



Our Ref A610586

Committee meetings Wednesday 14 October 2015

Following are the agendas for the Committee meetings to be held on Wednesday 14 October commencing at 1.00 pm. The venue is the Council Chamber, 70 Stafford Street, Dunedin, and members of the public are welcome to attend.

Full detailed reports referred to in the agendas are available on the Council website, or by contacting the Committee Secretary – see contact details below.

Committee agendas

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A handwritten signature in black ink that reads "Janet Favel". The signature is written in a cursive, flowing style.

Janet Favel
Committee Secretary

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OTAGO REGIONAL COUNCIL**Agenda for a meeting of the Finance and Corporate Committee
to be held in the Council Chamber, 70 Stafford Street, Dunedin
on Wednesday 14 October 2015 commencing at 1pm**

Membership:

Cr David Shepherd (Chairperson)
Cr Gary Kelliher (Deputy Chairperson)
Cr Graeme Bell
Cr Doug Brown
Cr Louise Croot MNZM
Cr Michael Deaker
Cr Gerrard Eckhoff
Cr Trevor Kempton
Cr Sam Neill
Cr Gretchen Robertson
Cr Bryan Scott
Cr Stephen Woodhead

Apologies:

Leave of absence:

In attendance:

Please note that there is an embargo on agenda items until 8.30 am on Monday 12 October.

CONFIRMATION OF AGENDA

PUBLIC FORUM

MINUTES

The minutes of the meeting held on 2 September 2015, having been circulated, for adoption.

Matters arising from minutes

PART A - RECOMMENDATIONS

Item 1

2015/1183 **Schedule of Meetings to September 2016.** DCS, 1/10/15

The report outlines the schedule of Ordinary Council and Committee Meetings to September 2016 with local body elections being held 8 October 2016.

Item 2

2015/1181 **Councillor Plan change hearing remuneration.** DCS 30/9/15

The report outlines the remuneration for Councillors for plan change hearings.

Item 3

2015/1185 **Passenger Transport Update.** DCS, 1/10/15

The report provides an update on various transport matters including: Noting delays outside Council's control, with procurement of the replacement ticketing system, developments regarding the Crown's intent to bulk fund the SuperGold free off-peak travel scheme, progress on the design development of the new Dunedin bus hub and advising on the commencement of the Wakatipu Network review and business case process.

Item 4

2015/1174 **Executive report.** DCS, 2/10/15

The report describes significant activities carried out by the Finance and Corporate sections since the last meeting of the Committee.

PART B – ITEMS FOR NOTING

Item 5

2015/1170 **Regional Collaboration and Shared services.** DCS, 23/9/15

The report informs Council of the collaboration and shared services with others both in Otago and wider as encouraged by central government.

OTAGO REGIONAL COUNCIL**Minutes of a meeting of the Finance and Corporate Committee held in
the Council Chamber, 70 Stafford Street, Dunedin
on Wednesday 2 September 2015 commencing at 11.35am**

Present: Cr Gary Kelliher (Deputy Chairperson)
Cr Graeme Bell
Cr Doug Brown
Cr Louise Croot MNZM
Cr Gerrard Eckhoff
Cr Trevor Kempton
Cr Sam Neill
Cr Gretchen Robertson
Cr Bryan Scott
Cr Stephen Woodhead

Apologies: Cr Michael Deaker.
The apology was accepted on the motion of Crs Kempton and Croot.

Leave of absence: Cr David Shepherd (Chairperson)

In attendance: Peter Bodeker
Jeff Donaldson
Scott Maclean
Nick Donnelly
Fraser McRae
Gavin Palmer
Charlotte Stickings
Sharon Bodeker (item 3)

CONFIRMATION OF AGENDA**MINUTES**

The minutes of the meeting held on 22 July 2015, having been circulated, were adopted on the motion of Crs Croot and Bell.

Matters arising from minutes

There were no matters arising from the minutes.

PART A - RECOMMENDATIONS

Item 1

2015/1130 **WW1 Commemoration.** DCS, 28/8/15

The report presented costs for the proposed distribution to schools of books relating to WW1.

All were in agreement that the two books should be distributed to all Primary, Intermediate and Secondary schools in Otago.

Councillors were pleased to see Council marking the WW1 commemoration and agreed that the books chosen were suitable. It was noted that further long-term Council commemoration was not mentioned in the report. Mr Bodeker advised that he was to meet with Ms Sue Bidrose, CE Dunedin City Council, and would discuss other forms of commemoration.

It was agreed that a note would go in with the books stating that it was a gift from the Regional Council to the community.

Cr Kempton moved

Cr Bell seconded

That Council proceed with the purchase and distribution of the two books as detailed above.

Motion Carried

Item 2

2015/1114 **Inactive Subsidiaries – Change of Director and Annual Return 2015.**

DCS, 21/8/15

The report noted that for name protection purposes, three companies bearing the Regional Services name were registered in April 2006. The Companies Act required that an Annual Return be completed for each of the companies, which were inactive and did not have constitutions.

It was queried whether ORC need to retain these companies, and it was noted that it was only a \$45 annual fee and meant that ORC retain the company names. Mr Bodeker was to report back to Councillors to confirm reasons for retaining the name.

Cr Woodhead moved

Cr Croot seconded

1. *That it shall not be necessary for Regional Services Limited to hold an Annual General Meeting under section 120 of the Companies Act 1993.*

2. *That no auditors be appointed for Regional Services Limited under section 196 (2) of the Companies Act 1993.*
3. *That Nick Donnelly be appointed as Director of Regional Services Limited and Wayne Scott cease to be a Director of Regional Services Limited.*
4. *That it shall not be necessary for Regional Pest Services Limited to hold an Annual General Meeting under section 120 of the Companies Act 1993.*
5. *That no auditors be appointed for Regional Pest Services Limited under section 196 (2) of the Companies Act 1993.*
6. *That Nick Donnelly be appointed as sole Director of Regional Pest Services Limited and Wayne Scott cease to be a Director of Regional Pest Services Limited.*
7. *That it shall not be necessary for Regional Monitoring Services Limited to hold an Annual General Meeting under section 120 of the Companies Act 1993.*
8. *That no auditors be appointed for Regional Monitoring Services Limited under section 196 (2) of the Companies Act 1993.*
9. *That Nick Donnelly be appointed as sole Regional Monitoring Services Limited and Wayne Scott cease to be a Director of Regional Monitoring Services Limited.*

Motion Carried

PART B – ITEMS FOR NOTING

Item 3

2015/1111 **12 month review to 30 June 2015.** DCS, 20/8/15

The report summarised project progress for the 12 months to 30 June 2015. The full report was circulated separately with the agenda.

Mr Donnelly noted that this information fed into the Annual Report.

It was commented that there was a high level of deferment in the report and the view was put forward that more care was needed in the planning process to avoid deferment where possible. Mr Bodeker added that the level of detail being seen on planning for 1C/6A was being done for that reason.

It was noted that different work relating to water and air from that consulted on in the LTP had been carried out and these changes should be discussed by Councillors in a public forum to ensure community awareness.

Clarification was made that capital works money unspent stayed in the project and would be spent the following year.

It was noted that there had been an overspend on environmental incidents, and Mr Donaldson responded that it was not possible to fully budget for hours put into investigations.

It was suggested that a workshop be held to look at Council's position for this year's work and what was planned for next year, noting that a workshop could assist the strategic approach. Mrs Bodeker advised that the four month review process could be completed in time for a 25 November workshop. It would be useful to carry out a comparison with the previous 12 month review.

Mr Bodeker commented that the 6A overspend was expected, as Council had made a commitment to do this work. The main focus of work was additional to what was initially planned; field days, drop in sessions, and fact packs were all successful and this model could be used again. He also noted that reports on project changes and budget effects could be brought to Committee meetings for Councillors' attention in future.

Mr Donaldson confirmed that prohibited and permitted activities, dairy, and forestry audits had been carried out:

Cr Woodhead moved
Cr Eckhoff seconded

That the report be received.

Motion carried

Item 4
2015/1113 **Director's report.** DCS, 21/8/15

The report described significant activities carried out by the Finance and Corporate sections since the last meeting of the Committee.

It was noted that David Benham would be in Dunedin for the 9 September Audit and Risk Subcommittee meeting, and would also attend the Council meeting on 16 September.

It was suggested that ratepayers be reminded through the website and social media that they could pay their rates in installments and/or online.

Cr Croot moved
Cr Kempton seconded

(1) *That this report be received.*

(2) *That the payments and investments summarised in the table above and detailed in the tabled schedule, totalling \$8,432,090.80 be endorsed.*

Motion carried

PART C – PUBLIC EXCLUSION

Cr Neill moved
Cr Woodhead seconded

That the public be excluded from the following part of the proceedings of the meeting.

The general subject of the matters to be discussed while the public is excluded, the reason for passing this resolution in relation to the matter, and the specific grounds under Section 48(1)(a) of the Local Government Information and Meetings Act 1987 for the passing of this resolution are as follows:

	<i>General subjects to be considered</i>	<i>Reason under LGOIMA for passing this resolution</i>	<i>Grounds under S.48 for the passing of this resolution</i>
<i>Item 5</i>	<i>In Committee portion of the minutes of the Finance and Corporate Committee meeting held on 22 July 2015, for noting</i>	<i>To maintain the effective conduct of public affairs through the free and frank experssion of opinions by or between or to members or officers or employees of a local authority. (S72(f)(i))</i>	<i>S.48(1)(a)(i)</i>
<i>Item 6</i>	<i>The Charter of Understanding between Southern Territorial Authorities and Te Ao Marama Incorporated</i>	<i>To maintain the effective conduct of public affairs through the free and frank experssion of opinions by or between or to members or officers or employees of a local authority. (S72(f)(i))</i>	<i>S.48(1)(a)(i)</i>

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by Section 6 or Section 7 of that Act or Section 6 or Section 7 or Section 9 of the Official Information Act 1982 as the case may require, which would be prejudiced by the holding of the whole or the relevant part of the proceedings of the meeting in public are as shown above with respect to each item.

Motion carried

Following discussion of items 5 and 6,

Cr Kempton moved
Cr Croot seconded

That the meeting resume in open session.

Motion Carried

Councillors noted that this was Mr Donaldson's last meeting as Director Environmental and Monitoring Operations, and thanked him for his work in that role, and for his assistance particularly to Regulatory Committee meetings.

The meeting closed at 12.30pm

Chairperson

REPORT

Document Id: A844267

Report Number: 2015/1183

Prepared For: Finance and Corporate

Prepared By: Director Corporate Services

Date: 1 October 2015

Subject: **Schedule of Meetings to September 2016**

1. Précis

A schedule of meetings has previously been adopted for the 2015 calendar year through to December 2016. Meetings need to be set for the 2016 calendar year through to the end of September 2016 with local body elections being held on 8 October 2016.

2. Schedule of Meetings

A draft meeting schedule through to September 2016 is attached for consideration.

The schedule has been predicated on a six week cycle with a single Committee day two weeks prior to Council meetings. Where necessary the cycle is extended to seven weeks to ensure a better fit with other events and reporting requirements. September includes three weeks between Committee and Council meetings to allow additional time for adoption of the Annual Report at a Council meeting in the final week of September. There is at least one meeting in every calendar month and the overall number of meetings remains consistent with previous years.

Workshops would be arranged in conjunction with the scheduled meetings. The proposed schedule identifies statutory holiday dates and other key dates that have been taken into consideration.

3. Recommendation

That the attached schedule of Ordinary Council and Committee meetings to September 2016 be adopted.

Nick Donnelly

Director Corporate Services

Schedule of Ordinary Council & Committee Meetings to October 2016

2015		Meeting	Other Key Dates
27 January	(Wed)	Committees	
6 February	(Sat)		Waitangi Day
8 February	(Mon)		Waitangi Day observance
10 February	(Wed)	Council	
9 March	(Wed)	Committees	
21 March	(Wed)		Otago Anniversary Day
23 March	(Wed)	Council	
25 March	(Fri)		Good Friday
28 March	(Mon)		Easter Monday
29 March	(Tues)		ORC Otago Anniversary Day observance
20 April		Committees	
25 April	(Mon)		Anzac Day
11 May	(Wed)	Council	
6 June	(Mon)		Queen's Birthday
8 June	(Wed)	Committees	
22 June	(Wed)	Council	
20 July	(Wed)	Committees	
22-23 July	(Fri-Sat)		LGNZ Regional Tour Southland
24-26 July	(Sun-Tues)		LGNZ Conference Dunedin
10 August	(Wed)	Council	
7 September	(Wed)	Committees	
28 September	(Wed)	Council	
8 October	(Sat)		Local body elections

REPORT

Document Id: A844137

Report Number: 2015/1181

Prepared For: Finance and Corporate

Prepared By: Director Corporate Services

Date: 30 September 2015

Subject: **Councillor Plan Change Hearing Remuneration**

1. Précis

At the February Commissioner Appointment Subcommittee councillors had requested that the Chief Executive discuss with the Director Corporate Services the policy for payment to Councillors acting as commissioners for plan change hearings, as distinct from consent hearings.

The remuneration and expenses for elected members are determined and approved through the Remuneration Authority.

2. Remuneration for Regional Plan Review Meetings

Provision has been made for additional payment to Councillors acting as members of regional plan change hearing panels as follows:

	Meeting Fee	
	Up to 4 hours	Over 4 hours
Panel Chairperson	\$150	\$200
Panel Member	\$100	\$150

There is a maximum amount payable for all councillors for the period beginning 1 July 2015 and ending 30 June 2016 of \$13,980. Meeting fees are not payable to the Council Chairperson.

3. Resource Consent Hearing Fees

Additional fees are payable for Resource Management Act hearings on an hourly rate basis for hearing time. This is distinct from the plan change hearing payments outlined above and there is no maximum annual amount payable. Rates payable for resource consent hearings are:

Chairperson - \$100 per hour

Member - \$80 per hour

4. Plan Change Hearings 2015/16

Plan change hearings scheduled for the year ending 30 June 2016 are:

Regional Policy Statement – Councillor Robertson (Chair) and Councillor Kempton, estimated 16 days.

Plan Change 5A – Councillor Robertson (Chair), estimated 10 days.

Based on the estimated number of full days above the total cost associated with plan change hearings in the 2015/16 year will be \$7,600. This sits comfortably below the maximum amount payable of \$13,980.

5. Recommendation

- (1) That this report be received.
- (2) That the plan change hearing remuneration pool be used in the 2015/16 year for the Regional Policy Statement and Plan Change 5A hearings as outlined above.

Nick Donnelly
Director Corporate Services

Document Id: A844332

Report No: 2015/1185
Prepared For: Finance and Corporate Committee
Prepared By: Manager Support Services
Date: 1 October 2015

Subject: Passenger Transport Update

1 Précis

This report provides an update on various transport matters including;

- Noting delays, outside Councils control, with the procurement of the replacement ticketing system and the need to implement changes to the existing system to accommodate the new fare structure and free transfer.
- Developments regarding the Crowns intent to bulk fund the SuperGold free off-peak travel scheme and timing for the new allocation model.
- Progress on the design development of the new Dunedin bus hub including recommending that DCC and NZTA be invited to participate in the design competition review prior to wider stakeholder engagement.
- Advising on the commencement of the Wakatipu Network review and business case process.

2 Ticketing System Replacement

Staff have been working with nine other Council's and NZTA on a joint procurement for a replacement ticketing system. Due to factors outside the Council's control there has been a delay in going to market for the procurement. NZTA are actively working through a number of matters internally to confirm the delivery model and procurement approach to ensure a best value for money investment over the whole of life of the system. NZTA have advised that the targeted Funding Assistance Rates (FAR) of 100% (central system) and 65% (device and direct deployment capital cost) is a recognition of the joint commitment of the Councils and the agency to meet the national and local needs. NZTA have confirmed that they expect to advise councils of their recommended pathway forward in November. Once NZTA's advice is received staff will be able to confirm timing for the new ticketing system.

The delay experienced does however mean that delivery of the new system will not be in time to accommodate the fare requirements for the new network such as the new zone structure and the free transfer. NZTA have agreed that they will support the necessary development for the new zone system, fare structure, and free transfer on the existing ticketing system at the enhanced targeted FAR of 65%.

Discussions have been held with our existing ticketing provider with the view to having the existing system modified for early April. As the new fare structure and free transfer are integral to the new network it is proposed that any further changes will not be made until the existing ticketing system has been modified accordingly.

3 SuperGold

As previously advised the Crown through the Ministry of Transport has signalled a change in the way the SuperGold Free Off-peak Travel Scheme will be funded from the 2016/17 financial year. Moving from a direct per passenger reimbursement to a bulk funded model.

LGNZ have been actively canvassing the Ministry on this matter due to the concern expressed by Council's regarding potential funding impacts on Council's and the transfer of funding risk to Councils.

NZTA have arranged for a joint workshop to develop a proposed apportionment model for Council's to consider this is scheduled for 20 October ORC staff will be in attendance. Council's have highlighted the need to have the apportionment model in place and agreed in time for next financial years annual plan process.

4 Bus Hub

Significant work has been undertaken to ensure that the movement of buses in and out of the preferred Hub location (Great King Street between Moray Place and Saint Andrew Street) can be achieved. At this stage the review has identified some minor modifications that will improve access to and from the Hub. These will be discussed with DCC staff over the coming month.

Staff are currently seeking, through an invited competition, concept designs of the Bus Hub and associated facilities. The concepts are scheduled to be available for a closed review late November. Once the review is complete and the preferred design endorsed by Council it will be used for wider stakeholder engagement.

It is recommended the closed review panel include Staff, and a minimum of two Councillors. It is further recommended that a NZTA representative, DCC staff (one Transport and one Urban Design) and up to two DCC councillors be asked to assist the review panel with their considerations.

5 Wakatipu Network Review and Business Case Development

Staff have engaged consultants to assist with the Wakatipu Network Review and Business Case Development the current programme targets having the initial network review and programme business case developed, by the end of November 2015 with the final Business Case and any proposed network changes completed by 30 June 2016.

6 Recommendation

- 6.1 That this report be received.
- 6.2 That Council nominate two Councillors to participate in the Bus Hub design review, and
- 6.3 That staff be requested to invite a NZTA representative, two DCC staff (one Transport and one Urban Design) and up to two DCC councillors to participate in the Bus Hub design review.

Nick Donnelly
Director Corporate Services

REPORT

Document Id: A842556

Report Number: 2015/1174
Prepared For: Finance and Corporate
Prepared By: Director Corporate Services
Date: 2 October 2015

Subject: **Executive Report - October 2015**

1. Economic Review

During consultation on Council's 2015-25 Long Term Plan, ratepayers from the Taieri area asked that an independent economic assessment of the level of public benefit generated from the flood and drainage schemes in the Taieri area be obtained. Council agreed to this request, and to a review of its current revenue policies for those schemes, in respect of the public / private benefit split of those schemes. Council also decided that this assessment should be undertaken for the Lower Clutha flood and drainage scheme, to ensure that a consistent approach is applied.

A request for proposal has been prepared inviting suppliers to complete an economic assessment of the public and private benefit splits for four of its flood and drainage schemes, namely the Lower Clutha flood and drainage scheme, the Lower Taieri flood protection scheme, and the West and East Taieri drainage schemes.

The request for proposal has been issued and interested parties have until Monday 12 October to submit their proposal. The successful supplier is expected to present their draft report to Council in late January 2016.

2. Irrigation Scheme Rates

We have received requests from two irrigation companies in Central Otago to remit their rates. Rating of these irrigation schemes has occurred for the first time in the 2015/16 year following a directive from the Office of the Valuer General that these utilities should be valued and therefore rated.

Quotable Value (QV) has performed valuations and these capital values have been used to strike rates for the 2015/16 year. The irrigation companies are disputing the valuation performed by QV and discussions are ongoing as to the correct valuation. Central Otago District Council and Waitaki District Council have made the decision to remit rates for these entities and Council has been asked to consider doing the same. Requests to remit rates based on disputed valuations is uncommon and rates have not been remitted in the past. As with previous requests of this nature Council policy is to follow S41A of the Local Government (Rating) Act 2002 and refer the ratepayer back to QV to review the valuation. Council requires payment of the rates as struck and invoiced however if the valuations are amended Council will adjust the rates and refund accordingly.

3. Sale of Properties

The following properties have been sold and settled over the last quarter:

Tarras Depot
 Dunback Depot
 31 Northumberland Street
 34 Northumberland Street
 77 Norwood Street
 43 Carr Street

4. Account Payments

Schedules of payments made are referred to the Finance and Corporate Committee for endorsement. The financial commitments and payment authorisation are made in accordance with Council's financial delegations and internal control procedures.

Payment Categories	August 2015
Trade and general payments	2,351,443.58
Payroll	619,374.06
Investments	-
Total	\$2,970,817.64

5. Recommendation

- (1) That this report be received.
- (2) That the payments and investments summarised in the table above and detailed in the tabled schedule, totalling \$2,970,817.64 be endorsed.

Nick Donnelly
Director Corporate Services

REPORT

Document Id: A840594

Report Number: 2015/1170

Prepared For: Finance and Corporate Committee

Prepared By: Manager Projects

Date: 23 September 2015

Subject: **Regional Collaboration and Shared services**

1. Précis

For some time, central government has been promoting greater use of collaboration and sharing of services, to encourage greater cost efficiency in local government.

The Otago Regional Council works with the territorial councils within Otago, and outside of Otago, on various projects and initiatives. The purpose of this paper is to inform the council of the work done with others.

2. Regional Collaboration and Shared Services

A number of initiatives and projects are currently being undertaken jointly with other councils, and the Long Term Plan (LTP) has made provision for further collaboration on projects into the future. A summary of those projects and initiatives is provided below.

2.1 Emergency Management

The Otago Regional Council acts as the administering authority for the Otago Civil Defence Emergency Management (CDEM) Group, and the Co-ordinating Executive Group (CEG). The CDEM comprises the Chairman, and Mayors and Chief Executives of the five Otago councils. The CEG comprises the chief executives and senior staff of the five Otago councils and emergency services. The ORC provides the Otago Group Controller, who will work with the territorial authorities and other agencies such as the police and fire services. ORC staff chair and participate in the Groups Risk Reduction and Readiness and Response committees.

2.2 Lower Waitaki River Control Scheme

ORC has worked with Environment Canterbury (ECan) to develop a strategy for the management of this river control scheme which lies partly in Otago and partly in Canterbury, and is now working with ECan to implement the management approach, share technical knowledge and efficiently deliver scheme works.

The Lower Waitaki River Liaison Group reviews and makes recommendations on annual works programmes and budgets. The Group comprises representatives of landholders, irrigation companies, Environment Canterbury, Meridian Energy Ltd and ORC (represented by Cr Brown).

2.3 Contaminated Sites

The Long Term Plan includes the establishment of a contaminated sites regional liaison group with territorial authority representatives, and the establishment of a centralised database for regional use. A first meeting of the liaison group is scheduled for October this year, where the scope of a database will be discussed.

2.4 South Island Pest Management

Council has been and continues to work with other South Island regional councils and other government agencies to develop a pest management plan for the South Island. Once developed, the plan will inform a review of our own Pest Management Plan for Otago.

Council is also collaborating with ECan on cross boundary animal pest issues, particularly wallabies, to ensure efficient delivery of pest management programmes for both regions.

2.5 Natural Hazards

A significant amount of work is done with our territorial authorities in respect of natural hazards. Such work includes the flood awareness campaign that ORC runs each year with QLDC in Queenstown and Wanaka, working with TA's to incorporate natural hazards provisions into District Plans, working with CDC on flood risk in Milton etc.

The LTP provides for collaboration with the DCC in developing a Natural Hazard Risk Management Strategy for South Dunedin.

