

Implementation Committee Agenda - 14 Sept 2022



Meeting conducted in the ORC Council Chamber
Level 2, Philip Laing House, 144 Rattray St, Dunedin

Members of the public may view livestream at: [Otago Regional Council YouTube Channel](#)

Members:

Cr Bryan Scott, Co-Chair
Cr Carmen Hope, Co-Chair
Cr Hilary Calvert
Cr Michael Deaker
Cr Alexa Forbes
Cr Gary Kelliher
Cr Michael Laws
Cr Kevin Malcolm
Cr Andrew Noone
Cr Gretchen Robertson
Cr Kate Wilson

Senior Officer: Dr Pim Borren, Interim Chief Executive

Meeting Support: Liz Spector, Governance Support Officer

14 September 2022 01:00 PM

Agenda Topic	Page
1. APOLOGIES No apologies were received prior to publication of the agenda.	
2. PUBLIC FORUM No requests to address the Committee under Public Forum were received prior to publication of the agenda.	
3. CONFIRMATION OF AGENDA Note: Any additions must be approved by resolution with an explanation as to why they cannot be delayed until a future meeting.	
4. CONFLICT OF INTEREST Members are reminded of the need to stand aside from decision-making when a conflict arises between their role as an elected representative and any private or other external interest they might have.	
5. CONFIRMATION OF MINUTES Minutes of previous meetings of the Implementation Committee will be adopted as true and accurate record(s), with or without changes.	3
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	This report updates on operational implementation activities undertaken in freshwater, biosecurity, and biodiversity and complements Annual Plan reporting.	
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	This paper details how site-led programmes and predator free partnerships have been addressed by ORC and outlines options for supporting opportunities for biosecurity collaboration for biodiversity outcomes with external parties.	
7.3	BIOSECURITY OPERATIONAL PLAN 2021/22 SUMMARY OF PERFORMANCE	41
	To report on the implementation of the Biosecurity Operational Plan 2021/22 for period 1 July 2021 to 30 June 2022, as required under Section 100C(2) of the Biosecurity Act 1993.	
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	This report provides a quarterly summary of river management operational activities including gravel extraction consents, development of work programmes for 2022/23 and asset management plans for plantings alongside riverbanks. An initial assessment of damage arising from the July/August 2022 floods is also presented.	
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	This report provides an update on the progress of the ORC's Climate Resilience Programme which comprises four (4) flood protection projects.	
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	The Committee will move into public-excluded session to consider minutes of the 11 August 2022 public-excluded portion of the Implementation Committee meeting.	
9.	CLOSURE	



Minutes of a meeting of the
Implementation Committee held in the
Council Chamber on Thursday, 11 August 2022 at 9AM

Membership

Cr Carmen Hope (Co-Chair)
Cr Bryan Scott (Co-Chair)
Cr Hilary Calvert
Cr Michael Deaker
Cr Alexa Forbes
Cr Gary Kelliher
Cr Michael Laws
Cr Kevin Malcolm
Cr Andrew Noone
Cr Gretchen Robertson
Cr Kate Wilson

Welcome

Co-Chair Scott welcomed Councillors, members of the public and staff to the meeting at 9:10 am. Staff present included Anita Dawe (GM Policy and Science), Gavin Palmer (GM Operations), Amanda Vercoe (GM Governance, Culture and Customer), Liz Spector (Governance Support), Doug Rodgers (Manager Transport), Garry Maloney (Principal Planner - Transport), Julian Phillips (Transport Implementation Lead), Libby Caldwell (i. Manager Environmental Implementation), and Melanie White (Project Delivery Specialist-Jobs for Nature). Present electronically were Nick Donnelly (GM Corporate Services/CFO) and Richard Saunders (GM Regulatory and Communications).

1. APOLOGIES

There were no apologies. Cr Deaker, Cr Kelliher and Cr Laws were present electronically.

2. PUBLIC FORUM

No public forum was held.

3. CONFIRMATION OF AGENDA

Co-Chair Scott informed the meeting that report *PPT2212 Ministry of Education Memorandum of Understanding – Review of School Bus Services* had been withdrawn from the agenda by the Chief Executive prior to the meeting in accordance with Standing Orders 9.9 and would not be considered. He noted the remainder of the agenda was confirmed as published.

4. CONFLICT OF INTEREST

No conflicts of interest were advised at this time.

5. PRESENTATIONS

5.1 Annual Report from Otago Catchment Communities

Sam Dixon, Regional Coordinator for the Otago Catchment Communities and Lloyd McCall, a catchment representative on the group, presented the Otago Catchment Communities annual report. Mr Dixon and McCall responded to questions.

5.2. Report from Land Information New Zealand (LINZ)

Dr Ini-Isabée Gunn (LINZ Principal Advisor Biosecurity and Biodiversity) and Tracey Burton (LINZ Manager Biosecurity and Biodiversity) provided an update on the LINZ Biosecurity Programme for the Otago Region. Dr Gunn and Ms Burton responded to questions.

6. CONFIRMATION OF MINUTES

Resolution: Cr Scott Moved, Cr Hope Seconded

That the minutes of the meeting held on 9 June 2022 be received and confirmed as a true and accurate record.

MOTION CARRIED

7. ACTIONS

Actions from resolutions of the committee were reviewed.

8. MATTERS FOR CONSIDERATION

8.1. Ministry of Education Memorandum of Understanding - Review of School Bus Services

Report PPT2212 Ministry of Education Memorandum of Understanding - Review of School Bus Services was withdrawn from the agenda prior to the meeting by the Chief Executive as per the Otago Regional Council Standing Orders Section 9.9.

8.2. Continuation of Half-Price Public Transport Fares

The report was provided to obtain decisions from the Committee on continuation of half-price public transport fares, implementation of half-price public transport fares for Community Service Cardholders, and hours of eligibility hours for SuperGold Card concession travel. Doug Rodgers (Manager Transport), Julian Phillips (Implementation Lead - Transport), Garry

Maloney (Principal Advisor - Transport) and Gavin Palmer (GM Operations) were available to respond to questions about the report.

Following a discussion of the report and questions from Councillors, Cr Calvert moved:

Resolution IMP22-111: Cr Calvert Moved, Cr Wilson Seconded

That the Committee:

- 1) **Notes** this report.
- 2) **Approves** extending the 50% reduced Dunedin and Queenstown bus and Queenstown ferry fares to 31 January 2023 in accordance with the Government extension to the initiative.
- 3) **Approves** reducing the Dunedin and Queenstown bus and Queenstown ferry adult Bee Card fare by 50% for those card holders that also are Community Services cardholders from 1 February 2023.
- 4) **Approves** the implementation of the half price fares within the constraints of the current vehicle/vessel fleets (that is, Council will not introduce extra capacity to meet excess demand).
- 5) **Declines** to extend the eligible period for weekday SuperGold travel from 3pm to 6:30pm as requested by Grey Power Otago Ltd.

MOTION CARRIED

9. RESOLUTION TO EXCLUDE THE PUBLIC

Resolution: Cr Wilson Moved, Cr Malcolm Seconded:

That the public be excluded under LGOIMA Sec 48(1)(a) per the order paper from consideration of:

- Minutes of the 9 June 2022 public-excluded Implementation Committee meeting
- Update on MfE-funded Te Hākapupu/Pleasant River Catchment Restoration Project
- Bus Driver Recruitment and Retention

MOTION CARRIED

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under [section 48\(1\)](#) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
<i>Minutes of the 9 March 2022 meeting</i>	To protect information where the making available of the information—would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information –	Section 48(1)(a): Subject to subsection (3), a local authority may by resolution exclude the public from the whole or any part of the proceedings of any meeting only on 1 or more of the

	<p>Section 7(2)(b)(ii)</p> <p>To enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) – Section 7(2)(i)</p>	<p>following grounds: (a) that the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist.</p>
<p><i>Update on the Ministry for the Environment-funded Te Hākapupu/ Pleasant River Catchment Restoration Project</i></p>	<p>To protect information where the making available of the information—would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information – Section 7(2)(b)(ii)</p> <p>To enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) – Section 7(2)(i)</p>	<p>Section 48(1)(a): Subject to subsection (3), a local authority may by resolution exclude the public from the whole or any part of the proceedings of any meeting only on 1 or more of the following grounds: (a) that the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist.</p>
<p><i>Bus Driver Recruitment and Retention</i></p>	<p>To protect information where the making available of the information—would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information – Section 7(2)(b)(ii)</p> <p>To enable any local authority holding the information to carry out, without prejudice or disadvantage, commercial activities – Section 7(2)(h)</p> <p>To enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) – Section 7(2)(i)</p>	<p>Section 48(1)(a): Subject to subsection (3), a local authority may by resolution exclude the public from the whole or any part of the proceedings of any meeting only on 1 or more of the following grounds: (a) that the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist.</p>

10. CLOSURE

There was no further public business and Co-Chair Scott declared the meeting closed at 11:05 am.

Chairperson

Date

DRAFT MINUTES

Action Register

Search Criteria

Showing Completed Items: Yes

Include Items Completed From: 09/06/2022

Applied Filters

Meeting Types: Implementation Committee

Generated By: Liz Spector

Generated On: 07/09/2022 at 11:22am

Implementation Committee Agenda - 14 Sept 2022 - OPEN ACTIONS FROM RESOLUTIONS OF THE COMMITTEE

Meeting Date	Item	Status	Action Required	Assignee/s	Action Taken	Due Date
08/12/2021	ENV2102 Decision on Future of Rabbit Control Assets	Completed	Report back prior to 30/06/2022 with options for the Galloway depot and oat processing equipment, to include information on values of the property, buildings and equipment. Res IMP21-119	General Manager Operations	19/01/2022 Executive Assistant To start 23/02/2022 Executive Assistant The working party comprising Cr Kelliher and staff met on 24 February 2022 to discuss how to develop options for the Galloway depot and oat processing equipment for Council consideration. 01/06/2022 Executive Assistant, Operations A report was provided to the 29 June 2022 Council meeting.	30/06/2022
09/06/2022	OPS2220 Environmental Implementation Quarterly Update	Completed	Arrange a workshop on Integrated Catchments prior to a paper coming to Council. Res IMP22-108	General Manager Operations	26/07/2022 Governance Support Officer A 1.5 hour briefing on Integrated Catchment Management was conducted on 30 June 2022 at 1pm.	30/06/2022
09/03/2022	OPS2206 Environmental Implementation Quarterly Update	In Progress	Develop a credible methodology to measure effectiveness of the Pest Management Plan with regards to combatting the #1 pest in Otago (rabbits). Res IMP22-102	General Manager Operations	28/03/2022 Executive Assistant This is currently under investigation by the Environmental Implementation Team	

7.1. Environmental Implementation Quarterly Update

Prepared for: Implementation Committee

Report No. OPS2230

Activity: Environmental: Land
Environmental: Water

Author: Libby Caldwell, Acting Manager Environmental Implementation

Endorsed by: Gavin Palmer, General Manager Operations

Date: 14 September 2022

PURPOSE

- [1] To provide a quarterly summary of operational implementation activities undertaken in the areas of freshwater, biosecurity, and biodiversity. This report complements the Annual Plan quarterly reporting. It includes details of projects underway, the milestones achieved within these projects and wider business as usual work.

EXECUTIVE SUMMARY

- [2] ORC is leading and delivering four Jobs for Nature projects to a total value of \$22.5m:
- i. The National Wilding Conifer Control Programme to Boost Regional Economies and Employment: Otago
 - ii. Containing Wallabies to Protect Agriculture, Forestry and Native Plants, And Boost Regional Economies: Otago
 - iii. Private Land Biodiversity: Maintaining the Gains
 - iv. Te Hakaupū/Pleasant River intervention and restoration project to reduce sediment and nutrient inputs into a waterway
- [3] Otago has a total of 28 Jobs for Nature-funded projects, totalling \$61m. The projects are expected to create approximately 503 jobs over the duration of implementation.
- [4] The Council's Integrated Catchment Management (ICM) Programme is underway. Following a paper to the Strategy and Planning Committee in August 2022 the next steps are to establish a working group to support the groundwork required prior to developing the pilot CAP (Catlins FMU) in partnership with iwi and in collaboration with the wider community.
- [5] Staff within the Catchments team have met with a range of Catchment Groups, community groups, industry groups and other key stakeholders across Otago to identify and pursue support opportunities. The development of various education and behaviour change work programmes is nearing completion, for delivery. Work is also underway to provide improved spatial data and analysis to individuals and groups to better inform their environmental management plans.
- [6] The restoration programme at Wai Whakaata (Lake Hayes) is continuing. The Cultural Values Assessment to inform the refreshed strategy is due to be completed in October 2022. The design of the proposed culvert has been completed and a consent application
-

for construction has been lodged. The estimated completion date for construction is March 2023. Detailed planning for completion of the augmentation project for Mill Creek has also commenced. A consent application for the discharge to Mill Creek has been prepared. Terms and conditions for the supply of water by Arrow Irrigation Company (AIC) to 2028 have been agreed. The supply is dependent upon AIC having a water permit that enables this supply. The connection to the AIC infrastructure has been delayed to Spring 2023 due to supply chain issues that prevent work being completed ahead of the 2022/23 irrigation season. The estimated total cost of the Lake Hayes programme has increased from \$1.15M to \$1.54M largely due to the need for more detailed environmental assessments, changes in market conditions, additional geotechnical works and metering and control equipment.

- [7] Management Plans for Tomahawk Lagoon and Lake Tuakitoto are being implemented, with ecological assessments being the first action for both water bodies. The ecological assessments for these waterbodies are currently underway and are due to be completed in June 2023 with an interim report to be provided in October 2022 identifying some work on the ground that can be pursued.
- [8] Biodiversity programme implementation for the last quarter includes the Otago Biodiversity Forum meeting in July 2022, input to the National Policy Statement-Indigenous Biodiversity (NPS-IB) exposure draft through the Regional Biodiversity Work Group and re-invigorating the ORC's internal Biodiversity working group.
- [9] The ECO Fund 2022 projects are underway with all successful applicants being notified. Funding will be distributed upon receipt of an invoice. Environmental Implementation Staff will be meeting with applicants over the next few months.
- [10] The Community Led Rabbit Management projects continue to be implemented in accordance with the overall project plan. There are numerous examples of collaborative, longer-term management options being implemented by landowners in Otago and, for those who have not engaged in the facilitated process, more formal compliance processes have commenced. A total of 196 management plans from non-complying community project area properties have been requested and 173 have been received to date. The creation and implementation of these plans represents a significant amount of control work that might otherwise not have been undertaken, and more importantly, the work has been planned in a more co-ordinated manner to ensure maximum impact.
- [11] Otago's delivery of the national wilding conifer programme continues, with over 67,000ha of wilding pine control completed during the 2021/2022 financial year across the twelve active Management Units (MU) and two Community Partnership Projects (CPP). Planning for 2022/23 has been completed, and work has commenced on delivery of this programme.
- [12] Otago's wallaby eradication efforts continue, with ground and aerial based contractors undertaking surveillance and control and responding to sightings from the public. During the 2021/2022 financial year over 292,911 hectares of surveillance and control work was completed, with 8 wallabies killed in total and wallaby sign detected at a further 13 locations across six Management Units (MU). One wallaby has been killed in the past quarter through a control operation in the North Otago area. Further control operations are planned in North Otago and Manuherikia over the next quarter.

RECOMMENDATION

That the Committee:

- 1) **Notes** this report.
- 2) **Notes** the range of implementation activities being undertaken to maintain and improve Otago Regional Council’s delivery of environmental implementation activities.

DISCUSSION

Environmental Implementation Summary

[13] Figure 1 provides a snapshot of activities undertaken by the Environmental Implementation team across the region for the period July 2021 – June 2022.

[14] These activities include working with over 20 catchment groups in various stages of development. These groups are being supported by Otago Catchment Community, who will receive funding of \$315,000 from ORC for the 2022/23 financial year to support Otago’s catchment groups.

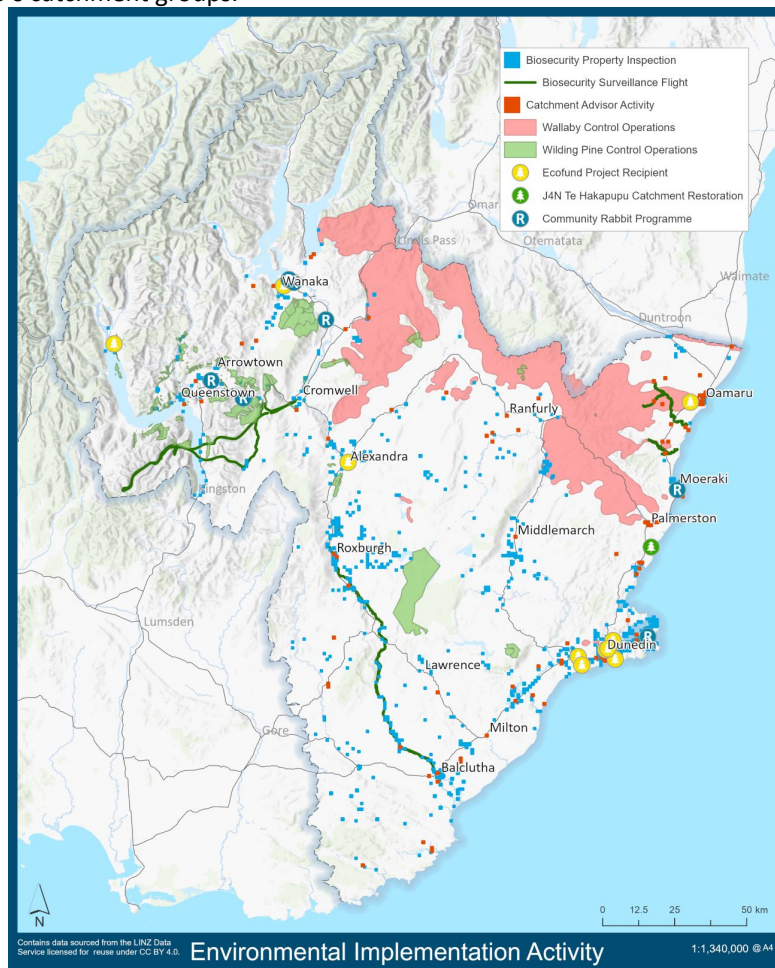


Figure 1: Environmental Implementation Activities: July 2021 – June 2022

[15] As of August 2022, 28 large projects in Otago have been funded by Jobs for Nature (J4N) (Table 1). These projects are worth \$61m to the region and will be delivered over several

years. The projects are focused on ecosystem and freshwater restoration, pest control, recreational enhancement, regulatory implementation, and building capability.

