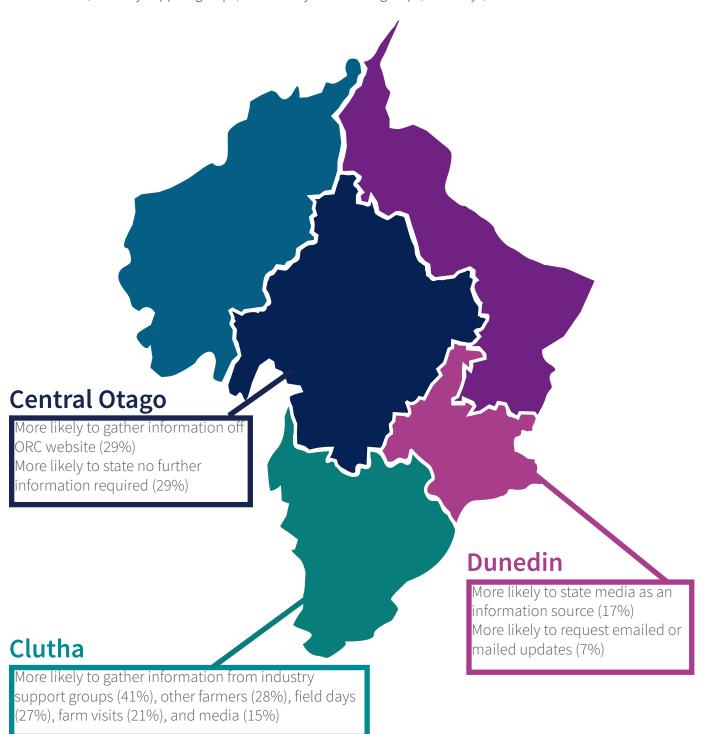
Less than 10 years in the industry: (8%)

Relevant guidelines/ checklists:

21-30 years in the industry: **(21%)**

Communication by District

The following image shows statistically significant differences by area. There were no statistically significant differences noted for Queenstown-Lakes and Waitaki. Land users in Central Otago were more likely to utilise ORC sources to obtain information, while Dunedin land users were more likely to have used no information sources or gather information through the media. Clutha land users appear to be more inclined to use more personal sources of information such as other farmers, industry support groups, community catchment groups, field days, and farm visits.



Land User Profiles

Land user profiles



These profiles look at the results overall for land users in the survey, with key themes and differences noted for each profile.

Subgroup analysis has been conducted amongst land user types in order to investigate any differences which emerge with regards to differing levels of awareness, engagement, perception, and preparedness. This allows ORC to understand the varying land user groups and enhance its engagement with these land users.

Statistical testing has been used to identify key differences, with subgroup results tested against the results for all other subgroups. Any statistically significant differences are commented on within the profiles and often use the terminology 'more likely' or 'less likely' to describe these differences. Where there are significant differences, the proportion is compared to the total in the parenthesis that follows, shown as (xx% cf. total, xx%). For some land user subgroups there are very few significant differences, therefore key findings only are discussed for these land user profiles.

The following table outlines the proportions of land users to which the land user profiles are based on.

Land use type	Expected proportion	Achieved proportion
Sheep and Beef	22%	24%
Dairy	9%	9%
Horticulture	1%	3%
Viticulture	1%	2%
Lifestyle Block (2ha +)	57%	54%
Deer	3%	2%
Other	7%	6%

Sheep and Beef

Sheep and Beef Farmers comprised 24% of the total sample, with these land users more likely to be located in Central Otago (32% cf. total, 23%) and less likely to reside in Dunedin (16% cf. total, 26%). Sheep and Beef Farmers were more likely to have a longer tenure in their current role, with almost half of these land users (48%) holding their current role for longer than 21 years (cf. total, 35%). This level of experience was further iterated through Sheep and Beef Farmers being more likely to have been involved in the Sheep and Beef industry for 31-40 years (24% cf. total, 15%) or more than 41 years (34% cf. total, 19%).

Sheep and Beef Farmers showed high levels of engagement with their environmental and regulatory responsibilities with these land users more likely to be aware of Overseer (60% cf. total, 36%), more likely to be part of a community catchment group (42% cf. total, 27%), more likely to have a farm or land management type plan (48% cf. total, 31%), and more likely to know what a reference flow site is (36% cf. total, 20%). In 2017, 21% of Sheep and Beef Farmers were collecting the information required to run Overseer, this increased to 48% in 2018.

Sheep and Beef Farmers appear confident that their water quality will comply with the permitted thresholds by 2020, with the highest proportion stating it was looking likely their water quality would comply (39% cf. total, 25%). This aligns with a good level of understanding of their responsibilities for ensuring their property complies with water quality rules with these land users more likely to rate their level of understanding as moderate (32% cf. total, 24%) or good (36% cf. total, 25%) and less likely to state they have no understanding (9% cf. total, 29%).

However, it was evident that there is still work to do, with these land users less likely to state they are already compliant (11% cf. total, 19%) or that they are certain they will comply (29% cf. total 36%). Barriers to this compliance related primarily to preparation and time with Sheep and Beef Farmers more likely to state that financial restrictions (15% cf. total, 7%), more work on farm (11% cf. total, 4%), and time (3% cf. total, 2%) were barriers to compliance and were less likely to say a lack of knowledge was a barrier (12% cf. total, 21%).

In terms of actions taken, Sheep and Beef Farmers were more likely to have undertaken most mitigation measures listed, with the exception of any measures pertaining to effluent storage and use. The top 5 mitigation measures undertaken by Sheep and Beef Farmers included: bridges or culverts for stock crossings (73%), maintain ground cover to avoid sheet erosion (66%), use minimum tillage cultivation (65%), graze winter crops from the top to the bottom to leave a buffer between crops and waterways (53%) and ensure a buffer or rank grass or other low vegetation to protect streams from runoff.

As mentioned however, time and resources are key barriers and with Sheep and Beef Farmers more likely to be operating on larger land sizes (101-500ha, 33%, 500+ ha, 37%), these land users were less likely to have fenced off more than 75% of their waterways (38% cf. total, 59%).