2.6 Regional Policy Statement (RPS)

Over the past two years, council has been working collaboratively with the territorial authorities, seeking their input into the development of the proposed RPS. Reviews of what work is being undertaken by the city and district councils in relation to the RPS, were undertaken, along with the identification of longer term outcome for the region.

2.7 Dam Safety

Council, as an accredited and registered Building Consent Authority undertakes certain dam safety and building control functions on behalf of Environment Southland and West Coast Regional Council, under transfer agreements. This has meant that rather than all three council's needing to be accredited and incurring the costs associated with accreditation, a cost sharing arrangement is in place for the Otago Regional Council to undertake these functions.

In addition, ORC collaboratively works with other regional councils on implementing the legislation for dam safety.

2.8 Regional Transport Planning

The Regional Transport Committee is responsible for strategic transport planning for the provision of safe, reliable and resilient land transport systems. The committee is represented by the ORC, the Otago territorial authorities, NZTA and other interested agencies.

Collaboration with Environment Southland on transport strategy, policy and plan for priority setting is undertaken, recognising that transport does not stop at regional boundaries. Staff from both councils are striving towards a goal that there might ultimately be a combined regional transport committee.

2.9 Public Passenger Transport

Council works collaboratively with the DCC in the provision of roading improvements that facilitate the efficient use of public transport. The DCC operates a call centre for bus enquiries on behalf of council.

Council works collaboratively with QLDC on the provision of public passenger services in the Wakatipu area.

Council is also working with other regional councils and NZTA on the procurement and implementation of a national bus ticketing system.

2.10 Stock Truck Effluent Working Party

This working party comprises members from all of the Otago councils, and meets periodically to discuss issues around stock truck effluent disposal.

2.11 Strategy Development – planned collaboration

The LTP provides for the development of an Air Strategy for Otago, a Biodiversity Strategy, and a Coastal Strategy for Otago.

There is no easy fix to the air quality problems we have in parts of Otago, so resolution will require an integrated approach with central government, our territorial authorities and other agencies such as Public Health South.

To assist the protection of areas of biodiversity in Otago, council plans to work collaboratively with the territorial authorities and other interested parties to develop a strategy for Otago.

A Coastal Strategy is planned for the 2016/17 year, to assist the efficient management of the coastal resource. ORC holds limited knowledge of the coastal environment, and so is planning to work with other agencies such as DoC, University of Otago and the DCC, to tap into the wealth of information potentially available. We also intend forming a Coastal reference group with these interested parties.

2.12 Demographic and Economic Information Sets – planned collaboration

Demographic, economic and social-economic data are needed for understanding our community and economy, undertaking strategic planning etc. The LTP provides for the purchase of data sets, in collaboration with the territorial authorities. ORC and the Otago territorial authorities will share the common data sets, ensuring all base assumptions used in planning and decision making are the same across all Otago councils.

2.13 Elections

The ORC does not have its own electoral officer, but rather has a regional electoral officer appointed from the DCC. The territorial authorities work with the regional electoral officer to run the ORC election. Cost sharing arrangements are in place.

2.14 LAWA

The LAWA (Land, Air, Water Aotearoa) website is a partnership between the 16 regional and unitary councils, Cawthron Institute, Ministry for the Environment and others, to provide the public with up to date validated information on one website. ORC, along with the other regional councils, regularly send updates to the website.

2.15 Health and Safety

ORC is working with the Otago territorial authorities to ensure that all legal opinions and information on health and safety is shared among the councils. It is also looking at the possibility of having a senior health and safety person who would work across all of the councils, to save duplication of work.

2.16 Maori Liaison

Council, along with the Otago territorial authorities, works with Te Roopu Taiao Otago, consulting with and working together on issues, primarily around Resource Management Act functions. The same work is being undertaken by council with Environment Southland and Te Roopu Taiao Southland.

2.17 Coastal Matters

Council is currently working with Environment Southland, scoping a joint review of the coastal plans prepared under the Resource Management Act, as each council's plan is due for review and update. The possibility of a shared plan is being considered.

3. Recommendation

That this report be received.

Nick Donnelly
Director Corporate Services

OTAGO REGIONAL COUNCIL

**Agenda for a meeting of the Technical Committee to be held
in the Council Chamber, 70 Stafford Street, Dunedin
on Wednesday 14 October 2015 following the Finance and Corporate
Committee meeting.**

Membership:

Cr Bryan Scott (Chairperson)
Cr Doug Brown (Deputy Chairperson)
Cr Graeme Bell
Cr Louise Croot MNZM
Cr Michael Deaker
Cr Gerrard Eckhoff
Cr Gary Kelliher
Cr Trevor Kempton
Cr Sam Neill
Cr Gretchen Robertson
Cr David Shepherd
Cr Stephen Woodhead

Apologies:**Leave of Absence:****In attendance:**

Please note that there is an embargo on agenda items until 8.30 am on Monday 12 October.

CONFIRMATION OF AGENDA**PUBLIC FORUM****MINUTES**

The minutes of the meeting held on 2 September 2015, having been circulated, for adoption.

Matters arising from minutes**PART A – RECOMMENDATIONS**

Item 1

2015/1078 **Spatial variability of air quality in Clyde.** DEHS, 20/8/15

The report details an investigation into the spatial air quality in Clyde completed during winter 2015.

Item 2

2015/1163 **Kakanui river morphology and riparian management strategy.** DEHS, 22/09/15

The Kakanui river morphology and riparian management strategy has been prepared to help protect and enhance the recreational, cultural and ecological values of the Kakanui and Kauru riverbeds and their margins. The full report ‘Kakanui River morphology and riparian management strategy’ is circulated separately with the agenda.

Item 3

2015/1184 **Leith Dundas to St David St.** DEHS, 09/09/15

The report seeks endorsement of the design and landscaping, approval to invite tenders for construction is sought for the Dundas Street to St David Street Footbridge reach of the Leith Flood Protection Scheme.

PART B - ITEMS FOR NOTING

Item 4

2015/1050 **Kakanui Estuary water quality and modelling.** DEHS, 30/09/15

The report details modelling work in the Kakanui Estuary. The full report ‘Kakanui Estuary Hydrodynamic Model’ is circulated separately with the agenda.

Item 5

2015/1166 **Director’s Report on Progress.** DEHS, 28/09/15

Topics covered in the report are: South American Tsunami 17 September 2015, Tomahawk Beach and Lagoons, Preparation for low river flows, and Pomahaka and Strath Taieri river morphology and riparian management strategies.

OTAGO REGIONAL COUNCIL**Minutes of a meeting of the Technical Committee held
in the Council Chamber, 70 Stafford Street, Dunedin
on Wednesday 2 September 2015 commencing at 9.37 am**

Present: Cr Bryan Scott (Chairperson)
Cr Doug Brown (Deputy Chairperson)
Cr Graeme Bell
Cr Louise Croot MNZM
Cr Gerrard Eckhoff
Cr Gary Kelliher
Cr Trevor Kempton
Cr Sam Neill
Cr Gretchen Robertson
Cr Stephen Woodhead

Apologies: Cr Doug Brown (for lateness)
Cr Michael Deaker
The apologies were accepted.

Leave of Absence: Cr David Shepherd

In attendance: Peter Bodeker
Jeff Donaldson
Scott MacLean
Nick Donnelly
Fraser McRae
Gavin Palmer
Michael Goldsmith
Ben Mackey
Lauren McDonald

CONFIRMATION OF AGENDA

There were no changes to the agenda.

MINUTES

The minutes of the meeting held on 22 July 2015, having been circulated, were adopted on the motion of Crs Scott and Neill.

Matters arising from minutes

Mr Bodeker confirmed that the Coastal Otago Flood Event report of 3 June 2015 had been provided to the DCC Councillors and Dr Bidrose.

PART A – RECOMMENDATIONS

Item 1

2015/1108 **Seismic Hazard in the Queenstown Lakes District.** DEHS, 19/8/15

The report illustrated the range of seismic hazards in the Queenstown Lakes District to local authorities, infrastructure managers, and other interested parties. The full report was circulated separately with the agenda.

Councillors thanked Drs Palmer and Mackey for a very interesting and detailed report.

A question was raised on the archiving of the Seismic Hazard report and if information was being shared with LTNZ and CDEM. Dr Palmer confirmed the integration of the report into the macro planning through the Lifelines Group, and the archiving of the report, maps and geotechnical data would be recorded in the Natural Hazards Database. Version 2 of the database was underway as capacity within the present database infrastructure had been reached.

A request was made to extend the report presentation beyond the QLDC and CODC Councils to include for example tourism operators. Mr Bodeker advised that a plan would be brought to Council for presentation of the information to the political level and then the wider community, including inter-regional.

The final paragraph of the Overview section of the main report stated that “the information would help reduce the seismic hazard to the Queenstown Lakes District ...” Dr Palmer agreed, that the reference should be to ‘risk’ rather than ‘hazard’. He advised that seismic hazard was covered in the Regional Policy Statement, risks would be noted on LIMs, and the Otago CDEM Group was to prepare a seismic event response plan.

Cr Brown joined the meeting at 10:01am.

Cr Kelliher moved
Cr Eckhoff seconded

That:

- 1. The report be noted;*
- 2. The report be presented to the Queenstown Lakes District Council and to the Central Otago District Council.*

Motion carried

PART B - ITEMS FOR NOTING

Item 2

2015/1088 **Director's Report on Progress.** DEHS, August 2015

The report discussed the climate situation, aerial geophysics survey, Leith Flood Protection Scheme, and Mosgiel/Taieri Community Adverse Events Response Plan.

A review of the low flow event of December 2014–February 2015 was requested as well as development of a protocol for a low flow event including identifying staff delegations. Mr Bodeker advised that this review had not been completed as yet and was being worked on currently across directorates.

Mr Donaldson advised that ORC was part of the National Drought Response and involved in the development of a strategic plan for across the South Island.

Councillors agreed they did not want ORC to be looked to or seen as the official predictor of drought, as this was not the role of this Council.

Dr Palmer advised a correction to a typographical error in the Aerial Geophysics Survey. The numbering of Stages 2 and 3 as stated in the text for geophysical survey should show Stage 2 as the portion that crossed into Southland, and Stage 3 as the portion in the Waitaki District. The labelling of figure 5 was correct.

It was agreed that the benefit from the Council investment made in the aerial geophysics survey needed to be maximised. Dr Palmer confirmed the information gathered during this survey had been secured, a review of the deliverables contracted by ORC was being conducted, and there was liaison with MBIE over the government's further work which would provide almost complete coverage of the Otago region.

Dr Palmer confirmed a site visit to the Leith Flood Protection Scheme was scheduled for 15 September for Councillors and a update report would be provided to Council following this visit. The intention was to award construction tenders for the Dundas to St David Street works by the end of October.

Cr Woodhead requested that the Leith Flood Protection Scheme project be entered in to the LGNZ infrastructure annual awards process for consideration. He noted the 2016 LGNZ conference was to be held in Dunedin.

Cr Eckhoff moved
Cr Neill seconded

That the report be noted.

Motion carried

The meeting closed at 10:30am.

Chairperson

REPORT

Document Id: A819754

Report Number: 2015/1078

Prepared For: Technical Committee

Prepared By: Deborah Mills, Environmental Scientist

Date: 20/08/2015

Subject: **Spatial variability of air quality in Clyde**

1. Précis

The National Environmental Standard for Air Quality (NESAQ) requires Councils to monitor PM₁₀¹ in their regions where exceedances of the NESAQ limit are expected to occur. As a secondary requirement, PM₁₀ should be monitored where levels are expected to be their highest and/or where the most people are affected.

Council's on-going spatial monitoring programme identifies and quantifies how PM₁₀ patterns vary by location (i.e. spatially) within selected cities and towns in real-time, providing information for decision-making by:

- identifying the 'worst' area of particle pollution in a town, and
- confirming the suitability of the location of existing monitors.

In this last in a series of programmed studies², an investigation into the spatial air quality in Clyde was completed during winter 2015. Clyde currently has a continuous air quality monitor that operates during winter months.

Results from this spatial study indicate that Council's monitoring site is located in an appropriate location.

2. Introduction

Clyde is designated as Air Zone 1 in the Otago Regional Plan: Air (Air Plan) as air quality frequently exceeds the NESAQ during winter months. Monitoring results from Clyde are used primarily to assess long-term PM₁₀ trends in the town.

In Clyde, continuous seasonal (winter only) PM₁₀ monitoring began in 2008. Monitoring is done using a MetOne environmental beta attenuation monitor (EBAM) which is designed mainly for campaign monitoring, as opposed to NESAQ compliance monitoring.

Current plans are to maintain the existing monitoring regime in Clyde. The spatial monitoring done for this study supplements the site-specific information on PM₁₀ gathered at that site.

¹ Particulate matter with an aerodynamic diameter less than 10 micrometres.

² Previous studies include: Dunedin and Mosgiel (2009); Balclutha and Milton (2010); Palmerston (2011); Queenstown and Lawrence (2012); Arrowtown and Wanaka (2013), Alexandra and Cromwell (2014).

3. Sampling methods and strategy

3.1 Sampling methodology

The objective of the spatial monitoring campaign is to provide information on the relative levels of PM across the area of interest. To do this, a network of sampling locations that provides adequate spatial coverage was developed prior to sampling.

A DustTrak 8520 aerosol monitor is used to record real-time particulate levels. This monitor uses a light-scattering technology to estimate a mass concentration of particles. Since particle size can influence the calculated mass, a coefficient³ is applied to the raw data to provide approximate PM₁₀ values. DustTrak results are not as scientifically robust as the permanent monitors used in Council's State of the Environment (SoE) monitoring network, but they do provide a relative indication of particulate levels useful for spatial studies.

With the DustTrak's inlet tubing mounted to the roof of a car, the circuit of pre-determined sampling points is driven multiple times. At each sampling point, the car is stopped and the engine turned off. PM samples are taken in real-time and averaged over 10 seconds for approximately one minute. Data are logged and downloaded later for processing.

3.2 Sampling strategy

In this study, 17 locations were chosen to provide representative spatial coverage of the town (Figure 1). Field work for this study was performed in late July and early August 2015, on days when conditions were conducive to obtaining a strong PM₁₀ "signal", i.e. cold, clear, and calm⁴.

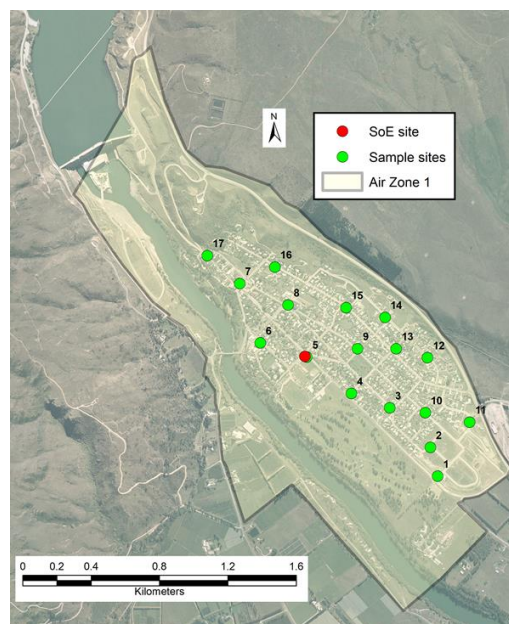


Figure 1. Spatial study sampling sites in Clyde

³ Raw data are multiplied by 0.5 to obtain adjusted values.

⁴ 30 July and 10 August

Multiple sampling runs were performed at three different times of day:

- afternoon (2-4pm);
- evening (4-6pm); and
- night (8-10pm).

The afternoon run was designed to provide a baseline PM₁₀ scenario. On a clear and calm day, these afternoon hours are typically the period of maximum solar gain and atmospheric instability. Since solid-fuel burning is generally at its lowest during this time of day⁵, sampling results reflect an ambient condition with minimal influence of either emissions or weather.

The evening hours represent a “start-up” setting when individual solid-fuel burners are, presumably, emitting maximum amounts while they heat up to operating at peak efficiency.

Night-time sampling is expected to capture a maximum ambient condition which is influenced by both emissions and weather conditions. It is during this relatively stable setting that spatial patterns become most evident.

4. PM₁₀ in Clyde

4.1 SoE monitor results

Measurements from the SoE monitor site (Figure 2) taken on 30 July and 10 August indicated a similar pattern. Hourly PM₁₀ values ranged from lows of about 5-10 µg/m³ during midday to highs of about 125 µg/m³ (9-10pm).

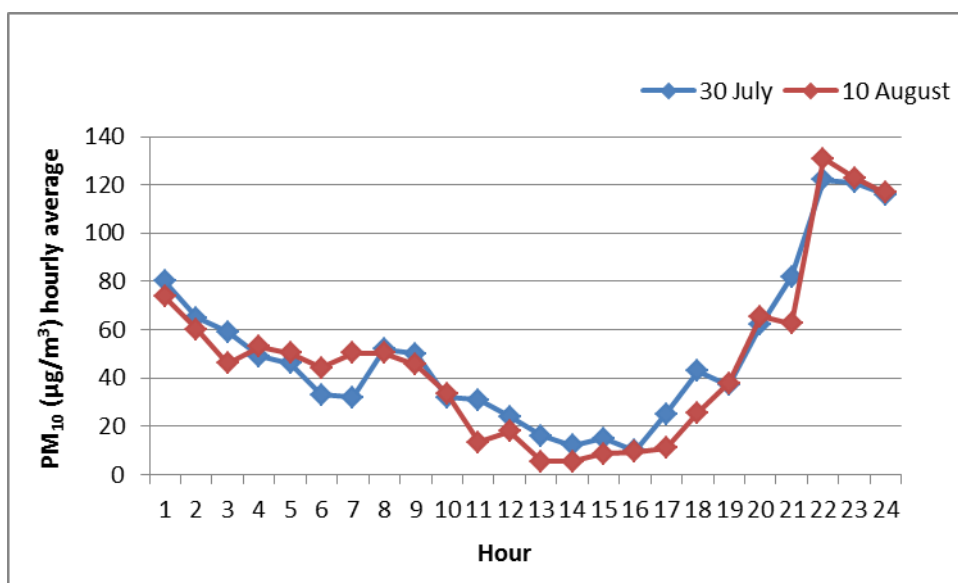


Figure 2. Hourly PM₁₀ values from the SoE monitor (spatial study site #5)

⁵ Environet, Ltd., 2006. *Air Emission Inventory – Dunedin, Mosgiel, and Alexandra 2005*.

The daily average on 30 July was $51 \mu\text{g}/\text{m}^3$, just over the NESAQ threshold concentration of $50 \mu\text{g}/\text{m}^3$, and $48 \mu\text{g}/\text{m}^3$ on 10 August. The pattern and magnitude of hourly PM_{10} values that occurred on these days is representative of a typical winter day.

Air temperatures during evening monitoring on both days was about $3\text{-}5^\circ\text{C}$, falling to about -2°C during night-time monitoring. Winds were very light, less than $0.5\text{m}/\text{s}$ on 30 July and less than $0.2\text{m}/\text{s}$ on 10 August. Skies were clear on both nights. Taken together, these are conditions conducive to minimal dispersion of smoke and the formation of temperature inversions.

4.2 Spatial sampling results

4.2.1 Background PM_{10}

Sampling results from the afternoon monitoring (2-4pm) indicate that the baseline PM_{10} levels are very low, less than about $10 \mu\text{g}/\text{m}^3$ (Figure 3) throughout town.

The following visual observations were made during sampling:

1. There were approximately a dozen active, smoky chimneys at 2pm.
2. Most actively smoking chimneys were located in the central, older portion of town; however, there were 2-3 newer houses around the periphery with smoking chimneys.
3. No portion of the town was in shadow at this time of day.
4. There was a fair amount of convection in the atmosphere, evidenced by the upward movement of smoke.
5. There was also gentle drift of smoke in a “downhill” direction (northeast to southwest).

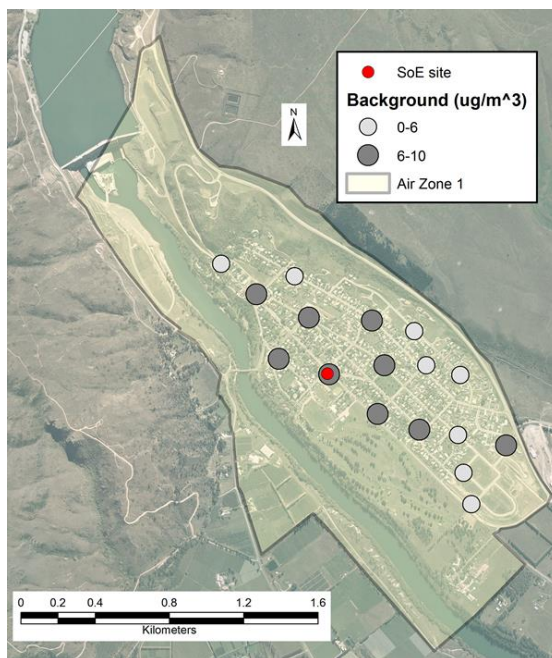


Figure 3. Background PM_{10} values recorded between 2-4pm

4.2.2 Night-time PM₁₀

It was assumed that by 8pm, any burners that were going to be active were already lit with well-established fires. Results of monitoring during this time revealed that PM₁₀ levels were significantly higher than background levels at all sites (Figure 4).

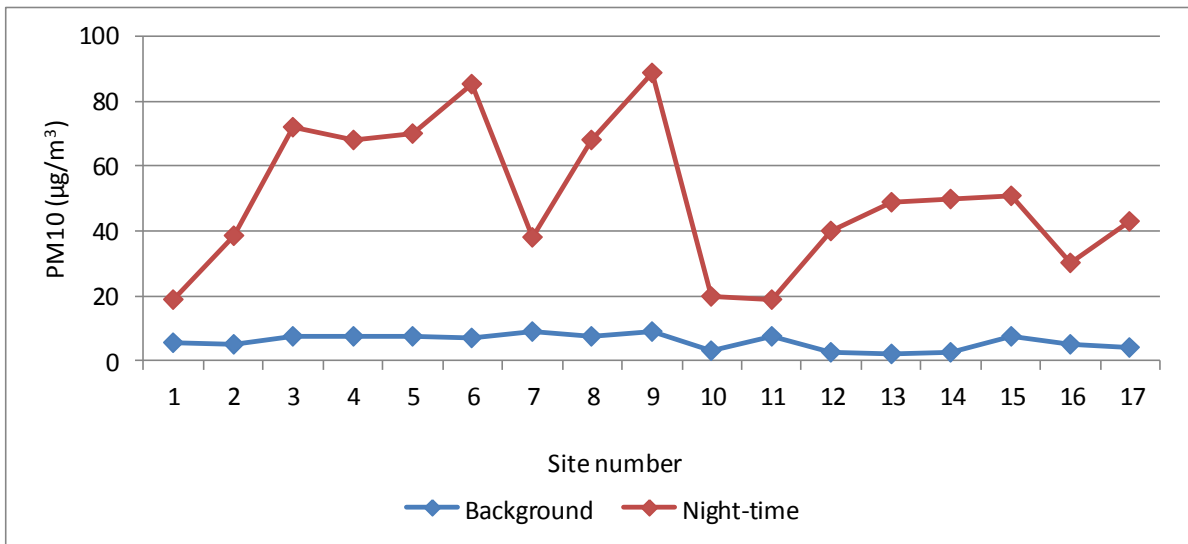


Figure 4. Background versus night-time PM₁₀ levels at spatial study sites

The highest values were located through the central portion of town; the lowest values were located in the south eastern part of town; this is the area of the newest housing (Figure 5).