Funding Recipient	Project Name	J4N Funding	Estimated FTE	Project Intent
Aspiring Biodiversity Trust	Makarora Catchment Threatened Species Project	\$354,374	2.05	Ecosystem Restoration, Pest Control Animals
Department of Conservation	In the Wild Queenstown & Fiordland Workforce Hub	\$250,000	9	Capability Development, Pest Control Animals, Pest Control Plants
Friends of Tucker Beach Wildlife Management Reserve Society Incorporated	Tucker Beach Habitat Restoration	\$1,000,000	14.3	Capability Development, Ecosystem Restoration, Pest Control Plants
Halo Project	Halo Project - Source to Sea	\$1,979,974	27	Ecosystem Restoration, Freshwater Restoration
Hukarere Station Ltd.	Hukarere Station Indigenous Planting	\$2,335,340	25	Ecosystem Restoration, Freshwater Restoration
Lake Dunstan Charitable Trust Board	Lake Dunstan Restoration and Community Engagement Project	\$953,000	5.29	Pest Control Animals, Pest Control Plants, Recreation Enhancement
Landscape Connections Trust	Halo Project - Source to Sea	\$600,000	NA	Freshwater Restoration
Lindis Catchment Group Inc	Lindis Catchment Group	\$771,724	2.94	Ecosystem Restoration, Freshwater Restoration, Pest Control Plants
Mana Tahuna Charitable Trust	The Rehabilitation of Te Wai Whakaata the Lake Hayes Catchment	\$4,450,000	64.1	Capability Development, Ecosystem Restoration, Freshwater Restoration, Pest Control Animals, Pest Control Plants
Manuhierikia Catchment Group Incorporated	Thomsons Creek Project as part of the Manuhierikia Exemplar Catchment Programme	\$2,877,670	NA	Capability Development, Ecosystem Restoration, Freshwater Restoration, Pest Control Animals, Pest Control Plants, Regulatory Implementation
North Otago Sustainable Land Management Group Inc	North Otago Sustainable Land Management	\$361,776	7.41	Ecosystem Restoration, Freshwater Restoration, Pest Control Plants
Otago Regional Council	Maintaining the Gains' - Protecting and restoring indigenous biodiversity on Otago's covenanted private land	\$961,234	11	Capability Development, Pest Control Plants
Otago Regional Council	National Wilding Conifer Control Programme to Boost Regional Economies and Employment: Otago	\$13,463,527	45.81	Pest Control Plants
Otago Regional Council	Containing Wallabies to Protect Agriculture, Forestry and Native Plants, And Boost Regional Economies - Otago	\$4,170,342	19.23	Pest Control Animals
Otago Regional Council	Te Hapakupu Restoration Project	\$4,004,500	30.2	Ecosystem Restoration, Freshwater Restoration, Pest Control Plants, Regulatory Implementation
Penguin Place Ltd	Penguin place	\$633,000	11.52	Capability Development, Ecosystem Restoration, Pest Control Animals, Recreation Enhancement
Pomahaka Water Care Group	Pomahaka Water Care Group	\$175,907	0.85	Ecosystem Restoration, Freshwater Restoration, Pest Control Plants, Regulatory Implementation
Pomahaka Water Care Group	Pomahaka Water Care Group	\$1,400,000	13.5	Ecosystem Restoration, Freshwater Restoration

Pomahaka Water Care Group Incorporated	Pomahaka Corridor Planting Project	\$2,312,161	NA	Freshwater Restoration
Royal Forest and Bird Protection Society Dunedin Branch	Tautuku Restoration	\$577,274	9	Capability Development, Pest Control Animals
Southern Lake Sanctuary (SLS) Trust	Southern Lakes Sanctuary (SLS)	\$2,986,000	38.7	Capability Development, Pest Control Animals
Te Rūnaka o Ōtākou	Te Nukuroa o Matamata	\$5,000,006	63.53	Capability Development, Ecosystem Restoration, Freshwater Restoration, Pest Control Animals, Pest Control Plants
The Routeburn-Dart Wildlife Charitable Trust Board	Routeburn Dart Wildlife Trust - Predator Trapping Project	\$416,000	8	Capability Development, Pest Control Animals
Tokomairiro	South Otago - Tokomairiro	\$83,970	0.79	Ecosystem Restoration, Freshwater Restoration, Pest Control Plants
Upper Taieri Wai	Maniototo Tiaki - Preservation Maniototo	\$4,550,000	57.61	Capability Development, Ecosystem Restoration, Freshwater Restoration, Historical or Cultural Heritage Restoration, Pest Control Plants, Recreation Enhancement, Regulatory Implementation
Wai Wanaka	WAI Wanaka - Wanaka Future Reset	\$3,000,000	22.38	Ecosystem Restoration, Freshwater Restoration, Pest Control Animals, Pest Control Plants
Wanaka Catchment Group	Wanaka Catchment Group Wai Ora Initiative	\$1,132,269	6.11	Capability Development, Ecosystem Restoration, Freshwater Restoration, Historical or Cultural Heritage Restoration, Recreation Enhancement, Regulatory Implementation
Yellow-eyed Penguin Trust / Te Tautiaki Hoiho (YEPT / the Trust)	Jobs Increasing Hoiho Conservation: the story of a taonga species	\$422,000	8	Capability Development, Ecosystem Restoration, Freshwater Restoration, Historical or Cultural Heritage Restoration

Table 1: Jobs for Nature Projects in Otago by Funder**LTP Service Level Measures**

[16] The Environmental Implementation Team is responsible for the Annual Plan level of service measures outlined in Table 2. Performance against these measures is outlined in the regular quarterly updates provided to Council, or in specific reports as outlined below.

Level of Service	Report to Council on...	Evidence by ...
Provide support and funding to selected initiatives and organisations across the region which deliver biosecurity, biodiversity and environmental outcomes that align with our strategic objectives.	...the initiatives and organisations supported, and the key deliverables achieved [LOSM 2065]	Quarterly Environment Implementation Reports. June 2022 report to Council on Ecofund and other financial incentive recommendations.
Collaborate with iwi, DoC and other key	...partnerships established in	Quarterly

organisations to develop, coordinate and deliver a programme of actions to enhance indigenous biodiversity.	line with the Biodiversity Action Plan, joint projects developed, and milestones identified [LOSM 2074]	Environment Implementation Reports – specifically <i>Maintaining the Gains</i> and <i>Te Hikapupu/Pleasant River Catchment</i> Restoration projects.
Support Catchment Groups in Otago to deliver their environmental outcomes and objectives.	...Otago Catchment Communities deliverables and targets achieved [LOSM 1972]	Quarterly Environment Implementation Reports, 25 May Council report and report by OCC to Council 11 August.
Develop and maintain an environmental planning framework that aligns with national directions and enables sustainable management of natural and physical resources.	...progress of Integrated Catchment Planning programme [LOSM 2080]	Quarterly Environment Implementation Reports, 29 June and 10 August Council report.

Table 2: Level of Service Measures

Integrated Catchment Management Programme

- [17] Staff are implementing the decisions made by the Strategy and Planning Committee on 10 August 2022 including planning for the Catlins to be the pilot area for the development of the ICM framework with iwi and the community.

- [18] In summary the next stages of work are to:
 - Canvass key community stakeholders in the Catlins to confirm if they are supportive of the Catlins being the pilot area for the first Catchment Action Plan (CAP).
 - Draft a Terms of Reference for an ICM Working Group to be brought back to Council for consideration on 28 September 2022.
 - Establish the ICM Working Group including representatives from Council, ORC Staff, Aukaha, Te Ao Marama, Otago Catchment Community (OCC) and Catlins community.

- [19] The initial tasks for the ICM Working Group (supported by Staff from Environmental Implementation) will be to:
 - Oversee a stocktake of information, projects, plans, strategies, networks etc relevant to the Catlins
 - Develop a detailed community collaboration plan for developing the pilot CAP
 - Assess the CAP Framework and programme logic to date in terms of its usefulness for guiding the development of the pilot CAP
 - Review prioritisation criteria for key environmental actions (e.g. planting, riparian works, protection, erosion control, etc) as a starting point for prioritising actions arising from the CAP.

- [20] Initial contact has been made with OCC, Catlins Coast Inc., and the Owaka Catchment Group. All have indicated their in principle support for the pilot and being involved in the ICM Working Group.

Freshwater Implementation

Jobs for Nature – Te Hākapupu (Pleasant River Catchment) Restoration Project

- [21] The \$4.0m, Ministry for the Environment funded, Te Hākapupu/Pleasant River project is continuing. Te Hākapupu is showing signs of excess sedimentation and nutrients, which impacts on ecosystem habitat and health, cultural values, as well as reducing recreation and amenity values. These signs include areas of dense algal mats, anoxic water conditions, and muddy sediment around the estuary. Changing land use in the area over time has contributed to sediment and nutrients entering the waterways. Erosion which is associated with land clearance and weather events has also exacerbated sediment issues in the catchment.
- [22] A communications working group has been formed with representatives of Kāti Huirapa ki Puketeraki, the community and ORC to work together to generate communications for the project. A website is under development. A community event is being planned for October 2022 as a soft launch to the project.
- [23] An RFP has been released to develop/deliver the Te Hākapupu Catchment Management Plan and related work. A supplier will be selected in September.
- [24] It is anticipated some sites will be identified for fencing and planting works before the end of 2022, and landowner engagement will then begin to install sediment mitigation works and assist landowners in developing sediment mitigation plans.
- [25] Other procurement will now get underway for plant production, fencing and planting.
- [26] The ORC Science Team are working on a sediment source tracking project in Te Hākapupu with NIWA that will identify how sediment has moved through the catchment over time. This will assist modelling of the catchment to identify sediment source hotspots and target intervention work (fencing and planting).
- [27] The ORC Science Team are also undertaking environmental assessment work in the catchment to establish baselines towards State of the Environment reporting. This work will contribute to the setting of environmental baselines so environmental monitoring can be established.
- [28] Fish surveys will be being carried out in the catchment to assist in both identifying fish passage and barriers to passage. Fish passage barrier mitigation is another deliverable for the project.

Delivering Annual Plan Programmes

Support of Catchment Groups

- [29] In the last three months, staff have met with a variety of catchment groups across the Otago region to provide advice and support including:
- NOSLaM

- Otago South Rivercare
- East Otago Catchment Group
- Upper Taieri Wai/Tiaki Maniototo
- Mid Taieri Wai
- Wai Wanaka
- Friends of Bullock Creek
- Lindis Catchment Group

- [30] The Catchment Advisor team promoted good practices around intensive winter grazing through nine events from May through to July, all in conjunction with farmer-led catchment groups. Catchment advisors generally spoke alongside ORC consents and compliance staff who covered the regulatory side of winter grazing. Several events were led by B+LNZ and NOSLAM, with Catchment Advisors speaking in a supporting role.
- [31] Catchment Advisors took the lead for on-farm events held in Matukituki Valley, Glenorchy and West Otago (with Ravensdown). In addition, advisors made several one-off farm visits to provide customised advice on minimising impacts from winter grazing. The Thriving Southland winter grazing plan was adapted by our team to suit ORC's needs and is now available on the ORC website.
- [32] Farmers are now seeking advice from ORC consents staff on how to get winter grazing resource consents for 2023 and beyond (in response to national regulations). Catchment advisors are facilitating this by liaising with catchment group leaders, while also looking to reinforce good practice messages. The first of these events took place in the Cardrona Valley on 22 August and it is expected that several more are to be scheduled through to late September.
- [33] Work continues to provide Catchment Groups with environmental and spatial data to help identify issues, priorities and potential mitigation solutions.

Lake Hayes Water Quality Strategy

- [34] The Wai Whakaata /Lake Hayes Strategy Group is continuing to support the development of a refreshed strategy. The group focuses on:
- Coordinating actions across member organisations in order to improve water quality.
 - Identifying significant existing and emerging issues affecting Wai Whakaata /Lake Hayes and responding appropriately.
 - Considering agreements, policies and strategies and all other proposals to achieve integrated outcomes for Wai Whakaata /Lake Hayes.
 - Identifying necessary actions by the partner organisations and other relevant organisations.
- [35] The group comprises representatives of mana whenua, ORC, Friends of Lake Hayes, Department of Conservation and Queenstown Lakes District Council.
- [36] A cultural values assessment for Wai Whakaata /Lake Hayes is underway, being led jointly by Aukaha and Te Ao Marama. The assessment will provide a comprehensive summary of mana whenua values and environmental aspirations and will be used to inform the final refreshed strategy (and other planning and strategic processes

concerning the Wai Whakaata catchment). The cultural values assessment is due to be completed in October 2022.

- [37] The Group continues to provide an effective mechanism to bring all parties together to discuss issues of mutual interest and to act as a liaison point between the community and government agencies. It has facilitated better communication and enabled ORC to quickly engage the views of key stakeholders to ensure acceptable progress is made to deliver the Lake Hayes restoration project.

Lake Hayes Restoration

- [38] This project aims to improve water quality within Lake Hayes and reduce the risk of flooding along the perimeter of the lake. Currently there are flooding impacts to the existing recreational trail which affects public access, negatively impacts on the Crested Grebe habitat, increases runoff of nutrients from flooded land and impacts adversely on native planting, which has been established for local biodiversity restoration along the shores of Lake Hayes.
- [39] Detailed geotechnical investigation work and detailed design have been completed for the culvert on Hayes Creek (SH6) A consent application for construction has been lodged. The estimated completion date for construction of the culvert is March 2023. This is approximately three months later than initially scheduled due to the altered consent approach and considerations for reducing risks of disruption to State Highway traffic over the Christmas/New Year period. The investigation work (survey, and hydrological and hydraulics modelling) has identified the need for some further downstream works to remove localised constrictions. This work is being scoped and treated as an opportunity to establish appropriate riparian planting to improve water quality and stream habitat.
- [40] Detailed planning for completion of the augmentation project for Mill Creek has also commenced. A consent application for the discharge to Mill Creek has been prepared. Terms and conditions for the supply of water by Arrow Irrigation Company (AIC) to 2028 have been agreed. The supply is dependent upon AIC having a water permit that enables this supply. The connection to the AIC infrastructure has been delayed to Spring 2023 due to supply chain issues that prevent work being completed ahead of the 2022/23 irrigation season.
- [41] The estimated total cost of the Lake Hayes programme has increased from \$1.15M to \$1.54M largely due to the need for more detailed environmental assessments, changes in market conditions, additional geotechnical works and metering and control equipment.

Tomahawk Lagoon Water Quality Project

- [42] Staff have developed a Tomahawk Lagoon Management Plan in consultation with the community. This was approved by Council in April 2022¹.
- [43] The Management Plan identifies three priority projects to commence with first: the support and formation of a catchment group, an ecological assessment of the catchment is to be undertaken and a permanent water quality monitoring site to be installed.

¹ <https://www.orc.govt.nz/media/12022/agenda-implementation-20220414.pdf>

- [44] The Ecological assessment for the Tomahawk Lagoon catchment is being progressed with work currently underway. The final report is due in June 2023 with an interim report provided in October 2022 to help identify on the ground actions that can be undertaken.
- [45] Otago Catchments Communities are leading the formation of the Catchment Group for this area with several community meetings being held in the last quarter to progress this and supported by ORC staff.
- [46] Staff have followed up with DoC staff who have advised that for the Tomahawk Lagoon Wildlife Management Reserve:
- There is no planned or current biodiversity works budgeted in this reserve this financial year
 - This reserve is included in a 'Lands Held' prescription that covers public conservation land parcels across the coastal otago district – currently budget for this prescription is being prioritised to other areas (i.e. Silver Peaks, Maukaatua Scenic Reserve etc)
 - Their role for this reserve, is in Land Owner approvals/permissions and to support with technical biodiversity advice

Lake Tuakitoto Water Quality Project

- [47] A Lake Tuakitoto Management Plan, based on community consultation, was approved by Council in April 2022².
- [48] The Management Plan identified three priority projects to commence with first: an ecological assessment of the catchment, establishment of new water quality monitoring sites and a hydrological assessment.
- [49] The ecological assessment for the Lake Tuakitoto catchment is being progressed with work currently underway. The final report is due in June 2023 with an interim report provided in October 2022 to help identify on the ground actions that can be undertaken.
- [50] The Robson Lagoon Flow Control Structures Upgrade Project is described in the report to committee on ORC's climate resilience projects (Report No. OPS2235).

Land Management and Freshwater

- [51] Over the past three months the Catchment Advisors have continued to build relationships and support catchment groups, community groups and industry. During this time, connections with approximately 40 different community groups/individuals across Otago.
- [52] Work is occurring to develop a multi-year implementation programme led by Catchment Advisors. This work will capture programmes and projects which have provided positive environmental outcomes across New Zealand in both the rural and urban context. This work will assist the team to learn what has worked in other regions across New Zealand and implement a range of best practice projects and interventions using a prioritisation methodology based on factors relevant to Otago.

² <https://www.orc.govt.nz/media/12022/agenda-implementation-20220414.pdf>

- [53] The development of both a stormwater education and a septic tank education programme is underway. Once developed the Catchment Advisors will roll this out in areas which are high priority throughout the region. The aim of these programmes is to encourage behaviour change to improve water quality.
- [54] Development of a stream health assessment programme is underway which will be rolled out for groups and individuals using SHMAK kits. This programme will assist to engage communities about their stream's health and what lives there. This will assist with supporting landowners in behaviour change to improve water quality.
- [55] Staff have attended the Otago Catchment Leaders Forum hosted by Otago Catchment Communities on 29 July 2022.
- [56] Staff attended and presented at the Summerfruits Forum in June in Alexandra which was an opportunity to build a connection with this industry and discuss how the team is able to support them in regards to water quality, biodiversity and biosecurity. Further work is ongoing to develop a programme of work to support this industry.
- [57] Staff have undertaken training in Land Use Capability assessment to enable them to support landowners with options for land management on different land use classes.
- [58] Staff have been collaborating with NZ Landcare Trust to support the Mid-Taiari Wai Group. This has involved a demonstration with the Lee Stream School on how to undertake water quality monitoring and what support ORC can provide through the SHMAK kit.
- [59] A communications plan is in development to raise awareness within the community of the support that the Catchments team can provide in regards to environmental enhancement and best practice.

Biodiversity Implementation

- [60] The Exposure Draft of the National Policy Statement for Indigenous Biodiversity (NPSIB) was reviewed and comments from the Environmental Implementation included into the Regional Council's collective submission, the Biodiversity Working Group and the ORC Staff Submission.
- [61] A meeting of the Otago Biodiversity Forum was held in July 2022. Discussion included the exposure draft of the NPS-IB, a review of the Otago Biodiversity Strategy in line with the NPS-IB, partnership updates on the Nga Awa project for the Taiari and Predator Free Dunedin. New partnerships for biodiversity are being explored through this forum.
- [62] A native planting guide best practice online tool is being developed. This tool will incorporate existing riparian planting guides and include a species selection guide for different areas of Otago (based on the existing ecosystem mapping). It will also provide guidance on best management practices for planning, planting and maintenance. The planting guide will also aim to include regulatory responsibilities (a 'check before you plant' section) for any planting proposed including requirements of the Flood Protection Management Bylaw.

- [63] The Maintaining the Gains project contracts with QEII and Aukaha are in place. The local QEII representative, along with ORC staff, are now assessing and prioritising QEII covenants for pest plant control work. The project has partnered with Aukaha are in the process of creating a field team to carry out pest plant control work on the selected QEII covenants.
- [64] The plant pest control team will receive training in Growsafe, Health and Safety, First Aid and any driver training required. They will also receive training in Mātauraka Māori, whakapapa and other related trainings.
- [65] An application is now being trialled that enables assessments and landowner agreements to be completed online and will enable pest plant work to be tracked and geo located. The result will be a dashboard showing where work has been carried out over the three-year project which will assist with reporting of outcomes achieved.
- [66] Once the first six covenants have been selected and prioritised, a programme of works will be developed and it is anticipated pest plant control work commence prior to the end of 2022.

ECO Fund

- [67] All successful ECO Fund and incentive funding applicants have been notified and sent a funding agreement. Almost all of these have been signed and invoiced ORC to receive fund to commence their project. Catchment Advisors and other staff will aim to meet each group over the next few months for a check-in to see if they need any help or have any issues we can assist with to ensure project outcomes are achieved.
- [68] Staff are continuing to work with IT to update and improve the online portal for ECO Fund applications, reporting and general process administration.

Biosecurity Implementation

Biosecurity Operational Plan Implementation

- [69] Biosecurity staff attended the NETS 2022 conference in Christchurch where the theme for the conference was 'Changing Landscapes'. Some key themes and takeaways from this conference were around; driving behaviour change, working more collaboratively across Aotearoa and the need for some national priorities to be set. Presentations on new technologies and specific pests and how these are being managed across the country were also delivered.
- [70] Staff have developed a small-scale management plan for Japanese and Indian knotweed which has been identified at four locations in Coastal Otago. These plant species have been found to be causing serious issues in other parts of Aotearoa and also in other countries. The Knotweed species have an adverse effect on biodiversity values by forming dense thickets which exclude other species and prevent native seedlings from establishing. They can also damage building foundations, push up roads, narrow water channels, impeded water flow leading to siltation and impact on recreational values of waterways.

- [71] A nassella tussock field day was held in the Roxburgh FMU in early July which staff attended to provide education around identification of nassella tussock and the best practice control methods for this pest.
- [72] Night count monitoring for rabbits has commenced for this financial year. An update on the results of this work will be included in a future quarterly report.