Sheep and Beef



This highlights that, for these land users, knowledge and awareness are not the barriers, rather the ability, time, and resource to prepare correctly for the permitted thresholds taking effect. This follows a pattern seen in 2017, whereby Sheep and Beef Farmers identified they do not require any further information to understand their responsibilities (a significant increase from 2016) and that they had a good understanding of what they need to do to make sure their property is compliant. Evidently, trends noted in previous research indicate that these land users are steadily working towards becoming fully compliant by 2020; specifically, when asked regarding changes made on farm, a marked decrease is noted over time for Sheep and Beef Farmers who stated they had not yet made any changes corresponding with an increase in those who had made most or all of the changes to their property.

In light of this, however, in 2017 the highest proportion (46%) had completed some changes on their property, corresponding with results in 2018 which suggest Sheep and Beef Farmers still have work to do; supporting these land users should be practical in nature, with a focus on providing information that may provide alternative cost-efficient and less resource-intensive changes on farm to assist in overcoming the financial and time barriers present for these land users.

Dairy

Dairy Farmers comprised 9% of the total sample, with these land users more likely to reside in Waitaki (33% cf. total, 20%) or Clutha (53% cf. total, 17%). Dairy Farmers were more likely to have been in the industry for 21-30 years (32% cf. total, 17%) and have a total of 6-10 (27% cf. total, 4%) or more than 11 (11% cf. total, 2%) full time staff employed.

Dairy Farmers showed the highest levels of engagement with their environmental and regulatory responsibilities across all land users, with a higher proportion of Dairy Farmers more likely to be aware of Overseer (89% cf. total, 36%), collect information required for Overseer (81% cf. total, 46%), and participate in a community catchment group (63% cf. total, 27%). Additionally, almost half (49%) of Dairy Farmers knew what nitrogen leaching zone they were in, with a further 61% aware of their nitrogen leaching rate. As noted amongst Sheep and Beef Farmers, there is an increase from 2017's results noted for Dairy Farmers collecting the information required for Overseer (81% cf. 2017, 66%).

Although Dairy Farmers appear more engaged with their responsibilities, this seems to create higher levels of concern or perhaps a more realistic expectation regarding their anticipated levels of compliance in 2020, with Dairy Farmers more likely to state it is looking likely their water quality will not comply with the permitted thresholds by 2020 (8% cf. total, 2%), and subsequently less likely to state they are certain their water quality will comply (24% cf. total, 36%).

This is not due to a lack of action, with Dairy Farmers more likely to have actioned mitigation measures, with an average completion of 14.1 of the mitigation measures provided. This is further evidenced by higher proportions, comparative to other land users, completing these actions. In particular, 95% of Dairy Farmers stated they had fenced all permanently flowing waterways, and of those who had not fenced off all waterways, 92% of Dairy Farmers had fenced more than 75%. Additionally, 91% have bridges or culverts, 91% have assessed effluent storage is suitable, 84% ensured effluent application is the correct distance away from a waterway, 83% have a nutrient budget and understand the impact of changes to this budget, and a further 83% avoid ponding or leaching by applying effluent at a rate that stays within the root zone. All other measures were completed by between 44% and 80% of Dairy Farmers. No Dairy Farmers stated they had done none of the mitigation measures.

With this level of action in place, it is important to note that 36% of Dairy Farmers did feel it was looking likely their water quality would comply (36% cf. total, 25%). Considering the amount of action undertaken so far, primary concerns regarding being completely ready appear to relate to collecting information for Overseer (6% cf. total, 1%) and monitoring/testing (6% cf. total, 2%), as well as time (4% cf. total, 2%). When looking at these specific concerns, in addition to expected levels of compliance, it appears that Dairy Farmers, as they become more engaged in the process, appear to be more overwhelmed and confused regarding where they need to be in 2020. This aligns with trends noted in previous years, where a significant decline is noted for Dairy Farmers stating they had made all changes on farm (2017, 12% cf. 2016, 21%) corresponding with the aforementioned levels of concern regarding not being fully compliant by 2020. Considering this, it appears that while Dairy Farmers have a good awareness, knowledge, engagement, and action they still have specific concerns or barriers. Therefore, when communicating with this industry, addressing these specific concerns and providing tailored information that can assure these land users that they are ready, or can be ready, for when the discharge thresholds come into effect will be beneficial.

Lifestyle Block

Lifestyle block owners comprised 54% of the total sample size and were more likely to be located in Dunedin (38% cf. total, 26%) and less likely to be located in Clutha (12% cf. total, 17%) or Central Otago (16% cf. total, 23%). Lifestyle block owners who completed this survey were more likely to be female (47% cf. total, 37%).

Lifestyle block owners showed significantly lower levels of awareness, understanding, and engagement compared to other land users, with a general perception that the new water quality rules were not relevant to them. When asked regarding barriers to compliance, almost half (47%) of lifestyle block owners stated it was not applicable to them (cf. total, 40%). This was further iterated through 29% (cf. total, 26%) stating they required no information to better understand the water plan, regardless of the 43% (cf. total, 29%) who stated they had no understanding of their responsibilities for ensuring their property complies with the water quality rules. A further 45% stated they had no understanding of what they need to do to be fully compliant (cf. total, 31%).

This reduced understanding of the rules coupled with the perception the water plan is irrelevant to lifestyle block owners contributes to a perhaps misguided view of the expected level of compliance, with a quarter (25%) of lifestyle block owners feeling they are already compliant and a further 39% stating they are certain their water quality will comply with the permitted thresholds. Taking into account the stated low levels of understanding, this raises concerns regarding whether lifestyle block owners understand enough to ensure they are fully compliant before 2020.