Figure 5. Night-time PM₁₀ levels in Clyde

4.2.3 Overall Average PM₁₀

Aggregating all of the evening and night-time sampling runs produces an approximate ‘snapshot’ of winter, evening ambient air quality across Clyde (Figure 6). The pattern of PM₁₀ is consistent with the individual runs in that the higher values are located more centrally in town, an area that includes the SoE monitor. Lower values are noted in both the outer (northwest and southeast) edges of town.

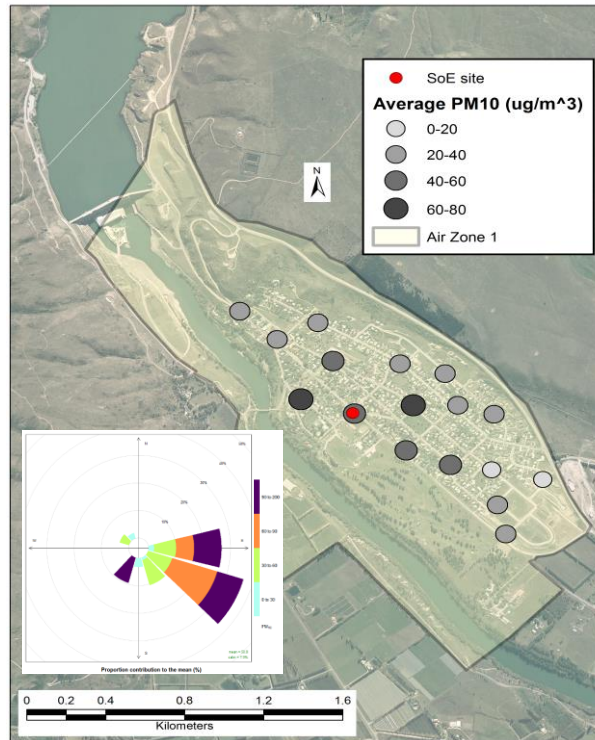


Figure 6. Overall average PM₁₀ in Clyde. Inset is the pollution rose for 30 July 2015 showing the distribution of PM₁₀ concentrations with respect to wind direction readings at the SoE monitoring site.

The pollution rose shown in Figure 6 indicates that most of the higher PM₁₀ concentrations (in this case orange and purple bands) are recorded when wind movement is from the eastern and southeastern sectors. This pattern is a common winter feature in Clyde, based on the long-term hourly wind direction and PM₁₀ record at Council’s monitoring site.

5. Conclusions

The highest particulate levels are found in the central area of town.

The Clyde PM₁₀ monitor is located appropriately and generally reflects the higher concentrations of particulate found in town.

6. Recommendations that:

1. This report be noted.
2. The results from this report be used to inform the monitoring component of the new air quality management strategy.

Gavin Palmer
Director Engineering, Hazards and Science

REPORT

Document Id: A839764

Report Number: 2015/1163

Prepared For: Technical Committee

Prepared By: Michael Goldsmith, Manager Natural Hazards
Jacob Williams, Natural Hazards Analyst

Date: 22/09/2015

Subject: **Kakanui River morphology and riparian management strategy**

1. Précis

The Kakanui River morphology and riparian management strategy has been prepared to help protect and enhance the recreational, cultural and ecological values of the Kakanui and Kauru riverbeds and their margins. The intention is that this work will result in incremental enhancements to the natural character and enjoyment of the riverbed, and enable long-term, sustainable use of the land which borders the river.

The strategy has been developed to guide work programs, decision-making and activities for the community, the Otago Regional Council (ORC), and other stakeholders. The strategy has been prepared by ORC, with significant input from the local community and other interested parties. The principles, objectives and actions outlined in the strategy reflect the values and concerns which have been identified by local residents and stakeholders through an extensive consultation process. It is therefore recommended that people who live, work or play within the Kakanui catchment consider, and give effect to the critical components of this strategy.

2. Community consultation and strategy development

The process of developing the strategy commenced in September 2013 when, at a meeting hosted by ORC to present the latest river monitoring study, it was agreed a consensus was needed on how to manage the Kakanui and Kauru rivers to overcome perceived problems with changes in river morphology (including bank erosion and sedimentation). A working group representing farmers, gravel extraction companies, anglers, local iwi, and conservation interests was set up to help ORC develop the strategy and to identify the values associated with the river. An opportunity for the public to consider the strategy was provided in May – June 2015, including a public meeting, drop-in sessions, and a public submission process. The draft strategy was presented to the working group on 23 September 2015, with support for its core components identified.

The values that the community attributed to the morphology of the river environment are summarised below (i to iv). The strategy is a means of encapsulating these values, and using them to inform decision-making and work programs within the Kakanui catchment.

- i. That the function of the river continues to support social, cultural, spiritual, recreational, and farming activities.
- ii. That the river is able to shift laterally within an identified margin, but
 - Farmland beyond the margin is not eroded;
 - Main flood flows are kept in the main channel;
 - Infrastructure is resilient and quickly reinstated.
- iii. Gravel extraction is enabled where appropriate.

- iv. That the form of the river includes riparian plantings (including both native vegetation and willows), weed control and fencing.

A range of views on the amount of human modification within the riverbed were expressed, ranging from *no or very limited* to *considerable* engineering work or gravel extraction.

3. Legislative context

The strategy is not a statutory document; rather it is intended to present the aspirations of the community and the various stakeholder agencies. However, the statutory processes which do influence river management activities¹ are more likely to be used effectively and efficiently if there is a general consensus on what is valued about the river, and commonly understood objectives. The strategy sets out the values identified by the community, and the outcomes they seek from managing river form and function, and will be used to inform resource consent decision-making.

4. Critical components

Principles:

The strategy provides a framework to guide activities and decision-making, based on the following set of principles:

- *Ensure sustainable river management.* Appropriate use of land, which will limit exposure to natural river and catchment processes.
- *Plan ahead.* An adaptive approach to river management that will allow for the dynamic nature of the Kakanui and Kauru rivers.
- *Maintain and enhance the natural environment.* Activities are managed in a way that results in a more visually appealing river system, and habitat that supports wildlife, fish and suitable plant species.

Objectives:

These are areas where the community, ORC and other stakeholders can achieve positive outcomes within the Kakanui and Kauru riverbeds and along their riparian margins. They are derived from the principles listed above.

- *Recognise and characterise natural river processes.*
- *Equip the community to live with the effects of changes in river morphology.*
- *Enable sustainable gravel extraction.*
- *Promote activities that enhance the natural character and enjoyment of the river.*

Information

ORC has undertaken work to understand and quantify the natural river processes that occur in the Kakanui and Kauru rivers, as well as the community values associated with the riverbed and its riparian margins. This information can be used to inform decisions and activities, such as gravel extraction and river maintenance work.

- *River form and function values.* Elements of the river system which are valued by the community.

¹ Including the Local Government Act (in regards to funding considerations), and the RMA (in regards to managing environmental effects)

- *River corridor design.* The location and width of the active river fairway, as well as appropriate buffer zones, which together form a corridor within which the river would naturally lie.
- *Natural gravel accumulation areas, and 'target' profiles.* Areas where sustainable gravel extraction may be appropriate, and the preferred shape of the riverbed in those locations.
- *River maintenance work areas.* Priority sites where work will be undertaken by ORC operations staff to assist in maintaining the shape and location of the river fairway.

5. Implementation

This strategy is concerned with the form and function of the Kakanui and Kauru rivers. It is intended to deliver appropriate guidance and assist with active engagement. It will help guide activities which affect the morphology of the river and riparian environment, including those elements of the river system which are highly valued by the community. The strategy will help to ensure that these activities are undertaken in a sustainable and appropriate manner.

The strategy is relevant to all who those who live, work or play within the Kakanui catchment; and decision-makers (including landowners, ORC, and other stakeholders) should therefore consider and give effect to the critical components contained with the strategy document.

It is noted that the strategy provides a comprehensive list of actions which can be used to achieve, or implement the key principles and objectives. However, due to the dynamic nature of these rivers, parts of the strategy are likely to change as the rivers themselves change. As such; the strategy should be treated as a live document, with regular review and revision required.

The program of river management work to be undertaken by ORC (as guided by the strategy and provided for in the annual plan process) will always be a balance between what is desired by the community, and what is affordable. Irrespective of the level of work undertaken, there will always be a remaining residual risk associated with the effects of large flood events on river morphology.

6. Financial considerations

Historically, the permanent removal of gravel from the river system has been used as a cost-neutral tool in an attempt to address bank erosion and sedimentation issues, and the strategy identifies gravel extraction should still be considered for river management purposes, where that is appropriate. However, a desire for more active involvement by ORC in river management activities was identified by many stakeholders during the development of the strategy, as well as a more pro-active approach to addressing river management issues early on.

An increased program of work in the Kakanui River by ORC will result in increased costs for the Waitaki Special Rating District (SRD). It is noted that river morphology and riparian management strategies are also to be developed for the Shag and Waianakarua rivers in the 2016/17 year. Revenue from rates within the SRD is projected to increase from \$260,000 in 2015/16 to \$420,000 in 2018/19, in order to fund additional in-stream work required to meet community river management expectations. The dynamic nature of all three rivers and the inability to predict the timing or consequences of future flood events in the Waitaki District means there is a risk that this additional funding for river management work may still be insufficient.

It is noted that all ratepayers within the Waitaki District contribute funding towards the Waitaki SRD. If significant additional river management activity is to be undertaken, focusing on a small number of the district's rivers, then re-consideration of this funding policy may be appropriate.

7. Recommendations

That:

1. This report is received;
2. The Kakanui River morphology and riparian management strategy is endorsed;
3. The financial considerations associated with the strategy are noted.

Gavin Palmer

Director Engineering, Hazards and Science

REPORT

File: A844324

Report No: 2015/1184

Prepared For: Technical Committee

Prepared By: Chris Valentine, Manager Engineering

Date: 01 October 2015

Subject: Leith Flood Protection Scheme – Dundas Street to St David Street

1. Précis

The Leith Flood Protection Scheme is being constructed in stages. The next stage to be constructed is from Dundas Street to St David Street Footbridge. Provision for the works has been made in the 2015- 2025 Long Term Plan. Endorsement of the design and landscaping and approval to invite tenders for construction of the remaining civil works is sought. Enabling works were completed earlier this year.

2. Introduction

The Leith Flood Protection Scheme is being constructed in stages, Figure 1. The St David Street to Union Street reach was completed in 2014, preliminary design for Union Street to Leith Street Footbridge is underway. The next stage to be constructed is from Dundas Street to St David Street Footbridge. Endorsement of the design and approval to invite tenders for construction of those works is sought. Provision for the works has been made in the 2015 - 2025 Long Term Plan

The proposed works will reduce the flood hazard for part of the Dunedin central business district, whilst improving visual and physical access to the water and along Montgomery Avenue. As previously reported to Council, the works will not be fully effective in reducing flood hazard until the Dundas Street culvert, along with downstream works on the ITS bend are completed in subsequent years.

The design for the proposed works has been informed by discussions between staff of ORC, the University of Otago, and the Dunedin City Council over the past 18 months. The works are in alignment with the Memorandum of Understanding endorsed by the preceding parties in June 2014. The works provide space for the possibility of a future combined pedestrian and cycleway along Montgomery Avenue should others wish to construct that.

3. Description of Works

The works required in this reach have been the subject of a value engineering study. As a result of this study the scope of work has been reduced in scale and complexity over what was previously proposed.

The scheme works proposed are as follows.

1. On the right (west) bank immediately upstream of St David Street Footbridge, continuation of the pedestrian pathway from below the St David Street Footbridge up to the esplanade on Montgomery Avenue. The excavation for the pathway improves the flow characteristics and channel capacity immediately upstream of the St David Street Footbridge. The work will include an anchored cellular confinement system in combination with erosion matting to provide scour protection of the bank's landscaping. The toe of the bank in the channel adjacent to the pathway will be fortified with rock rip-rap.
2. Channel widening and enabling works for a future culvert on the right bank at Dundas Street Bridge. The channel widening incorporates construction of a public access pathway from Montgomery Avenue to a natural stone river beach. An existing Dunedin City Council sewer pipe is to be exposed, extended and armoured. A number of mature Rhododendrons will need to be removed to enable the channel widening works. From consultation with Dunedin City Council and University of Otago these are likely to be relocated.
3. On the right bank along Montgomery Avenue, removal of large trees to improve the stability of the embankment.
4. Undertake various ancillary works along Montgomery Avenue. This largely comprises a new fence, landscaping on the river side of Montgomery Avenue, pedestrian footpath safety improvements, relocation of two lighting poles, and combined pedestrian/ vehicle crossing to the north end of Montgomery Avenue.
5. The 3 June flood event resulted in localised scour to two areas within this reach. The marginal cost of undertaking an engineered solution to the scour while a contractor is mobilised and has heavy equipment in the river will enable cost savings for this maintenance work. Consequently, it is proposed to include two operational repairs in the scope of works. Stabilisation and underpinning of concrete scour wall on the right bank downstream of Dundas Street Bridge is also included in the scope, as are rock rip-rap armouring and stabilisation of existing scour walls on the left bank upstream of St David Street Footbridge.

4. Timing and Funding

With regard to the timing of the works, the intention is to coincide as much of the construction activity around the St David Street Footbridge with the University summer holidays in order to minimise disruption to University operations.

Tenders for the main construction contract will be let using a publicly advertised process. The tender documents will, in addition to other matters such as traffic management (pedestrian and vehicular) and environmental management, place particular emphasis on the need to minimise disruption to the University and coordinate with ongoing University landscaping projects.

A sum of \$3.61M has been budgeted in the current Financial Year for the works on the Dundas Street to St David Street reach of the Leith Flood Protection Scheme. Enabling works and preliminary design costs within this reach total \$552k as at 30 June 2015.

5. Recommendations

That:

1. This report be noted;
2. The design and landscaping of the Leith Flood Protection Scheme works in the Dundas Street to St David Street reach be endorsed;
3. Tenders be invited to complete construction of the Leith Flood Protection Scheme works in the Dundas Street to St David Street reach.

Gavin Palmer
Director Engineering, Hazards, and Science

Stage	Year
Rockside Road	2006
Forth to Harbour	2010
Cumberland St – Dundas St	2012
Leith Walk – Forth St	2013
St David to Union St	2014
Dundas St – St David St	2015
Union St – Leith Walk	2016
Dundas St Bridge Culvert	2017
Forth St to Harbour	2018 - 20

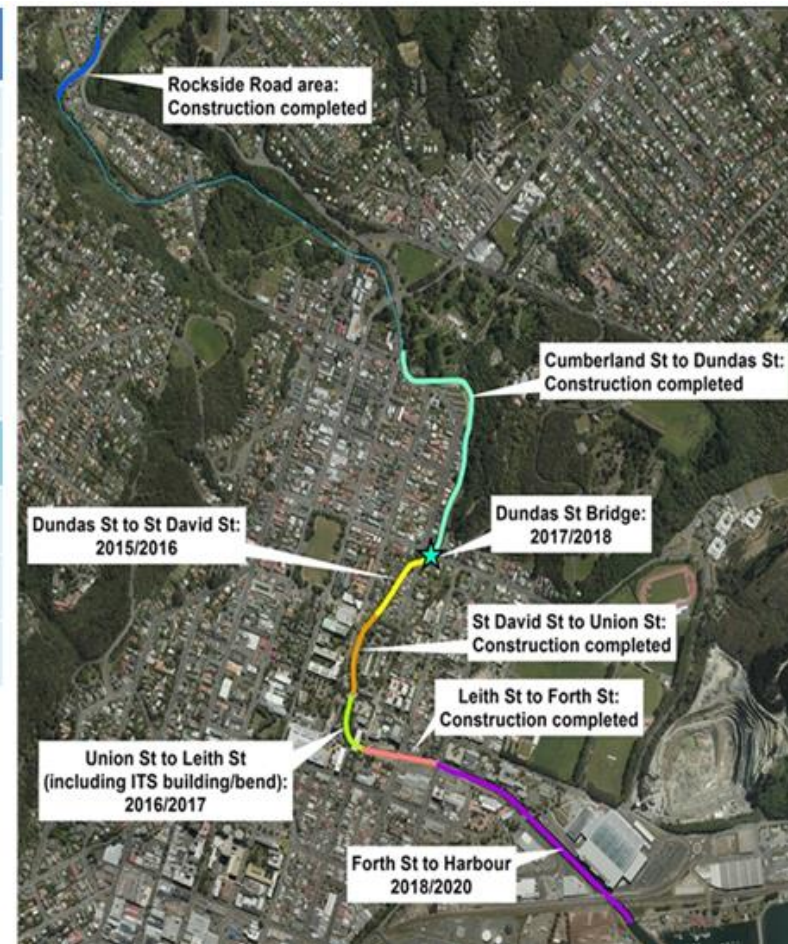


Figure 1 – Staging of Works – Leith Flood Protection Scheme



Figure 2 – Plan View of the Dundas to St David Street Works.



Figure 3 – Detailed View of the Dundas to St David Street Works – St David Street Bridge Works

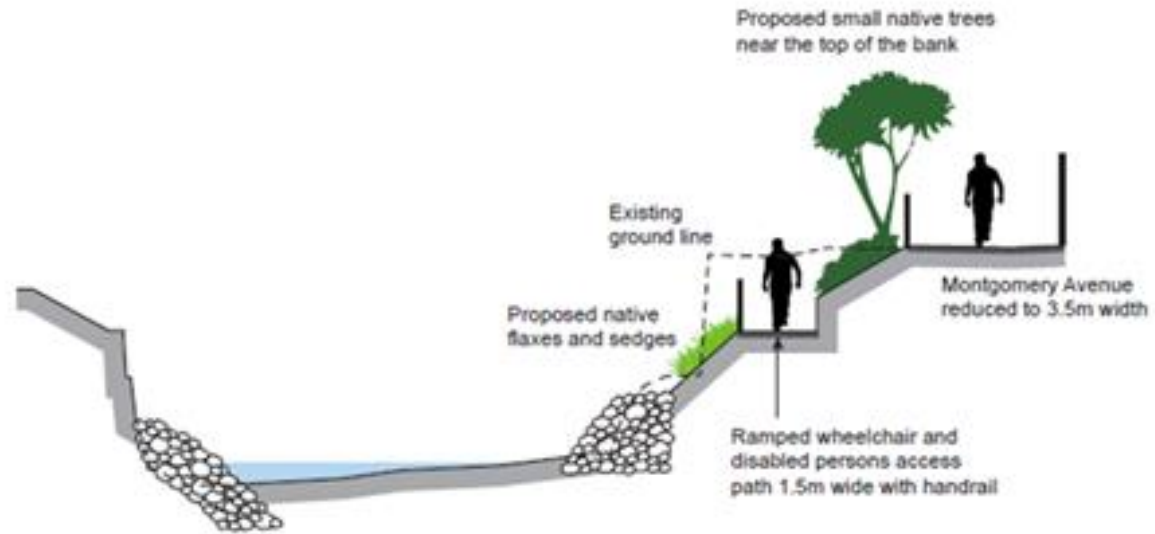


Figure 4 - Cross-section A – A, upstream of St David Street Bridge (looking downstream)



Figure 5 – Detailed View of the Dundas to St David Street Works – Dundas Street Bridge Work

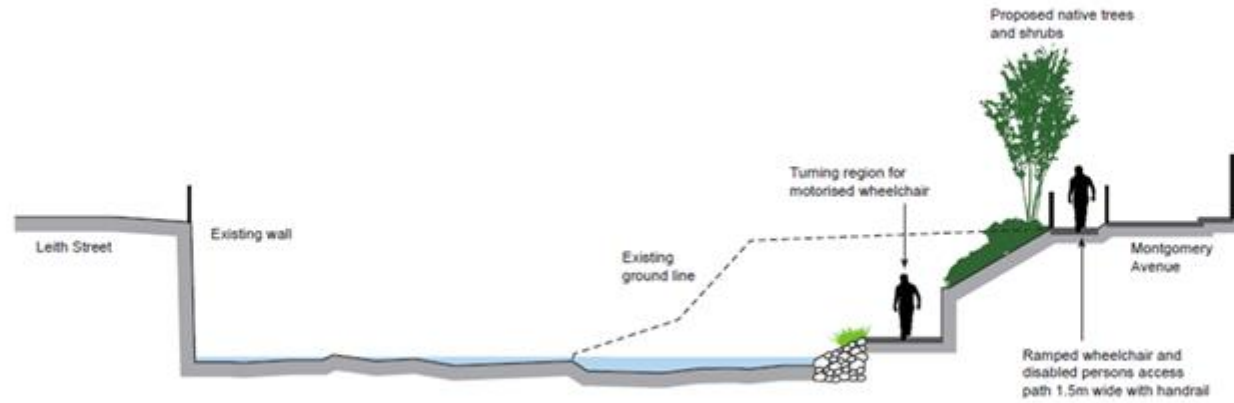


Figure 6 – Cross-section B – B, downstream of Dundas Street Bridge (looking downstream)

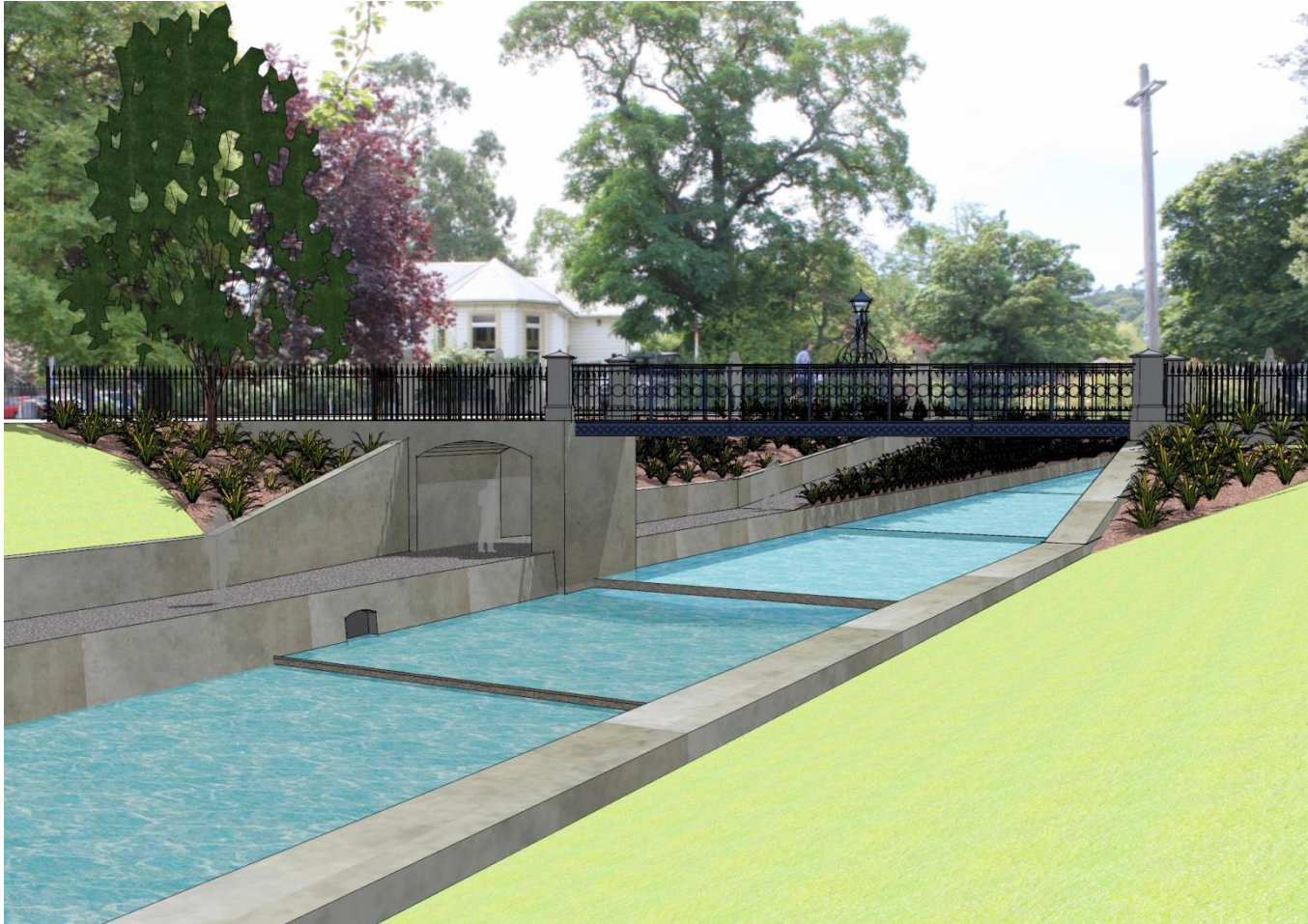


Figure 7 – Artists' Impression of Proposed Modifications at the St David Street Footbridge and the pedestrian walkway extending to Montgomery Avenue.