Biosecurity Administration

- [73] A significant focus over the past year has been the Biosecurity Integration Project aimed at improving the administration processes related to for biosecurity compliance. As noted in the Biosecurity Compliance and Enforcement Policy³, the Biosecurity Act 1993 (BSA) has distinct compliance requirements which requires active attention to administration processes to ensure statutory obligations are met.
- [74] The Biosecurity Integration Project has two primary components:
- Consolidating Data Collection: Currently biosecurity inspection data is acquired using two mobile data collection apps using a GIS platform (Survey123) – one for rabbit inspections and one for pest plant inspections. These current apps were designed at different times hence have different logical processes. This project merges these two data collection apps into one app that ensures better consistency in data collection.
 - Administration Process: The administrative requirements under the BSA are extensive and currently much of this is done manually. This reduces responsiveness and organisational effectiveness. Under this project, data acquired through the GIS platform will be linked to an existing ORC administrative system (Accela), aided by newly developed procedures. A key function of this integration will enable compliance letters and related communications to be automatically generated.
- [75] The new integrated system is planned to be rolled out from 1 October 2022. Training of staff will commence from late September and extend until late October.
- [76] Along with improved administration, this project will also improve the assessment of biosecurity effectiveness through having better quality data, with the ability to more quickly report on trends.

Rabbit Management

Inspections – Rabbit Management

- [77] Overall, 800 rabbit inspections were completed between 1 July 2021 until 30 June 2022. Analysis of inspection data is provided in the companion Council paper reviewing the achievement of the 2021-22 Biosecurity Operational Plan.
- [78] The first Notices of Direction (NoD) for non-complying properties were issued in early March 2022, with another 31 NoDs issued in late June/July. Recipients of the NoD have three months to undertake the required pest control before a re-inspection is undertaken. (Table 3).

³ As approved by Council 9 June 2021

NoD Status	Count	Notes
Issued & compliant	2	Both compliant on re-inspection
Issued	31	Awaiting re-inspection
NOD Reviewed	27	Require further re-inspection to confirm
Total	60	

Table 3: Summary and Status of Notice of Directions (as of 15 August 2022)

[79] *Notices of Direction* (and subsequent Default Work) will be issued to both private and public land occupiers. As per Council's Biosecurity Compliance Enforcement Policy⁴, occupiers will be given a set time to comply and if this isn't achieved, where appropriate, the *Default Work* process will be undertaken.

Community-Led Rabbit Management Programmes

[80] In addition to standard compliance work within our rabbit programme, which has increased significantly in the past year, ORC is facilitating several large-scale community responses to better rabbit management in semi-rural and peri-urban environments.

[81] Table 4/Figure 2 provide an overview of the communities that ORC is currently working with. Each approach is unique, based on the landscape, number of properties, land use activities and preferences of the community. The projects have been run simultaneously where possible but have had to be prioritised due to resourcing.

[82] The engagement, initial inspections, situation overview and management planning phases have been delivered in all project areas. The formal compliance phase is now underway in some areas, and will continue through 2023, for those properties who have not voluntarily engaged in the process (e.g., not submitted plans for reducing numbers and/or shown a decrease in rabbit populations).

[83] Staff continue to provide support and guidance to many individual occupiers as well as connecting people with neighbours, with contractors and providing technical information to assist community efforts. A total of 196 management plans from non-complying community project area properties was requested and 173 have been received to date. The creation and implementation of these plans represents a significant amount of control work that might otherwise not have been undertaken, and more importantly, the work has been planned in a more co-ordinated manner to ensure maximum impact.

[84] Public agencies continue to be responsive as a result of ORC advocacy and are delivering on the ground action to meet their responsibilities. Queenstown Lakes District Council have embarked on a large programme of works⁵ in and around reserves near Lake Hayes, Shotover Cemetery and Gibbston. Actions include installing new rabbit-proof fencing in locations near Lake Hayes, and conducting monitoring, night shooting and other control methods over the winter months. LINZ are also undertaking increased rabbit control, including near Bannockburn.

⁴ https://www.orc.govt.nz/media/10235/orc-biosecurity-compliance-enforcement-policy_final.pdf

⁵ <https://www.qldc.govt.nz/services/environment-and-sustainability/pest-control/rabbit-management-lake-hayes-shotover-cemetery-and-gibbston-reserve>

[85] The perceived (and real) lack of public agency action in recent years has been source of immense frustration for private landowners, and the community programmes have provided an effective framework to ensure that all parties are working collaboratively to reduce rabbit populations. The Department of Conservation and Land Information New Zealand are also planning and implementing control works. Staff will continue to ensure that these plans are completed and that compliance expectations are met.

	Initial Engagement	Initial Property Inspections	Situation Overview	Management Planning	Programme Monitoring Inspections	Formal Compliance Inspections	Default Work*
Lake Hayes					Sep 2022	Scheduled for Feb/ Mar 2023	
Albert Town					N/A	N/A	
Gibbston					Sep 2022	NoDs Issued	3 months from NoD
Otago Peninsula					Oct 2022	Feb/ Mar 2023	
Queensberry					Sep 2022	Feb/ Mar 2023	
Moeraki					Oct 2022	Feb/ Mar 2023	
Hidden Hills					N/A	N/A	

Table 4: Status of Community Led Rabbit Management Programmes as at August 2022



Figure 2: Community Rabbit Management Project Areas

- [86] A process for engaging landowners to ensure strategic responses and coordination of control efforts has been developed. The community-led strategic management approach will be facilitated and supported through the following means:
- Education and awareness – workshops, website, social media, pamphlets, and one on one meetings/discussions highlighting:
 - Rules, roles and responsibilities.
 - Primary and secondary control techniques; and
 - Contractor selection.
 - Information gathering to support recommendations and compliance action, including:
 - i. Property inspections to identify properties that are at greatest risk of non-compliance, and to produce heat maps showing rabbit hotspots and to identify fences other than barriers that reduce the risk of reinvasion; and
 - ii. Ongoing monitoring of control efforts.
 - iii. Support with preparation of Management Plans – including technical advice on control methods.
 - iv. Compliance inspections and implementation of enforcement procedures. This is critical to increase recognition of ORC’s rules and compliance functions, and to ensure that a few non-compliant properties do not cause wider community efforts to fail.

[87] Table 5 provides a summary of recent progress to implement ORC's community led rabbit management programmes as of August 2022. This approach follows the previously outlined Community Led Rabbit Management process and compliance pathways⁶.

COMMUNITY	ACTIONS UNDERWAY – PAST QUARTER
ALBERT TOWN	<p>Staff continue to meet with DoC, QLDC and LINZ to support the implementation of long-term, sustained control interventions.</p> <p>In August 2022, a Pindone control operation was undertaken in a joint effort between QLDC and DOC on public and crown land from Hikuwai Conservation Reserve along the walking track to the outlet of Lake Wanaka. ORC carried out a night count prior to the operation and will follow up with a post-operation night count.</p>
LAKE HAYES	<p>Biosecurity staff inspected 230 properties, of which 82 were indicative of non-compliance.</p> <p>46⁷ Management Plans requested, 37 (80%) have been received or are imminent. Follow up is ongoing with those who have not submitted.</p> <p>Community update distributed June 2022.</p> <p>Re-inspections for the programme and compliance monitoring are scheduled for September 2022. These re-inspections will identify properties that have not engaged in the programme or are not undertaking effective rabbit management. These properties will be scheduled for a NOD compliance inspection in Feb/ Mar 2023.</p>
GIBBSTON	<p>Biosecurity staff inspected over 170 properties, of which 52 were indicative of non-compliance.</p> <p>A total of 49 management plans were requested. Of these, 44 (89%) have been received or are imminent.</p> <p>In April 2022, compliance inspections were completed on 22 properties that had not engaged with the programme or responded to correspondence. Of these, 3 were compliant at re-inspection.</p> <p>Community update distributed June 2022.</p> <p>Five NODs have been issued for the Gibbston area to date. These are due for re-inspections to check compliance in January 2023.</p> <p>Re-inspections for programme and compliance monitoring are scheduled for September 2022. These re-inspections will identify any remaining properties that are not undertaking effective rabbit management. These properties will be scheduled for an NOD compliance inspection in Feb/ Mar 2023.</p> <p>Staff continue to support recipients of the new Rabbit Incentive Funds to undertake collaborative rabbit management.</p>

⁶ <https://www.orc.govt.nz/media/11902/agenda-implementation-20220309.pdf>

⁷ Note that the number of management plans requested is often lower than the number of properties inspected because there are various groups of properties managed collectively.

HIDDEN HILLS	<p>Advice and connections provided to Residents Association. Application was successful for the new Rabbit Incentive Funds for a rabbit management programme involving 37 properties.</p> <p>Staff continue to work with the Hidden Hills Residents Association to monitor rabbit numbers and support collaborative rabbit management.</p>
QUEENSBURY	<p>68 property inspections took place in February 2022.</p> <p>A total of 34 management plans were requested. Of these, 31 (91%) have been received or are imminent, and there are currently 3 where communications have not been responded to. Follow-up is ongoing with those who have not submitted.</p> <p>Efforts ongoing to support community collaboration.</p> <p>There has been good engagement from the Queensbury community with a lot of communication for information, requests for assistance to connect property owners for collaboration, and good positive feedback about the programme overall.</p> <p>Re-inspections for the programme and compliance monitoring are scheduled for September 2022. These re-inspections will identify properties that have not engaged in the programme or are not undertaking effective rabbit management. These properties will be scheduled for an NOD compliance inspections in Feb/ Mar 2023.</p>
MOERAKI	<p>Biosecurity staff inspected 56 properties, of which 39 were indicative of non-compliance.</p> <p>A total of 39 management plans were requested and plans for 34 (87%) properties have been received or are imminent (some of the plans received cover more than one property). Follow-up is ongoing with those who have not submitted.</p> <p>Efforts to support community collaboration ongoing.</p> <p>Community update distributed May 2022.</p> <p>A significant decline in the Moeraki rabbit population prompted testing of rabbit carcasses from the area to identify the cause of the decline and communication with the community. Staff engaged with the community to reassess or amend their management plans and encourage continued rabbit management to further reduce and maintain rabbit numbers and reduce potential for a 'bounce back' in the population following the event.</p> <p>Re-inspections for the programme and compliance monitoring are scheduled for October 2022. These re-inspections will identify properties that have not engaged in the programme or are not undertaking effective rabbit management. These properties will be scheduled for an NOD compliance inspection in Feb/ Mar 2023.</p> <p>Staff continue to work with a community group that has formed to initiate engagement in a wider community management plan.</p>

OTAGO PENINSULA	<p>Initial property inspections took place in Otago Peninsula in early 2021, prior to the full community programme model being established. A rabbit management plan workshop was held with property owners in early 2021, but little progress was made by owners during the year.</p> <p>Biosecurity staff inspected 37 properties at the end of 2021 and 28 management plans were requested. A further rabbit management plan workshop was held with landowners in February 2022. A total of 27 management plans have been received and staff are working with one remaining property to finalise options.</p> <p>Re-inspections for programme and compliance monitoring are scheduled for October 2022. These re-inspections will identify properties that have not engaged in the programme or are not undertaking effective rabbit management. These properties will be scheduled for an NOD compliance inspection in Feb/ Mar 2023.</p> <p>Staff continue to work with ECO Fund Rabbit Incentive Funding recipient, Otago Peninsula Biodiversity Group, to develop their programme to initiate community engagement and consultation on the establishment of a rabbit management plan for the remaining Peninsula area.</p>
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Table 5: Summary of Community-Led Rabbit Management Programme Progress

- [88] Staff will continue to assess other communities that might benefit from some extra assistance. The Millers Flat community is currently considering if they would like support and there has been some interest from rural property owners in the Waianakarua area. Support for the smaller, more rural focused communities is considered 'business as usual' work.

Access to Pindone Liquid Baited Carrots for Rabbit Control

- [89] In order to ensure adequate supply of pindone liquid baited carrots for rabbit control in the region, ORC entered into a pilot partnership agreement with Excell Pest Control and Mainland Vector Contracting Ltd. This agreement saw Council assisting these contractors (selected from a full tender process) to make pindone liquid baited carrots available to suitably qualified persons⁸ in both Central and Coastal Otago. The contractors have almost finished collecting and distributing orders for baited carrots this season and will then provide a final report.
- [90] The pilot project aims to ensure effective control tools are available this winter and provide information that will establish future demand and direct further initiatives that could be undertaken by Council to support a reduction in rabbit numbers.

Bait Pen Trials

- [91] In June 2022, a Pindone pellet bait pen trial was initiated to observe the effectiveness of using Pindone pellets in bait stations within fenced pens for rabbits. If effective, this method could be suitable as a secondary control tool in sensitive areas where open bait stations may pose a risk for people, dogs, or other animals, for example public walking tracks, stocked paddocks, or areas of foreshore inhabited by seals and penguins.

⁸ Purchasers must hold an Approved Use for Pindone Certificate.

- [92] Two different bait station designs were used in the trial with a total of 18 bait stations trialled over three sites (6 at each site). Two of the sites were in Lake Hayes and one was in Moeraki. Data was collected from night count monitoring and trail cameras set up at each bait station. The trial was carried out over 8 weeks and has just concluded. A report of the findings will be compiled with results provided through the next quarterly update for Environmental Implementation.

National Wilding Conifer Programme

- [93] Whakatipu Wilding Conifer Control Group (WCG) – control operations across the Whakatipu basin for the 2021/22 financial year saw a total 24,287 hectares of wilding pines removed or controlled across the five Management Units (MU). Planning for 2022/23 was completed during May/June, with 9,500 hectares of wilding pine work scheduled to be carried out over the next financial year. Harvesting and felling operations have commenced at selected sites in the Glenorchy and Whakatipu Management Units (MU), and further control work is due to start in the Kawarau, Northern Eyre, Remarkables and Shotover MU in the next quarter.
- [94] Central Otago Wilding Conifer Control Group (CWG) – control operations across Central Otago for the 2021/22 financial year saw a total 29,558 hectares of wilding pines removed or controlled across 5 Management Units and the 2 Community Partnership Projects (CPP). Planning for 2022/23 was completed during May/June, with 11,450 hectares of wilding pine work scheduled to be carried out over the next financial year. Discussions with landowners is ongoing and control work is due to commence in the Alexandra, Dunstan, Lammermoor, Naseby and Rough Ridge MU and the Kakanui and Maungatua CPP during the next quarter.
- [95] The Central Otago Wilding Conifer Control Group (CWG) have engaged a part-time Community Engagement person and a communications strategy has been developed for the group. A variety of engagement activities are planned through various channels throughout the season to maximise awareness and increase landowner participation.
- [96] Luggate Control – all planned control work in the Luggate MU for the 2021/22 financial year was completed at the end of June, with a total 14,131 hectares of wilding pines removed or controlled on the northern end of the Pisa Range. Planning for 2022/23 was completed during May/June, with 3,106 hectares of control work scheduled to be carried out over the next financial year. Discussions with landowners is ongoing and control work is due to commence in the Luggate MU in September.
- [97] A workshop was held in Alexandra on 22 August with the Whakatipu and Central Otago Wilding Conifer Control Groups, Department of Conservation (Whakatipu and Central Otago), Ministry for Primary Industries and ORC to discuss the current delivery arrangements for wilding conifer control. The discussion will help inform consideration by ORC of any potential changes to the current arrangements. The significant reduction in central government funding in 2023/24 and the cessation of the national programme in June 2024 were noted.

National Wallaby Programme

- [98] Operations across the seven priority Management Units (MU) continue with up to five contractors undertaking surveillance activities, including ground hunters searching for field sign, ground hunters with dogs, and ground hunters using thermally equipped UAV (drones).

- [99] For the 2021/22 financial year, a total of 292,911 hectares of surveillance and control work was completed, with 8 wallabies killed in total. This included extensive aerial thermal surveillance work completed across the Hawea, Dunstan, Hawkdun, North Otago, and Macraes Management Units during May/June.
- [100] A total of 38 sighting reports were received during the 2021/22 financial year, with 24 confirmed as reliable. All reports were followed up within 3 working days, and a search completed using ground hunters with dogs or ground hunters using thermally equipped UAV (drones). No live wallaby or sign was found during follow-up surveillance of a sighting report.
- [101] A total of 8 wallaby were destroyed during the 2021/22 financial year in the following areas: Clyde (1), Richmond (1), Boundary Creek (2), Kyeburn (1), Horse Range (2 + 1 joey).

Total area searched (ha)	Total sightings reported	No. wallaby destroyed
292,911	38	8

Surveillance and control results for the period 1 July 2021 to 30 June 2022

- [102] One wallaby has been killed in the past quarter through a control operation in the North Otago MU (Shag River). Further control operations are planned over the next quarter in the North Otago MU (Livingstone) and Dunstan MU (Boundary Creek) where several wallabies have been detected through surveillance work.
- [103] Planning for the 2022/23 financial year was completed during May/June, with a further 313,593 hectares of ground and aerial surveillance work planned to be undertaken during the year. Surveillance operations are currently underway in the North Otago and Macraes MU, and will commence in the Hawkdun, Hawea, Maniototo, and Dunstan MU during the next quarter.
- [104] A Communications Plan is currently being prepared for the 2022/23 financial year, which aims to increase the number of reported sightings made and to inform and educate the public about the pest control work ORC facilitates. A recent story has featured on TVNZ centred around the use of wallaby surveillance dogs and UAV (drone) use.

CONSIDERATIONS

Strategic Framework and Policy Considerations

- [105] No considerations arising from this paper.

Financial Considerations

- [106] The increase in estimated costs for the Lake Hayes restoration work is noted in this paper.

Significance and Engagement Considerations

- [107] No considerations arising from this paper.

Legislative and Risk Considerations

[108] The dependency on AIC's water permit for the augmentation of Lake Hayes is noted in this paper. The augmentation is also dependent upon ORC obtaining a resource consent to discharge to Mill Creek.

Climate Change Considerations

[109] No considerations arising from this paper.

Communications Considerations

[110] No considerations arising from this paper.

ATTACHMENTS

Nil

7.2. Large Funding Requests

Prepared for: Implementation Committee
Report No. OPS2225
Activity: Governance Report
Author: Anna Ferguson, Principal Advisor Environmental Implementation & Richard Ewans, Partnership Lead - Biodiversity
Endorsed by: Gavin Palmer, General Manager Operations
Date: 14 September 2022

PURPOSE

- [1] The purpose of this paper is to describe how site-led programmes and predator free partnerships have been addressed by Otago Regional Council (ORC) to date; and to outline current options within ORC for supporting opportunities for biosecurity collaboration for biodiversity outcomes with external parties.

EXECUTIVE SUMMARY

- [2] Southern Lakes Sanctuary (SLS) have made multiple requests to ORC for funding in a similar partnership arrangement to Predator Free Dunedin (PFD). This request has been unable to be accommodated by ORC but raises the issue of how ORC can partner with and potentially fund large scale community biosecurity projects (or other environmental based projects).
- [3] The ORC does not have any avenues for receiving or assessing large-scale funding requests or partnerships. The only options would be through:
- a. Biosecurity Strategy which mentions large and smaller scale initiatives for biosecurity but no detail on how this could work.
 - b. ECO Fund, but it is limited to \$50,000 and not in the same scale as the SLS request.
 - c. Site-led programmes under the Regional Pest Management Plan which provides a formal structure but not guaranteed funding, and funding to date is not in the same scale as the SLS request.
 - d. Developing a partnership model and process for receiving and assessing large funding requests in the lead up to each Long-Term Plan.
- [4] ORC receives requests for ongoing or multi-year support from various organisations. These are likely to increase given Jobs for Nature funding will end and create a significant gap in funding for community organisations.
- [5] Other regional councils do not appear to have formal methods for assessing large scale funding requests (although further investigation could explore this in more detail). Some examples found indicated a similar approach to the ORC which was to include it through their Long-Term Plan consultation and commitments.
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[6] This paper provides a starting point for discussion.