The number of touch points for engagement, and therefore guidance and understanding, with environmental and regulatory responsibilities is significantly fewer for lifestyle block farmers, with these land users less likely to be involved in community catchment groups (13% cf. total, 27%), less likely to have a farm or land management type plan (13% cf. total, 31%), less likely to know what a reference flow site is (9% cf. total, 20%), and less likely to know what the model Overseer is (15% cf. total, 36%). Additionally, these land users were less likely to know what nitrogen leaching zone they are in (5% cf. total, 13%) or know their annual nitrogen leaching rate (2% cf. total, 12%). Correspondingly, lifestyle block owners were more likely to have made no changes to their property, with 44% of lifestyle block farmers stating they had made none of the mitigation measures listed (cf. total, 28%).

Interestingly, those lifestyle block owners who were involved in a community catchment group appear to have greater levels of understanding and preparation, with these lifestyle block owners more likely to be conducting regular water quality sampling (27% cf. lifestyle block total, 11%), and more likely to be aware of the model Overseer (24% cf. lifestyle block total, 15%). Positively, lifestyle block owners who were members of community catchment groups were also more likely to rate their understanding of their responsibilities as excellent (18% cf. lifestyle block total, 9%) and their understanding of what they need to do to comply as excellent (20% cf. lifestyle block total, 10%). Furthermore, these lifestyle block owners were more likely to have completed some mitigation measures, such as ensuring effluent application is the correct distance away from a waterway (5% cf. lifestyle block total, 1%) and to feed out silage away from a waterway (7% cf. lifestyle block total, 1%).



Lifestyle Block

While lifestyle block owners believe that the water rules are irrelevant to their property type, this is to some extent due to a disengagement and disconnect with understanding rules around rural water quality and how this pertains to all land users in the Otago region. This appears, in part, to be addressed through involvement in community groups, however a large proportion of lifestyle block owners are not engaged in this way with their rural community. Encouraging these land users to participate in discussions about the water rules and their responsibilities or through encouraging networks between lifestyle block owners and other land users in the region may increase the awareness and knowledge amongst lifestyle block owners and will ensure that their expectation of their level of compliance by 2020 is accurate, rather than assumed.



Horticulture/Viticulture

Horticulturalists and viticulturalists comprised 5% of the total sample, resulting in a sample size of n=40, with these land users more likely to be located in Central Otago (78% cf. total, 23%) and more likely to have a land size of between 11 and 100ha (55% cf. total, 23%). Horticulturalists/Viticulturalists were more likely to have been in their industry for between 11 and 20 years (45% cf. total, 24%) and have between 6 and 10 staff (10% cf. total, 4%) or more than 11 staff (8% cf. total, 2%).



Horticulturalists/viticulturalists appear to be evenly spread in terms of their level of understanding of their responsibilities for ensuring their property complies with water quality rules, with 20% of these land users stating they had no understanding of their responsibilities, followed by a further 20% who had a little understanding. Twentyeight per cent had a moderate understanding, while 20% had a good understanding and 13% had an excellent understanding. When looking specifically at what they need to do to be fully compliant, a similar distribution of levels of understanding was noted; 23% had no understanding, 23% had little understanding, 30% had a moderate understanding, 10% had a good understanding, and 15% had an excellent understanding. There were no statistically significant differences noted for levels of understanding for these land users compared to the total.

In terms of engagement with their environmental and regulatory responsibilities, a third (33%) of horticulturalists/viticulturalists were aware of the model Overseer, and 10% were aware what nitrogen leaching zone they were in. A further third (33%) were part of a community catchment group and 28% knew what a reference flow site was. While these results are not statistically significant compared to the total, horticulturalists/ viticulturalists were significantly more likely to conduct regular water quality sampling (40% cf. total, 19%) and were also more likely to have a farm or land management type plan (55% cf. total, 31%).

In terms of mitigation measures, on average, horticulturalists/viticulturalists had completed 2.4 of the mitigation measures listed. The top measures undertaken by horticulturalists/viticulturalists were maintaining ground cover to avoid sheet erosion (50%), use minimum tillage cultivation (40%), and have a nutrient budget and understand the impact of farming changes on these budgets (30%).

Horticulturalists/viticulturalists were more likely to have gathered information about compliance from the ORC website (33% cf. total, 16%) with more general information being the type of information that these land users require to better understand what they need to do to comply with the water plan when the discharge threshold rules come into effect in 2020. This follows a similar pattern seen in the 2015 research whereby horticulturalists/viticulturalists had lower levels of awareness of the rule changes compared to other industries, but for those who were aware were more likely to actively be making changes in order to be compliant. Continuing to communicate with these land users will be important to ensure that horticulturalists/viticulturalists remain engaged with their responsibilities leading up to the rules taking effect in 2020.

Deer

The overall sample structure of land users in Otago was determined using data provided by Agribase and identified that, of land users in the Otago region, Deer farmers should comprise around 3% of the total sample, however only n=13 Deer farming surveys were able to be achieved (2%), therefore these results have been weighted to allow a more representative view of the Deer farming population in Otago. It is important to note that base sizes are still small for this segment and as a result there are no statistically significant differences noted. Sixty-two per cent of the Deer farmers were located in Queenstown-Lakes, with the remaining 38% located in Central Otago.

In terms of awareness, 62% of Deer farmers were aware of the model Overseer, with half of those aware collecting information for Overseer. A further 62% had a farm or land management type plan. Fifteen per cent were aware of what nitrogen leaching zone they were in, with 31% knowing their annual nitrogen leaching rate. Over a third (38%) of Deer farmers were members of a community catchment group. Almost a guarter (23%) of Deer farmers knew what a reference flow site was, with a third (33%) of these land users knowing where their reference flow site was.

Over half (61%) of Deer farmers rated their understanding of their responsibilities to ensure their property complies with water quality rules as good (38%) or excellent (23%) with only 8% stating they had no understanding. A difference is seen for ratings for understanding of what they need to do to be fully compliant, with less Deer farmers rating their understanding as excellent (8%) for this measure, rather stating they have a good (54%) understanding of this. This indicates that Deer farmers understand what is occurring but not directly what they should be doing on their property to ensure they are compliant. With this, only 8% of Deer farmers are conducting regular water quality sampling on their property.