REPORT

Document Id: A812107

Report Number: 2015/1050

Prepared For: Technical Committee

Prepared By: Dean Olsen, Manager Resource Science
Rachel Ozanne, Environmental Resource Scientist

Date: 30 September 2015

Subject: **Kakanui Estuary water quality and modelling**

1. Précis

Highly permeable stony soils over the Kakanui-Kauru aquifer allow groundwater with high concentrations of nitrogen (N) to enter the main-stem Kakanui and Kauru Rivers. The high N concentrations allow for prolific algae growth in the lower Kakanui River and Kakanui Estuary¹ (Figure 1). Prolific growths of algae can be unsightly and can adversely affect people's enjoyment and use of the estuary and can affect the quality of habitat and ecology of the estuary (Figure 2).

To protect against periphyton growth, the Kakanui River is in Receiving Water Group 2 in Schedule 15 of the Regional Plan: Water, which has a nitrite-nitrate nitrogen (NNN²) limit of 0.075 mg/l. Plan Change 6A (PC6A) also set a leaching limit of 20 kg/N/ha for the Kakanui Aquifer as it was considered highly unlikely that the NNN river water limit (0.075 mg/l) could be maintained under a higher leaching rate.

NIWA was commissioned by ORC to investigate the relationship between estuarine water quality, river flows and nutrient loads in the Kakanui Estuary (Figure 1) as an outcome of mediation on PC6A and the resulting Memorandum of Understanding (MOU) between ORC and the North Otago Irrigation Company (NOIC). NIWA's work is described in 'Kakanui Estuary Hydrodynamic Model' that accompanies this report.

NIWA developed and ran a hydrodynamic model for a range of Kakanui River flows and with 4 different mouth configurations (closed and 3 open mouths of different size) to determine the likely concentrations and distributions of nutrients within the estuary. The purpose of this modelling was to determine if any parts of the estuary were more susceptible to riverine nitrogen and to develop nitrogen concentration thresholds for macro-algae growth in the Kakanui Estuary.

The estuary modelling work aligns well with the Schedule 15 NNN limit, suggesting that it is likely to prevent excessive growth of macro-algae in the estuary. The estuary modelling work sits alongside the Kakanui groundwater project (in progress), which aims to determine if the current N-loading threshold (20 kg/N/ha) is appropriate to deliver NNN concentrations in the Kakanui River that are consistent with Schedule 15 limits.

¹ Nitrogen and phosphorus are essential nutrients for the growth of algae. The proliferation of algae in the Kakanui Estuary is likely to be stimulated by high nutrient concentrations provided by the Kakanui River (NNN) and Waiareka Creek (NNN and dissolved reactive phosphorus (DRP))

² NNN is almost entirely nitrate (NO₃⁻) but includes small amounts of nitrite (NO₂⁻) and ammonium (NH₄⁺).

NIWA's work is described in "Kakanui Estuary Hydrodynamic Model" that accompanies this report.



Figure 1 Kakanui Estuary



Figure 2 Prolific growth of macroalgae in the Kakanui Estuary, 28 January 2015.

2. Nutrient concentrations in the estuary

Modelling and field data show that nutrient concentrations within the estuary are governed by the state of the estuary mouth (how open it is, or whether it is closed), river flow and the nutrient concentrations in the Kakanui River and Waiareka Creek.

Nutrient concentrations in the estuary can be estimated by multiplying water volume fractions from the ocean, Kakanui River and Waiareka Creek by the corresponding nutrient concentrations. Concentrations are near uniform throughout the estuary when the mouth is closed. When the mouth is open to the sea, nutrients concentrations are highest in the upper part of the estuary, and decrease towards the mouth due to dilution by seawater.

At low flows, Waiareka Creek contributes a significant proportion (>50% at mean 2014/15 summer flows) of the N-loading even though the flows from this source (7-d MALF³ = 90 l/s) are lower than in the Kakanui (7-d MALF = 388 l/s). This is due to the higher concentrations of NNN in Waiareka Creek.

Nutrient concentrations in the estuary could be controlled in the short-term by artificially opening the estuary mouth. However, the best option in the medium- to long-term is to manage nutrient loadings from the Kakanui River and Waiareka Creek because, while opening the mouth will reduce nutrient concentrations in the estuary, it is

³ Mean annual low flow, the average of the lowest 7-day low flow period for every year of record

likely to have only a small influence on algal growth rates without also reducing the inputs of nitrogen to the estuary.

3. Regional Plan: Water Limits and Target Ranges of N

The Regional Plan: Water sets out the numerical limits for acceptable water quality for all catchments in the Otago region (Schedule 15). The receiving water limits are applied as five-year, 80th percentiles, when flows at the appropriate reference site (Kakanui River at Clifton Falls) are at or below median flow. Results from the Kakanui catchment (2010 to 2015) are shown in Table 1 below.

NNN exceeds the limit in both the lower Kakanui and Waiareka Creek, and DRP⁴ exceeds the limit in Waiareka Creek. Long-term monitoring in the lower Kakanui River shows that the mean concentration of NNN has increased from 0.08mg/l in 1992 to 0.307 mg/l in 2014, with a maximum of 1.03mg/l recorded in September 2012. This increase has contributed to recent prolific algal growth in the lower Kakanui River and estuary.

Trend analysis (2006 to 2015) shows a continuing significant increase in NNN in Waiareka Creek, but no further significant increases in DRP in either the Kakanui or Waiareka Creek.

Table 1 Comparison of nutrient concentrations in the Kakanui catchment to Schedule 15 limits. The orange cells show where the 80th percentile based on values collected when flows at Clifton Falls were below median flow exceeded the Schedule 15 limit.

	NNN	DRP
Schedule 15 limit	0.075 mg/l	0.01mg/l
Kakanui at Clifton	0.036	0.0042
Kakanui at McCones	0.290	0.003
Waiareka Creek	0.428	0.144
Kauru River	0.026	0.006

Samples of the macro-algae *Ulva* (sea lettuce) collected from the Kakanui Estuary indicated moderate (high in some cases) levels of N availability. Other factors, such as temperature and light, can also affect the growth rate of *Ulva*, so NIWA recommended target ranges of both *Ulva* tissue-N content and potential water N concentrations to control algae growth rate (Table 2).

The target ranges shown in Table 2 correspond to environmental effects in the field, with low values delivering no effects, through to high values delivering extensive, seasonally persistent cover and biomass of algal mats. To reach low to moderate *Ulva* tissue N values (indicating some enrichment, but generally limited effects on amenity and ecological values), NNN concentrations in the estuary would have to reduce to <0.070 mg/l (Table 2).

⁴ Dissolved reactive phosphorus

Table 2 Guide for potential growth rate in *Ulva* based on its tissue-N content and potential water nutrient concentrations.

	Low	Low to moderate	Moderate to high	High
Ulva tissue-N (%)	<1	1 - 2	2 - 3	>3
NNN (mg/l)	<0.028	0.028 – 0.070	0.070 – 0.210	>0.210

For the mouth configurations modelled at mean summer flows, the concentrations of NNN in the estuary reduce as the estuary mouth opens, therefore the NNN concentrations suggested by NIWA to control algae growth were <0.096 mg/l for an open mouth, <0.084 mg/l for a narrow mouth and <0.070 mg/l when the mouth is closed.

The Schedule 15 NNN limit for the Kakanui River is 0.075 mg/l. The results from the estuary study align well with this limit, suggesting that the existing Schedule 15 limit for NNN is likely to prevent excessive growth of macro-algae in the estuary.

Values taken from a summary of water quality published by the Otago Regional Council (Ozanne and Wilson 2013, Table 4.2⁵) give a mean value of NNN of 0.139 mg/l for the Kakanui River and 0.299 mg/l for Waiareka Creek. These values were used as a baseline to estimate the reduction in NNN necessary to meet the target concentration as proposed in this study.

- Mean NNN in the Kakanui River needs to reduce by ~100%
- Mean NNN in Waiareka Creek needs to reduce by ~300%.

These are conservative estimates of the reductions required to meet the Schedule 15 target, as Waiareka Creek has an increasing trend in NNN (2006 to 2015).

4. Management implications of this work

The estuary modelling work aligns well with the Schedule 15 NNN limit, suggesting that it is likely to prevent excessive growth of macro-algae in the estuary. The estuary modelling work sits alongside the Kakanui groundwater project (in progress), which aims to determine if the current N-loading threshold (20 kg/N/ha) is appropriate to deliver NNN concentrations in the Kakanui River that are consistent with Schedule 15 limits.

The estuary work and Schedule 15 monitoring has clearly identified that Waiareka Creek contributes a substantial amount of nutrients to the Kakanui Estuary. This contribution is likely to increase, as NNN concentrations have increased significantly in recent years (2006 to 2015) and intensification (sheep to dairy) is likely to continue.

Waiareka Creek contributes approximately half the flow to the Kakanui Estuary at low flows, although this flow is augmented by irrigation water. The augmented flow in Waiareka Creek is transporting a significant nutrient load to the estuary, at the time of year when it is most likely to nuisance algae growth. Prior to the augmented flow,

⁵ Ozanne, R., Wilson, S. (2013) Kakanui River Water Quality Report: 95.
<http://www.orc.govt.nz/Documents/Publications/Research%20And%20Technical/surface-water-quality/Kakanui-river-water-quality-report.pdf>

Waiareka Creek contributed very little flow to the estuary, and therefore the load of NNN was likely to be much lower.

The results from this study suggest that the current NNN concentration limit should deliver community outcomes in the Kakanui Estuary. The results will also help inform the current research into the surface water and groundwater quality in the Kakanui catchment and will be particularly relevant to informing analyses on the appropriateness of the current OVERSEER limit for the Kakanui catchment, and in particular, the nitrogen sensitive zone.

Recommendation

That this report and the technical report ‘Kakanui Estuary Hydrodynamic Model’, produced by NIWA, are received and noted.

Gavin Palmer
Director Engineering, Hazards and Science

REPORT

Document Id: A840210

Report No: 2015/1166

Prepared For: Technical Committee

Prepared By: Gavin Palmer, Director Engineering, Hazards and Science

Date: 28 September 2015

Subject: Director's Report on progress

1. South American tsunami, 17 September

A magnitude 8.3 earthquake near the coast of central Chile at about 11:20am on 17 September (NZ time) resulted in a tsunami warning being issued by the Ministry of Civil Defence and Emergency Management for the Chatham Islands and east coast of New Zealand. The Otago Civil Defence and Emergency Management Group (including local authorities) responded to the alert in a coordinated way, with key activities including public messaging through various media platforms, direct approach to at-risk groups (eg, whitebaiters) and monitoring the event as it unfolded. The first effects of the tsunami were felt from about midnight on 18 September onwards, and Figure 1 below shows the sea-level traces from 3 gauges from Sumner Head (Canterbury) to Green Island (Otago). The strength of the tsunami seiche that developed as a result of this event was relatively minor at the Green Island gauge, although Figure 1 shows that it did persist for at least 4 tidal cycles. This resulted in some unusual water conditions such as local tidal surges and strong currents.

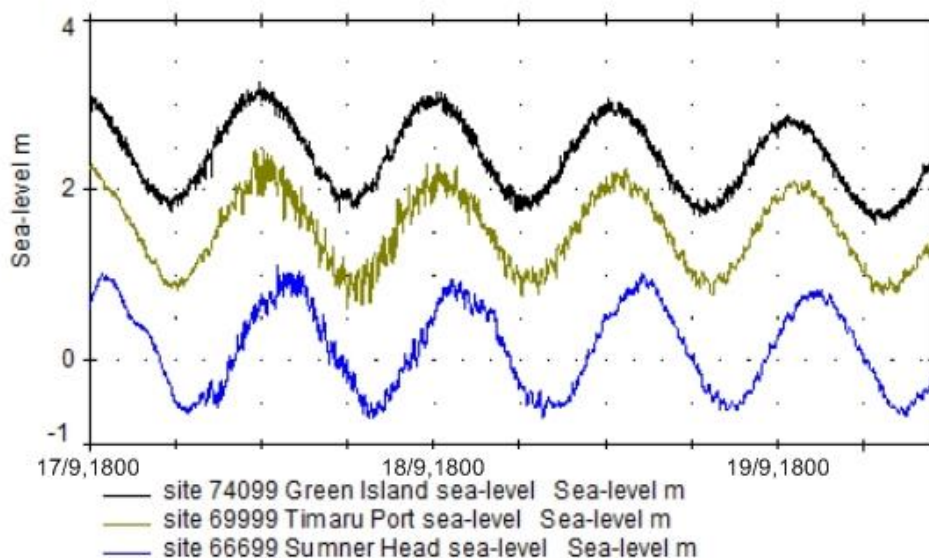


Figure 1. Sea level traces from Green Island, Timaru and Sumner Head, 6pm on 17 September to midnight on 19 September 2015

Work undertaken by ORC in 2012 to characterise the vulnerability of coastal communities to tsunami was utilised during this event. This work consisted of a series of maps identifying the parts of coastal communities which may be affected by tsunami events, and a description of potentially vulnerable assets and infrastructure. ORC then worked with Clutha District Council, Waitaki District Council, and community boards in the Dunedin City district in 2012 and 2013 to help prepare community response plans, or to inform existing plans.

2. Tomahawk Beach and Lagoons

At the request of Paul Pope, Deputy Chair of the Otago Peninsula Community Board, Crs Neill, Scott and staff met with Mr Pope, and Richard Saunders (Group Manager Parks, Recreation and Aquatics, DCC) on 21 September regarding beach sand extraction and flooding of private property at Tomahawk (Photograph 1).



Photograph 1 Tomahawk Beach and Lagoons

The meeting arose from concerns by some members of the Tomahawk community about whether consented beach sand extraction is complying with consent conditions and about high water levels in the upper lagoon during heavy rainfall. Staff described the recent routine audit of the consent which showed it is being complied with and explained the factors that influence water levels in the lagoons. It was agreed that ORC will provide the audit information to the Board for discussion and reporting at their next meeting. The purpose, function and limitations of the gated culvert that connects the two lagoons were discussed.

It was suggested that if the community would like improvements to the lake level regime then consideration could be given to including a technical investigation in the 2016/17 Draft Annual Plan.

3. Preparations for low river flows

Preparations for low river flows this summer are continuing. They include planning for targeted monitoring and reporting of river health and ecology, methods of obtaining reliable information on actual water use, approaches and procedures for enforcing conditions associated with taking surface water and groundwater and steps to assure accurate and reliable information systems (particularly low flow ratings and WaterInfo). Planning for community and stakeholder engagement and communications is also underway.

4. Pomahaka and Strath Taieri river morphology and riparian management strategies

Work to initiate these two strategies has commenced. This includes commissioning cross-section surveys (including at new cross-section locations to help inform river management decisions and consent applications to extract gravel), commissioning of LiDAR (topographic) data, and initial site inspections / walkovers / discussions with landowners. To help inform these strategies, a program of formal community consultation is being developed, and additional work to define natural river processes will be undertaken before January.

5. Recommendation

That this report is noted.

Gavin Palmer
Director Engineering, Hazards and Science

OTAGO REGIONAL COUNCIL**Agenda for a meeting of the Communications Committee to be held in
the Council Chamber, 70 Stafford Street, Dunedin on
Wednesday 14 October 2015 following the Technical Committee
meeting****Membership:**

Cr Trevor Kempton (Chairperson)
Cr Graeme Bell (Deputy Chairperson)
Cr Doug Brown
Cr Louise Croot MNZM
Cr Michael Deaker
Cr Gerrard Eckhoff
Cr Gary Kelliher
Cr Sam Neill
Cr Gretchen Robertson
Cr Bryan Scott
Cr David Shepherd
Cr Stephen Woodhead

Apologies:**Leave of absence:****In attendance:**

Please note that there is an embargo on agenda items until 8.30 am on Monday 12 October.

CONFIRMATION OF AGENDA**PUBLIC FORUM****MINUTES**

The minutes of the meeting held on 2 September 2015, having been circulated, for adoption

Matters arising from minutes

FOR NOTING

Item 1

2015/1175 **Stakeholder Engagement Report.** Manager Communications/ Manager Community Liaison and Education, 30/9/15

Reporting on community, stakeholder and staff engagement activities carried out by Stakeholder Engagement directorate staff since the last meeting.

OTAGO REGIONAL COUNCIL**Minutes of a meeting of the Communications Committee held in the
Council Chamber, 70 Stafford Street, Dunedin on
Wednesday 2 September 2015 commencing at 10.46 am**

- Present:** Cr Trevor Kempton (Chairperson)
Cr Graeme Bell (Deputy Chairperson)
Cr Doug Brown
Cr Louise Croot MNZM
Cr Gerrard Eckhoff
Cr Gary Kelliher
Cr Sam Neill
Cr Gretchen Robertson
Cr Bryan Scott
Cr Stephen Woodhead
- Apologies:** Cr Michael Deaker
The apology was accepted on the motion of Crs Croot and Scott.
- Leave of absence:** Cr David Shepherd
- In attendance:** Peter Bodeker
Jeff Donaldson
Nick Donnelly
Peter Taylor
Jane Turnbull
Fraser McRae
Gavin Palmer
Lauren McDonald

CONFIRMATION OF AGENDA

There were no changes to the agenda.

MINUTES

The minutes of the meeting held on 22 July 2015, having been circulated, were adopted on the motion of Cr Woodhead and Cr Neill

Matters arising from minutes

There were no matters arising from the minutes.

FOR NOTING

Item 1

2015/1087 **Stakeholder Engagement Report.** DSE, 24/8/15

The report detailed community, stakeholder and staff engagement activities carried out by Stakeholder Engagement directorate staff since the last meeting.

Councillors expressed interest in having more opportunity to attend upcoming events where their attendance would be appropriate. It was agreed that Councillor attendance was appropriate at public events and ORC lead events but not always for activities where ORC was not the lead agency.

Mr Bodeker confirmed a calendar list of upcoming management events would be provided to Councillors for their attendance as participants or observers as appropriate.

Water Quantity

Mr McRae and Dr Turnbull outlined the five options currently being assessed for working with groups, including timeframes, level of Council involvement in advisory role, and education of consent holders. Staff would report back to Council by December 2015 on the community's key messages, and seek feedback from Council on the staff evaluated options including the costs, risks and benefits of those options.

Cr Bell moved
Cr Robertson seconded

That the report be noted.

Motion carried

The meeting closed at 11.20 am.

Chairperson

REPORT

Document Id: A842686

Report Number: 2015/1175

Prepared For: Communications Committee

Prepared By: Manager communications
Manager community liaison and education

Date: 30 September 2015

Subject: **Communications Committee – Report September 2015**

This report records stakeholder engagement activity between 15 August and 25 September 2015.

1. Water Quality

Table: Number of people at events and meetings

110 At events	62 Meetings	19 Other	49 Schools
<ul style="list-style-type: none"> ■ Kakanui Landcare Trust community catchment riparian planting day ■ Alexandra 6A presentation to urban and lifestyle block owners ■ Pathway to the Pomahaka Stakeholder group ■ Washpool community meeting. 	<ul style="list-style-type: none"> ■ Kakanui Community Catchment Project steering group ■ Dairy stakeholder meetings ■ North Otago dairy working group ■ Beef and Lamb NZ collaboration ■ North Otago Irrigation Company ■ SFF Central Otago Dairy Grazing Project 	<ul style="list-style-type: none"> ■ Staff from Waterwatch and community groups on water measuring 	<ul style="list-style-type: none"> ■ Weston Primary School ■ Lawrence School ■ Queens High School.

External events

We have continued to support landholders and industry groups by speaking at their events. We have also undertaken or been part of meetings with both Dairy NZ and Beef and Lamb NZ to develop initiatives to work together.

Events that we have spoken at include;

- **Kakanui Community Catchment Project** riparian planting day at Clifton Falls, Kakanui River on 6 September. Staff discussed the water quality in the catchment. Fifty-five people attended the day, including 18 children.
- **Neighbour to Neighbour – We Share: Water and Waterways in the Manuherikia and Districts** meeting on 10 September in Alexandra. The presentation covered water quality information and the messages outlined at the 6A road shows. Fish and Game also presented to the group. Twenty people attended.
- **Pathway for the Pomahaka group** biannual meeting on 24 August with the group's stakeholders. Staff contributed to the discussions on an overview of catchment project and Council activities in the catchment. Twenty people attended.
- **Washpool Community** meeting on 4 September – Staff held a drop-in session in Clydevale, for farmers to come in and discuss the intensive sampling compliance programme in the Washpool. Approximately 15 farmers attended, to discuss what the project was about, and to get feedback on how the community would like to be involved.
- **North Otago Irrigation Company** MOU meeting on 28 August. NOIC presented an overview of their farm plan audit process and the results from the 2014/15 season. ORC staff reciprocated with an overview of the latest SOE results for North Otago.
- **Kakanui Community Catchment Project Steering Group** meeting on 15 September. Approximately 10 industry and stakeholder representatives attended. Staff provided an overview of what ORC is working on in the catchment and gave input into the milestone projects for the coming year.
- **North Otago Dairy Working Group** meeting on the 24 September. ORC staff gave an update on the Compliance situation in North Otago before the aims, objectives and outcomes from the group were discussed. Eight people attended.
- **Sustainable Farming Fund (SFF) dairy grazing project.** Staff took part in the annual review of progress on 18 August. The focus of the programme has been to determine the N leaching rates that result from wintering of cows in Central Otago. It is anticipated that these assessments will be achieved ahead of timelines – accordingly the original three-year project timeframe has been reduced. The recent reduction of product prices for milkfat has reduced the demand for off-farm grazing which is now being taken up by alternative land uses. Assessments of the impact of alternative land use on Nitrogen leaching for winter greenfeed supply properties have now been included in the project. On completion of the project, information will be accessible on a shared website between Beef and Lamb and DairyNZ. This will include environment industry best practice, and a link to Regional Council websites to highlight relative rules.

- **Beef and Lamb Meeting with ORC** on 27 August. ORC and Beef and Lamb staff met to discuss collaborative opportunities to improve water quality on sheep and beef farms. Discussions focused on developing joint messages, co-ordinating programme delivery, supporting farmer leadership via the development workshops for farming leaders, ORC input at land and environment plan workshops, and collaborating on field events.

ORC staff presented the latest water quality results for sheep and beef farming catchments, and identified the key practices that farmers could implement to improve or maintain water quality.

Following this meeting we distributed a media release encouraging farmers to establish protective buffers for waterways adjacent to winter crops to reduce sediment runoff, and to manage stock access around small tributaries. This media release was published by the ODT and the Otago Southland Farmer.

- **Dairy stakeholder meetings.** Staff attended and participated in meetings with the dairy industry on 17 August and 7 September to discuss options for collaboration with the Dairy Industry to improve effluent management.