RECOMMENDATION

That the Implementation Committee:

- 1) **Notes** this report.

BACKGROUND

- [7] A resolution from the 1 June 2022 Finance Committee meeting was that the Committee:
 - a. *Requests an issues discussion paper for potential funding of large site-led community biosecurity projects be brought to the 14 September 2022 Implementation Committee.*
- [8] For the purposes of this paper, the scope of the resolution has been interpreted more broadly than being specific to site-led projects in Regional Pest Management Plan 2019-2029 (RPMP) terms.
- [9] It is understood that this resolution came from discussion about the 2022/23 Annual Plan; specifically, a request by Southern Lakes Sanctuary (SLS) to encourage ORC to budget for becoming a partner in the SLS project, in a manner similar to Predator Free Dunedin (PFD), to facilitate co-funding of SLS by Predator Free 2050 Ltd (PF2050) and increase predator control work in Otago Upper Lakes.
- [10] The staff response to this request in the Committee papers was that *“the Council considered this matter very carefully during the Long-Term Plan (LTP) process (May 2021) and decided that it could not increase its funding support for this type of pest control activity without changing its overall prioritisation of Council-wide service delivery and/or increase its funding impost on Otago ratepayers. Council notes that rate sourced funding constraints have, if anything, become greater since adopting the LTP in June 2021.”*
- [11] The SLS request illustrates that a more strategic approach to investing in large scale (site-led or otherwise) community biosecurity projects is appropriate, rather than ad hoc consideration of such proposals at draft annual plan stage. Currently ORC does not have a consistent process for considering proposals like PFD and SLS.
- [12] This paper outlines issues and options related to potential funding for large scale community biosecurity projects for discussion. It does not describe a process or strategy for assessing potential investment in such projects.

DISCUSSION

- [13] Supporting large scale environmental community projects is an action embedded in ORC’s various strategies and plans. Key commitments are outlined in Table 1 below.

Table 1: Key commitments to Biosecurity and biodiversity collaborative projects.

Strategy / Plan	Commitment
Long-Term Plan	Provide support and funding to selected initiatives and

	<p>organisations across the region which deliver biosecurity, biodiversity and environmental outcomes that align with our strategic objectives.</p> <p>Collaborate with iwi, DOC, and other key organisations to develop, coordinate, and deliver a programme of actions to enhance indigenous biodiversity.</p>
Biosecurity Strategy	<p>Support, facilitate and participate in other non-regulatory (i.e., non RPMP) landscape scale approaches to manage harmful organisms; & provide facilitation support to smaller non-regulatory site-based approaches at a community, group, and individual level where appropriate.</p> <p>Contribute to the development of the Predator Free Dunedin 2050 'whole of site' management plan/s by December 2020; & within 18 months of establishing the [whole of site management plan], develop a plan of action for ORC's role in the delivery of the plan outcomes (e.g., service delivery, monitoring, research).</p>
Biodiversity Strategy	<p>Partner with city and district councils, Kāi Tahu, DOC, Fish and Game, and other organisations on key projects.</p> <p>ORC will promote opportunities for communities to get involved in initiatives that support enhanced indigenous biodiversity by supporting and promoting community initiatives that provide opportunities for people to get involved; & encouraging new community initiatives where there are significant opportunities or issues.</p>
Biodiversity Action Plan	<p>Build on existing predator and weed control initiatives to develop and implement landscape scale programmes.</p> <p>Support community groups working to enhance biodiversity by providing advice, connections, and funding.</p>

Predator Free Dunedin and Southern Lakes Sanctuary requests

- [14] In March 2017, ORC signed a Memorandum of Understanding which, among other things, proposed to develop a formal relationship to collaborate on a project called 'Predator Free Dunedin' and for that relationship to be known as the 'Predator Free Dunedin Partnership'.
- [15] In 2018 PFD submitted to the LTP 2018-2028 requesting ORC contribute to a shortfall in funds required to receive substantial funding from PF2050.
- [16] At the time it was noted that:
 - a. the PFD bid to PF2050 was among the top two bids in the country however PF2050 wanted to see a stronger commitment from both the DCC (Dunedin City Council) and the ORC. Subsequently, the DCC committed \$1.4 million to the project.
 - b. ORC is a signatory to the PFD Memorandum of Understanding and had provided in principle support for funding to be confirmed during the LTP process.
- [17] ORC agreed to fund PFD \$300,000 per year for five years (2018-2023), a total of \$1.5 million.

- [18] ORC also supported PFD by including a site-led programme in the 2019-2029 RPMP for the main non-urban PFD areas that included the primary target pests.
- [19] SLS made a PF2050 application in c.2021. It is understood that SLS was offered \$8 million but were unable to secure matching non-crown funding to accept the grant.
- [20] SLS then made a submission to the Long-Term Plan 2021-31 requesting ORC “renew its relationship with SLS and work collaboratively going forward in planning, discussion and ultimately funding”. No funding amount was specified but SLS referred to funding in a manner like the support provided to PFD.
- [21] A response to SLS in July 2021 advised that funding to directly support SLS was unable to be included in the LTP 2021-31.
- [22] SLS submitted again to the 2022/23 Annual Plan to encourage ORC to budget for becoming a partner in the SLS project in a manner similar to PFD to facilitate co-funding funding with PF2050 Ltd and increase predator control work in Otago. This was unable to be supported, but discussion on that issue highlighted the lack of a consistent, transparent, and equitable process for dealing with large funding requests or partnerships.
- [23] It is noted that SLS received c. \$3 million in funding through Jobs for Nature in 2021 and both PFD and SLS have received ECO Fund grants for aspects of their projects either directly, or via their constituent groups.

OPTIONS

Biosecurity Strategy

- [24] The Biosecurity Strategy outlines three different ways landscape scale and site scale biosecurity initiatives can be progressed:
 - a. Site-led programmes in the RPMP – for existing larger scale initiatives
 - b. Adding new site-led programmes – for new and future larger scale initiatives
 - c. Other site and landscape scale initiatives – for smaller scale initiatives
- [25] The Biosecurity Strategy does not provide any guidance on what is considered ‘larger scale’ and ‘smaller scale’; however, the categories imply larger scale initiatives should be formally included in the RPMP using Appendix 2 of the Biosecurity Strategy as guidance, and that smaller scale initiatives could be pursued outside the RPMP process.
- [26] There is no further guidance on how these other initiatives are to be implemented or resourced. However, providing facilitation, support and participating in non-regulatory approaches would be something staff undertake through ‘business as usual’. Any extra resourcing would need to be met through existing budgets, through ECO Fund applications, or through annual plan / LTP reviews.
- [27] As outlined in the previous section, previous large scale biosecurity project opportunities have been considered through LTP or Annual Plan processes.

- [28] ORC also directly funds some biosecurity projects through the provision of contestable funding (ECO Fund).

ECO Fund

- [29] The ECO Fund was established in July 2018. To date, the ECO Fund has funded 89 projects totalling just over \$1 million over 8 rounds. Each round has averaged around 27 applications being submitted and has been oversubscribed by around 300% on average.
- [30] Additional contestable incentives community funding totalling \$180,000 was provided for the following strategic LTP 2021-2031 priorities in the April 2022 round: sustained rabbit management (\$100,000), native planting after wilding pine removal (\$50,000) and native planting for water quality (\$30,000). Council approved administration of this funding using ECO Fund processes on 23 February 2022. The additional incentives funding was ringfenced for each priority.
- [31] Applications are limited to a maximum of \$50,000 per project per application. This means that ECO Fund is generally supporting smaller scale projects or components of larger projects. In its current form, the ECO Fund is unable to support PFD and SLS-type partnerships. It is noted that the annual funding amount for PFD (\$300,000) exceeds that of total ECO Fund (\$290,000).
- [32] To support large scale community biosecurity projects a larger funding pool for ECO Fund with ring-fenced funding for large-scale projects or programmes could be considered. This could be available less often e.g., every 3 years to coincide with the LTP development.
- [33] The benefits of the ECO Fund framework include established criteria, brand and profile, and tested assessment, approval, and administrative processes.
- [34] However, it would be necessary to modify some established processes for significant investment in large projects e.g., criteria, assessment, project oversight, accountabilities, and funding timeframes, to the point where a separate fund or alternative model may provide for more effective delivery.
- [35] In addition, the scale of funding would need to increase significantly, e.g., \$1 million every three years in addition to the existing ECO Fund.

RPMP Site-led programmes

- [36] The RPMP includes a category of “pests to be managed under site-led programmes”. Site-led programmes seek to manage pests whose presence, at or nearby, threaten the values that are special to particular sites (protecting the values at the place).
- [37] The Biosecurity Strategy provides for the addition of site-led programmes, or the amendment of an existing programme in the RPMP, where this meets the requirements of the *Biosecurity Act 1993* and results in positive benefits to the environment and people.
- [38] Appendix 2 of the Biosecurity Strategy provides guidance for the addition of site-led programmes, but further detail and clarity of interpretation needs to be developed,

along with an agreed process, to enable a consistent and transparent approach for assessing for proposals.

- [39] The RPMP identifies 4 site-led programmes: Otago Peninsula, West Harbour – Mt Cargill, Quarantine & Goat Islands (all in support of PFD), and management of lagarosiphon in Lake Wānaka, Kawarau River, Lake Dunstan, and Lake Wakatipu.
- [40] ORC's focus for site-led programmes is education, advocacy and coordination, however regulatory and operational actions are in scope from an RPMP perspective.
- [41] Funding allocated to the current four site-led programmes is \$200,000 for 2022/23. This resourcing is for ORC to take a lead role in supporting community groups and agencies in achieving desired levels of protection for the sites.
- [42] To support large scale site-led community biosecurity projects in a similar way to PFD, and as requested by SLS, significant additional budget would be required for the RPMP site-led programme.
- [43] Advantages of this model include an existing framework for adding sites, a formal national biosecurity framework within which the model can run, and the relative ease of adding more groups into an overarching site-led programme.
- [44] However, the scope of site-led programmes may not allow enough flexibility for all potential proposals to be considered, and funding may be less secure.

Partnerships funded through Long-Term Plan (LTP)

- [45] Funding partnerships through Long-Term Plan commitments is a version of how previous requests for large funding by community groups (PFD & SLS) have been considered, that is, requests made through submissions to the draft Long-Term Plan.
- [46] Both PFD and SLS requests were about contributing to a partnership arrangement. They were not specifically related to establishing site-led management programmes in the RPMP. However, PFD was successful and SLS was not. This outcome could have been influenced by timing and ORC having formally signed up to a partnership with PFD, but without a formal evaluation process it is difficult to explain the specific reasons for difference in outcome.
- [47] Formalising this model would require development of a process and criteria for assessing proposals prior to the development of the draft Long-Term Plan so that any proposals that meet the criteria could then be consulted on. Strategic guidance that would assist in decision-making include the Biosecurity Strategy, Biodiversity Strategy, Biodiversity Action Plan and RPMP.
- [48] This model (consideration of proposals through the Long-Term Plan development) would allow for public consultation and Council approval, and potentially allow more transparent evaluation of projects against other strategic priorities. It would also give certainty as to timeframes for proposals to be developed and allow a reasonable time between each assessment round (every 3 years for LTP).

- [49] Consideration of proposals via this model may be more appropriate for the type of large-scale, long-term investments required for effective operational partnerships.
- [50] However, the 3 years gap between opportunities to receive partnership funding may be too restrictive for some groups where co-funding is contingent on other funders e.g., SLS and PF2050 and is the funding window is time constrained.

Other considerations / opportunities

- [51] An agreed model, process, and criteria for considering for biosecurity collaboration for biodiversity outcomes (or any other environmental partnerships) with external parties would be timely. It is anticipated that requests for funding from external parties will increase significantly in the short to medium term as central government funding initiated through the Covid-19 response (e.g., Jobs for Nature) is likely to be down-scaled leaving significant funding shortfalls for some groups and projects.
- [52] In addition, ORC partnership funding to PFD is due to cease in 2023 and a thorough review of this project's outcomes should inform assessment of future investment alongside other partnership options. It is noted that this coincides with a significant reduction in government funding for the National Wilding Conifer Control Programme. The National Programme finishes in June 2024.
- [53] SLS and PFD are not the only groups seeking large scale, long-term funding. ORC receives several informal and formal requests for funding or support each year. Some examples include the Marine Science Centre for citizen science programmes, Nga Whenua Rahui to meet a shortfall in funding a project in Otago, QEII for Remarkable Station rehabilitation, and NZ Landcare Trust for Owhiro stream catchment management and modelling.
- [54] As of February 2022, 25 large projects in Otago have been funded by Jobs for Nature (J4N). These projects are worth \$53m to the region and will be delivered over several years. Of these it is estimated between 10-20 could be expected to seek further large funding sources if J4N funding is not renewed. Note, that this includes catchment projects as well as biodiversity/biosecurity projects. In addition, large-scale site-led type projects are anticipated such as those seeking to implement ongoing possum control after OSPRI retreats from areas.
- [55] Although it is unlikely that current levels of funding for Jobs for Nature (and other) community group-run projects can be maintained by the government sector, there is an opportunity for ORC to partner with already successful groups where there is a high likelihood that positive long-term environmental outcomes can be sustained.
- [56] Such partnerships could achieve strategically aligned actions in the Biosecurity Strategy, Biodiversity Strategy, and Biodiversity Action Plan via proven projects with existing infrastructure, rather than having to start from scratch, which would be an efficient and potentially more effective way of establishing the core of an embedded operational partnership programme within ORC.
- [57] The proposed Catchment Action Plans (Integrated Catchment Management) when developed, are likely to identify priorities and opportunities for large scale funding partnerships or other approaches for landscape scale outcomes. But this would also require some level of cross FMU / rohe comparison or assessment. Whatever the

process for assessing potential investments in opportunities for large scale environmental outcomes with external parties, it would need to be consistent, transparent, and equitable.

Other Regional Council Approaches

- [58] Most other Regional Councils invest in biodiversity projects in some way. This can be via contestable community funding or direct partnerships such as that with the QEII National Trust, for example Hawke’s Bay and Greater Wellington. Available Regional Council Biodiversity Strategies usually refer to community partnerships, funding and coordination but are not prescriptive in how they deal with large funding requests.
- [59] An example from Taranaki Regional Council’s Biodiversity Strategy 2017 (Section 5.3.4 ‘Iconic’ and ‘Significant’ projects) states that “the Council works with other agencies or community groups on a small number of ‘big-ticket’ projects that contribute to the protection of a network of ‘biodiversity-jewels’ in the Taranaki ‘crown’, particularly those that showcase Taranaki’s biodiversity and the value of communities and diverse groups working together. These projects are referred to as either iconic or significant projects. The level of TRC involvement is assessed on a case-by-case basis taking into consideration:
- a. The project being based on sound scientific/ecological information
 - b. The project covering sites and areas recognised as having regionally significant biodiversity values
 - c. Strong and sustainable community and landowner support and active involvement
 - d. The ability for the Council to assist by providing technical support and/or leveraging funds from the community or central government
 - e. The ability of the project to become a public showcase of Taranaki’s biodiversity (i.e., educational opportunities, level of public access etc), and
 - f. The benefits of investing ratepayer resources.”
- [60] Environment Canterbury (ECan) has supported the Predator Free Banks Peninsula project (110,000 ha) though funding of \$600k each year. This partnership appears to be similar to ORC’s involvement in PFD, in that a memorandum of understanding was entered into with multiple organisations, community groups and runaka for a community-led project (Banks Peninsula Conservation Trust). The Banks Peninsula Predator Free project proposal linked to ECan’s Regional Biodiversity Strategy and other strategies. The MoU did not commit ECan to any financial obligations.
- [61] Increasing funding and control of pests on Bank Peninsula was consulted on as a part of ECan’s Long-Term Plan in 2018. In 2019/20 ECan decided to fund the Predator Free project through a portion of targeted rates.
- [62] Predator Free seems to be the most common purpose for which Regional Councils enter into partnerships with community-led projects.

CONSIDERATIONS

Strategic Framework and Policy Considerations

- [63] This paper is for discussion only so no strategic, or policy considerations are relevant at this stage.

Financial Considerations

[64] None at this stage.

Significance and Engagement Considerations

[65] None at this stage.

Legislative and Risk Considerations

[66] Nil.

Climate Change Considerations

[67] There are no immediate climate change considerations for this work.

Communications Considerations

[68] None at this stage.

NEXT STEPS

[69] These depend on decisions of Council.

ATTACHMENTS

Nil

7.3. Biosecurity Operational Plan 2021/2022 Summary of Performance

Prepared for:	Implementation Committee
Report No.	BIO2202
Activity:	Environmental: Land
Author:	Murray Boardman, Performance and Delivery Specialist Libby Caldwell, Acting Manager Environmental Implementation
Endorsed by:	Gavin Palmer, General Manager Operations
Date:	14 September 2022

PURPOSE

- [1] To report on the implementation of the Biosecurity Operational Plan 2021/22 for period 1 July 2021 to 30 June 2022, as required under Section 100C(2) of the Biosecurity Act 1993.

RECOMMENDATION

That the Committee:

- 1) **Notes** this report and the range of work undertaken to give effect to Otago's Regional Pest Management Plan and the Biosecurity Act (1993).
- 2) **Notes** the lessons learnt from the 2021/22 Biosecurity Operational Plan (BOP) are being applied to the delivery of the 2022/23 BOP.
- 3) **Agrees** for this report and the attached Biosecurity Operational Plan 2021-22 Report to be provided to the Minister for Biosecurity.

EXECUTIVE SUMMARY

- [2] An RPMP Biosecurity Operational Plan (BOP) is required by the Biosecurity Act 1993 to detail the nature and scope of activities the Council intends to undertake in the annual implementation of the RPMP. Under Section 100C(2) of the Act, ORC as the respective management agency "must prepare a report on the operational plan and its implementation not later than 5 months after the end of each financial year" and "provide a copy of the report to the Minister or council." This report and the attached report fulfil that requirement.
- [3] The 2021/22 BOP contained 90 Key Performance Indicators (KPIs). Overall, 53 KPIs were fully achieved or exceeded (achievement rate of 58.9%). A further 26 KPIs were assessed as being partially achieved (28.9%) with five KPIs being not achieved (5.6%). A further six KPIs (6.7%) were not measurable as the required event did not occur. This is an improvement on the previous year's achievement where 20 KPIs were fully achieved or exceeded (achievement rate of 29.9%) with 25 KPIs being partially achieved (37.3%), six KPIs being not achieved (9.0%) and 16 KPIs (23.9%) not measured.
- [4] COVID-19 continued to restrict some fieldwork and administrative tasks (August 2021 lockdown and February 2022 red setting), contributing to some KPIs only being partially achieved.

- [5] Work has progressed to improve administrative actions. A new system that links inspections and administration will be rolled out in October 2022. The new system is expected to simplify and speed up the administration of biosecurity compliance.

BACKGROUND

- [6] In accordance with the Biosecurity Act 1993, the Council's Regional Pest Management Plan 2019-2029 (RPMP) was adopted in November 2019. The RPMP details the plants and animals that are declared pests in the Otago region, explains why they are declared as pests, and outlines how each pest will be managed over a ten-year period.
- [7] A Biosecurity Operational Plan (BOP) is required by the Act to detail the nature and scope of activities the Council intends to undertake in the annual implementation of the RPMP. The Plan details the range of activities that will be undertaken by Council across five programmes used to manage pests in Otago.
- [8] The BOP enacts the RPMP and provides additional detail explaining how the objectives in the RPMP will be met through specific deliverables (actions), performance measures and targets.