Interestingly, when asked about mitigation measures, Deer farmers have completed, on average, 5 of the mitigation measures listed. The top mentioned measure for Deer farmers was using minimum tillage cultivation (69%), which, incidentally, was the highest proportion for this measure across land user types. Maintaining ground cover to avoid sheet erosion (54%) was the second highest measure for Deer farmers, followed by having a nutrient budget and understanding the changes to the farming system to those budgets (46%).

Deer farmers appeared relatively confident about their expected levels of compliance, with 8% stating they are already compliant, and a further 54% stating they are certain they will be compliant. Thirty-one per cent believe it is looking likely they will be compliant, while 8% were unsure if their water quality will comply with the expected thresholds. The top mentioned barrier for Deer farmers to being fully compliant was a lack of information (17%); these land users appear confident and willing to engage in their responsibilities therefore more tailored information for Deer farmers would assist in ensuring they are making the correct changes on farm and are fully compliant by 2020.

Other

The category of 'other' land users is made up of forestry (16%), other animal farming (61%), and other agriculture (25%). This subgroup makes up 6% of the total sample. These land users appeared to have had a longer tenure in their industry (41+ years, 33% cf. total, 19%) and are more likely to operate properties between 11ha and 100ha (39%) cf. total, 23%).

Thirty-seven per cent of other land users were aware of the model Overseer, and half of these land users were collecting the information required. Fewer of these land users (18%) knew what nitrogen leaching zone they were in or their nitrogen leaching rate (8%). Almost a quarter (24%) were conducting regular water quality sampling and 41% had a farm plan or land management type plan. Twenty-two per cent of other land users were involved in a community catchment group, with a similar proportion knowing what a reference flow site was (20%).

In terms of levels of understanding, results were mixed for these land users, with 31% stating they had no understanding, 12% little understanding, 22% a moderate understanding, 20% a good understanding and 14% an excellent understanding of their responsibilities for ensuring their property complies with water quality rules. A similar distribution of ratings was seen for understanding what they need to do to be fully compliant, with 36% rating their understanding of this as good (20%) or excellent (16%).

Other land users were less likely to state they were already compliant (6% cf. total, 19%) but were more likely to state it is looking likely their water quality will comply with the permitted thresholds by 2020 (37% cf. total, 25%). The key barrier identified by these land users to being ready for the rules to come into effect in 2020 was information (24%). Interestingly, these land users were more likely to say they would like to talk to someone (7% cf. total, 1%).



Points to Consider

Points to Consider

Tailored information by land user Type:

As discussed in the qualitative research and seen through quantitative findings, ORC is seen as a trusted source of information regarding water quality rules. Land users reference a range of ORC materials when looking at the information sources they have used. Continuing to build on this trust and reliance is crucial as ORC and land users move closer to the discharge thresholds taking effect in 2020. However, it is also imperative that ORC recognise that different land user types will be at different stages of this journey, as such, the information needs will vary.

Reviewing trends seen over past research, it is clear that Sheep and Beef and Dairy farmers have very good awareness and understanding of the rules, and are actively making changes on farm to accomodate this. These land users are at a later stage in their journey, whereby they are in search of specific and relevant information, and reassurance that what they are doing is correct. Barriers for these land users do not pertain to needing further general knowledge, rather a more practical assistance or assurance that they are on the right track. Therefore, supporting these land users should be practical and affirming in nature, with a focus on providing information that may provide alternative costefficient and less resource-intensive changes on farm to assist in overcoming the financial and time barriers present for these land users.

This is in contrast to requirements of lifestyle block owners, who have very limited awareness and understanding of the rules and a perception that the rules are not relevant for them. These land users are also less likely to obtain information through direct ORC sources, instead accessing information through the media. As such, these land users believe they are fully compliant and are not making changes on their land. Lifestyle block owners need an easy to digest, simple explanation of the parts of the plan that may directly pertain to them, with a checklist of activities that are realistic for lifestyle block owners to complete on their land.

Similarly, for smaller industries (such as viticulture/ horticulture) communication needs to be tailored to be applicable to the activities relevant for these land users. Previous trends for these land users have shown that land users in these industries who are aware of the rules were more likely to be making changes to their properties. However, it appears that these land users are comparatively still in the beginning stages of their journey, therefore more ground work addressing awareness and understanding needs to be instigated in the first instance.

Tailoring information for the land user type will ensure each land user, at the varying stages of this journey, will recieve the most relevant information for their needs and can apply the information to their situations specifically and with greater clarity of the end result.

Community engagement contributes to a greater understanding and engagement with responsibilities:

Across the board, it appears that land users who are actively engaged in their environmental and regulatory responsibilites are those who are involved in community groups or similar. This is particularly evident amongst the lifestyle block subgroup, whereby significantly higher levels of awareness and understanding (and subsequently action) were seen amongst lifestyle block owners who were involved in community groups. This desire to connect personally regarding responsibilites was also seen in the (unprompted) specific mentions of personal visits, meetings/ workshops etc. when asked what information would assist in understanding the rules. Further to this, mentions are also seen regarding other farmers as a source of information. This was further evidenced in the results seen in 2015, whereby ORC Roadshow, catchment group meetings, and farm visits were the most preferred sources of information.

Encouraging land users (particularly land user types with currently low awareness and understanding) to get involved with their communities whether throughinvolvement with a community catchment group or through encouraging lifestyle block owners to connect with their rural counterparts will allow for a transfer of knowledge amongst all land users in the rural community with the intention of encouraging all land users to engage with their responsibilities and ultimately understand where they fit in the overall picture.

Points to Consider

Consistency in data collection and questions to monitor smaller land user types:

Surveying in 2015, 2016, 2017, and 2018 has been beneficial to follow the increase in awareness and understanding, particularly amongst Sheep and Beef and Dairy farmers. We can see that for Sheep and Beef and Dairy as their awareness grew their information needs changed, and being able to actively support all land users by providing the most relevant information will be integral in the overall level of compliance seen by 2020. However, in order to fully track and forsee whether all

land users will be compliant by 2020 a more consistent approach to the data collection and survey sampling could be instigated in future years to monitor the lifestyle block owners and smaller industries as they move through this journey and their information needs start to become more specific in nature. With this, continuing to include all land user types in subsequent surveys, and consitently monitoring their information needs and levels of understanding will assist in developing resources that will be most applicable to each land user type.