Other

Other stakeholder work has included the following;

- **Weston Primary School** on 8 September. Staff, in conjunction with DoC conducted a water quality session with nine pupils and the landowner.
- **Lawrence School** held an interactive water quality field day on 25 August for 25 pupils. Staff discussed water quality as well as visiting a local creek to undertake a water quality assessment.
- **Queens High School** on 21 September. Presentation on the water quality in the Taieri catchment to 15 year 13 Outdoor Education class students.
- **Waterwatch.** Staff were given a broad overview on 4 September of the Waterwatch programme and how it could fit in Otago. Waterwatch is an interactive programme that involves students monitoring the 'health' of their local rivers or streams in a safe and ecologically friendly way.

2. Water Quantity

An implementation plan for 1C is currently being developed. This work follows on from the work of the last few months to identify the role of Council in supporting groups. Staff are seeking governance input into a final approach.

Staff met with seven Strath Taieri irrigators on 9 September as they discuss options for consenting and water storage.

3. Land, Biodiversity, and Biosecurity

Nothing to report.

4. Air Quality

Staff attended a meeting of the National Air behavioural change project in Christchurch in August. This project is piloting social community based behavioural change techniques to improving air quality in Christchurch and two North Island locations. The outcomes of this pilot will be applicable to air quality rule implementation in Otago.

5. Hazard and Risk Mitigation

Natural hazards staff presented the draft Kakanui River Morphology and Riparian Management Strategy to key stakeholders. The presentation focussed on the key objectives of the strategy, and the identified mechanisms for implementation.

The manager communications has been coordinating the regional promotion for the national MCDEM ShakeOut event. Each district council, and the ORC have been publicising ShakeOut through print and radio promotions, social media and community based activities. At the time of writing about 42,000 people in Otago had registered to participate.

6. Regional Land Transport

Nothing to report.

7. Statutory Responsibilities

The Long Term Plan was published and distributed.

8. Customers and Stakeholders

Staff met with the Untouched World Charitable Trust (UWCT) on how we will provide staff resource and expertise to support the development of a new water leadership programme, based in Central Otago to be held in December in Bannockburn.

9. Media and Communications

Media activity

Over the period we had 92 print media mentions, and six broadcast media mentions. Stories covered included:

- Emergency preparedness and ShakeOut
- The proposed Regional Policy Statement
- Submissions on the Lindis River minimum flow
- Dunedin waterfront development
- Preparations for the next stage of the Leith flood protection work
- Introducing the Korean strain of RHD virus
- Farm prosecutions
- New ORC directors
- Proposed city bus hub
- Wilding pines.

Six media releases were issued – topics covered included the Tsunami risk, protecting local waterways, collaborative dairy approach, the appointment of new ORC directors, further submissions on the RPS, and wilding pines.

No letters to the editor required responses during the period.

Social media

There were 25 posts on Facebook. As at 01 October the ORC Facebook page had 936 likes. Topics posted included ShakeOut, the Tsunami threat, wilding pines, new directors, and water quality.

We sent out 40 Tweets or retweets on topics similar to those featured in media releases and on Facebook – our Twitter account had 472 followers as of 01 October.

Communications

The spring issue of Otagowide, focussing largely on our LTP work programmes was published and distributed.

Web development and traffic summary

Updates are made daily to the ORC website. Altogether 115 changes were made during this period.

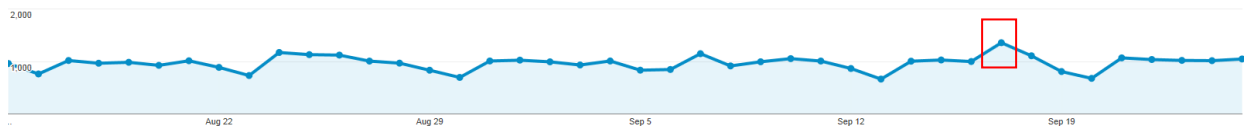
Some important updates made during this period include:

- A new online direct debit form is now accessible from the rates page.
- 156 submission added to the Otago Regional Policy Statement Review page.
- A new webpage has been created for the Proposed Dunedin flood protection and drainage scheme designations.
- A new septic tanks page displaying information on maintenance, dos and don'ts, and septic tank failure.

- Updates to the Proposed Plan Change 5A page including displaying 81 submissions.
- Currently working on new pages for the buses section that will display information about the 2016 Dunedin bus network changes, including interactive maps, new route numbers, fare zones etc..

Visits to the ORC website

During this period visits to the website were fairly consistent, however, we had a slight rise in visitors on the 17th September when Civil Defence NZ issued the tsunami warning for the east coast of New Zealand. On this day we had 1,351 people visit our website compared to an average daily visit of 1000 people.



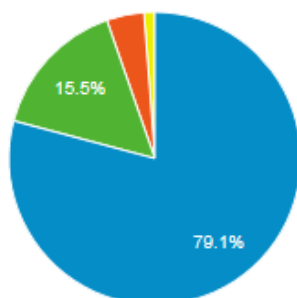
The top documents downloaded during this period have been the:

- 2015 bus timetable (4,251 downloads)
- Direct Debit form (416 downloads)
- Proposed RPS submissions (175 downloads).

General website statistics



The graph below shows how people are getting to our website and indicates a heavy reliance on an organic search. As our social media presence grows we are expecting more people to link to the website from those channels.



- Organic Search
- Direct
- Referral
- Social

Number of visits resulting from these channels:

Organic – 31,962

Direct – 6,275

Referral – 1,675

Social - 479

Organic Search: Google, Bing.

Direct: Typing website address directly into browser.

Social: Visitors have clicked on a link to our website from social media.

Referral: Visitors have clicked on a link to our website from another website.

The devices used to visit our website and comparisons between this period and the previous period are:

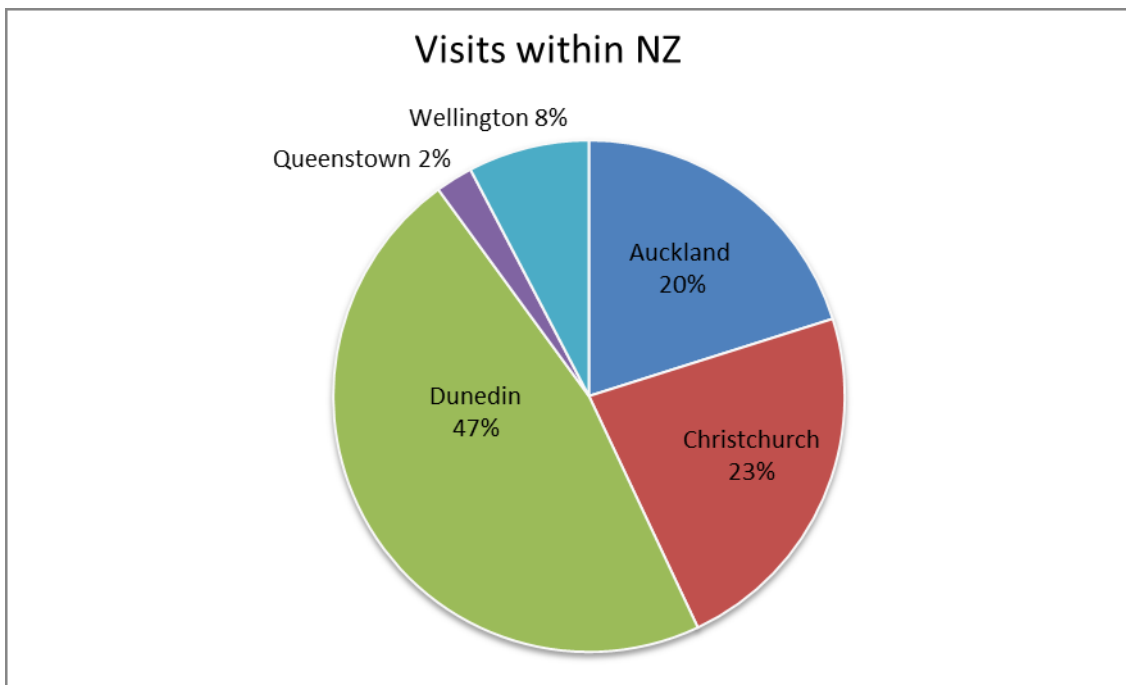
Desktop/laptop (current period): 20,842 visits

Desktop/laptop (previous period): 25,622 visits

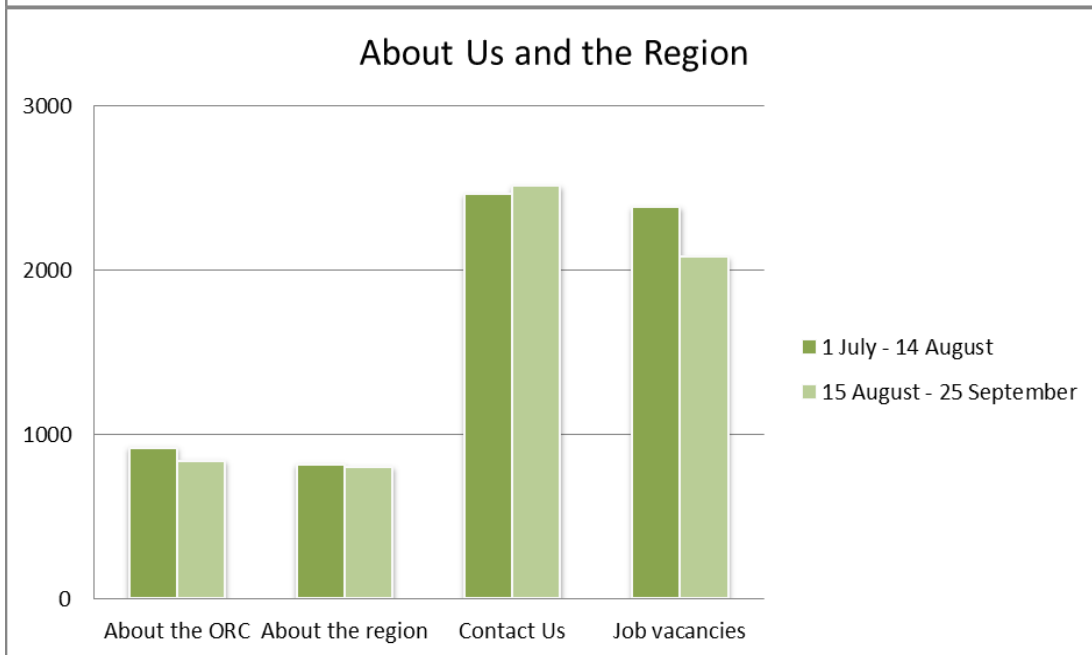
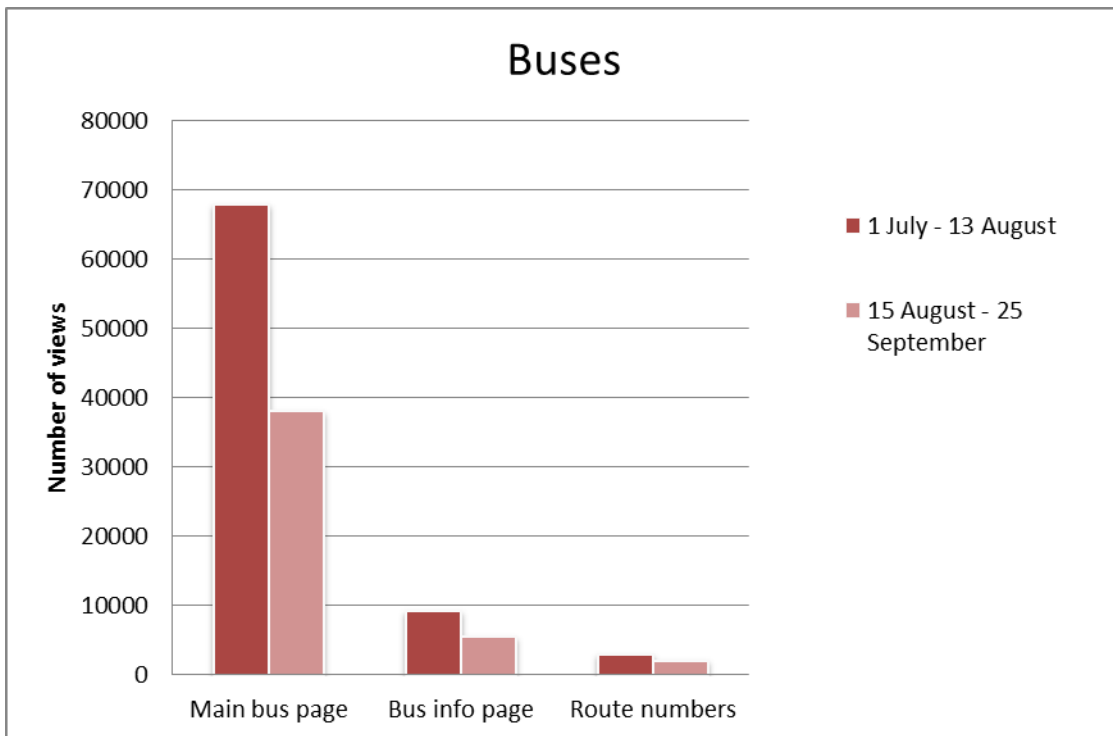
Mobile/tablet (current period): 19,549 visits

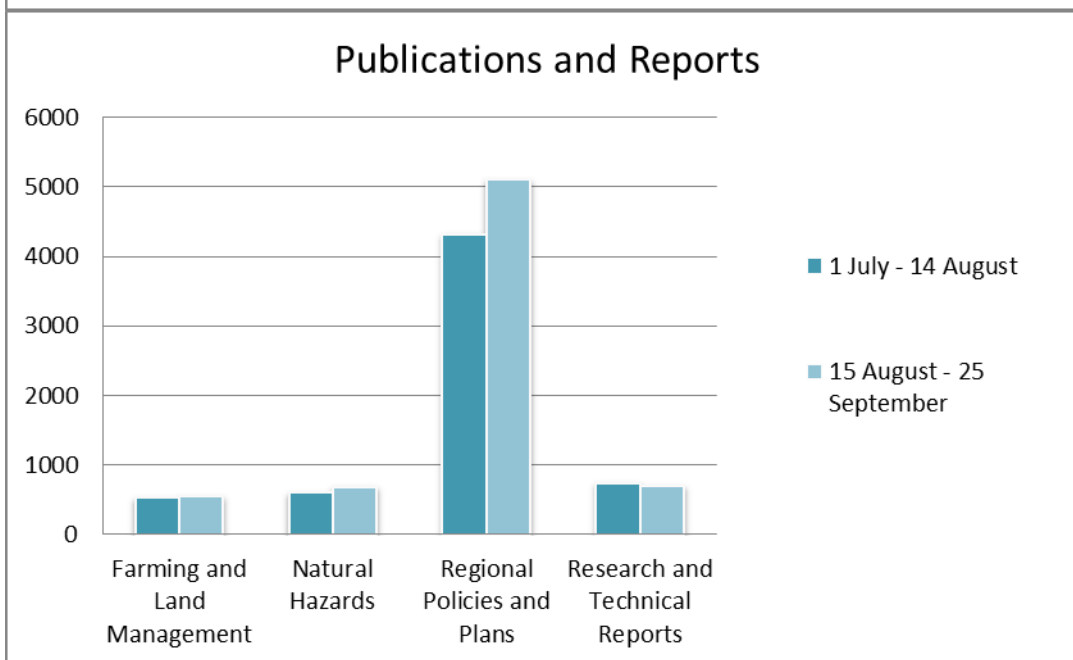
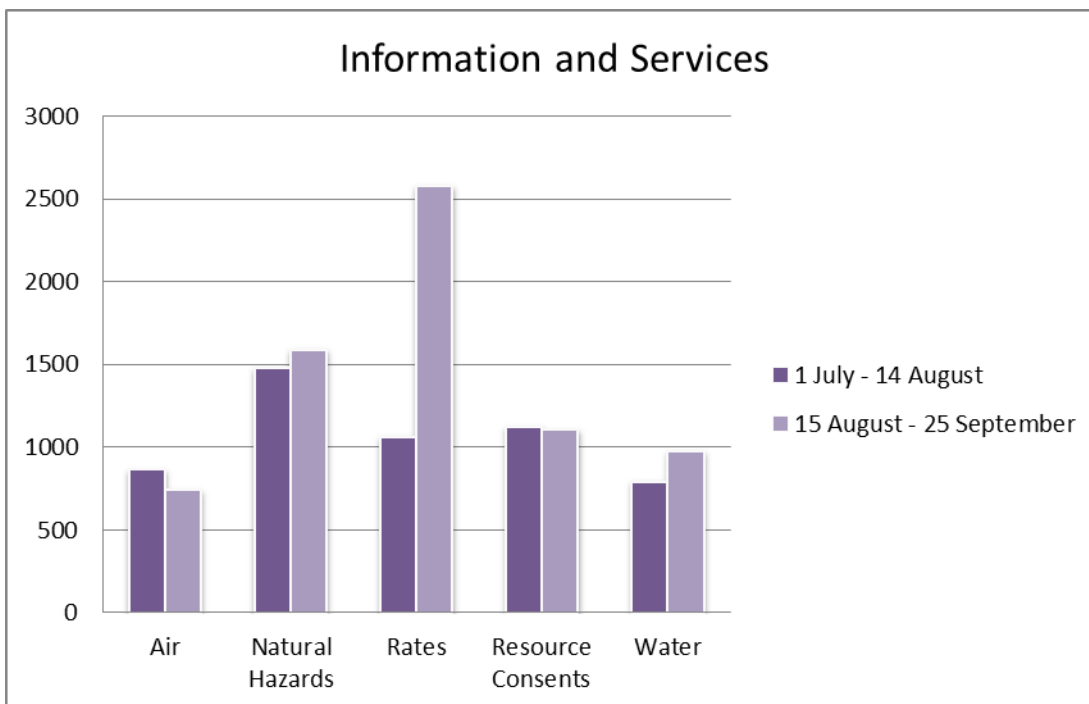
Mobile/tablet (previous period): 29,004 visits

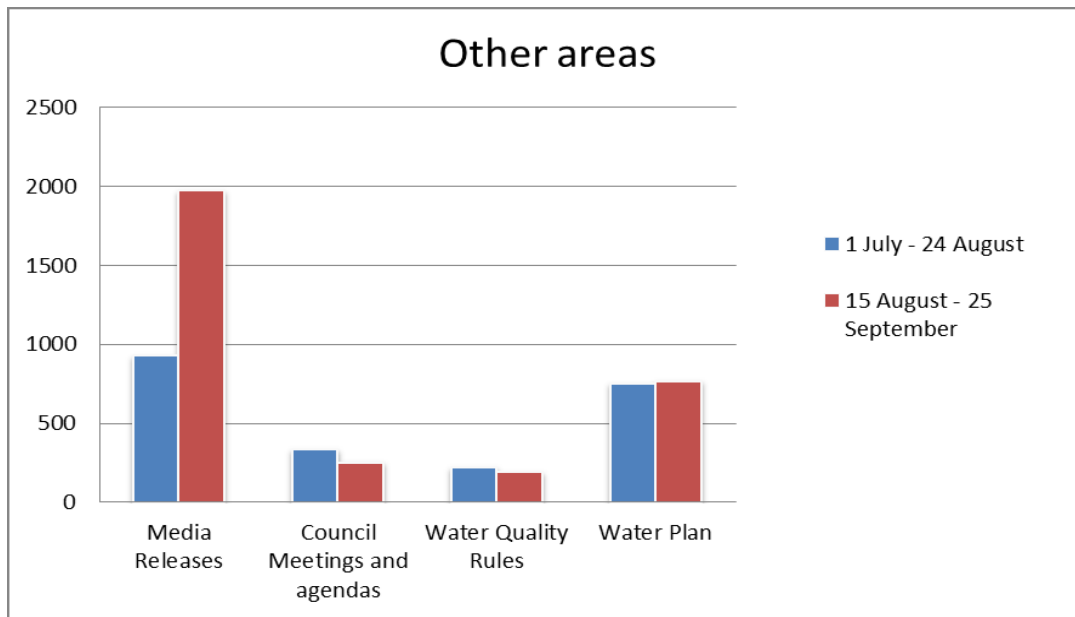
There were 37,720 visits to the ORC website from New Zealand, 899 from Australia, and 422 from the United States.



Analysis of webpages viewed







10. Recommendation

That this report is noted.

Peter Taylor
Manager communications

Nicola McGrouther
Manager of community liaison & education

OTAGO REGIONAL COUNCIL**Agenda for a meeting of the Policy Committee to be held in the
Council Chamber, 70 Stafford Street, Dunedin on
Wednesday 14 October 2015 following the Communications
Committee meeting**

Membership:

Cr Gretchen Robertson (Chairperson)
Cr Michael Deaker (Deputy Chairperson)
Cr Graeme Bell
Cr Doug Brown
Cr Gerrard Eckhoff
Cr Gary Kelliher
Cr Trevor Kempton
Cr Sam Neill
Cr Bryan Scott
Cr David Shepherd
Cr Stephen Woodhead

Apologies:

Leave of absence:

In attendance:

Please note that there is an embargo on agenda items until 8.30 am on Monday 12 October.

CONFIRMATION OF AGENDA

PUBLIC FORUM

MINUTES

The minutes of the meeting held on 2 September 2015, having been circulated, for adoption.

Matters arising from minutes

ITEMS FOR NOTING

Item 2

2015/1168 **Director's Report on Progress.** DPPRM, 2/10/15

The report gives an overview of significant activities undertaken by the Policy section since the last meeting of the Policy Committee.

OTAGO REGIONAL COUNCIL**Minutes of a meeting of the Policy Committee held in the
Council Chamber, 70 Stafford Street, Dunedin on
Wednesday 2 September 2015 commencing at 11.20am**

Present: Cr Gretchen Robertson (Chairperson)
Cr Graeme Bell
Cr Doug Brown
Cr Gerrard Eckhoff
Cr Gary Kelliher
Cr Trevor Kempton
Cr Sam Neill
Cr Bryan Scott
Cr Stephen Woodhead

Apologies: Cr Michael Deaker (Deputy Chairperson)
The apology was accepted on the motion of Crs Robertson
and Scott.

Leave of absence: Cr David Shepherd

In attendance: Peter Bodeker
Jeff Donaldson
Scott Maclean
Nick Donnelly
Fraser McRae
Gavin Palmer
Charlotte Stickings

CONFIRMATION OF AGENDA

There were no changes to the agenda.

MINUTES

The minutes of the meeting held on 22 July 2015, having been circulated,
were adopted on the motion of Crs Croot and Neill.

Matters arising from minutes

Clarification was given that the submission was made by Council on the Proposed National Environmental Standard for Plantation Forestry. Cr Woodhead noted that he was to meet with the minister on Friday and this matter was on the agenda.

PART A – RECOMMENDATIONS

Item 1

2015/1115 **Updating designation assessment.** DPPRM, 21/8/15

The report provided an update on ORC designations to be processed as part of the Dunedin City Council's district plan review.

A question was raised asking if the landowners in the Taieri had been updated on the designations. Mr McRae responded that they had not yet been fully informed but they were all being written to and invited to drop-in sessions where they would be able to look at maps and talk with staff. He also noted that following the decision made at the Extraordinary Council meeting of 22 July 2015, the request for designation of the Chute area of the Lower Taieri Flood Protection Scheme had been removed.

In response to a question Mr McRae explained that ORC relied on the designation authority and the City Council would consult on the entire district plan which included designations. Members of the public could submit to the City on the plan, which would be notified 26 September 2015.

Mr McRae further explained in response to a question that a designation prevented a landowner doing work on their property which could have an effect on the designations purpose, such as affect ORC drains. Designations are used to protect public utilities such as roads, power lines, and flood schemes.