DISCUSSION

- [9] A summary of achievement towards the delivery of the BOP 2021/22 is presented in the attached document (Biosecurity Operational Plan 2021/22 Report), detailing the achievement of each Key Performance Indicator (KPI).
- [10] The 2021/22 BOP contained 90 KPIs. Overall, 53 KPIs were fully achieved or exceeded (achievement rate of 58.9%). A further 26 KPIs were assessed as being partially achieved (28.9%) with five KPIs being not achieved (5.6%). A further six KPIs (6.7%) were not measurable as the required event did not occur.¹ This is an improvement on the previous year's achievement where 20 KPIs were fully achieved or exceeded (achievement rate of 29.9%) with 25 KPIs being partially achieved (37.3%), six KPIs being not achieved (9.0%) and 16 KPIs (23.9%) not measured.
- [11] The five KPIs not achieved for 2021/22 all relate to Russell Lupin. The KPIs were found to be impractical to measure in the current context. A summer project was undertaken by a student to assess the state of Russell Lupin in Otago. This work will help inform a Russell Lupin strategy that will be developed as part of the 2022/23 Operational Plan. The strategy will inform the work that will be undertaken in regard to Russell Lupin going forward.
- [12] Of the KPIs partially achieved, several them can be classified as being substantively achieved. For example, 14 night count routes were planned with 13 being completed. The final route was not achieved due to delays related to Covid lockdown extending into lambing season.

Exclusion Pests

¹ For example, one KPI measures the compliance after default work. However, in order to determine such compliance, a default work notice would need to have been issued first. If none are issued, then the KPI is unable to be measured.

- [13] One possible exclusion pest (Chilean Needle Grass) was reported during the 2021/22 reporting period. However, the sighting was deemed to be negative by professional advice.
- [14] The surveillance of the exclusion pests will be strengthened through a dedicated work programme and through the establishment of a proposed Southern Biosecurity collaboration with Environment Southland and Environment Canterbury. This will allow the three Councils to work proactively to understand pest pathways and to reduce the likelihood of pest plant spread between regions.

Rabbit Inspections

- [15] The BOP 2021/22 had a target of at least 250 property inspections to assess the prevalence of feral rabbits. Over the year, a total of 800 rabbit inspections were carried out. 564 rabbit inspections were completed across six community programmes. The remaining 236 were general rabbit inspections.
- [16] Overall, 57.6% of inspections (461) were compliant with 42.4% being non-complaint (339) (Table 1). In comparison to the previous year (331 inspections, with 52.6% compliant and 47.4% non-compliant) there has been a progressive improvement in the overall compliance rate.

Table 1: Rabbit inspection compliance and non-compliance by programme

Compliance Status	Compliant	Non-compliant
First Inspection	393 (60.3%)	259 (39.7%)
Re-Inspection	58 (39.2%)	90 (60.8%)
Total	461 (57.6%)	339 (42.4%)

- [17] The geographical distribution of rabbit inspections is shown in Figure 1. Inspections focused on areas of high/extreme rabbit proneness and to support the community programmes.

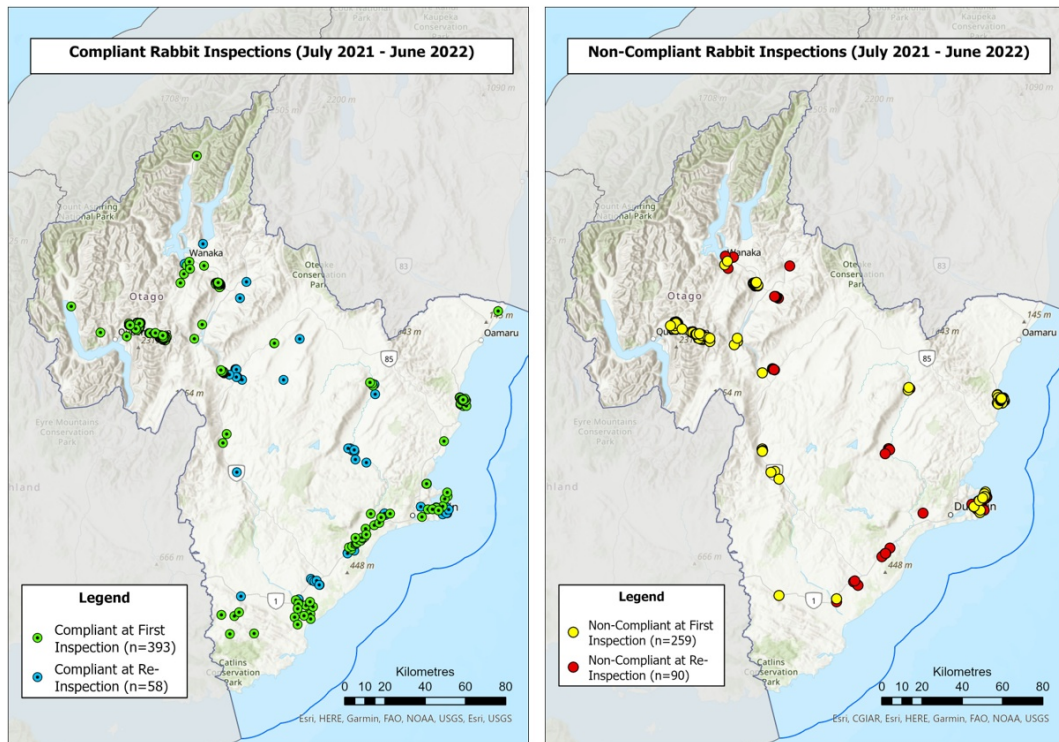


Figure 1a/b: Compliant [left] and non-Compliant [right] Rabbit Inspections (July 2021 – June 2022)

- [18] Of the rabbit inspections, 393 (57.6%) of first inspections were compliant and 259 (42.4%) were non-compliant. 148 re-inspections were completed with 58 (39.2%) of properties becoming compliant.
- [19] In terms of area, properties where rabbit inspections were conducted covered approximately 35,187 hectares. This consists of 9,831 ha for community programme areas and 25,356 ha for non-community programme areas.

Plant Inspections

- [20] 2,146 pest plant inspections² were completed in 2021/2022 (Table 2), with a compliance rate of 43.7%. Comparison with the previous year is difficult as the definition, and hence the counting of pest plant inspections, was revised during the year to ensure a more consistent methodology (property-based rather than individual plants).³

Table 2: Plant Pest Inspection Status

Compliance Status	Compliant	Non-compliant	Total
First Inspection	454 (30.4%)	1,037 (69.6%)	1,491
Re-Inspection	483 (73.7%)	172 (26.3%)	655
Total	937 (43.7%)	1,209 (56.3%)	2,146

² This excludes 243 plant pest inspections that were classed as informational. Most of these relate to organisms of interest (i.e. potential plant pests).

³ For completeness 4,265 pest plant compliance ‘inspections’ were completed in 2020-2021 with 52.3% compliant.

- [21] Pest plant inspections included 1,157 inspections for Old Man’s Beard against the target of 500, focused on areas of high biodiversity. Appendix 2 provides a breakdown by plant pests.
- [22] Overall, 69.6% of first plant pest inspections were non-compliant with 30.4% being compliant (Table 2). Of the 655 re-inspections completed, 73.7% of properties had become compliant. This would strongly suggest that engagement has had a positive outcome on attending to plant pest infestations.
- [23] The geographical distribution of pest plant inspections is shown in Figure 2.

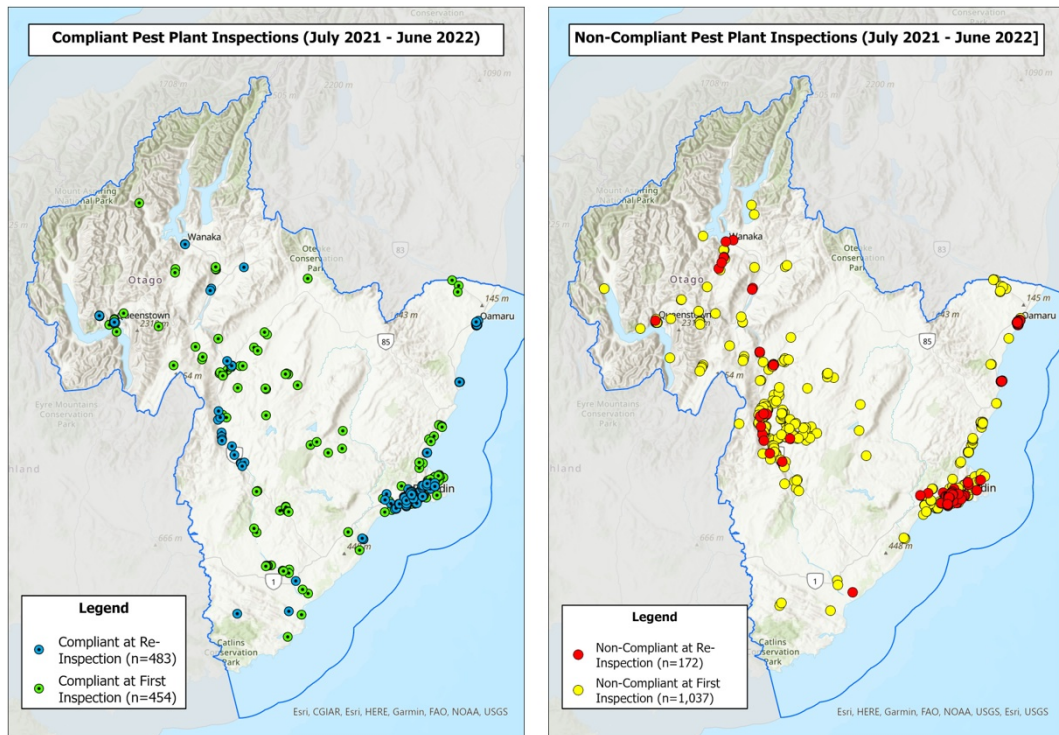


Figure 2a/b: Pest Plant Compliance (July 2021 – June 2022)

Other Biosecurity activities

- [24] 66 inspections of known and potential rookeries were completed in 2021/22, against a target of 40 inspection (Figure 3a). No rooks were observed during these inspections.
- [25] Surveillance of wallabies was undertaken throughout 2021/22, predominately along the boundary with Environment Canterbury. Approximately 292,911 ha was covered by surveillance activities (Figure 3b) with eight wallabies killed in total.
- [26] Control activities (both ground and aerial) for wilding conifers continued during 2021/22, with approximately 67,977 ha covered (Figure 3b).
- [27] The geographical distribution of rook inspections, wallaby surveillance and wilding conifer control inspections is shown in Figure 3.

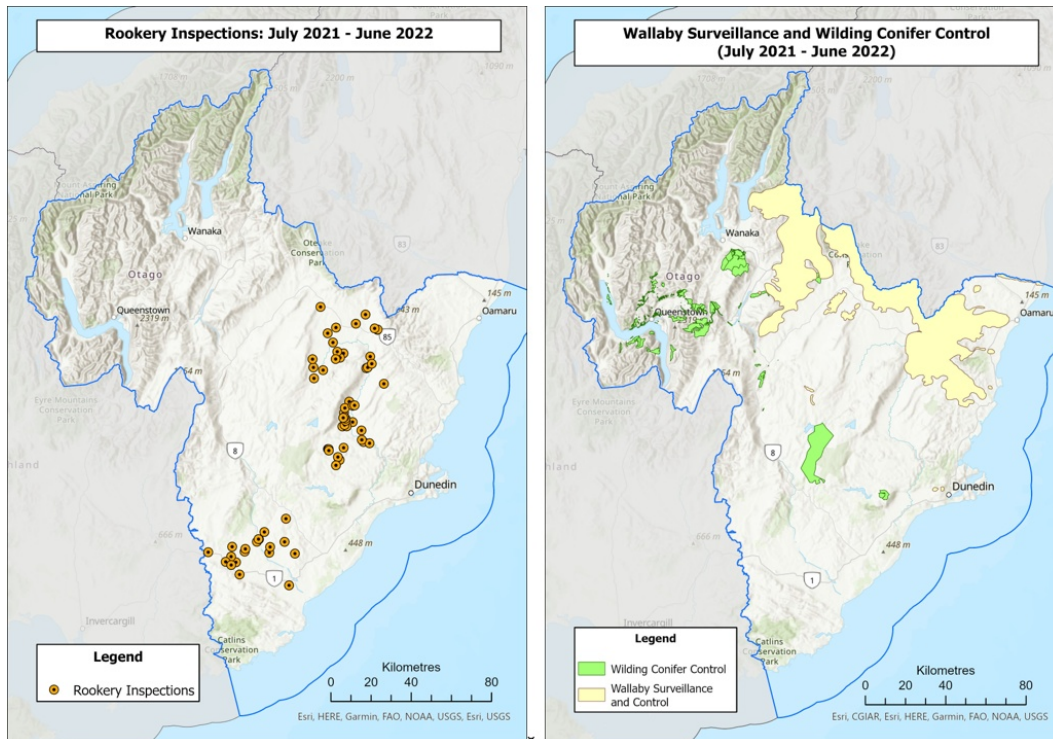


Figure 3a/b: Rook Inspections, Wallaby Surveillance & Wilding Conifer Control (July 2021 – June 2022)

CONSIDERATIONS

Strategic Framework and Policy Considerations

[28] None.

Financial Considerations

[29] None.

Significance and Engagement Considerations

[30] None.

Legislative and Risk Considerations

[31] In line with the Biosecurity Act (1993), it is desirable that this report is submitted proactively to the Minister of Biosecurity prior to the 30 November 2022.

Climate Change Considerations

[32] None.

Communications Considerations

[33] None.

NEXT STEPS

[34] Lessons learned and required improvements identified through this review process are being implemented.

[35] The reports will be provided to the Minister for Biosecurity.

ATTACHMENTS

1. Appendix 1 Biosecurity Operational Plan 2021 22 Report [**7.3.1** - 15 pages]
2. Appendix 2 Plant Inspections listed by Species 2021 22 [**7.3.2** - 2 pages]

Biosecurity Operational Plan 2021-22 Report ***Implementing the Regional Pest Management Plan 2019-29***

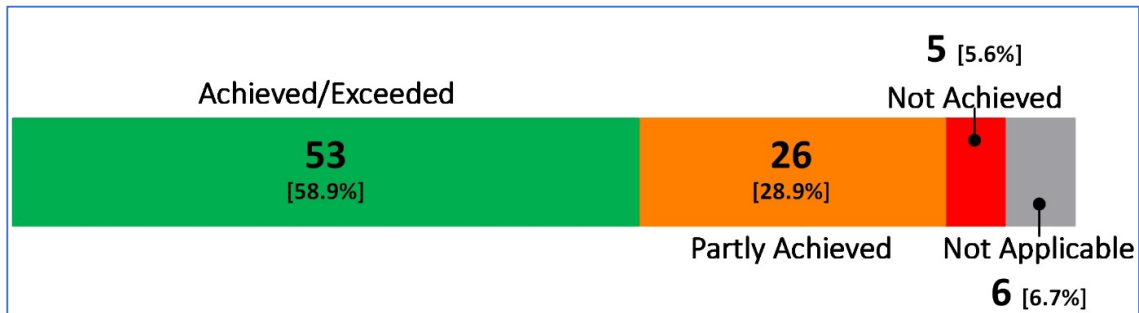





Figure 1: Summary of Performance

Figure 1 is calculated from 90 KPIs as listed in the Biosecurity Operational Plan 2021-22. 6 KPIs are 'not applicable' as a required event did not occur for them to be measured.¹

This report presents an assessment of the Biosecurity Operational Plan 2021-22 and reviews the achievement of the Key Performance Indicators (KPIs) as listed in the plan. This report is divided into the five pest control programmes as outlined in the Regional Pest Management Plan 2019-29, along with the administration programme.




Key Legend

	Achieved/Exceeded	100% or more achieved
	Partly Achieved	Between 1-99% achieved
	Not Achieved	0% achieved
---	Not Applicable	Not able to be measured

¹ For example, one KPI measures the compliance after default work. However, in order to determine such compliance, a default work notice would need to have been issued first. If none are issued, then the KPI is unable to be measured.








1. Exclusion Pest Programme

ORC will prevent six high threat pest plants from establishing in the region.

Exclusion Pest Programme				
Objective: Preclude the establishment of the following plant pests (listed below) in the Otago region for the duration of the RPMP: African feather grass, Chilean needle grass, Egeria, False tamarisk, Hornwort, and Moth plant.				
		Target	Actual	
KPI 1	% of risk assessments completed in 48 hours	100%	100%	
KPI 2	% of control/response plan defined within 5 working days	100%	n/a	---
KPI 3	% of reported sightings investigated within 24 hours of ORC becoming aware of a report	100%	100%	
KPI 4	Regular operational level meetings focused on exclusion strategies held with biosecurity counterparts in Canterbury and Southland	4	2	
Comments	<p>KPI 1: One potential sighting of an exclusion pest (Chilean Needle Grass) was reported just prior to Christmas. The sighting was referred to Landcare Research who confirmed the sighting was not Chilean Needle Grass.</p> <p>KPI 2: No need for any further response.</p> <p>KPI 4: Engagement with Canterbury and Southland is progressing through the Biosecurity Southern Alliance, which is being developed and implemented.</p>			
Lessons Learnt	There is a need prepare a detailed exclusion response plan. This will be advanced in the subsequent operational plan.			

2. Eradication Pest Programmes



ORC will eliminate spiny broom, and eradicate Bennett's wallaby and rooks from the region

Bennett's Wallaby				
Objective: There are three key objectives in the eradication of Bennett's Wallaby.				
<ul style="list-style-type: none"> Reduce known wallaby populations to zero density and prevent their further expansion in the region, Prevent further spread of wallaby into North Otago from Canterbury, and Inform the Otago community on the wallaby threat and encourage vigilance and reporting to council. 				
		Target	Actual	
KPI 1	% of sightings, notifications and complaints responded to within 3 working days	100%	97%	
KPI 2	# of known hotspots and areas of previous control inspected	20	>20†	
KPI 3	% of property owners where wallabies have been located in past year are spoken to at least twice a year and provide an update on the current status	100%	See comment	
KPI 4	% of outputs as listed in MPI contracts are met	90%	>90%	
KPI 5	Implement joint Memorandum of Understanding	Enacted	Enacted	
KPI 6	# of national wallaby meetings attended as per MPI contact	All	All [9]	
KPI 7	# of regional coordination group of wallaby management attended as per Terms of Reference.	4	5	
Comments	<p>KPI 1: 34 of 35 credible sightings were responded to in time. The remaining sighting was responded to within seven days.</p> <p>KPI 3: For operational efficiency, this KPI was assessed differently so achievement differs from the KPI wording. Property owners were regularly contacted and updated as part of the programme engagement by the respective contractors. Contact details are held by the contractors.</p>			
Lessons Learnt	To ensure responsiveness and capacity to respond to sightings is continually improved.			

† Based on individual tracklogs of locations that were surveyed during 2021-22.




Rooks

Objective: Reduce rook populations to zero density, within the RPMP period and maintain this status until eradication is attained.

		Target	Actual	
KPI 1	% of reports, notifications and complaints responded to no later than 3 working days.	100%	75%	
KPI 2	# of known rookeries inspected annually	40	66	
Comments	KPI 1: Four sightings were reported but none confirmed. One sighting was reported though a non-standard method, delaying the inspection. The inspections provided the ability to establish a comprehensive baseline of rookery locations. These have now been mapped onto a GIS layer.			
Lessons Learnt	The programme is progressing as planned. No specific lessons identified to change current approach other than to simplify reporting methods to ensure that staff can respond in a timely manner.			







Spiny broom




Objective: Reduce spiny broom populations to zero density within the RPMP period and maintain this status until eradication is attained.

		Target	Actual	
KPI 1	% of reports, notifications and complaints responded to within 5 working days	100%	n/a	---
KPI 2	Report of high-risk sites submitted	1	1	
KPI 3	# of inspections undertake at known infestations sites	10	13	
KPI 4	Report of current level of infestation prepared identifying any implications	1	1	
Comments	KPI 1: No new sightings of spiny broom were reported in 2021-22 so actual percentage is not measurable.			
Lessons Learnt	The spiny broom report has recommended to broaden from an inspection basis to one of localised surveillance around the known sites to ensure any potential spread is identified.			