Appendix

Appendix One: Questionnaire

are the	re we start can you please confirm that you main person responsible for making decisions day to day land use for your/the property, ss or farm that you manage or own?	regard	w I am just going to ask a few questions ding the land itself. Which of the following cts is the main part of your property in? Waitaki
()	Primary decision maker Joint decision maker None - THANK AND CLOSE	() () () ()	Central Otago Queenstown Lakes Dunedin Clutha
	ly, which of the following best describes the se activities that occur on the land you manage?	()	DO NOT READ OUT- None of these (screen out)
Multiple	e responses allowed if more than one property	5) Wh	at is the size of the property you manage?
[]	Sheep and beef farmer Dairy Horticulture		res:
[]	Viticulture Lifestyle block owner (2 hectares/ 5 acres	6) And	d, at its peak, what is your stocking rate?*
	and above only) Deer Forestry Other animal farming (e.g. pigs), please specify: None of the above (Screen out) Other agriculture (e.g. crop farming):	rules affect	e next few questions are about the Water Plan and your level of understanding of how they you. They are also about understanding what ties you are undertaking to comply with the ules.
[]		-	ou conducting regular water quality sampling e property?
ONE O	RVIEWER: ONLY ASK IF THERE IS MORE THAN PTION LISTED BELOW- IF ONLY ONE, SELECT IT RESS NEXT.	()	Yes No
And, w	hich of these is the main land use activity?	8) Are	you sampling from:
[] [] [] []	Sheep and beef farmer Dairy Horticulture Viticulture Lifestyle block owner (2 hectares/ 5 acres and above only)	[]	READ OUT: The waterway The discharge source before it enters the waterway DO NOT READ OUT: Neither of these
[]	Deer	-	y are you not conducting water quality
[]	Forestry Other animal farming (e.g. pigs), please specify:	samp	ling? DO NOT READ OUT* No waterway to sample
[]	Other agriculture (e.g. crop farming):	()	Don't need to Other:

10) Do	you have a farm plan or land management lan?	15) And, do you know your annual nitrogen leaching rate?	
()	Yes No	() Yes () No	
11) Do you know what a reference flow site is?		16) Overseer models the nutrients coming onto and out of a farming system. Before this survey, were you	J
()	Yes No	aware of the model Overseer?	
12) An	d do you know where your reference flow?	() Yes- aware () No- not aware	
()	No, I don't know Yes (Record unprompted awareness):	17) Have you been collecting information needed to run the model Overseer?*	
	m going to read out a list of reference flow sites, of these reference flow sites is relevant to your rty?	() Yes () No 18) Why not? *	
() () () () () () () () () () () () () (I don't know Bengerburn at Booths Cardrona at Mt Barker Catlins at Houipapa Dart at The Hillocks Kakanui at Clifton Falls Bridge Leith at University Foot Bridge Lindis at Ardgour Road Lindis at Lindis Peak Lovells Creek at SH1 Manuherikia at Campground Manuherikia at Ophir Matukituki at West Wanaka Mill Creek at Fish Trap Nevis at Wentworth Station Pomahaka at Burkes Ford Pomahaka at Glenken Shag at Craig Road Shotover at Peats	19) Are you part of a community catchment group or similar?* () Yes () No 20) Which group are you associated with? * 21) In May 2014 Otago Regional Council introduced new rules to the Otago Water Plan to improve the water quality of lakes, rivers and wetlands across the region. These changes are also known as Plan Change 6A. Using a 1 - 10 scale where 1 means I have no	- e
() () () ()	Silverstream at Gordon Road Taieri at Canadian Flat Taieri at Outram Taieri at Sutton Taieri at Tiroiti	understanding and 10 means I have an excellent understanding, can you please indicate how well you understand your responsibilities for ensuring your property complies with those water quality rules.	ı
() () () () () ()	Taieri at Waipiata Tokomairiro at West Branch Bridge Waianakarua at Browns Waikouaiti at Confluence Waitahuna at Tweeds Bridge Waiwera at Maws Farm	 () 1 - I have no understanding of my responsibilities () 2 () 3 () 4 () 5 () 6 	35
14) Do	you know what nitrogen leaching zone you	() 7 () 8 () 9	
()	Yes No	() 10 - I have an excellent understanding of my responsibilities	

unders	d, using the same scale, where 1 is no standing and 10 is an excellent understanding, rell do you understand what you need to do to y compliant with the water quality rules?	[]	Temporarily fenced any temporary streams if grazing while water is flowing Have sediment traps to filter runoff Ensure a buffer of rank grass or other low
() () ()	1 - I have no understanding 2 3	[]	vegetation to protect streams from runoff Assessed effluent storage is suitable Reduced the amount of rainwater going into
()	4 5	[]	effluent pond Avoid ponding or leaching by applying effluent at a rate that stays within the root zone
() ()	6 7 8	[]	Ensured effluent application is the correct distance away from a stream, river, lake or wetland Prevents silage leaching into a waterway
()	9 10 - I have an excellent understanding	[]	Feed out silage away from a waterway Sufficiently wilts silage before adding to silo or stack
-	nere, or from whom, have you gathered nation about your responsibilities for	[]	Ensures silage pits are well constructed and watertight Has a nutrient budget and understands the
•	T READ OUT, RECORD ALL MENTIONS, PROMPT IF	[]	impacts of changes to the farming system to those budgets Retires or space plants steep eroding land to
[]	Otago Regional Council Publications/ Factsheets Field days	[]	stabilise it Maintains ground cover (of grass or crops) to avoid sheet erosion
[] []	ORC Waterlines Newsletter Otago Regional Council website Industry support group such as Dairy NZ, Beef	[]	Uses minimum tillage cultivation Graze winter crops from the top to the bottom to leave a buffer between crops and waterways
[]	and Lamb etc Advertising (print or online) Community catchment group meetings	[]	(DO NOT READ OUT) None of these
[]	Other Community meetings Farm visit Other (please specify):	26) An	d, is there anything else that you have done?
[]	None of these ORC Staff members		
[] 24) Wh	Other farmers nat information, if any, do you require to better		ughly, what proportion of waterways have you don your property?
water	stand what you need to do to comply with the plan when the discharge threshold rules come fect in 2020? Please be as specific as possible.	()	READ OUT None 1% to 25% 26% to 50%
Record	l verbatim	()	51% to 75% More than 75%
measu	date, which of the following mitigation ires do you have in place on your land to ve water quality?	until 1 land n your o discha	e discharge thresholds don't become operative. April 2020. This gives you time to review your nanagement practices and, if needed, modify perations so your water quality meets the arge thresholds. You can apply for a short-term
[]	Fenced all permanently flowing waterways (including wetlands)		rce consent, which will give you more time to further changes on your property.
[]	Have bridges or culverts for stock crossings Developed and implemented a riparian management plan (include any plantings)	best d	his in mind, which of the following statements escribes your expected level of compliance with rmitted activity thresholds in 2020?