Cr Kempton moved

Cr Neill seconded

That the designation for the Lower Taieri Flood Protection Scheme be altered in accordance with this report.

Motion carried

PART B - FOR NOTING

Item 2

2015/1092 **Director's Report on Progress.** DPPRM, 21/8/15

The report gave an overview of significant activities undertaken by the Policy section since the last meeting of the Policy Committee.

Cr Croot moved
Cr Scott seconded

That the report be noted.

Motion carried

The meeting closed at 11.35am.

Chairperson

REPORT

Document Id: A840396

Report Number: 2015/1168

Prepared For: Policy

Prepared By: Director Policy, Planning and Resource Management

Date: 2 October 2015

Subject: **Director's Report on Progress**

1. Policy Responses

1.1 National Policies, Strategies and Plans

The following were received over the six week period to 2 October:

Agency	Number	Details
Ministry of Business, Innovation and Employment	1	NZ Petroleum and Mineral's consultation for the 2016 Block Offer. This is the annual tender for oil and gas exploration permits.

1.2 Responses: Territorial Authority and Regional Authority Plan Changes and Resource Consent Applications

In the six weeks ending 2 October 2015, the following were received:

Agency	Number Received	Document
Queenstown Lakes District Council	2	Consent applications
Queenstown Lakes District Council	1	Notified Proposed District Plan
Dunedin City Council	2	Consent applications
Dunedin City Council	1	Notified Proposed District Plan ('2GP')
Central Otago District Council	2	Consent applications

The following responses were made over the six week period:

Proposal	Response Type	Issues
QLDC – Bridesdale Farms Limited (Special Housing Area)	Submission – oppose	Further assessment is required to demonstrate the development will not exacerbate or be affected by, flooding events.
DCC - Glenelg Gospel Trust Inc	Submission – oppose	Location of the development and related infrastructure is at risk from natural hazards, further assessment is required to address these risks. Advice also given that certain activities will also require approval under ORC's Flood Protection Management Bylaw 2012.

1.3 Appeal: Clutha District Council Proposed Plan Change 28 (Natural Hazards)

No change to that reported in the previous directors' update. ORC is still awaiting the s274 party's update due to the Environment Court by 9 October 2015

1.4 Declaration sought from High Court on livestock deposition of excreta

The Royal Forest and Bird Protection Society of New Zealand Incorporated have sought declarations from the High Court, regarding their appeal against Canterbury Regional Council's Proposed Land and Water Plan, that:

- Where a person uses land for livestock farming, the deposition of excreta by the livestock to land, in circumstances where contaminants from the excreta may enter water, is a discharge for the purposes of :
 - Section 15(1) of the Resource Management Act 1991; and
 - The National Policy Statement for Freshwater Management 2014;
- On land supplied with water from an irrigation scheme in the Selwyn Te Waihora sub region, the direct deposition by livestock of excreta in circumstances where contaminants may enter water is a discharge for the purposes of Rules 11.5.15 and 11.5.15A of Variation 1 of the Proposed Canterbury Land and Water Regional Plan.

Justice Dunningham has ordered that all regional councils, amongst other named parties, should have the opportunity to participate in the determination process, as they have an interest greater than the public generally.

ORC will participate in these proceedings, and is liaising with other regional councils to make a regional response to the declarations sought.

2. ORC: Policy, Plans and Strategies

2.1 Appeals: Proposed Plan Change 3C (Waiwera catchment minimum flow)

Two appeals have been received on Proposed Plan Change 3C (Waiwera catchment minimum flow):

- PJ Neame, with respect to the proposed primary allocation minimum flow lifting from 260 litres per second (notified) to 300 litres per second (ORC decision);
- Otago Fish and Game Council, with respect to their request to see a higher supplementary minimum flow.

PJ Neame has joined the Otago Fish and Game appeal as a Section 274 party.

ORC will be seeking mediation through the Environment Court to resolve the appeals.

2.2 Review of Regional Policy Statement

The Proposed Regional Policy Statement for Otago was publicly notified on Saturday 23 May 2015, with submissions closing on Friday 24 July 2015.

The Summary of Decisions Requested by submitters and Call for Further Submissions was publicly notified on Saturday 29 August 2015, with further submissions closing on Friday 11 September 2015. Further submissions were received from 40 people or organisations.

The hearing is scheduled to commence in Dunedin on Monday 9 November 2015, and will extend over three weeks. Hearings will be held in Dunedin, Alexandra, Queenstown and Oamaru.

2.3 Proposed Plan Change 5A (Lindis: integrated water management)

This proposed plan change was notified on Saturday 8 August 2015, with submissions closing on Friday 4 September 2015. A total of 81 submissions were received.

The Summary of Decisions Requested by submitters and Call for Further Submissions was publicly notified on Saturday 26 September 2015. Further Submissions close on Friday 9 October 2015. As yet, no further submissions have been received.

The hearing is being scheduled for early in 2016.

2.4 Pest Management Plan

Over the past two years, staff have been involved with development of a template for use in the next Regional Pest Management Plan. Initially, Otago collaborated with Southland and Canterbury, and over the past year, every region has become involved. The national template is now being finalised.

The National Policy Direction for Pest Management 2015 came into effect on 24 September 2015, and sets out new requirements for:

- pest and pathway management plans;
- various programmes;
- cost benefit analyses;
- allocation of costs; and
- provisions for good neighbour rules (which bind the crown).

It also requires the regional council to make a determination as to whether a pest management plan or pathway management plan is inconsistent with the national direction. A report will be presented back to Council for that determination in due course.

3. The Trans-Pacific Partnership

The Wednesday 16 September 2015 Council Public Forum meeting involved a petition relating to the Trans-Pacific Partnership. The TPP is currently before Government. Comment on the TPP with a recommended response is contained in Attachment 1 of this report.

4. ORC Proposed Designations

On 31 August, ORC lodged Notices of Requirement with the DCC for designations to be included in the Proposed Dunedin District Plan (2GP). These designations relate to:

- Lindsay Creek river works
- Kaikorai Stream river works
- Leith Flood Protection scheme
- Lower Taieri Flood Protection scheme
- East Taieri Drainage Scheme
- West Taieri Drainage Scheme

Notifications letters from ORC were sent out to all identified land owners affected by the proposed designations on 18 September 2015, prior to the DCC's notification of its Proposed District Plan on 26 September 2015.

ORC is consulting with affected land owners through a number of forums including running drop in sessions where the public attend at their convenience and ask questions of ORC staff. To date, three of the four drop in sessions have been run, two in Mosgiel and one in North Dunedin. Approximately 60 people have attended the three drop in sessions.

Public response to the designations has largely been supportive and staff have been able to resolve almost all concerns affected landowners raised in respect to the effect of the designations.

Public attendees raised many questions beyond the scope of the designations. At the North Dunedin session, questions focused on:

- What was the ORC doing about the previously proposed Lindsay Flood Scheme?
- Erosion of private property
- Proposed zone reclassification for flood hazards by DCC

At the Mosgiel drop in sessions, questions focused on:

- concern with the function of the current flood protection and drainage scheme.
- Proposed zone reclassification for flood hazards by DCC

A notable positive benefit of running the drop in sessions is that staff have been able to increase land owners awareness of the Flood Protection Management Bylaw and its requirements.

At the conclusion of the final drop in session, staff will debrief and document the outcomes of the sessions including the scope of information and questions raised by the public.

The public has till November 24 to lodge a submission with the DCC in respect to the proposed designations.

5. Royal Forest and Bird Protection Society application

The Royal Forest and Bird Protection Society has made application in the High Court for declarations and the deposition of excreta from farmed livestock is a discharge for the purposes of both the RMA and the National Policy on Freshwater Management 2014.

The two declarations effectively seek answers to the same question. As a subordinate document, the NPS cannot broaden the term "discharge" as used in the RMA itself.

Section 15(1)(b) states no person may discharge any contaminant onto or to land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water.

Generally, neither Section 15 RMA, nor its equivalent earlier provision, Section 34 Water and Soil Conservation Act 1967, were regarded as applying to animal discharges to land.

This conventional view was affirmed by the High Court in Awarua Farm (Marlborough) Limited and Woolley [2014] NZHC 2264, paras [40]-[51]

The conventional approach means that a discharge occurs when the contaminants leave the control of the discharger. The rules in the Otago Regional Water Plan are drafted accordingly.

There are also ancillary, difficult issues; for example, what is “livestock farming”? What is the difference between livestock farming and keeping other animals who discharge excreta to the ground?

If the application for declarations were successful, the outcome will be that this Council will have to revise the Regional PlanWater:

- Amend the plan to make such discharges permitted activities, or
- Require all farmed animals near rivers to be consented, or
- Require all rivers to be fenced so that no “discharge occurs where it may get into water”

All these will have very high costs for water management, both Council for plan changes and consents, and farmers for consents or fencing and land out of production. Essentially, there will be little real benefit to water quality.

The matter is of national significance.

Council has lodged a response to this effect with the Court.

6. Recommendation

That this report is noted.

Fraser McRae
Director Policy Planning and Resource Management

The Trans-Pacific Partnership

Attachment 1

1 What is TPP

The Trans-Pacific Partnership is a proposed free trade agreement between 12 countries bordering the Pacific Ocean, being Australia, Brunei, Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, USA and Vietnam. Notably, China is not included in TPP.

The TPP countries are responsible for 40% of world GDP, 26% of trade and 793 million consumers.

2 Pros and cons of TPP

2.1 Pros

TPP is seeking to remove tariff and non-tariff barriers to trade by aligning statutes and regulations on the provision of goods and services. In so doing, it seeks to:

- Boost economic growth and exports.
- Create employment.
- Increase incomes.

2.2 Cons

Widespread alignment of statutes and regulations will likely mean lowest standards will be accepted along with:

- Extend income from patents and reduce access to cheaper generic products.
- Promote manufacturing relocation to cheaper labour sources.
- Concentrate income increases to wealthier countries.
- Investor-state dispute settlement mechanism will be further reinforced.

3 Barriers to TPP

Different approaches by individual countries mean TPP negotiation is fraught with conflicts.

Conflicts include:

- USA wants protection for intellectual property, unlike much of Asia.
- Singapore, Vietnam and Malaysia want to support SoEs, unlike USA.
- USA and Japan want to retain barriers for automobiles and farming unlike NZ.
- USA wants to allow business to directly sue governments using the investor-state dispute settlement mechanism.

4 Public Comment

Negotiation of TPP has been undertaken behind closed doors and consequently public comment has been based on leaked material and prepared by commentators having opposing views to the proponents of TPP. Points raised include:

- It threatens to give corporates greater influence over local and central governments.
- Undermines the public interest role of publicly owned enterprises which have private competitors.

- Ends preference for local investors and suppliers, and ends use of local resources.
- Protects against regulation that impacts on value or profit – meaning economic outcomes dominate over environmental and social outcomes.

5 Discussion

Control over the process of regulating [statutes, regulations, plans and bylaws prepared by [central, regional and local government] will require far greater scrutiny including consideration of risks, cost and benefits, and application of evidence based decision making, at the local, regional and international – all resulting in light handed regulation.

Allowing business to directly sue governments using the investor-state dispute settlement mechanism will continue the current situation where: Philip Morris Tobacco is suing the Australian Government over plain legislation for packaging of cigarettes, and Bilcon Mining is suing the Canadian Government over restriction on mining in environmentally sensitive areas. Canadian experience, resulting from dispute settlement, is such that federal government is now seeking to recover costs from state government.

6 Recommendation

That Council receives this report

OTAGO REGIONAL COUNCIL**Agenda for a meeting of the Regulatory Committee to be held in the
Council Chamber, 70 Stafford Street, Dunedin on Wednesday
14 October 2015 following the Policy Committee meeting.**

Membership:

Cr Sam Neill (Chairperson)
Cr Gerrard Eckhoff (Deputy Chairperson)
Cr Graeme Bell
Cr Doug Brown
Cr Louise Croot MNZM
Cr Michael Deaker
Cr Gary Kelliher
Cr Trevor Kempton
Cr Gretchen Robertson
Cr Bryan Scott
Cr David Shepherd
Cr Stephen Woodhead

Apologies:

Leave of Absence:

In attendance:

Please note that there is an embargo on agenda items until 8.30 am on Monday 12 October.

CONFIRMATION OF AGENDA

PUBLIC FORUM

MINUTES

The minutes of the meeting held on 2 September 2015, having been circulated, for adoption

Matters arising from minutes

PART A – RECOMMENDATIONS

- Item 1
2015/1177 **Summary of Dairy Farm Inspections for 2014/2015.** DEMO, 19/08/15

The report describes the findings of the 2014/2015 annual inspection of dairy farms in the Otago Region.

PART B - ITEMS FOR NOTING

- Item 2
2015/1169 **Biosecurity and RMA Monitoring Report.** DEMO, 02/10/15

Reporting on water, air, pest, and contaminated site environmental monitoring and incidents for the period 24 July to 4 September 2015.

- Item 3
2015/1180 **Consent processing, consent administration and Building Control Authority update.** DPPRM, 30/9/15

Detailing consent processing, consent administration and building control authority activity for the period 17 August to 25 September 2015.

- Item 4
2015/1167 **RMA, Biosecurity Act and Building Act Enforcement Activities.** DPPRM, 25/9/15

Detailing Resource Management Act 1991, Biosecurity Act 1993 and Building Act 2004 enforcement activities undertaken by the Otago Regional Council for the period 13 August to 25 September 2015.

- Item 5
2015/1178 **Rabbit Serum Results 2015.** DEMO, 15/07/15

The report details rabbit serum results collected across 10 sites in Otago during February and March 2015.

OTAGO REGIONAL COUNCIL

**Minutes of a meeting of the Regulatory Committee held in
the Council Chamber, 70 Stafford Street, Dunedin on Wednesday
2 September 2015 commencing at 9.00 am**

Present: Cr Sam Neill (Chairperson)
 Cr Gerrard Eckhoff (Deputy Chairperson)
 Cr Graeme Bell
 Cr Louise Croot MNZM
 Cr Gary Kelliher
 Cr Trevor Kempton
 Cr Gretchen Robertson
 Cr Bryan Scott
 Cr Stephen Woodhead

Apologies: Cr Doug Brown (for lateness)
 Cr Michael Deaker
 The apologies were accepted on the motion of Crs Eckhoff and Croot.

Leave of Absence: Cr David Shepherd

In attendance: Peter Bodeker
 Jeff Donaldson
 Scott MacLean
 Nick Donnelly
 Fraser McRae
 Gavin Palmer
 Lauren McDonald

CONFIRMATION OF AGENDA

There were no changes to the agenda.

MINUTES

The minutes of the meeting held on 22 July 2015, having been circulated, were adopted on the motion of Crs Kempton and Croot

Cr Neill welcomed Mr MacLean who has been appointed as Director of Environmental Monitoring and Operations effective from 7 September.

Cr Woodhead acknowledged the sad passing of long standing staff member Colin Walker. Mr Walker had worked in the Queenstown area for over 21 years and was widely respected for his experience and knowledge and will be sadly missed by Council.

Matters arising from minutes

There were no matters arising from the minutes.

ITEMS FOR NOTING

Item 1

2015/1086 **Biosecurity and RMA Monitoring Report.** DEMO, 18/8/15

The report detailed water, air, pest, and contaminated site environmental monitoring and incidents for the period 12 June to 24 July 2015.

Mr MacLean confirmed better communication was now in place with DoC in regard to identifying wallaby movements and sightings throughout the Otago region.

Councillors requested more insight into the details of the Audit & Inspection monitoring as it related to understanding the degree of non compliance. Mr Donaldson explained that the majority of non-compliance matters were minor in that data had either been received late or was incomplete. Mr MacLean advised that details of the levels non-compliance would be provided in future reports.

Mr McRae advised in regard to state of the environment monitoring that the Ministry for the Environment was now focusing on addressing one topic (air, land, water, coast) each year.

Cr Woodhead confirmed the National Policy Direction has recently been approved by Cabinet in regard to pest management. This outlined the national Pest Plan including the responsibility of the Crown to act as a "good neighbour".

Mr Donaldson confirmed there was a strategy in place for water metering and clarified that of the 152 meters still in the process of installation, verification of the data was the issue in that there was currently a limited number of companies able to verify data. Only those consent holders who are not taking any action in regard to installation of metering equipment would receive abatement notices.

Cr Eckhoff moved

Cr Robertson seconded

That the report be noted.

Motion carried

Item 2
2015/1116

Consent processing, consent administration and Building Control Authority update. DPPRM, 21/8/15

The report detailed consent processing, consent administration and building control authority activity for the period 1 July to 14 August 2015.

Mr McRae confirmed the Southern Clams Ltd resource application had been withdrawn by the applicant. 55 submissions were received on the application, the majority of which were in opposition.

Cr Croot moved
Cr Kelliher seconded

That the report be noted.

Motion carried

Item 3
2015/1093

RMA, Biosecurity Act and Building Act Enforcement Activities. DPPRM, 12/8/15

The report detailed Resource Management Act 1991, Biosecurity Act 1993 and Building Act 2004 enforcement activities undertaken by the Otago Regional Council for the period 1 July to 12 August 2015.

Mr Donaldson confirmed 12 incidents were under investigation by staff at present prior to going through to the Enforcement Committee.

Cr Croot moved
Cr Scott seconded

That the report be noted.

Motion carried

Item 4
2015/1096

Appointment of Plan Change Hearing Commissioners. DPPRM, 1/9/15

The report listed hearing commissioners appointed for the period to 1 September 2015.

Cr Croot moved
Cr Woodhead seconded

That the report be noted.

Motion carried

The meeting closed at 9.33am

Chairperson

REPORT

File: A843207
 Report No.: 2015/1177
 Prepared For: Regulatory Committee
 Prepared by: Martin King, Manager Environmental Services
 Peter Kelliher, Legal Counsel.
 Date: 19 August 2015
Subject: Summary of Dairy Farm Inspections for 2014/2015

1. Précis

This report describes the findings of the 2014/2015 annual inspection of dairy farms in the Otago Region.

2. Introduction

There are currently 451 operating dairy sheds in Otago. As farm dairy effluent discharges have the potential to adversely affect water quality when managed poorly, all farms have been inspected annually since 2001. These inspections are in addition to investigations from any complaints that may be received about discharges from farms.

The purpose of the annual inspections is to determine whether farms were meeting the prohibited activity rules for the discharge from animal waste collection systems. The prohibited activity rule conditions that are assessed include:

Rule 12 C.0.2

The discharge of any contaminant from an animal waste system, silage storage or a composting process:

- (i) To any lake, river or Regionally Significant Wetland; or
- (ii) To any drain or water race that goes to a lake, river, Regionally Significant Wetland or coastal marine area; or
- (iii) To the bed of any lake, river or Regionally Significant Wetland; or
- (iv) To any bore or soak hole; or
- (v) To land in a manner that results in overland flow entering any:
 - (a) Lake, river, Regionally Significant Wetland or coastal marine area that is not permitted under Rule 12.C.1.1 or 12.C.1.1A; or
 - (b) Drain or water race that goes to any lake, river, Regionally Significant Wetland or coastal marine area that is not permitted under Rule 12.C.1.1 or 12.C.1.1A; or
- (vi) To land within 50 metres of:
 - (a) Any lake, river or Regionally Significant Wetland; or
 - (b) Any bore or soak hole; or
- (vii) To saturated land; or
- (viii) That results in ponding,
 is a *prohibited* activity.

The 2014/2015 dairy inspections and any follow up visits were carried out between September 2014 and April 2015 by RMA warranted Council staff.

During the visit the farm is visually inspected for compliance with the above conditions, the irrigation system assessed and a series of questions asked of the farm owner, manager or share-milker.

Any identified breaches of the rules are noted, with photographic evidence taken of any serious ponding or discharges to water. If there is evidence of discharge to water, water samples may be taken for laboratory analysis of faecal coliforms and nutrients. Where problems have been identified, a follow-up visit is arranged with the farmer to ensure that remedial measures have been put in place.

Where non-compliance is identified, the Enforcement Decision Group determines whether enforcement action is warranted.

3. Results of the 2014/2015 Annual Dairy Inspections

A total of 451 dairy sheds (involving 465 inspections) were operating during the season. During the summer milking season it was found that 416 (representing 89.5%) of the farms were compliant with the prohibited rules.

A total of 48 dairy farms (10.5%) were found to have one or more breaches of the rules that were considered to have the potential to result in adverse effects on the environment. A total of 20 out of the 48 non-compliant dairy farms were identified to have serious non-compliance with the rules. This resulted in the Council authorising eight prosecutions and the issuing of 20 infringement notices.

Unfortunately, this season has seen our second worst level of non-compliance since the introduction of the 2007/08 Council Enforcement Policy, on non-compliance of the animal waste collection systems rules.

Reasons for the non-compliance can be attributed to:

- Stalled and failed travelling irrigators;
- Discharges on saturated soils;
- Overflowing ponds and sumps;
- Ponding; and
- Discharges to rivers.

Failure of infrastructure is not limited to old infrastructure, it relates to all types of infrastructure. Unfortunately, the common element with most of the failures was related to human intervention, or the lack of it. All too often, when warranted staff enter a property they find non-compliance within 10 minutes of their inspection taking place. While it is pleasing to see an increase in the numbers of owners taking a proactive staff management/training role on effluent disposal, and the importance of maintaining their equipment, it is still not the norm. This issue needs to be at the forefront of all dairy owners and sharemilkers responsibilities.

A summary of the prosecution cases can be found in Table 1.

Table 1. Prosecutions for 2014/15 by Area

Location	Offence
North Otago	Discharge to land that may enter water and ponding of effluent
North Otago	Discharge to land that may enter water and ponding of effluent
North Otago	Discharge to land that may enter water and ponding of effluent
Taieri	Discharge to water and ponding of effluent.
Clutha	Discharge to land that may enter water and ponding of effluent
Clutha	Discharge to land that may enter water and ponding of effluent
Clutha	Discharge to water and ponding of effluent.
Clutha	Discharge to water and ponding of effluent.