3. Progressive Containment Pest Programmes

ORC aims to contain and reduce the extent of 11 pest plants (or groups of plants) across the region








Wilding conifers				
Objective: Contain wilding conifers within the region (in accordance with national strategy), reduce infestation densities where practicable and prevent their spread to new locations				
		Target	Actual	
KPI 1	# of meetings attended	All	4 [All]	
KPI 2	# of meetings held	4	5	
KPI 3	# of meetings attended	All	5 [All]	
KPI 4	% of outputs as listed in MPI contracts are met	90%	>90%	
KPI 5	# of hours of remote sensing analysis of wilding conifers carried out	50	31.5	
KPI 6	# of face-to-face visits to properties on wilding conifer actions	>200	25	
Comments	KPI 5: Adequate assessment on wilding conifers was completed during the year, with a specific focus on analysis of shelterbelts as they relate to RPMP rules. KPI 6: Face-to-face visits started late in the FY and will be progressed during the next financial year.			
Lessons Learnt	To support engagement, a practical application of the wilding conifer rules in the RPMP was developed. This has recently been completed by an external consultant.			

African love grass				
Objective: Contain African love grass to its 20 known sites within the region, reduce its densities at these sites and prevent spread to new sites.				
		Target	Actual	
KPI 1	# of direct control operations carried out	20	n/a	---
KPI 2	# of suitable monitoring sites identified	5	5	
KPI 3	# of density calculations at monitoring sites (at least two per year per site).	10	5	
KPI 4	# of known sites inspected at least twice a year	40	17	

Comments	<p>KPI 1: No direct control operations were required.</p> <p>KPI 3: At least one density monitoring (using an infestation grading scale) was undertaken at each identified site. These sites will be more formally developed into monitoring sites in the coming year.</p> <p>KPI 4: The difference in achievement relates to what is defined as a 'known site'. Some 'sites' have multiple plants.</p>
Lessons Learnt	Clarify the definition of 'known sites' and ensure these are confirmed prior to inspection.







Nassella tussock

Objective: Contain Nassella tussock to known areas within the region, reduce its densities at these sites and prevent spread to new sites.

		Target	Actual	
KPI 1	% of known sites inspected twice a year	90%	84%	
KPI 2	List of known sites maintained and is up-to-date	1	1	
KPI 3	# of suitable monitoring sites identified	5	5	
KPI 4	# of density calculations at monitoring sites (at least two per year per site)	10	5	
KPI 5	# of hours of remote sensing analysis of Nassella tussock carried out	50	19.5	
KPI 6	# of hectares covered in remote sensing and ground operations	40,000	27,550	
KPI 7	Report on findings from remote sensing monitoring completed	Completed	Completed	
Comments	<p>KPI 1: The difference in achievement relates to what is defined as a 'known site'. Some 'sites' have multiple plants.</p> <p>KPI 4: At least one density monitoring (using an infestation grading scale) was undertaken at each identified site. These sites will more formally developed into monitoring sites in the coming year.</p> <p>KPI 5: Given the localised nature of Nassella tussock, the target was set too high.</p> <p>KPI 6: Technically this was a difficult KPI to achieve. A better focus would be to assess properties with known sites and adjoining properties.</p>			
Lessons Learnt	Clarify the definition of 'known sites' and ensure these are confirmed prior to inspection. Revise KPIs so they are appropriate to the scale of infestation.			





Old Man's Beard


Objective: Contain old man's beard to known areas within the region, reduce its densities at the above sites and prevent spread to new locations.

		Target	Actual	
KPI 1	A list of properties identified and prioritised for Old Man's Beard inspections	1	1	
KPI 2	# of properties inspected for Old Man's Beard	500	1,157	
KPI 3	% of properties inspected for Old Man's Beard within high biodiversity areas	50%	17%	
KPI 4	% of non-compliant properties that have been re-inspected within set timeframes	80%	59%	
KPI 5	# of suitable monitoring sites identified	10	10	
KPI 6	# of density calculations at monitoring sites (at least two per year per site).	10	5	
Comments	<p>KPI 3: This is a start to move inspections towards being prioritised by high biodiversity areas. This has involved the refining of what defines high biodiversity areas.</p> <p>KPI 4: Target was not achieved due to delays related to Covid restrictions and administrative challenges.</p> <p>KPI 6: At least one density monitoring (using an infestation grading scale) was undertaken at each identified site. These sites will more formally developed into monitoring sites in the coming year.</p>			
Lessons Learnt	<p>Important to settle on areas classified as 'high biodiversity' to help focus inspections (this is now being finalised). The administrative challenges show the need for a new administration system (which will be rolled out in October).</p>			

Spartina

Objective: Contain spartina to known areas within the region, reduce its densities at the above sites and prevent spread to new locations.



		Target	Actual	
KPI 1	# of bi-annual inspections at current sites	6	40	
KPI 2	# of meetings held with DOC and KiwiRail	1	1	
KPI 3	# of suitable monitoring sites identified	2	2	
KPI 4	# of density calculations at monitoring sites (at least two per year per site).	2	2	

KPI 5	# of new infestations found at historic sites	0	0	
KPI 6	# of contractor days providing direct control	20	n/a	---

Comments	KPI 6: Control work was not undertaken this financial year
Lessons Learnt	Some uncertainty as per the historic sites, which needs to be clarified prior to inspection.







Six [low incidence] containment pest plants

Objective: Contain the six pest plants (Bomarea, Boneseed, Bur daisy, Cape Ivy, Perennial nettle, White-edged nightshade) within the region for the duration of the RPMP, reduce their densities at known sites and prevent spread to new sites.

		Target	Actual	
KPI 1	# of inspections at current and historic sites completed (<i>Bomarea, Boneseed, Bur Daisy, Cape Ivy, Perennial nettle, White-edged nightshade</i>)	250	729	
KPI 2	# of meetings with ECan	2	2	
Comments	A strong programme that has made a significant reduction in infestation levels. 84% of bomarea re-inspections show compliance has been achieved.			
Lessons Learnt	No obvious lessons learnt			

4. Sustained Control Pest Programmes

ORC will enforce rules to ensure control of rabbits and five widespread pest plants (or groups of plants) to reduce their impacts and spread.





Feral rabbits				
Objective: Ensure continuing control of feral rabbits to manage their spread and to reduce adverse effects and impacts on economic wellbeing and the environment.				
		Target	Actual	
KPI 1	A list of properties generated based on rabbit proneness	Met	Met	
KPI 2	# of property inspections carried out	≥250	800	
KPI 3	% of properties inspected that are on high or extreme proneness to rabbits	≥60%	56%	
KPI 4	% of non-compliant properties that have been re-inspected within set timeframes	80%	46%	
KPI 5	# of night count monitoring locations completed	14	13	
KPI 6	Report on rabbit sampling for RHD virus completed	1	1	
KPI 7	Results disseminated to relevant parties to ensure feral rabbits are appropriately controlled	1	See comment	
KPI 8	Report to Council on rabbit analysis completed by staff	1	4+	
KPI 9	% of complaints responded to within 5 working days	100%	71%	
KPI 10	% of complaints that are inspected within 15 working days	100%	44%	
KPI 11	Landowner-led rabbit control groups established and supported	≥8	8	
Comments	<p>KPI 3: Some areas where rabbits are now known to be prevalent, were not initially mapped as high/extreme proneness. This was particularly notable for rabbit prevalence in community programmes at Moeraki and Lake Hayes.</p> <p>KPI 5: Given the work programme, this was substantively achieved. The reason for the target not being achieved is due to the Covid lockdown in August 2021. This moved the night count schedule later, into the lambing season which resulted in four routes not able to be counted.</p> <p>KPI 7: The report was finalised after the end of the 2021-22 Financial Year. This report is now available for dissemination as needed.</p> <p>KPI 4, 9 and 10: Delays with inspections and responding to inquiries were primarily due to the Covid lockdown in August 2021 and Red setting in Jan-Feb 2022. This</p>			

	meant a target of 100% was unachievable. Secondly, this partial achievement is also due to systemic delays, especially inefficiencies around scheduling inspections.
Lessons Learnt	Explore the options to update the rabbit proneness map during 2022-23 Systemic delays will be largely addressed through the new administration and inspection process that will be rolled out from October 2022.

† Reports were submitted as part of Environmental Implementation Quarterly updates to the Implementation Committee.


Gorse and broom

Objective: Ensure continuing control of gorse and broom, that prevents land free of these pests from becoming infested and reduces adverse effects on the economic (and environmental) wellbeing of occupiers regionwide.

		Target	Actual	
KPI 1	# of properties inspected and assessed for compliance	90	115	
KPI 2	# of hours of remote sensing analysis of Gorse and Broom	50	41.5	
KPI 3	Report on findings from remote sensing completed and non-compliance is followed up.	Met	Met	
KPI 4	# of meetings with occupiers and landowners	4	8	
Comments	KPI 2: Largely achieved (83%) in terms of hours allocated to this work.			
Lessons Learnt	No specific lessons learnt. However, work will expand in preparation for Gorse and Broom free areas in 2024.			






Nodding thistle and ragwort

Objective: Ensure continuing boundary control of nodding thistle and ragwort to reduce adverse effects on the economic wellbeing of rural land occupiers regionwide.

		Target	Actual	
KPI 1	% of inspections undertaken following a complaint responded to within 10 working days.	100%	100%	
Comments	Twelve complaints were received, with all responded to within the set timeframes.			
Lessons Learnt	No specific lessons learnt, except to ensure more prompt response to complaints.			

Russell lupin

Objective: Instigate boundary controls of Russell lupin to prevent spread (e.g. the planting and subsequent seeding) of wild lupin plants, and to reduce adverse effects in rural zoned land.

		Target	Actual	
KPI 1	# of inspection of high-risk areas where Russell lupin is planted as production crop to ensure there is no spread (e.g. tussock country and braided riverbeds).	20	0	
KPI 2	# of lupin management plans approved within 25 working days of being received from occupiers	20	0	
KPI 3	# of commercial suppliers of Russell lupins that have an on-going relationship	10	0	
KPI 4	# of suitable monitoring sites identified	2	0	
KPI 5	# of density calculations at monitoring sites (at least two per year per site)	4	0	
Comments	The Russell lupin work was re-assessed during the year and most of the KPIs were deemed to be difficult to progress given current understanding and resourcing. As part of this re-assessment a student was employed over summer to undertake a study on Russell lupin. The findings are to be used to develop a Russell lupin strategy to be completed in 2022-23.			
Lessons Learnt	There is a need to develop a strategy for Russell lupin to inform a work programme and develop suitable KPIs. The strategy is due for completion by 1 March 2023.			




5. Site-led Pest Programmes

ORC has two site led pest programmes.

1. ORC will take a lead role in supporting community and agency control of six pest plants and nine pest animals to support Predator Free Dunedin and wider biodiversity enhancement initiatives.
2. ORC will target one freshwater pest plant.






Otago Peninsula, West Harbour – Mount Cargill and Quarantine & Goat Islands





Objective: Support community groups and other agencies to protect the ecological integrity of the Otago Peninsula, West Harbour-Mt Cargill, and Quarantine & Goat Islands.

		Target	Actual	
KPI 1	# of site-led programmes confirmed by 30 th September 2021	Met [3]	Met [3]	
KPI 2	A plan for all site-led programmes is created	All [3]	All [3]	
KPI 3	# of success stories provided by site-led programmes	10	8	
Comments	KPI 3: While KPI only partially achieved, the evidence within the stories shows that the site-led programmes are progressing as planned and making a positive difference.			
Lessons Learnt	No specific lessons learnt			

Lagarosiphon

Objective: Support LINZ in controlling and eradicating lagarosiphon in the region's rivers and lakes



		Target	Actual	
KPI 1	# of surveys at nine priority 'non-LINZ managed' sites.	18	18	
KPI 2	% of sites where lagarosiphon was not found	100%	89%	
KPI 3	# of days identified sites are monitored	10	11	
KPI 4	# of monitoring events where lagarosiphon was not found in Lake Wakatipu	100%	See comments	
KPI 5	# of interactions in the 'Check, clean, dry' programme	650	886	

KPI 6	# of meetings attended with LINZ and other stakeholders.	4	6	
KPI 7	# of meetings attended with the identified community groups	6	7	
KPI 8	Report on findings completed	Met	Met	
KPI 9	Results disseminated to relevant parties to ensure lagarosiphon is controlled	Met	Met	
Comments	<p>KPI 2: The only site (one of the nine priority 'non-LINZ managed' sites) with lagarosiphon was Albert Town detention ponds, observed at both inspections.</p> <p>KPI 4: Taken from LINZ report, where lagarosiphon was present in the Frankton Arm and Marina. Other locations lagarosiphon free.</p>			
Lessons Learnt	<p>Environmental Implementation is developing an aquatic weed monitoring programme for the 2022-23 FY. This will include lagarosiphon and compliance with ponds.</p> <p>For an Operational Plan, KPIs are best to be framed so they are attributable to actions by ORC.</p>			

6. RPMP Administration



Compliance and Enforcement Actions

Objective: The effective administration of compliance and enforcement

		Target	Actual	
KPI 1	% of occupier/landowner advised of inspection status within four weeks of the inspection	100%	72%	
KPI 2	% of 'Notices of Direction' (NOD) assessed as compliant at the expiry of the stated NOD period	100%	100%	
KPI 3	% of properties deemed to be compliant following default actions	100%	n/a	---
KPI 4	% of properties paying default action charges	100%	n/a	---
Comments	<p>KPI 1: Partial achievement due to Covid lockdown in August 2021, and Red setting in Jan-Feb 2022, caused delays with administration (letters). This meant a target of 100% was not achievable. Secondly, administration processes contained inefficiencies to track/match re-inspections.</p> <p>KPI 2: By end of year, two Notices of Direction were issued. One became compliant within the timeframe. The other had the timeframe extended beyond the financial year, and has since become compliant.</p> <p>KPI 3 & 4: No default action was enacted in 2021-22 so actual percentage is not measurable</p>			
Lessons Learnt	The administration inefficiencies will largely be resolved through the adoption of an integrated compliance system that will link field inspections to the administrative requirements.			




Biosecurity Operational Plan Administration

Objective: To ensure the Biosecurity Operational Plan is fit for purpose and responsive to pest inquires

		Target	Actual	
KPI 1	Biosecurity Operational Plan for 2022/23 approved by Council	Approved	Approved	
KPI 2	% of pest inquires responded to expected timeframes.	95%	74%	
Comments	KPI 2: Administrative inefficiencies were identified as the primarily reason for partial achievement. Also, affected by the Covid lockdown in August 2021, and Red setting in Jan-Feb 2022.			
Lessons Learnt	Strengthen administrative processes to ensure timely responses.			

Biosecurity Communication Plan

Objective: Ensuring biosecurity information is effectively communicated to achieve the RPMP outcomes.

		Target	Actual	
KPI 1	A Biosecurity Communication Plan is implemented by 30 th September 2021	Met	Met	
KPI 2	An advocacy and education programme developed by 1 October 2021 and implemented from 1 December 2021	Met	Met	
KPI 3	# of community events attended (e.g. field days, A&P shows)	20	22	
Comments	KPI 2 was implemented through the Biosecurity Communication Plan (KPI 1) and the rabbit community programme (see KPI 11 – Feral Rabbits)			
Lessons Learnt	Developing a more integrated Biosecurity Communication Plan that actively includes advocacy and education.			

Plant Inspections Listed by Species: July 2021 – June 2022

First Inspection				
Plant Species	Total	Compliant	Non-Compliant	Informational
Old Man's Beard	743	183	488	72
Bomarea	364	108	256	0
Broom	98	9	83	6
Cape Ivy	77	22	55	0
Nassella Tussock	69	10	59	0
Boneseed	47	34	13	0
Darwin's Barberry	43	0	0	43
Gorse	38	2	30	6
Spartina	38	20	18	0
Wilding Pines	29	5	7	17
Lagarosiphon	21	20	1	0
Gunnera	20	0	0	20
Perennial Nettle	19	19	0	0
African Love Grass	12	3	9	0
Spiny Broom	13	11	2	0
Veldt Grass	13	0	0	13
Bur Daisy	11	1	10	0
Saltmarsh Rush	11	0	0	11
Rowan	10	4	0	6
Japanese Honeysuckle	9	0	0	9
Reed Sweet Grass	7	0	0	7
Buddleia	6	1	0	5
Rough Horsetail Reed	6	0	0	6
Cape Honey Flower	5	0	0	5
Ragwort	4	0	4	0
Spanish Heath	4	0	0	4
Giant Hogweed	3	0	0	3
Nodding Thistle	3	1	2	0
Chilean Flame Creeper	2	0	0	2
Banana Passionfruit	1	0	0	1
Blackberry	1	0	0	1
Brush Wattle	1	0	0	1
Burdock	1	0	0	1
Cotton Thistle	1	0	0	1
Datura	1	0	0	1
Horehound	1	0	0	1
Nuisance Weeds	1	1	0	0
Russell Lupin	1	0	0	1
	1,734	454	1,037	243

Re-Inspection			
Plant Species	Total	Compliant	Non-Compliant
Old Man's Beard	414	305	109
Bomarea	169	142	27
Cape Ivy	41	22	19
Lagarosiphon	7	5	2
Nassella Tussock	6	0	6
Gorse	5	2	3
African Love Grass	5	2	3
Broom	3	1	2
Ragwort	2	1	1
Boneseed	1	1	0
Spartina	1	1	0
Wilding Pines	1	1	0
	655	483	172

7.4. River Management Update

Prepared for: Implementation Committee

Report No. OPS2234

Activity: Environmental - Central Otago Rivers & Waterway Management
Environmental - Clutha Rivers & Waterway Management
Environmental - Lower Waitaki Rivers & Waterway Management
Environmental - Waitaki Rivers & Waterway Management
Environmental - Wakatipu Rivers & Waterway Management
Environmental - Wanaka Rivers & Waterway Management
Environmental - Dunedin Rivers & Waterway Management

Author: Michelle Mifflin, Manager Engineering
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Endorsed by: Gavin Palmer, General Manager Operations

Date: 14 September 2022

PURPOSE

- [1] To provide a quarterly summary of river management operational activities including gravel extraction consents, development of work programmes for 2022/23 and asset management plans for plantings alongside riverbanks. An initial assessment of damage arising from the July/August 2022 floods is presented.

RECOMMENDATION

That the Committee:

- 1) **Notes** this report.
- 2) **Notes** the progress that is being made with the reporting, planning and progression of the framework that supports river management activities.
- 3) **Notes** the preliminary scope and estimate of costs of repairs resulting from the July/August 2022 floods.

BACKGROUND

- [2] Otago has an extensive and diverse network of rivers, extending from the rivers to the sea. Many of the rivers are characterised by high rates of sediment supply and mobile beds. Some of the rivers are still responding to the effects of historical activities such as 19th Century alluvial gold mining, construction of hydroelectric dams, channel realignment and commercial gravel extraction.
- [3] ORC has a river management function which is based on the districts and rated accordingly within those districts across all parts of Otago (Figure 1 and Table 1).