READ OUT

- I am certain my water quality will comply with the () permitted thresholds by 2020
- It is looking likely my water quality will comply () with the permitted thresholds by 2020 and I won't need to apply for a consent
- I am not sure if my water quality will comply with () the permitted thresholds by 2020, and I may need to apply for consent
- It is looking likely my water quality will not () comply with the permitted thresholds by 2020 and I will need to apply for consent
- I am already compliant so when 2020 arrives I () won't need to make any changes or apply for consent

29) What are the barriers for you, if any, to being
completely ready for the rules to come into effect in
2020?

30) That's all the questions I have for you about the water quality rules, I just have a couple of questions to ensure we get a good cross section of respondents. Can you please tell me how long you have been in your current role?

- () Less than 5 years
- () 6 - 10 years
- () 11 - 20 years
- () 21 + years
- () Refused

31) And how long have you been in your industry?

- () Less than 10 years
- () 11 - 20 years
- () 21 - 30 years
- 31 40 years ()
- 41+ years ()
- () Refused

32) Including yourself, how many full time staff are employed in your business?

- 5 or fewer
- () 6 - 10
- () 11 - 20
- () 21 - 50
- () 51+
- () Refused

33) That is all the questions I have for you today, in
case you missed it my name is {NAME} and this survey
has been completed on behalf of Otago Regional
Council. Do you have any other comments that
you would like to make about what we have been
discussing today?

RECORD VERBATIM*	
34) Thank you for your time, have a good day.	
Interviewer: Record gender*	

() Male

- () Female

Appendix Two: Community Catchment Groups

- Manuherikia Catchment Group/Water Company
- Low Burn Catchment Group/Low Burn Valley Irrigation
- Sow Burn Water Users Group
- Earnscleugh Irrigation Co
- Kyeburn Water Takers/ Catchment Group
- Cardrona Valley Catchment/Water Scheme
- Poolburn
- Pigburn Water Users Group
- Luggatt Creek Irrigation
- Ida Valley Irrigation Group
- Lindis Catchment Group
- Last Chance Irrigation Company/Scheme
- Galloway Irrigation Society
- Thompsons Creek Irrigation Group
- Northburn Water Supply
- Irrigation Company Lauder Creek Irrigation Company
- Maniototo Irrigation Co
- Upper Taieri
- Strath Taieri Irrigation Group
- Lower Waitaki Irrigation Co (LWIC)
- Waitaki Irrigators Collective (WIC)
- North Otago Irrigation Company (NOIC)
- NOSLAM
- Kakanui Irrigators
- Shag River Catchment Group
- Arrow Irrigation Company/Scheme
- Local Silver Stream Waterways
- West Taieri Flood Scheme
- Pomahaka Water Care Group
- Waipahi Water Group
- Tokomairiro Water Group
- Tuakitoto Group
- Clutha Development
- Waitahuna Water Scheme
- Tuapeka Catchment Group/Tuapeka West Water Scheme
- Waiwera Stream Catchment
- Hawea Irrigation Company
- Long Grass Place Waterproof
- Queensberry Irrigation Group
- Wanaka Catchment Group
- The GVI
- The Pisa Irrigation Company
- Dunstan Creek
- The Triangle Group
- Island Linden Strings

- Bannockburn
- Loess Lane Owners' Association
- Eweburn Creek Catchment Group
- Orchard and Farmers Group
- Fullstand Company& Blackstone Irrigation Company
- Shotover River
- West Side Irrigation
- Indigo Water
- The Waianakarua Catchment
- Wanaaka Catchment Group
- North Land
- Bern Cottage Creek
- The Gibbston Community Water Scheme
- NOFMLA

Environmental Desktop Risk Assessments

Martin King Manager Environmental Services





Scope

- All rural and large lifestyle properties over the next two years are going to be assessed to help landowners to understand any action they may need to take so they can meet the rules in the Water Plan.
- The desktop assessment is looking at information we already have including:
- Geophysical aspects of the property, including soil, drainage, slope & nitrogen leaching risks
- Whether the property has waterways
- Whether the property has constructed drains & where they may go
- The water quality of the catchment forms part of the assessment.
- Approximately 4,700 properties have been completed in the desktop audit to date. There are approximately 10000 properties to do.

Definitions of Assessment Criteria

- SLOPE uses 1:50 000 scale of NZ Land Resource Inventory survey derived from stereo aerial photograph interpretation, field verification & measurement in horizontal degrees using the dominant slope.
- N LEACHING RISK combines all relevant factors, including soil properties, rainfall/drainage, stock numbers & type & existing land use & management practices (irrigation) to estimate N leaching for existing land use.
- DRAINAGE ON PROPERTY aerial assessment looking at the slope of the land, if there are any swales, drains, tile drains or waterways going through the property

<u>Definitions of Assessment Criteria</u> <u>cont</u>

- WATERWAYS using the physical characteristics of NZ rivers.
 Individual sections are mapped using physical factors like climate, topography, Geology, Land Cover & Valley landforms.
- DRAINAGE RISK –using different types of soil profiles including chemical, physical & mineralogical characteristics.