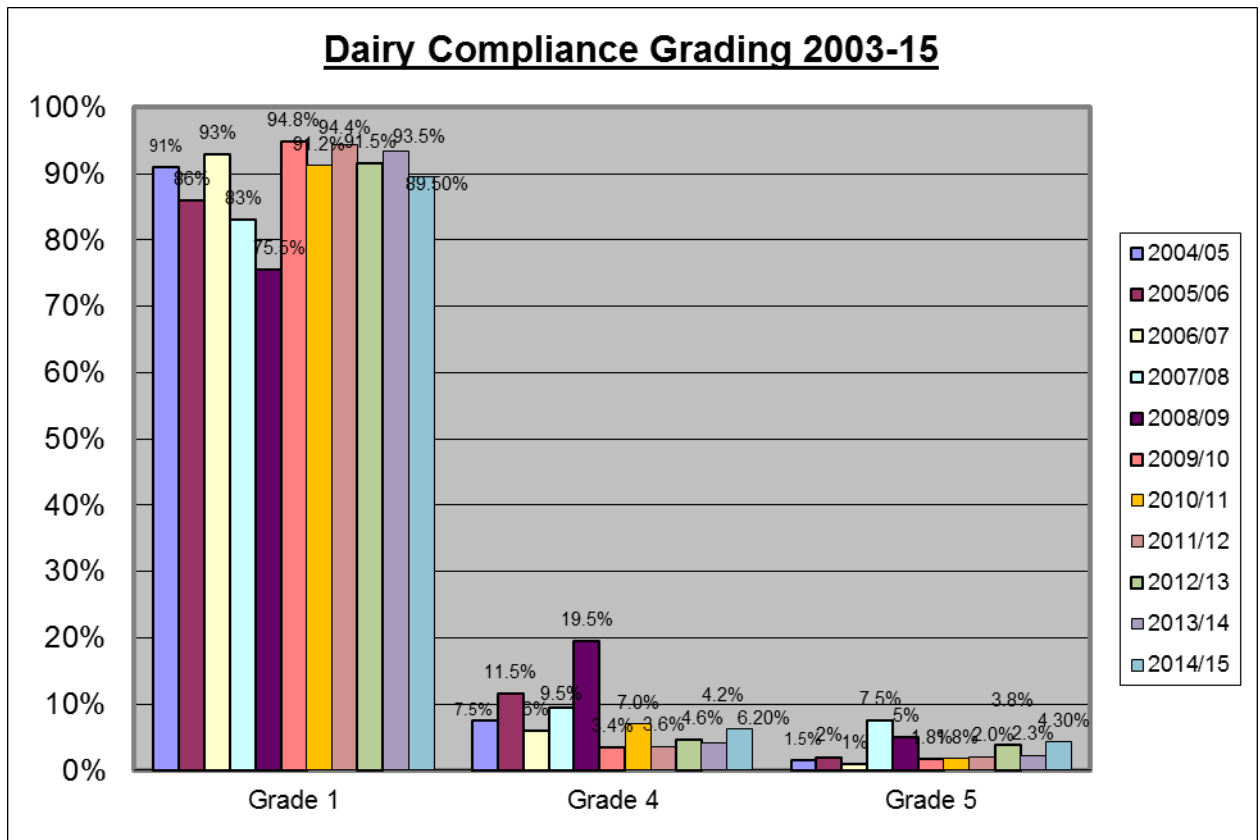
3.1 Comparison with Previous Inspections

A total of 435 dairy farms were milking during the 2013/14 season. During the summer milking season it was found that 407 (representing 93.5%) of the farms were compliant with the old permitted activity rules.

A total of 28 dairy farms (6.5%) were found to have one or more breaches of the permitted activity rule that were considered to have the potential to result in adverse effects on the environment. A total of 10 out of the 28 non-compliant dairy farms were identified to have serious non-compliance with the rules. This resulted in the Council authorising eight prosecutions and the issuing of four infringement notices.

Figure 1 shows a breakdown in dairy farm compliance since 2003

Figure 1 Dairy compliance by grade since 2003/04



The Council operates a grading system that is consistent with national reporting standards for dairy farming in New Zealand. The grading system is:

- Grade 1** Full compliance found.
- Grade 4** Non-compliance and minor adverse environmental effects observed (e.g. minor ponding around the sump, minor ponding found around the travelling irrigator).
- Grade 5** Non-compliance and significant adverse environmental effects observed (e.g. discharges to water, significant ponding from the travelling irrigator on land, irrigation on saturated soils).

Since 2003 a total of 87 infringement fines have been issued and 98 prosecutions initiated (97 since 2007/08). Table 2 provides a breakdown of enforcement actions since 2003.

Table 2. Enforcement Actions Since 2003

Year	Infringements	Prosecutions
2003/04	13	1
2004/05	5	1
2005/06	2	
2006/07	5	
2007/08	18	25
2008/09	4	21
2009/10	1	11
2010/11	4	5
2011/12	7	10
2012/13	4	8
2013/14	4	8
2014/15	20	8
Totals	87	98

4. Plan Change 6A

While undertaking inspections during the 2014/15 year, risk profiling of the dairy farms occurred. Every farm was assessed on an environmental risk matrix that incorporated:

1. Whether the dairy farm is in a degraded river catchment;
2. Whether the dairy farm has adopted best infrastructure management for their area; and
3. Whether there are drainage risks (e.g. tiles, mole drains that lead to waterways) on the property.

This work will continue each inspection year, for the purpose of gauging what infrastructure (and management regimes) changes are occurring on all dairy farms.

5. Compliance Monitoring Methodologies

Council undertake a pro-active and reactive approach when it comes to animal waste collection systems rule implementation.

Since 2007/8 Council has undertaken a pro-active and strong stance on monitoring and enforcement of dairy effluent discharges. Council approach has been to “cold call” on farms for the purpose of inspection. While on farm every attempt is made to contact the manager/sharemilker or a staff member to inform of the inspection. If no-one is present, staff carry out the inspection and leave an inspection form in a prominent place.

Often during these visits discussions are held with sharemilkers/owners on a variety of matters including, 6A water quality, infrastructure best practice, effluent risks, consenting issues around rivers etc. Direct advice is never given however, a variety of options may be provided, depending on the topic, and guidance on rules and interpretation of rules is often discussed.

Staff also respond to complaints about alleged environmental incidents, including those related to dairy farms. These alleged environmental incidents are responded to in accordance with Council standard practice. Warranted Council staff will firstly go to the site where the alleged incident was observed. If the incident is confirmed, staff will investigate fully and enter property where required. If the person responsible for the discharge can be located, staff will instruct that person to cease the discharge. At the conclusion of the investigation, staff may recommend enforcement action be considered.

Extreme rainfall and flood events can result in infrastructure failures, especially ponds overflowing and land becoming saturated. During these events the Council takes this factor into consideration. Historically, Council has not taken action on these matters, as we view the extreme weather event as “out of their control”. However, if we were to observe deliberate and intentional actions e.g. pumping of an effluent pond into a flooded river, we would consider that action to be highly culpable and enforcement action may be considered.

6. Enforcement Outcomes- 2013-15

Council utilises a range of enforcement tools in response to non-compliance with the Regional Plan; Water for Otago. These tools include education, warnings, directions through to infringement notices and prosecutions.

This section of the report considers environmental and infrastructure outcomes which have arisen through the use of prosecutions authorised by Council. The cases listed exclusively relate to offending associated with the discharge of effluent.

During the 2013/14 period, Council authorised 8 prosecutions. The environmental and infrastructure outcomes from these authorised prosecutions were as follows:

Table 3. 2013/14

Case 1	<ul style="list-style-type: none"> • replaced split hose; • implemented a new monitoring system; • remedial work on winter shed storage to ensure that effluent overflow would be prevented in the future.
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Case 2	<p>Infrastructure upgrade consisting of:</p> <ul style="list-style-type: none"> • the installation of a drying pad and stone trap; • the installation of a stirrer and diffuser; • the installation of a progressive cavity pump; • the installation of 2 pod sets and pod buddies; • The installation of manifold pulsing system; and • The installation of 5,500m of effluent lines (in ground) and associated hydrants. <p>Donation to an environmental project (which included fish survey and riparian planting). Hosted local school children at site – riparian planting.</p>
Case 3	<p>Infrastructure upgrade consisting of:</p> <ul style="list-style-type: none"> • Installation of a new stone trap; • Pump; • Piping for k-line system; and • Failsafe remote pond level monitoring device.
Case 4	<ul style="list-style-type: none"> • Carrying out native planting of swales on the subject property; • Attending ITO effluent course; • Whole new/different effluent irrigation system; and • Became involved in a local environmental community group
Case 5	None
Case 6	None – but commits to employing another full time staff member this year to increase management capabilities.
Case 7	None
Case 8	Arranged a riparian strip of native plants over an area of 1.6 ha

During the 2014/15 period, 8 prosecutions were authorised by Council. As at the date of this report, only two cases have concluded. The environmental and infrastructure outcomes from these cases were as follows:

Table 4. 2014/15

Case 1	None
Case 2	Case was withdrawn

The above information was collated from defence submissions and diversion proposals offered by the defendants.

7. Discussion

The current monitoring and enforcement regime for dairy effluents has been successful in creating on-farm changes, mainly infrastructure and practices. Staff have observed a lot of infrastructure changes either through voluntary means or alongside Court prosecution and/or diversion. However, having excellent infrastructure does not mean you have good management structures to maintain and monitor the systems and train staff on the importance of effluent management.

It is timely that Council review the approach we are taking on dairy effluent monitoring. Enforcement by itself can only go so far. A balanced approach between reinforcement of good practice/behaviour and compliance/enforcement is needed. Field days that focus primarily on good practice should also be supplemented with information on compliance issues currently being observed by Council staff. The dairy sector also needs to take up the management issue with their own stakeholders. The Council approach would support industry in achieving good water quality outcomes.

8. Recommendations

1. That this report be noted.
2. That Council discuss the merits of any changes to the Compliance Monitoring of the dairy effluent program.

Scott MacLean

Director Environmental Monitoring and Operations

REPORT

Document Id: A840493

Report Number: 2015/1169

Prepared For: Regulatory Committee

Prepared By: Director Environmental Monitoring and Operations

Date: 02/10/2015

Subject: **Biosecurity & RMA Monitoring Report 24 July to 4 September 2015**

Précis

This report describes the Regulatory activity for the reporting period.

Items arising since last Committee meeting

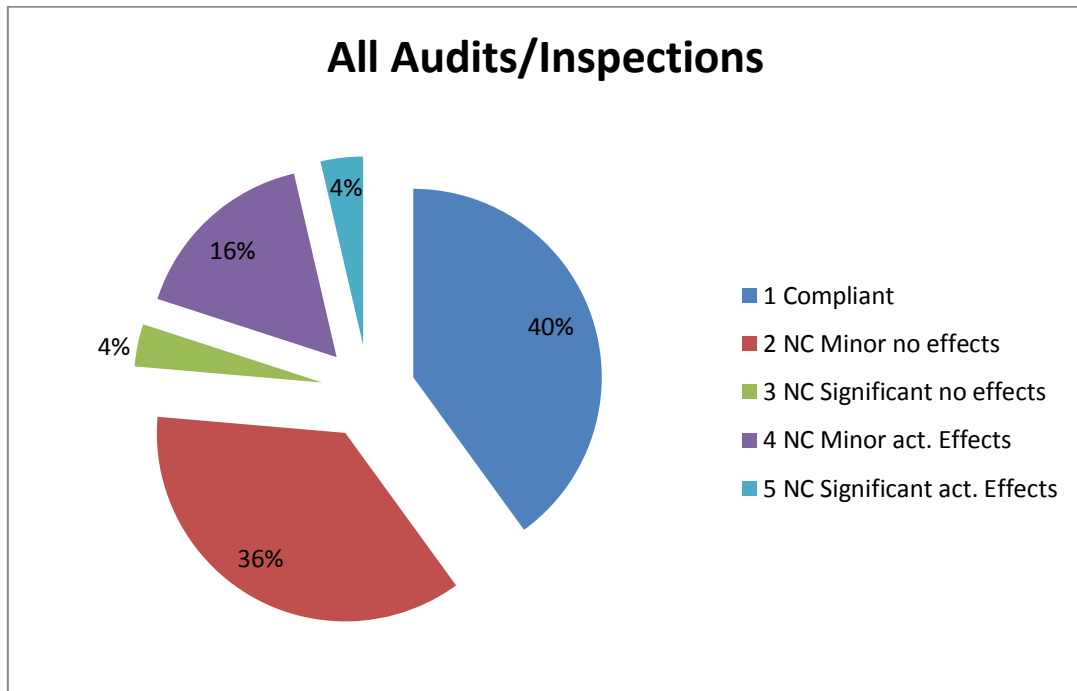
- a) On Wednesday 16th September 2015, a complaint regarding the possible discharge to water of sewage from QLDC's treatment ponds adjacent to the Shotover River was received. Staff were on-site within one hour of receiving the complaint by Council. Water samples were taken and sent to the laboratory for analysis. Results show that the discharge was well within QLDC's consent conditions and that the activity was fully compliant.
- b) Following recent media coverage of a complaint regarding a whitebait stand on the Waikouaiti River, numerous complaints regarding "unregistered" whitebait stands and equally numerous requests to "register" whitebait stands have been received. In order to quantify the issue and make an assessment of their impact on the environment, river capacity and management decisions going forward, it is proposed to make provisions in the next Annual Plan to properly resource this investigation work.

1. Water Quality and Quantity

1.1 Regional Plan: Water and Resource Consent Monitoring

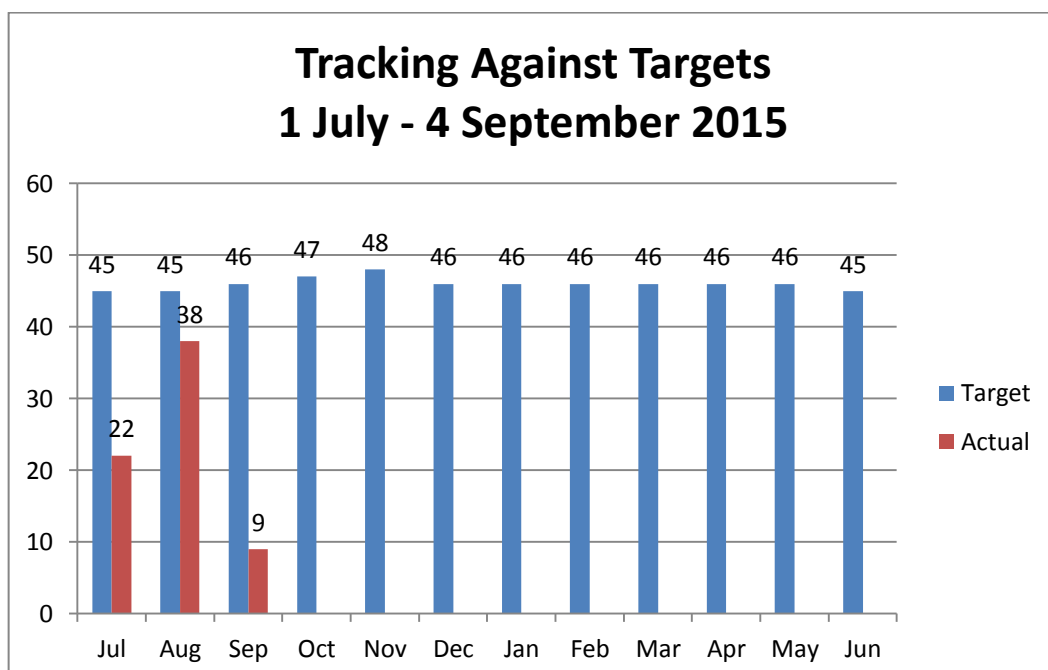
1.1.1 Audit & Inspection Monitoring

55 consent audits/inspections were conducted over this reporting period, with 11 inspections of water measuring equipment and 6 other structure and bore inspections.



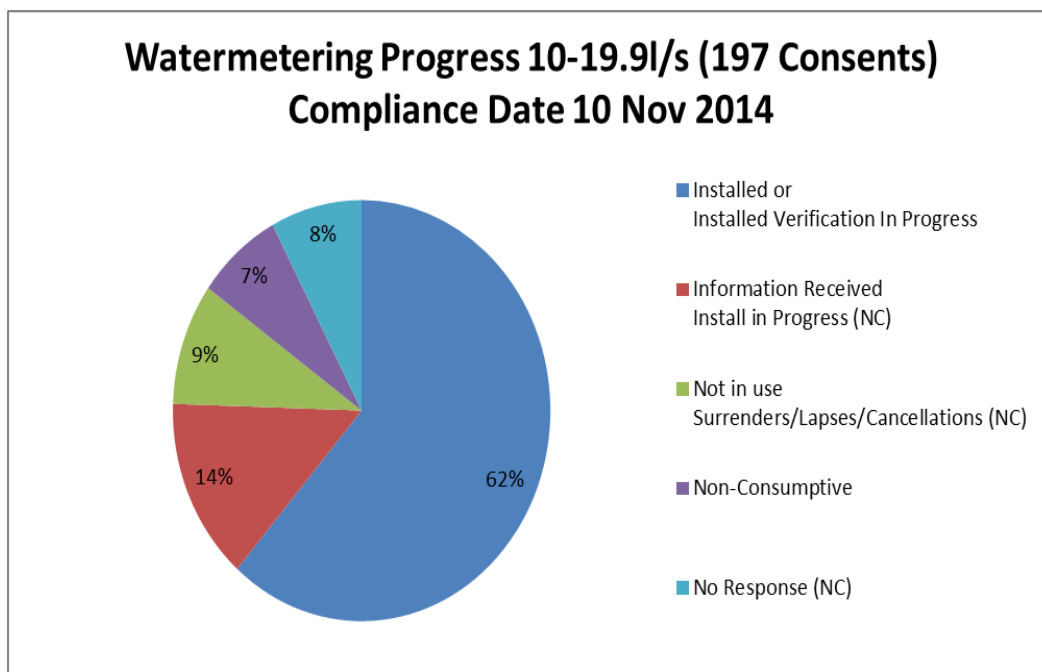
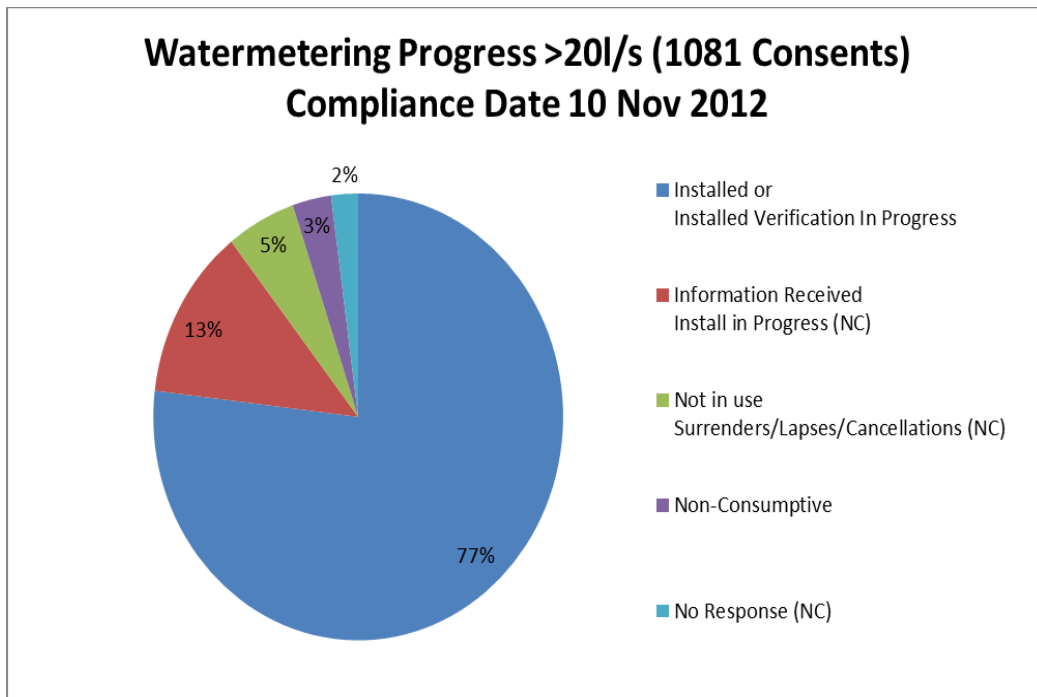
An explanation of the the gradings are:

- **Grade 1** – fully compliant with the conditions of the consent including providing information on time;
- **Grade 2** – compliant with the parameters of the consent that they are required to stay within but some information was provided late;
- **Grade 3** – hasn't provided information so no assessment of effects has occurred;
- **Grade 4** – are non-compliant with some parameters of the consent but not having an significant environmental effect. *An example would be e-coli is required to be no higher than 10 but results show it is 500.*
- **Grade 5** – are non-compliant with some parameters of the consent but are having a significant environmental effect. *An example would be e-coli is required to be no higher than 10 but results show it is 20,000.*



1.1.2 Water Metering – RMA Regulations

Non-compliant (NC) consents are being followed up with a deadline of 1 October 2015 given to those who are yet to fully comply with the regulations. If still non-compliant by this date enforcement action will be taken. Those who have not responded have already been issued with abatement notices prohibiting the abstraction of water until the required measuring is installed. Consents where cancellation or lapsing is being assessed will require a site visit to confirm water is not being taken.



2. Air Quality

2.1 SOE Monitoring

Ecotech carried out an audit of the field installations and office practice. Practices were found to be compliant to national standards, some minor issues were highlighted and will be attended to.

3. Pest Management Strategy Implementation and Biosecurity Compliance

3.1 Pest Management Strategy

3.1.1 Rabbits

Night counts undertaken in this reporting period with inspections continuing. Post poison inspections show good kills. Increase in complaints from small land holders as rabbits become highly visible due to good spring weather conditions for breeding.

3.2 Plant Pests

3.2.1 Gorse and Broom Surveillance

Four complaints received in the reporting period in the Dunedin City area, one complaint has resulted in a non compliance notice being issued for a rural property. Control work is currently being undertaken by the property occupier, with reinspection of the property scheduled for October.

3.2.2 Wilding Conifers

Consultative meetings have been planned with all TLAs and forestry companies to be completed by 30 September. Consultation with government departments is planned for 7 October. Development of a communications plan is underway for the wider Otago community.

3.2.3 Lagarosiphon

The Manager Biosecurity and Biodiversity attended the Lake Dunstan Management Group meeting to identify control options for 2015-16 to ensure compliance with the regional pest strategy. Control methods identified include chemical spraying and weed cutting. LINZ are applying for a new consent to carry out this control work.

The Manager Biosecurity and Biodiversity also attended the Lake Wanaka Management Group meeting where a new 10 year management plan was approved and works programme for 2015-16 also approved.

Meetings have been held this reporting period with the QLDC Mayor and staff to identify a control programme for the Kawarua River prior to summer 2015 activity. A number of control options are being looked at, including the development of a weed “gate” below the bridge.

3.2.4 Low incident plants

Bomarea

216 properties inspected in the Macandrew Bay area (Otago Peninsula) for Bomarea, of which 45 were found to be non-compliant, 39 of these minor and 6 major. Reinspections are scheduled to be carried out on those non-compliant properties in September/October. Seven areas of Bomarea identified on DCC land, who have been notified and control measures are in place.

3.3 Biodiversity

Staff attended the Technical Advisory Group (TAG) meeting for the HALO project (which aims to address the biodiversity issues beyond the boundary of the Orokonui Ecosanctuary).

4. Environmental Incident Response

4.1 Contaminated Sites

Fifty-three enquiries regarding the land-use history or contamination status of specific properties were received.

4.1.1 Remediation Projects

A draft application to the Ministry for the Environment was prepared for funding to assist the Dunedin City Council with remediation planning for the former Dunedin City Gasworks.

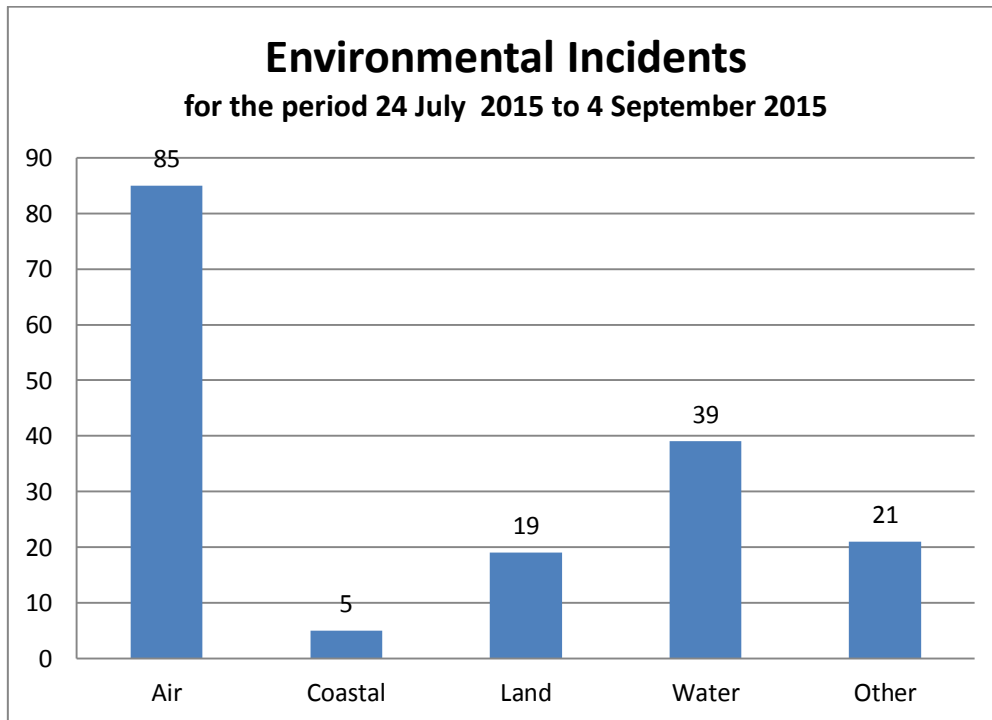
4.1.2 Investigations

One underground petroleum storage system (UPSS) removal report was received during the reporting period. The report has been assessed, and found to comply with Ministry for the Environment Guidelines. Work was carried out in accordance with industry best practice and ORC has no concerns about any environmental effects.