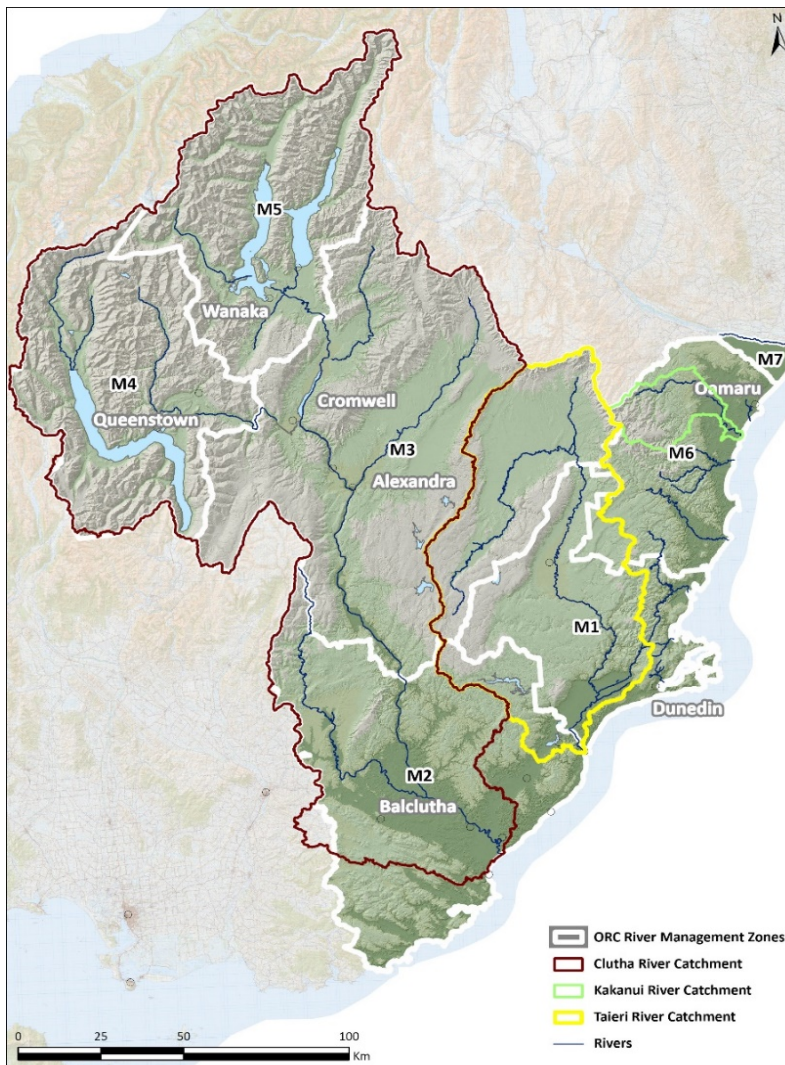


Figure 1: Map of ORC’s River Management (M) Rating Districts of some of the rivers across Otago where river management activities are undertaken.

River Management Zone
M1 = Dunedin Rivers
M2 = Clutha
M3 = Central Otago
M4 = Wakatipu
M5 = Wanaka
M6 = Waitaki
M7 = Lower Waitaki River Control Scheme

M' reflects the code used for river management with its respective numerical reference to a district

Table 1: Explanation of ORC River management rating districts

- [4] This report provides a summary of river management operational activities that have been carried out to the end of Quarter 4 FY 2021/22 and provides an update on the three resolutions made at the Implementation Committee meeting of 8 September 2021 to do

with gravel extraction consents, river management work programmes and asset management plans for plantings along riverbanks.

- [5] Background on legislation, resource consents and strategies that guide river management activities at ORC was provided in the River Management Quarterly Update (Quarters 1 and 2) to the Implementation Committee on 9 March 2022.

DISCUSSION

River Management Level of Service Reporting

- [6] The Level of Service Statement for the River Management activity is “Maintain channel capacity and stability, while balancing environmental outcomes and recognising mana whenua values in rivers” (ORC Long-Term Plan 2021-2031). Figure 2 shows the performance measures and targets defined within this Level of Service Statement.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Percentage of identified and reported issues that have been investigated and appropriate action determined and communicated to affected landholders within 20 working days	2019-20: 100%	100%	100%	100%	100%
Percentage of planned maintenance actions achieved each year	New measure	≥90%	≥90%	≥90%	≥90%

Figure 2: Performance measures and targets as defined in the ORC Long-term Plan 2021-2031.

- [7] Performance to the end of Quarter 4 for financial year 2021/22, in relation to communicating back to affected landowners on identified and reported issues within 20 working days, is summarised in Figure 3 below. 94% (97 out of 103) of identified and reported issues had been investigated and the appropriate action determined and communicated back to affected landowners within 20 working days. Of those queries responded to within 20 working days, the average response time was less than five working days.

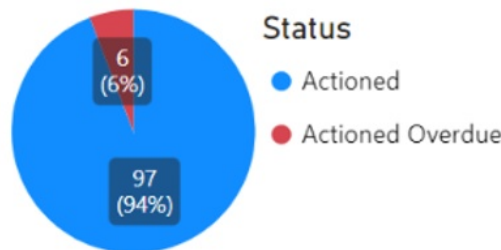


Figure 3: Status of performance to end of Quarter 4 FY 2021/22 for Performance Measure; Percentage of identified and reported issues that have been investigated and appropriate action determined and communicated back to affected landowners within 20 working days.

- [8] 45% (46 out of 103) of customer queries received in FY 2021/22 were in relation to concerns about sediment deposition or fallen trees blocking river channels or river mouths. 7% (7 out of 103) were received in relation to concerns about riverbank erosion.

The remaining 50 enquiries were of a general nature about the functioning of rivers and coastal protection, with 18 of these directed to other ORC departments or a territorial authority to address.

- [9] Six (6) reported issues in Quarters 1 and 2 were not recorded as being investigated and appropriate action determined and communicated back to affected landowners within 20 working days. All six of these issues have since been investigated and affected landowners contacted, with all issues now fully resolved. All reported issues within Quarters 3 and 4 were investigated and communicated back to landowners within 20 working days.
- [10] Some overdue responses can be attributed to the development of Engineering’s customer enquiries database and ongoing improvements in the record keeping process throughout Quarters 1 and 2. It is likely that responses were provided to affected landowners within the required 20 working day timeframe, however at the time of the quarterly reporting this was not able to be verified through records. The issues raised in these six customer queries were assessed as not being a threat to life or property. Further improvements to data accuracy and recordkeeping were made throughout Quarters 3 and 4.
- [11] Full resolution of a customer query often takes time to implement due to a range of factors that must be considered, including consent requirements, weather, design, or contractor availability. This performance measure therefore measures the time taken to investigate any matters raised and communicate the appropriate action back to affected landowners. Full resolution of the enquiry then occurs when any required physical works have been completed.
- [12] Performance to end of Quarter 4 for financial year 2021/22, in relation to percentage of planned maintenance actions achieved, is summarised in Figure 4 below. 78% of the river engineering workplans were completed as planned. The 90% target was not achieved this financial year.

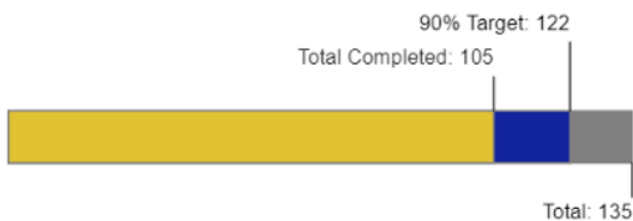


Figure 4: Status of performance to end of Quarter 4 FY 2021/22 for Performance Measure: Percentage of planned maintenance actions achieved each year.

- [13] The commencement of the nationwide Level 4 Covid-19 lockdown on 18 August 2021, and subsequent restrictions, delayed the river management work programme throughout Quarters 2 and 3. Critical tasks were prioritised, and plans were put in place to catch up on any delayed works or inspections. High river levels throughout Quarter 2 also resulted in a delay in completing planned works.
- [14] In addition to the above challenges there were an additional 33 unplanned activities added to the programme during the course of the year. These works were prioritised ahead of some planned works due to the risk they presented.

Community Engagement

- [15] The team has been active in attending meetings in the community and has been visible on worksites across Otago throughout FY 2021/22.
- [16] Members of the Engineering and Natural Hazards teams have attended Strath Taieri Community Board meetings in September 2021 and March and June 2022. This has been focussed on the response to the January 2021 flooding in Middlemarch. A short-written update is provided in conjunction with attendance at meetings to answer any questions and summarise ongoing river management activities in the area.
- [17] As previously reported in Quarter 3, in the Wakatipu district staff have engaged with Mana Tāhuna, Friends of Lake Hayes, Arrowtown Village Association and Arrowtown Business Association to coordinate vegetation maintenance in Mill Creek, Bush Creek and the Arrow River.
- [18] In the Lower Waitaki staff have been working with Aukaha on their Whiria te Waitaki Project, to provide Moeraki whānau with an opportunity to be actively engaged and employed in local environmental management. This has also involved working with Environment Canterbury who oversee the overall functioning of the Lower Waitaki River Control Scheme.

Gravel Extraction

- [19] Gravel extraction for hazard mitigation has been included in the current consent application for ‘global consents’ and the supporting Environmental Management Plan.
- [20] Progress with the consent application is summarised in Figure 5 below:

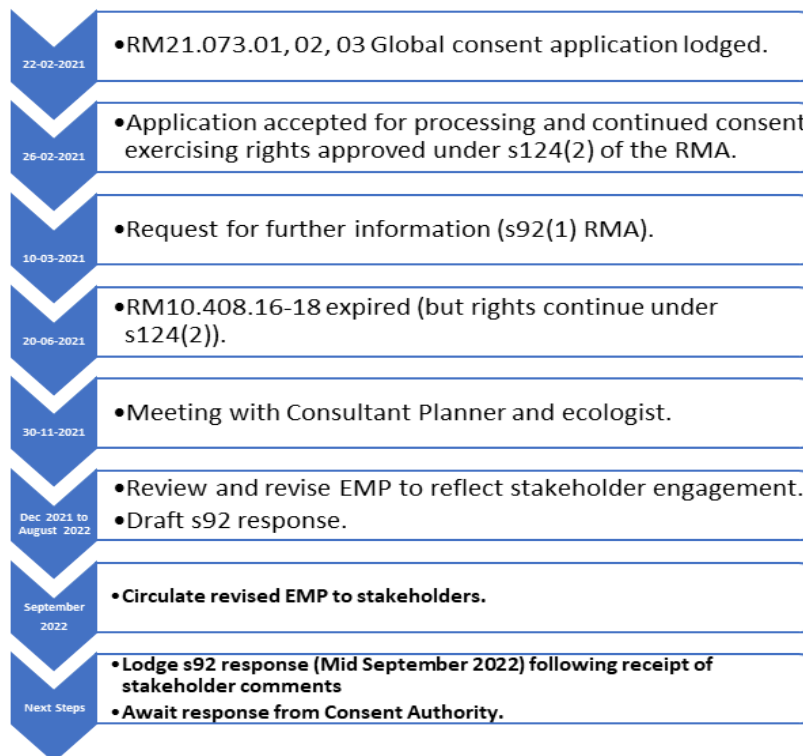


Figure 5: Summary of Global Consent renewal.

- [21] The Environmental Management Plan (EMP) has been reviewed and revised internally. It was circulated to stakeholders on 23 September 2022 requesting feedback from them which will be incorporated prior to lodging a s92 response.
- [22] It is anticipated that the s92 response and EMP will be submitted within approximately four weeks of the draft EMP being finalised with stakeholders.
- [23] It is the intention through this long-term plan cycle to investigate a longer-term solution to gravel management previously described in previous River Management Quarterly Updates (Quarters 1, 3 and 3), to the Implementation Committee. The timeframe to investigate this proposal will be during Year 2 of the 2021-31 Long Term Plan, which will proceed after the completion of the renewal of the global consents and work in with the reviews being undertaken of the regional plans.

Development of Work Programmes for 2022/23

- [24] The 2022/23 work programmes are currently under development.
- [25] Inspections through winter and helicopter inspections in September 2022 assist in finalising these work programmes and identifying additional works to the programme for each of the river districts shown in Figure 1.
- [26] The work types that are programmed include the following:
- On foot Inspections
 - Aerial Inspections
 - Asset Inspections
 - Mechanical cleaning
 - Gravel re-distribution
 - Bank protection
 - Willow removal
 - Willow trimming
 - Vegetation removal
 - Aerial spray
 - Channel spraying
 - Asset (i.e. groynes) repairs
- [27] The weather events of July 2022 are impacting on programme development, but it is planned to have this programme refined by the end of September 2022. The impact of these events on rivers across the region is outlined in paragraphs 40 – 51.
- [28] The planning cycle for river management activities is shown in Figure 6.

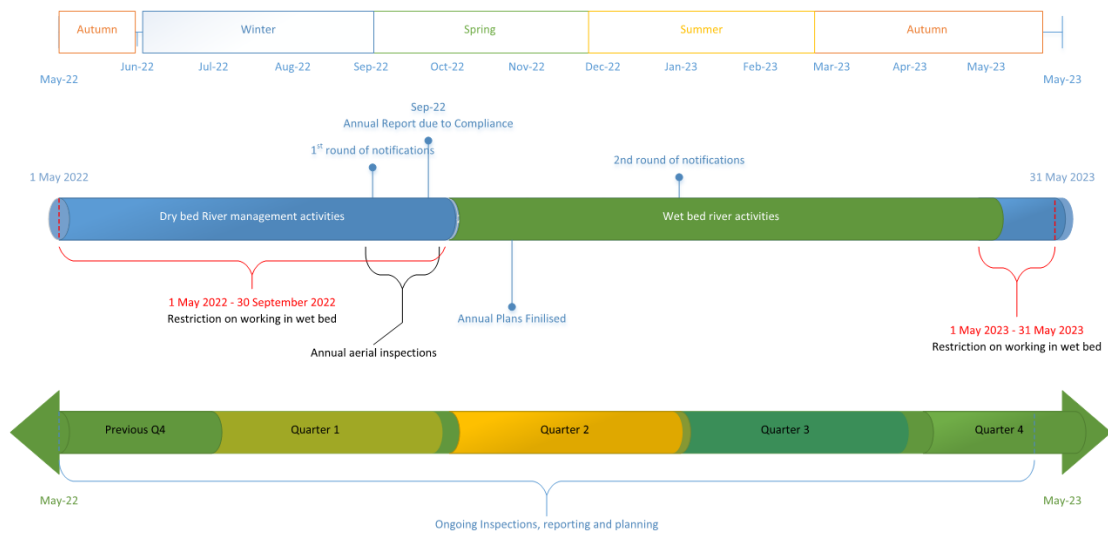


Figure 6: Summary of River Management 'Year', Planning and Reporting cycles.

- [29] The delivery of planned river management activities is dependent on factors that include:
- Weather/seasonal variations.
 - River levels.
 - Land access.
 - Stakeholder approvals.
 - Internal and external resources.
 - Unplanned activities from customer queries.
 - Flood events.
 - Other restrictions (e.g., Covid-19).

[30] To manage the risks and constraints outlined above, the Operations, Engineering team has been adapting work programs where possible to address priority works. Priority activities are those activities that pose an imminent risk to the environment, people, or property.

Asset Management Plans (including for plantings along riverbanks)

[31] ORC's Infrastructure Strategy 2021-2051 states that there are some tree and vegetation assets located within our flood protection schemes and river management areas that have not been fully captured in ORC's Asset Management Information System (AMIS).

[32] A significant programme of work is underway to capture data pertaining to trees and vegetation that have been planted, or are being maintained, as assets by Engineering for the purpose of providing edge protection. Initially this involves staff recording the location of trees and vegetation that are deemed to be assets as they work through their annual work programme. This information will then be translated into ORC's AMIS database and GIS.

[33] Collecting and adding data to ORC's asset management database is an iterative process that, as for all ORC flood protection and drainage assets, requires ongoing work to maintain and improve the quality of data available.

- [34] Ongoing improvements are being made in the process for the collection, addition and maintenance of asset management data for ORC’s AMIS. Efficiencies in this process are highly likely to be developed as work progresses and the timeframe for collecting data may reduce as a result.
- [35] As depicted in Figure 7, Engineering is in the process of finalising the structure for a suite of revised asset management documentation that clearly defines the purpose of each document at a tactical and operational level for both engineering and river management activities.

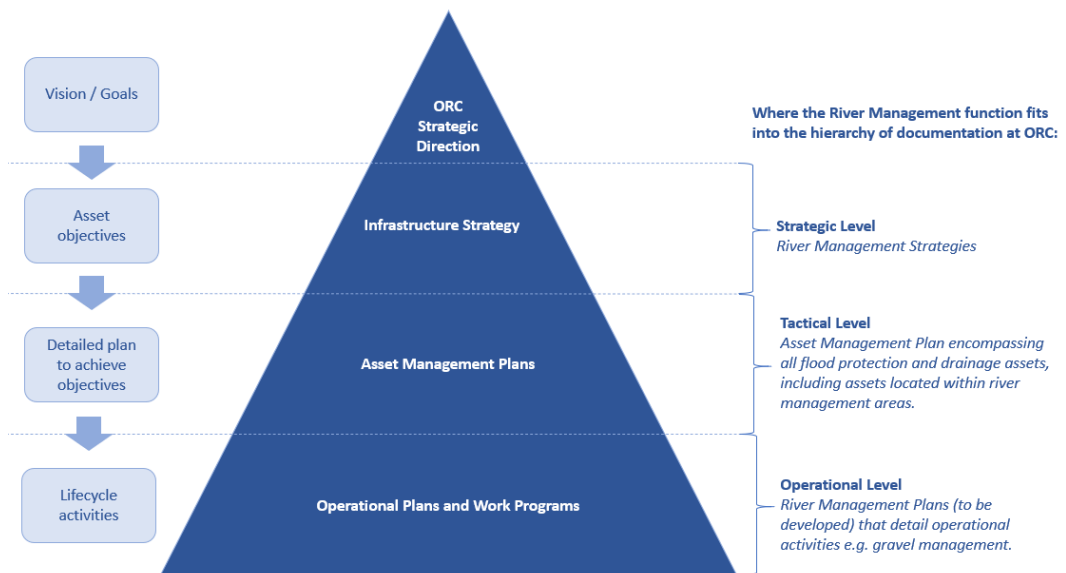


Figure 7: Extract from Infrastructure Strategy which shows the relationship between decision making and operational framework, with the addition of where the River Management function fits into the hierarchy of documentation.

- [36] Engineering has commenced the process of compiling an Asset Management Plan to cover all engineering assets identified within schemes and rivers across Otago. This is more in keeping with the type and scale of assets that ORC manages, as well as the size of the team that manages them. The draft Asset Management Plan has been completed and work to refine some details has commenced.
- [37] Information on assets within specific schemes or rivers will still be available by scheme or river within the Asset Management Plan despite only one document being created and maintained.
- [38] Current records of tree and vegetation assets are being used to develop the relevant section/s of the Asset Management Plan. This will identify areas where data confidence and reliability could be improved, particularly around tree and vegetation asset data where it is known that the data in ORC’s AMIS needs improvement.
- [39] The review period for the Asset Management Plan will be shortened to two years to enable ORC to incorporate data from its targeted approach to collecting tree and vegetation asset data over this time period, and subsequently demonstrate a greater degree of confidence and reliability in this information moving forward. Further reviews

will be carried out as part of a routine schedule alongside the broader suite of asset management documentation, including the asset management system and processes.

July/August 2022 Floods

- [40] In July and August 2022 there were four successive weather events that resulted in elevated flows in rivers across the region which have been included in Appendix A attached to this paper.
- [41] The distribution of rainfall accumulations across the region varied for each event and subsequently had different impacts throughout the region. All four events had some impact across the region, however the first and third events had more significant impacts on coastal Otago. The second and fourth events had more significant impacts for inland Otago, including Central Otago and the Queenstown Lakes Districts, with the Lower Clutha also impacted downstream.
- [42] During the course of these events the team actively monitored rivers and river mouths across the region to observe their behaviour and provide on the ground intelligence back to ORC's Flood Team. This also enabled the team to identify any urgent matters that may need to be addressed immediately following each event.
- [43] Three river engineering staff from Environment Southland (ES) spent two days with the Engineering team during the latter part of the July floods. This provided additional resourcing for ORC as well as a training opportunity for the ES staff. It has also further strengthened the relationship between ORC and ES on river management activity. Two of ORC's Engineering staff were deployed to the West Coast in August 2022 to assist West Coast Regional Council with its flood response.
- [44] These events caused damage across the region as depicted in Figure 8 below. This figure summarises only the damage identified to date and does not include the full assessment of damage to the flood protection or drainage schemes.