What are the results so far?

- Results of the assessment are identified as high/medium/low risk of non-point sources discharges from property.
- Properties considered high risk are determined by the overall criteria grade of 10 or above.

What are the results so far? cont

- Waitaki District
- >10 360 properties
- <10 623 properties
- Dunedin City
- >10 715 properties
- <10 1080 Properties
- Queenstown District
- >10 157 properties
- <10 1000 properties
- Clutha & Central Otago districts have not yet been completed.

Where to From Here?

- Every land owner to be advised in written report of the findings
- Landowners will be encouraged to contact Council to discuss the findings
- High Risk properties may undergo a site inspection for further validation and discussions with landowners.
- Analysis of information will go towards Council understanding of Water Plan effectiveness.

Plan Change Process

Council Meeting September 2018



Council functions under the Resource Management Act (RMA) 1991

Functions

- Regional Council functions are listed under s30 (water, air, coast, soil conservation, indigenous biodiversity, etc)
- Territorial Authorities functions are listed under s31 (land use, subdivision, noise, indigenous biodiversity)
- Policy Statement and Plan content ss62-70
- Overlaps between RC and TAs Regional Policy Statement role to resolve
- Plans need to give effect to the RPS and any National Policy Statement

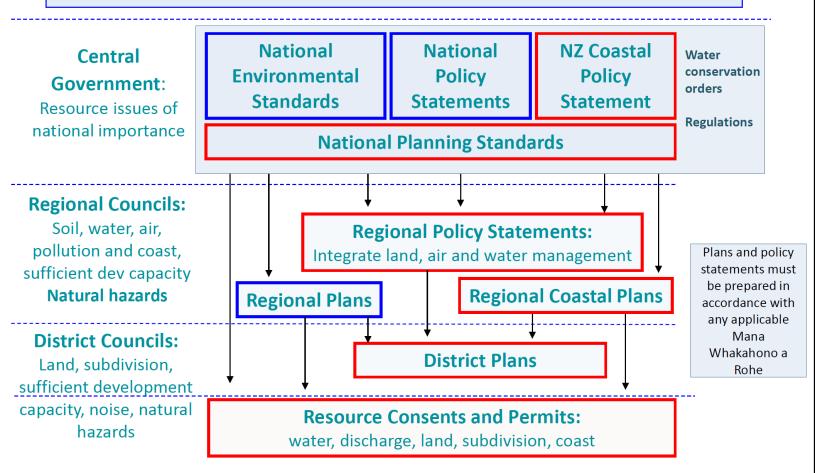
s10(1) LGA states the two purposes of local government:

- (1) To enable democratic local decision-making and action
- (2) To meet the current and future needs of communities

It also requires all councils to separate policy setting from operational functions as far as possible

Legislative Hierarchy

Resource Management Act Responsibilities:



National Policy

- Five National Policy Statements , and one draft NPS
 - NZ Coastal Policy Statement
 - NPS for Freshwater Management
 - NPS Renewable Electricity Generation
 - NPS Urban Development Capacity
 - NPS Electricity Transmission
 - Draft NPS Indigenous Biodiversity
- Six National Environmental Standards, plus more in draft
 - NES Air Quality
 - NES Drinking Water
 - NES Telecommunications Facilities
 - NES Electricity Transmission
 - NES Soil Contamination for Human Health
 - NES Plantation Forestry

NPSFM

- Came into effect in 2011
- Amended in 2014 and 2017
 - Introduced FMU's
 - Introduced National Objectives Framework
 - Prescriptive CA1 CA4 process (values, objectives, limits, targets)
 - Overarching Objectives and Policies

NPSFM – Objectives

- Freshwater objectives:
 - are a description of the intended state of the water and are expressed in relation to specified attribute(s)
- Once values are set, freshwater objectives must be set using the compulsory attributes in Appendix 2 of the NPSFM, plus any other attributes considered appropriate.
- Relationship with limit setting is an iterative one.

NPSFM – Limit Setting

- Definition of a limit:
 - Is the maximum amount of resource use available, which allows a freshwater objective to be met.
- Six principles for setting limits. A limit:
 - Is about the amount of resource use, rather than the state of the water;
 - Should be a quantifiable amount that expresses the maximum available for use;
 - Is only effective if it is articulated in a way which will manage the cumulative effects of resource users;
 - Should be underpinned by information obtained through freshwater accounting;
 - Must be clearly articulated in the plan, including the point at which further allocation will stop so that over allocation is avoided;
 - Can be on any type of resource use.

NPSFM – Over allocation

Over-allocation definition:

The situation where the resource has been allocated to users beyond a limit; or is being used to a point where a freshwater objective is no longer being met.

Targets:

Where something is already over the limit, a **target** is a limit which must be met at a defined time in the future.

Who is doing what?