One detailed site investigation was received during the reporting period. The report confirmed that contaminant concentrations were acceptable at a site previously used for clean-fill disposal and fuel storage.

4.3 Environmental Incidents

A total of 169 incidents were reported for this period. The following is a summary of the incidents received by activity type.



The majority of the air incidents can be attributed to domestic chimneys and rural burnings. The coastal incidents were mostly to do with Marine Pollution. The majority of land incidents were from disturbances, deposits and land contamination. Concerns about fresh water pollution were the cause of the majority of water investigations. The other types of incidents were varied however most of them were in regard to the impacts of pest animals.

5. Recommendation

That this report be noted.

Scott MacLean
Director Environmental Monitoring and Operations

Summary of RMA Incident Complaints (General Location)

From 24 July 2015 to 4 September 2015

General Location		AIR							COAST					LAND				WATER				OTHER			
	Row Summary	Backyard burning	Burning	Domestic chimneys	Dust	Industrial air discharge	Odour	Spray Drift	Coastal structures	Marine oil spill	Marine pollution	Reclamation	Removal	Deposit	Disturbance	Land contamination	Mining	Abstraction	Damming	Diversion	Fresh water pollution	Stormwater	Noise	Other	Staff performance
Catlins	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	0	0	0	0
Central Otago	21	0	4	4	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	7	0
Clutha Plains	15	2	1	1	0	1	1	0	0	0	0	0	0	0	2	2	0	0	0	0	5	0	0	0	0
Dn - Abbots/Green Is	5	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0
Dn - Coast North	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Dn - Coast South	5	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0
Dn - Inner City	27	2	0	15	0	0	3	0	0	0	1	0	0	2	0	0	0	0	1	1	0	0	0	2	0
Dn - Mosgiel	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Dn - Otago Harbour	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dn - Peninsula	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	2	0
Dn - West Harbour	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
East Otago Uplands	9	2	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	3	0	0	1	0
Lakes	33	0	10	4	1	1	10	1	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	2	0
Maniototo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
North Otago	10	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0
Roxburgh	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	4	0
South West Otago	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	4	0	0	0	0
Strath	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Taieri Plains	13	1	6	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	4	0	0	0	0
TOTALS	169	8	25	28	3	3	16	2	1	1	3	0	0	6	8	5	0	0	1	4	34	0	0	21	0

REPORT

Document Id: A844019

Report Number: 2015/1180
 Prepared For: Regulatory
 Prepared By: Marian Weaver
 Date: 30/09/2015

Subject: **Resource Consent and Building Act Activity Report
 Aug 17 to 25 Sept 2015**

1. Consent Processes

1.1 Consent applications where status has not changed since the last report are summarised in Appendix 1.

1.2 Limited Notified Applications

There are 6 applications currently going through the limited notification process where either written approvals have not been forthcoming, or the applicant has requested limited notification. Hearings will be set up where there are opposing submissions. Six decisions on limited notified applications were given in the period.

RM15.089 Waitaki Riparian enhancement Society Inc

This application to have a salmon rearing facility in Welcome Creek was opposed by a submitter which did not wish to be heard. The hearing was on September 8th and the decision to grant the permits subject to conditions was given on 22 September. The appeal period closes on 14 October.

2. Consent Statistics

Table 1. Consents Statistics Summary

Reporting Period	Lodged			Rejected	Decision Given		
	Consents	Variations			Consents	Variations	
		Regular	Water reporting date			Regular	Water reporting date
14/15 year total to date	348	33	24	10	356	54	31
1 Jul – 14 Aug 15	47	5	4	0	44	3	4
16 Aug – 25 Sept 15	51	2	0	2	40	6	0
15/16 YTD	98	7	4	2	84	9	4

All decisions on consents were given within RMA allowed timeframes.

3. Consent Administration

Table 2. Consent Administration Statistics

Reporting Period	Transfers Received	Transfers Issued	S417 Certs Received	S417 Certs Issued
14/15	89	91	2	6
1 Jul – 14 Aug 15	30	29	0	0
16 Aug – 25 Sept 15	25	17	0	0
15/16 YTD	55	46	0	0

4. Building Consent Authority (BCA) Administration

4.1 In Progress:

Dam Building Consents	4
Code Compliance Certificates	3
PIM	0
Certificate of Acceptance	5

4.2 Dam Safety.

As the Dam Safety Regulations have been revoked, standard consent conditions for dams which require resource consent under the RMA have been drawn up. This will include identification of dam hazard classification, ongoing surveillance of the facilities and appurtenant structures and review conditions.

5. Public Enquiries

Appendix 2 shows that 264 enquiries were received by the Consents Unit during the reporting period.

Table 3. Public Enquiries Statistics

Period	Number of Enquiries
14/15 year	2259
1 Jul- 14 Aug 15	366
16 Aug-25 Sept 15	264
	630

6. Measuring water taking administration

The Resource Management (Measurement and Reporting of Water takes) Regulations 2010 requires all consented takes to be measured, without exception. However, Council can determine where measurement will occur and how frequently results will be forwarded to it.

As measurement of a take involves expense and costs for open race measurement is far greater than for pipes, Council has been approached to address the total cost measuring all takes. Several irrigation schemes use open water races to collect and transport water from many small burns and creeks. In response to request, including Maniototo and Earnsclough irrigations schemes, Council has given place-of-measuring exemptions for several takes to be a single site located before any use of water occurs.

7. Recommendation
That this report is noted.

Fraser McRae
Director Policy Planning and Resource Management

Appendix 1: Summary of applications that have not changed since the last report to the Committee

RM12.066 – Environment Canterbury - erosion protection works in the Lower Waitaki River.

An officer at Environment Canterbury has applied for consents to allow them to undertake erosion protection works in the Lower Waitaki River. Numerous erosion protection measures are proposed over a 3 km stretch of river. DoC, Iwi, Fish and Game and owners of land on which the works are to take place are all considered to be affected parties. The applicant is continuing to work through a consultation process to determine whether or not the works applied for will continue to be undertaken.

Pending Applications of Interest

RM13.423 – Manuherikia Catchment Water Strategy Group (MCWSG)

A working party has been established comprising MCWSG, Golder Associates and ORC staff. The aim of the working party is to develop a consenting strategy giving regard to existing mining privileges, individual water takes and irrigation options within the Manuherikia catchment.

Appendix 2

Resource Consent Public Enquiry Report

For period from 16 August 2015 to 25 September 2015

Report gen

Total Number of Enquiries **264**

Enquiry Type	No.	% of Total
Current Consents	116	43.9 %
Mining Privileges	3	1.1 %
Other	19	7.2 %
Permitted Activities	70	26.5 %
Pre-application	37	14 %
Property Enquiries	15	5.7 %
TLA Enquiries	1	0.4 %
Transfers	3	1.1 %

Enquiry Location	No.	% of Total
Central Otago District Council	89	33.7 %
Clutha District Council	11	4.2 %
Dunedin City Council	38	14.4 %
Outside Otago	1	0.4 %
Queenstown Lakes District Council	59	22.3 %
Throughout Otago	9	3.4 %
Unspecified	33	12.5 %
Waitaki District Council	24	9.1 %

Enquiry Method	No.	% of Total
Counter	16	6.1 %
Email	143	54.2 %
Internet	1	0.4 %
Telephone	104	39.4 %

REPORT

Document Id: A840268

Report Number: 2015/1167

Prepared For: Regulatory Committee

Prepared By: Peter Kelliher, Legal Counsel

Date: 25 September 2015

Subject: **Resource Management Act 1991, Biosecurity Act 1993 and Building Act 2004 Enforcement Activities from 13 August 2015 to 25 September 2015**

This report details Resource Management Act 1991, Biosecurity Act 1993 and Building Act 2004 enforcement activities undertaken by the Otago Regional Council during the period 13 August 2015 to 25 September 2015.

1. Resource Management Act 1991

Table 1. Infringement Notices

Details	Period – 13 August 2015 to 25 September 2015	Total – from 1 July 2015
Discharge of contaminants to air – outdoor burning	1	2
Discharge of contaminants to land in breach of a regional rule – effluent	1	1
TOTAL	2	3

2. Recommendation

That this report be noted.

Fraser McRae

Director Policy Planning and Resource Management

Report

Document ID: A843220

Report No: 2015/1178

Prepared For: Regulatory Committee

Prepared by: Richard Heyward, Environmental Officer

Martin King, Manager Environmental Services

Reviewed By: Scott MacLean, Director Environmental Monitoring and Operations

Date: 15th July 2015

Subject: Rabbit Serum Results 2015

1. Précis

Wild rabbit serum samples were collected across 10 sites in Otago during February and March 2015 as part of the Otago Regional Councils long term monitoring of Rabbit Haemorrhagic Disease Virus (RHDV). Sera were tested for antibodies using a competition ELISA to determine immunity levels to RHDV within the wild rabbit population.

Those samples with detectable antibody levels at the 1:40 dilution or greater were considered to be immune to the virus. Samples where antibodies were not detected or only detected at the 1:10 dilution were not considered immune.

At two of the 10 sites where rabbit numbers have been traditionally low and attaining sample sizes greater than 15 has been difficult, immunity rates were again low at 21 and 25%.

Overall immunity ranged from 21% to 87% across all sites in Otago, with an average immunity of all 10 sites 62%. This level of immunity was significantly lower than in the previous sampling of 2013, where immunity was 71%, but similar to levels found in 2009 and 2011. The average immunity for a subset of eight of the 10 sites sampled has consistently averaged between 70 and 76% since 2009, and this is likely to be a more representative estimate of immunity levels across Otago.

The average rate of increase of immunity across Otago appears to be slowing. However, rates of increase between sites remain highly variable.

2. Introduction

First discovered in China in 1983 and illegally introduced into New Zealand in 1997, rabbit haemorrhagic disease virus (RHDV) infects European rabbits (*Oryctolagus cuniculus*) causing the rapid development of acute rabbit haemorrhagic disease (RHD). Susceptible rabbits suffer blood clotting within vital organs and usually die within 50hrs of contracting the disease. Rabbits under 10 weeks of age usually survive viral challenge to become immune for life. The offspring of these immune rabbits are protected by maternal antibodies for a time before becoming susceptible after a few months. Some rabbits may also become

immune through exposure to a benign rabbit calici virus (RCV) which is also present in New Zealand.

The Otago Regional Council has carried out long term monitoring of RHD since its outbreak in Otago in September 1997. Monitoring is carried out every two years across 10 permanent monitoring sites spread throughout Otago and aims to understand how well the virus is working in relation to rabbit immunity. Sampling involves the taking of 30 rabbit serum samples as well as information on breeding status and rabbit age over the period mid-February to early March. Rabbit spotlight night counts were also carried out across the monitoring sites as part of a wider programme monitoring rabbit population trends across Otago.

3. Methods

Rabbits were shot at night under spotlight using either a .22 or 12G shotgun and blood extracted immediately using a 5ml syringe with 18gx40mm needle inserted into the heart. At least 2ml of blood is drawn off and transferred into a labelled 9ml vacutainer with z serum clot activator. Rabbit sex, breeding and body condition were recorded and an eyeball taken for aging.

Collected blood was centrifuged the following morning to separate the serum, which was then drawn off into labelled micro-titre tubes before being frozen. Serum samples were sent to the Hopkins Research Centre at Massey University to be tested for RHDV antibodies using the Cuppuci competitive ELISA test. As part of the test, serum is diluted at a rate of 1:10 and 1:40 to determine the level of antibodies within each sample. Those samples that were seropositive at 1:40 dilution were considered to be from rabbits immune to RHDV. Samples that were seropositive at the 1:10 dilution or seronegative were classed as not immune.

Eyeballs were fixed in 10% formalin for 2 weeks before the eye lens was extracted and dried at 85⁰C for 72 hours. Eye lenses were then weighed and the age estimated using the formula of Dudzinski & Mykytowycz (1961). Age data, sex, body and breeding condition were matched with immunity status of the individual rabbit for analysis.

4. Results

A total of 272 samples were sent for testing. Immunity to RHDV over the 10 monitoring sites varied from 21 to 87% (Fig 3). The average of immunity across all sites was 62% (Fig 1.). This was significantly less than in 2013 where 70% immunity was recorded (t-test $P < 0.05$).

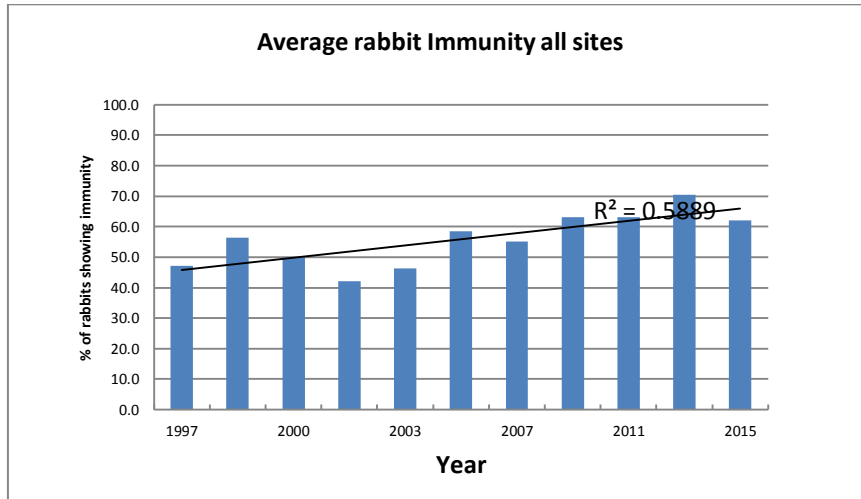


Fig 1. Average rabbit immunity by year across all 10 sample sites

The Dunback site continued to show the highest immunity of all sites at 87%, and this was comparable to an average 90% immunity for the three previous sampling periods of, 2009, 2011 and 2013. Due to property access issues this year the shot sample was obtained from a property immediately adjacent to where we had sampled previously. At this site rabbits were abundant and the shot sample was obtained in the least amount of time of all the sites. In comparison, two sites, Manorburn, and Hillend rabbit numbers were again very low, so only 16 and 14 rabbits were able to be obtained from each site. These sites had the lowest immunity of 25% and 21% respectively.

If the sites of Manorburn and Hillend are excluded from the analysis due to the statistically inadequate sample sizes, the average immunity for the remaining subset of 8 sites was higher at 72% (Fig 3.). This was also not significantly different to the 76% average immunity for the 8 sites in the previous sampling in 2013 (t-test $p > 0.05$) and similar to the preceding years of 2011 (72%) and 2009 (74%).

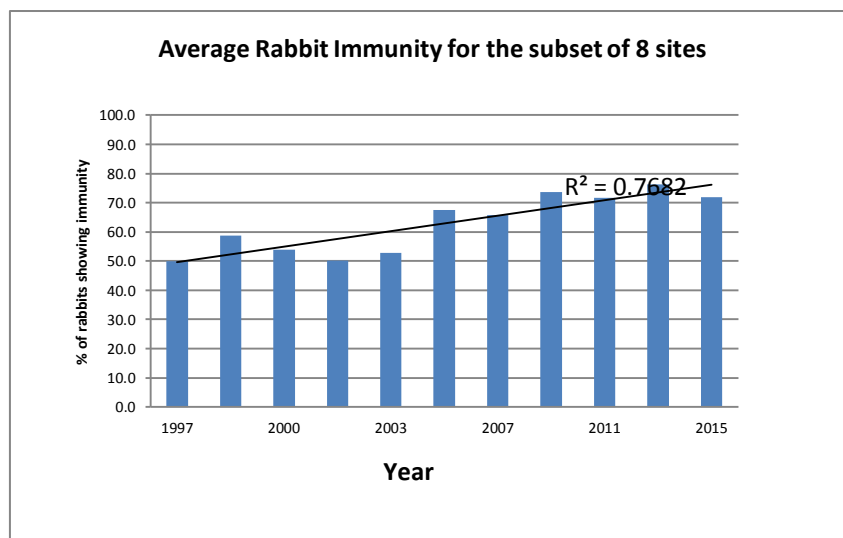


Fig 2. Average rabbit immunity by year for the 8 sites that had a sample size of n=30

Of these 8 sites, Tarras had 50% and 63% immunity, the lowest immunities of the 8 sites, while the Ida valley had 70% and 80% immunity. Bannockburn had 83% immunity, Fruitlands 70% and 71% and Dunback 87% immunity. The long term trend for increasing

immunity within the rabbit population continued across all sites, with considerable variation in the rates of increase between sites.

Demographic analysis of the population indicated the highest proportion of rabbits sampled was within the 15 to 35 week age bracket corresponding with the 2014 spring-summer cohort. The peak of seropositive rabbits was from 20-30 weeks indicating the virus was active over the spring-summer 2014/15 period. The median age of rabbits was 27 weeks and this is similar to the median age found in previous years.

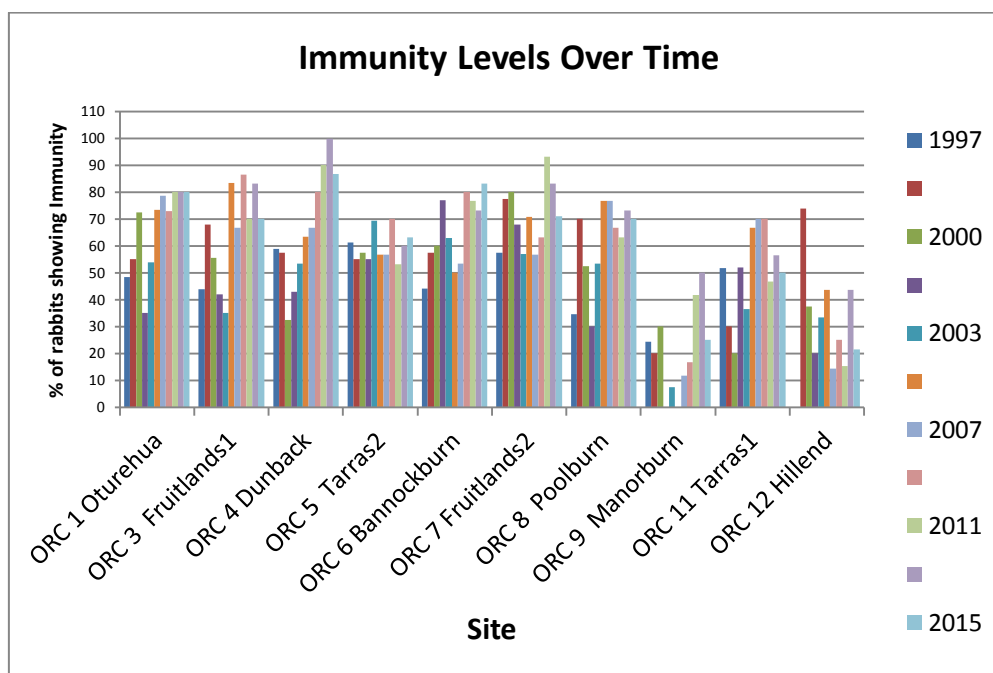


Fig 3. Average immunity levels at each site over time

5. Discussion

Average rabbit immunity to RHDV across all sites in Otago showed a significant decline from the previous sampling period in 2013, but was similar to the average immunities recorded in 2009 and 2011. This fluctuation was most likely due to the average immunity across all Otago being heavily influenced by the Manorburn and Hillend sites where rabbit numbers are extremely low and where sufficient sample sizes are unable to be obtained.

When these two sites were excluded from the analysis, average immunity for 2015 was 72%, with a similar level of immunity recorded for the 3 previous sampling periods of, 2009 and 2011, 2013. This average level of immunity is likely to be a more representative estimate of rabbit immunity across Otago.

In comparison, Environment Canterbury have also shown average immunity levels in the last 12 months at their MacKenzie Basin study sites to be in the range of 60 to 70% (B. Glentworth, pers. comm.) and in Marlborough 64% (S. Sam, pers. comm.)

Although antibody testing provides a useful estimate of immunity at a given point in time for a rabbit population, it fails to adequately identify the causes of changes in immunity. Age data in our sampling allows us to exclude an increase in the number of older immune rabbits

as a cause for an overall increase of immunity because the median age of immune rabbits has stayed more or less the same since sampling began in 1997.

Other possible scenarios for an increase in immunity are that the virus is becoming less virulent and so there are more survivors after each epidemic. This is possible, but virus isolated from infected rabbits in Otago by Landcare Research in 2014 and used to inoculate healthy sero-negative rabbits still shows a high virulence. In fact Otago isolates has shown some of the highest virulence of all the RHDV isolates collected from throughout the country.

Also, the presence of a benign rabbit calici virus (RCV) which causes immunity but not death is known in other countries, including Australia and has often been touted as a possible cause for increases of immunity. An RCV recently isolated from New Zealand rabbits in May 2015 (J. Duckworth pers. comm.) may indeed be a possible cause of the rise in immunity, but this virus has yet to be tested on healthy sero-negative rabbits to better understand what level of immunity it may confer.

In terms of what an increasing immunity means for rabbit populations in Otago, ORC spotlight rabbit counts have shown a cyclical trend in the rabbit population every 4-5 years since the arrival of RHDV. However, the overall long term trend in rabbit numbers does not appear to be increasing with increasing immunity. Recent rabbit counts show rabbit abundance at less than <4 per spotlight km for much of Otago, and this is similar to Marlborough (<3 per spotlight km) and parts of Canterbury's MacKenzie Basin where rabbit numbers continue to remain low (<4 per spotlight km) despite little secondary control (B. Glentworth pers. comm.).

It is difficult to determine how much these trends in rabbit population might be attributed to traditional primary and secondary control measures. However, anecdotal evidence from landholders and through ORC compliance inspections indicate that in many areas rabbit numbers are being suppressed by RHD and the rates of increase are well below those seen pre-RHD. Although RHD is both highly variable in nature and predictability as to where and when outbreaks may occur, evidence indicates that RHD will work best at those sites with very low rabbit numbers, as rabbits at these sites show the least immunity.

This year's RHD sampling clearly shows that the virus is still working in Otago. It might not cause the spectacular knockdowns of rabbit populations we first saw when it arrived, but rather it appears to be regularly removing a proportion of the rabbit population in many areas complementing secondary control methods. Despite the apparent increase in immunity rabbit populations still remain well below the levels seen pre-RHD.

References

- Duckworth, Janine. Landcare Research, Lincoln.
- Dudzinski, M. L., & Mykytowycz, R. (1961). The eye lens as an indicator of age in the wild rabbit in Australia. *CSIRO Wildlife Research* 6, 156-159.
- Glentworth, Brent. Environment Canterbury, Timaru.
- Sam, Shona. Marlborough District Council, Blenheim.

6. Recommendation

That this report be received.

Scott MacLean

Director Environmental Monitoring and Operations