- Environment Southland
 - Proposed Southland Water and Land Plan 2014 on going (in appeals stage)
 - Southland Science Project 2015 2018; &
 - Southland Economic Project 2015 2018
 - Values conversation commencing 2019
- Greater Wellington Regional Council
 - Whaitua process
- Bay of Plenty Regional Council
 - Plan Change 10 Lake Rotorua Nutrient Management
 - Plan Change 9 Regional Water Quantity

Progressive Implementation **Programme**

- Objective E1
- Time staged provisions
 - PIP must be prepared by 31 Dec 2018
 - Complete implementation by 31 Dec 2025, or 2030 if not practicable
 - Initial thoughts from PIP for ORC (draft)

Draft PIP

Draft Progressive Implementation Plan

Pursuant to Policy E1 of the National Policy Statement for Freshwater Management 2014(amended 2017), the Otago Regional Council gives public notice of its Progressive Implementation Programme for implementing Policies AA1, A1, A2,A3,A4,A5,A6,A7,B1,B2,B3,B4,B5,B6,B7, B8,C1,C2,CA1,CA2,CA3 and CA4 as outlined below:

Stage	Process	Timeline
Establish Freshwater Management Units(FMU's)	Objective CA 1 and Policy CA1 outline the process for setting Freshwater Management Units	TBC
Review of Water Plan	Stocktake and gap analysis of water plan against the NPSFM Stocktake and gap analysis against the NES Drinking Water	TBC
Science Work Programme to understand baseline science knowledge	Stocktake of baseline SoE data for each water catchment (grouped into FMU's)	TBC
Values Conversation	Policy CA2 outlines the value setting process	TBC
Science Work Programme to support Limit setting	Using the values to understand the science work programme required to set objectives	TBC
Plan Change		Notified by December 2025

ORC Plans and reviews

	Water Plan	Air Plan	Coast Plan	Waste Plan
Date notified	1998	1998	1994	1994
Date operative	2004	2003	2001	1997
Number of plan changes / amendments	14 (+1 underway)	2	2	0

Policy work programme

- Water Plan Review, including
 - NPSFM compliant / S.79 requirements
 - Gap analysis consider requirements for land use controls
 - National Planning Standards
 - Aim to notify by 2025

Initial Timeline for Water Plan Review

18/19

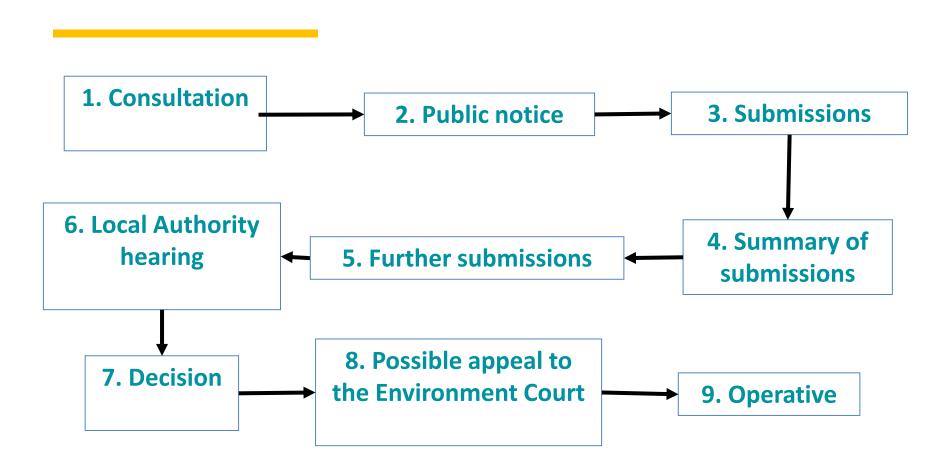
Background analysis Plan drafting Notify

Plan Change Process

- RMA sets out three processes that can be followed in undertaking a Plan review or change process:
 - Standard (Sch1)
 - Collaborative
 - Streamlined



Standard Process



Section 32 – underpins the process

S.32 of the RMA is integral to ensuring transparent, robust decision making on RMA plans and policy statements (MFE 2014)

- Supports evidence-based approach to policy development
- Helps to identify different options and approaches, costs and benefits, consequences and trade offs
- Demonstrates how the Plan is the most appropriate way of achieving the purpose of the RMA
- Provides the community with an understanding and rationale of the policy approaches and methods used

Roles

Councillors

- Make well-informed decisions
- Set and agree to the policy direction
- Approve the notification of the Plan

Staff

- Give you the best advice they can, based on their experience and technical advice
- Respond to your questions
- Advise you of risks and implications

Questions

The National Policy Statement for Freshwater Management

What the Freshwater NPS is about

National policy statements are issued by central government to provide direction to local government about how they carry out their responsibilities under the Resource Management Act 1991 when it comes to matters of national significance.

The matter of national significance to which the National Policy Statement for Freshwater Management (updated 2017) (Freshwater NPS) applies is the management of fresh water through a framework that considers and recognises Te Mana o te Wai as an integral part of freshwater management.

What it requires

In a nutshell, the Freshwater NPS directs regional councils, in consultation with their communities, to set objectives for the state of fresh water bodies in their regions and to set limits on resource use to meet these objectives.

Some of the key requirements of the Freshwater NPS are, but not limited, to:

- consider and recognise Te Mana o te Wai which recognises the health of the environment, the health of the waterbody and the health of the people, in freshwater management
- safeguard fresh water's life-supporting capacity, ecosystem processes, and indigenous species
- safeguard the health of people who come into contact with the water
- maintain or improve the overall quality of fresh water within a freshwater management unit
- Set water quality targets to contribute to the national target of making 90 percent of New Zealand rivers and lakes swimmable by 2040.
- protect the significant values of wetlands and outstanding freshwater bodies
- take an integrated approach to managing land use, fresh water and coastal water
- involve iwi and hapū in decision-making and management of fresh water.
- Consider the economic well-being of communities, within resource use limits.
- Implement the national objectives framework for setting FMU's, identifying the values that tāngata whenua and communities have for water, and setting limits (water quality and quantity) to achieve objectives
- set limits on resource use (eg, how much water can be taken or how much of a contaminant can be discharged), and identify appropriate methods to phase out any over-allocation (this may take some time)

Implementation requirements

The Freshwater NPS must be fully implemented no later than 31 December 2025 (or 31 December 2030 in certain circumstances). A progressive implementation programme must be prepared by a regional council to set out how it will implement the NPSFM by either 2025 or 2030. This needs to be publicly notified and progress must be reported on annually.

Source: http://www.mfe.govt.nz/fresh-water/acts-and-regulations/national-policy-statement-freshwater-management/2017-changes and http://www.mfe.govt.nz/fresh-water/national-policy-statement-freshwater-management/2017-changes and http://www.mfe.govt.nz/fresh-water/national-policy-statement/about-nps