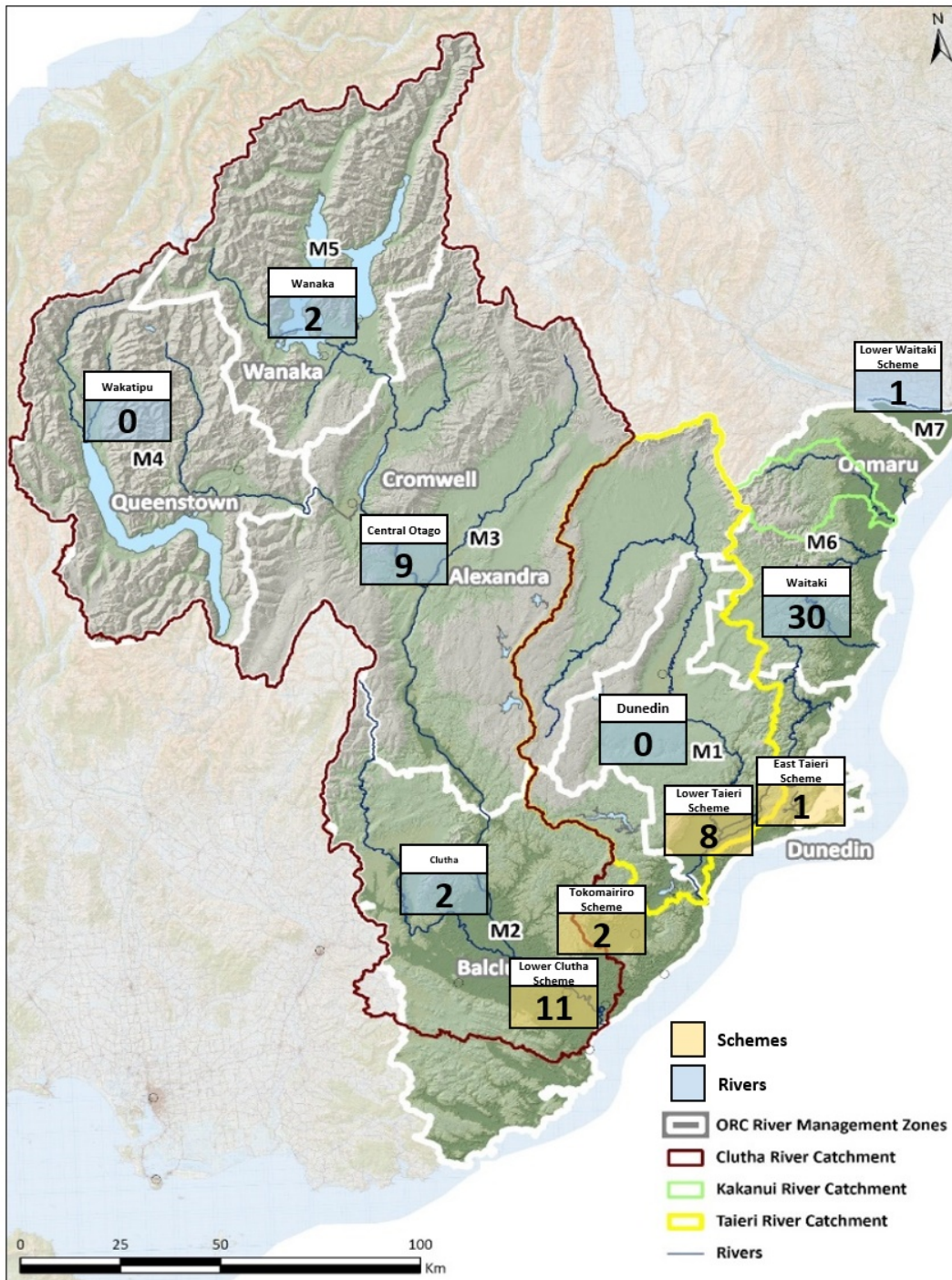


Figure 8: Preliminary map showing instances of damage (i.e. debris, erosion) in river management areas across Otago. This map was up to date as of 26 August 2022.

[45] The majority of issues identified to date are the result of riverbank erosion and debris accumulation.

[46] In the Waitaki area the majority of the damage has occurred in the Kakanui River where the river has broken out of its usual bed, and where gravel accumulation is impacting on

river behaviour and accelerating erosion of the riverbank in concentrated locations. There has also been a significant amount of debris accumulation in the Shag River.

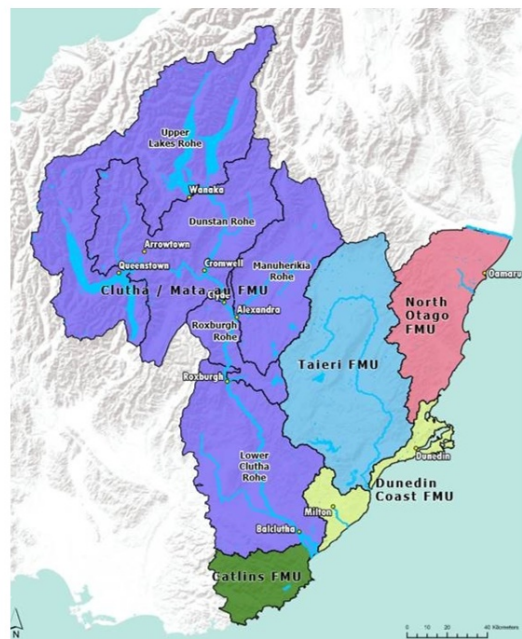
- [47] In Central Otago the majority of damage is associated with riverbank erosion on the Manuherikia River and its tributaries.
- [48] Preliminary estimates for remedying the river management issues are in the order of \$400,000 or more, with the cost of some damage yet to be quantified.
- [49] Preliminary estimates for the flood protection and drainage schemes, namely the Lower Clutha Flood Protection & Drainage Scheme and the Lower Taieri Flood Protection & Drainage Scheme, are indicating numerous repair sites with initial repair estimates in the order of \$1,900,000.
- [50] The finalisation of the assessment of both the river management and flood protection & drainage scheme repair sites is continuing and will be reported to Council in due course.
- [51] These events referred to above, occurred in Quarter 1 of FY 2022/23 and will be covered in more detail in future reports. The damage caused by these events will add a significant quantity of work to our annual work programme, and the impact of this is yet to be realised while damage assessments and prioritisation of work continues.

River Management Planning and Reporting

- [52] There has been discussion in previous quarterly updates on the current river management rating area aligning to the FMU boundaries. The comparison of current rating areas to the FMU boundaries is shown in Figure 9.



Current River Management Rating Structure



FMU Structure

Figure 9: Current district rating of river management compared with FMU structure

[53] The Year 2 Annual Work Programme (AWP) of activities has adopted an approach that associates with the FMU structure by categorising the works to internally reference FMU structure. This is shown in Table 2. This facilitates closer alignment with the proposed approach to Integrated Catchment Management (ICM)

		Main Rivers (for coding)	FMU (Rohe)
M1	Dunedin	Leith/Lindsay	Dunedin Coast
		Kaikorai	Dunedin Coast
		Waikouaiti/Waitati	Dunedin Coast
		Lower Taieri	Taieri
		Middlemarch Area	Taieri
		Silver Stream	Taieri
		Other	Dunedin Coast, Taieri
M2	Clutha	Pomahaka	Clutha / Mata-au (Lower Clutha)
		Lower Clutha	Clutha / Mata-au (Lower Clutha)
		Catlins	Catlins
		Other	Catlins, Clutha / Mata-au (Lower Clutha)
M3	Central Otago	Manuherikia	Clutha / Mata-au (Manuherikia)
		Ida Burn	Clutha / Mata-au (Manuherikia)
		Dunstan Creek	Clutha / Mata-au (Manuherikia)
		Roxburgh Area	Clutha / Mata-au (Roxburgh)
		Middle Clutha	Clutha / Mata-au (Roxburgh)
		Upper Taieri	Taieri, Clutha / Mata-au (Manuherikia and Roxburgh)
		Kyeburn	Taieri, Clutha / Mata-au (Manuherikia and Roxburgh)
		Other	Taieri, Clutha / Mata-au (Manuherikia and Roxburgh)

Table 2 An example showing the alignment of AWP by rivers to FMU (Rohe)

[54] Having our AWP be associated with the respective FMU (Rohe) enables us to align the activities and collect data on activities within FMU (Rohe) that will inform our long-term river management planning.

CONSIDERATIONS

Strategic Framework and Policy Considerations

[55] There are no policy considerations associated with receiving this report.

Financial Considerations

[56] These are described in the report, particularly the estimated costs of the July/August 2022 floods. Those costs are unbudgeted.

Significance and Engagement Considerations

[57] No considerations arising from this paper.

Legislative and Risk Considerations

[58] ORC is operating under the provision of the Soil Conservation and Rivers Control Act 1941.

[59] The potential scale of works arising from the July/August 2022 floods combined with a tight contracting market present a risk to the delivery of the 2022/23 Annual Plan work programme.

Climate Change Considerations

[60] There are no climate change considerations with receiving this report.

Communications Considerations

[61] There are no communications considerations with receiving this report.

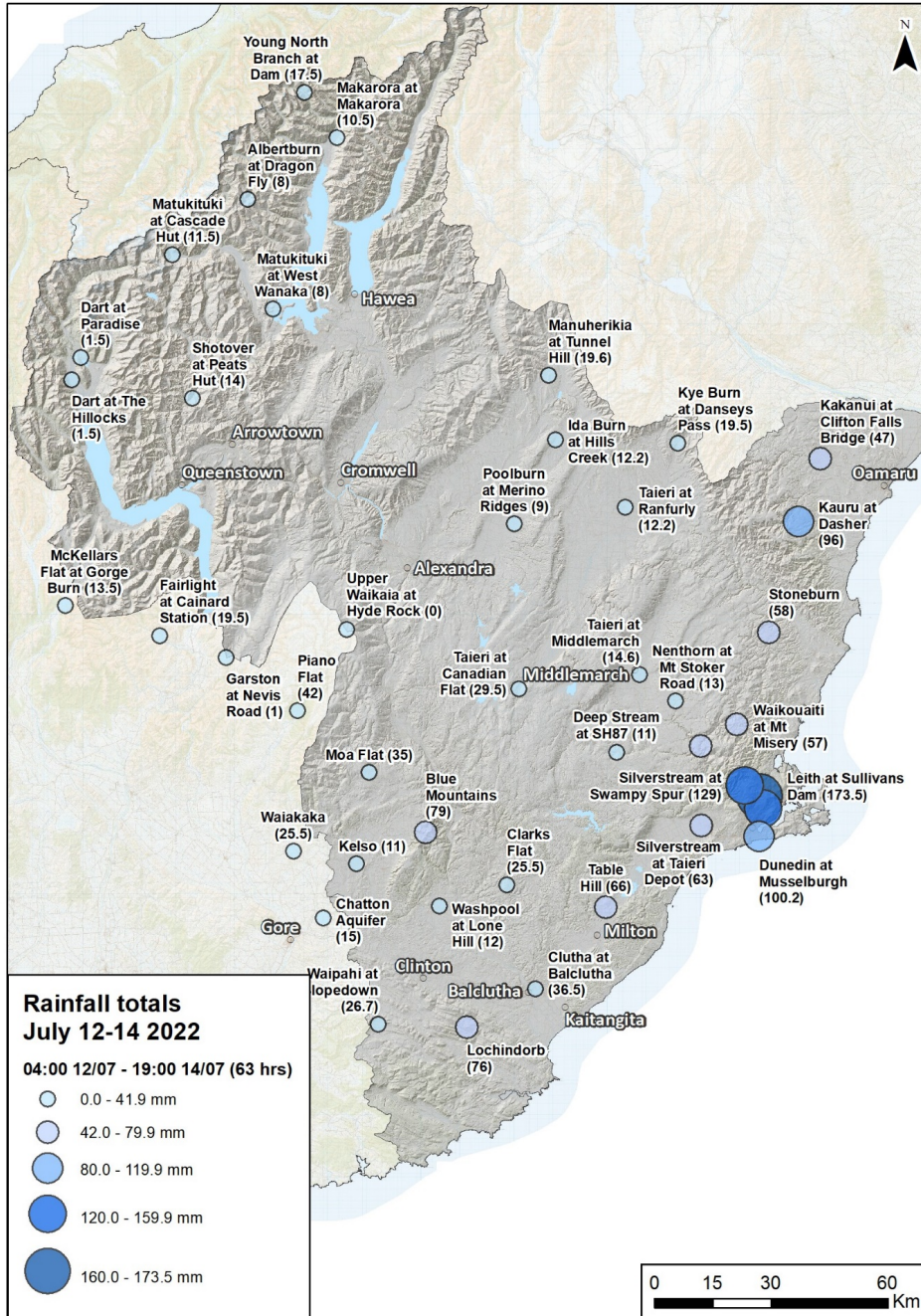
NEXT STEPS

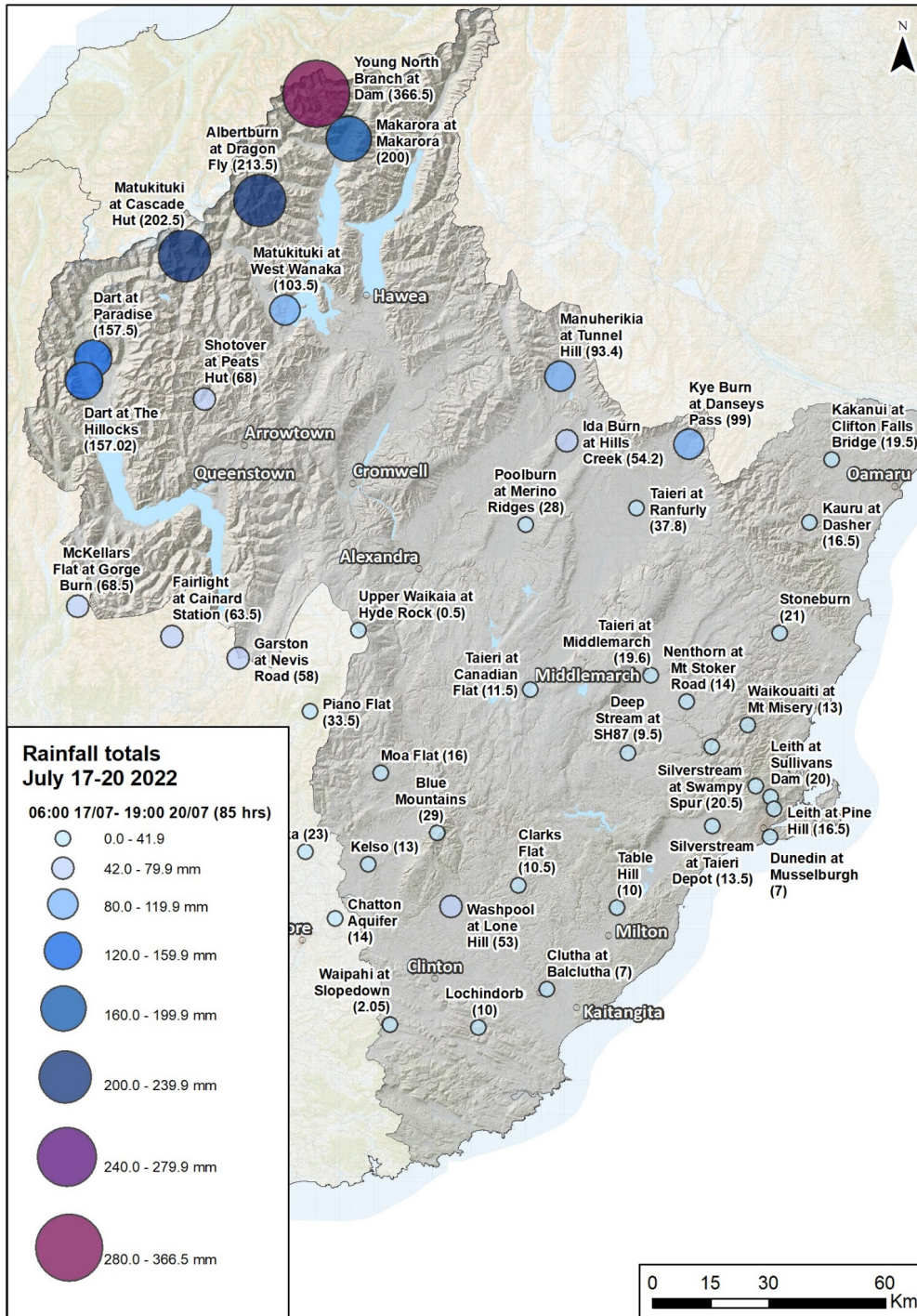
[62] Complete the assessment of damage during the July/August 2022 floods and the estimated costs of repairs.

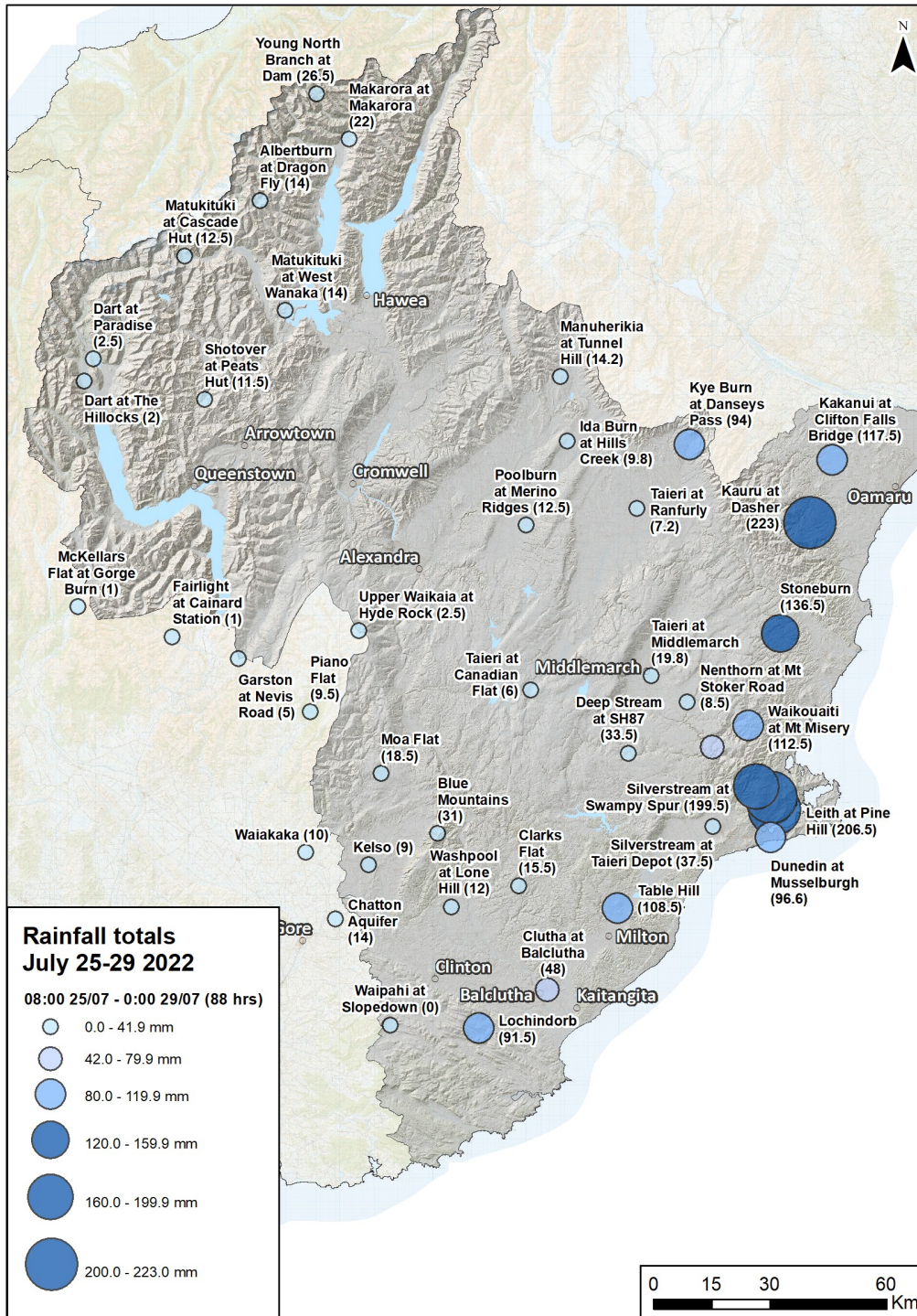
ATTACHMENTS

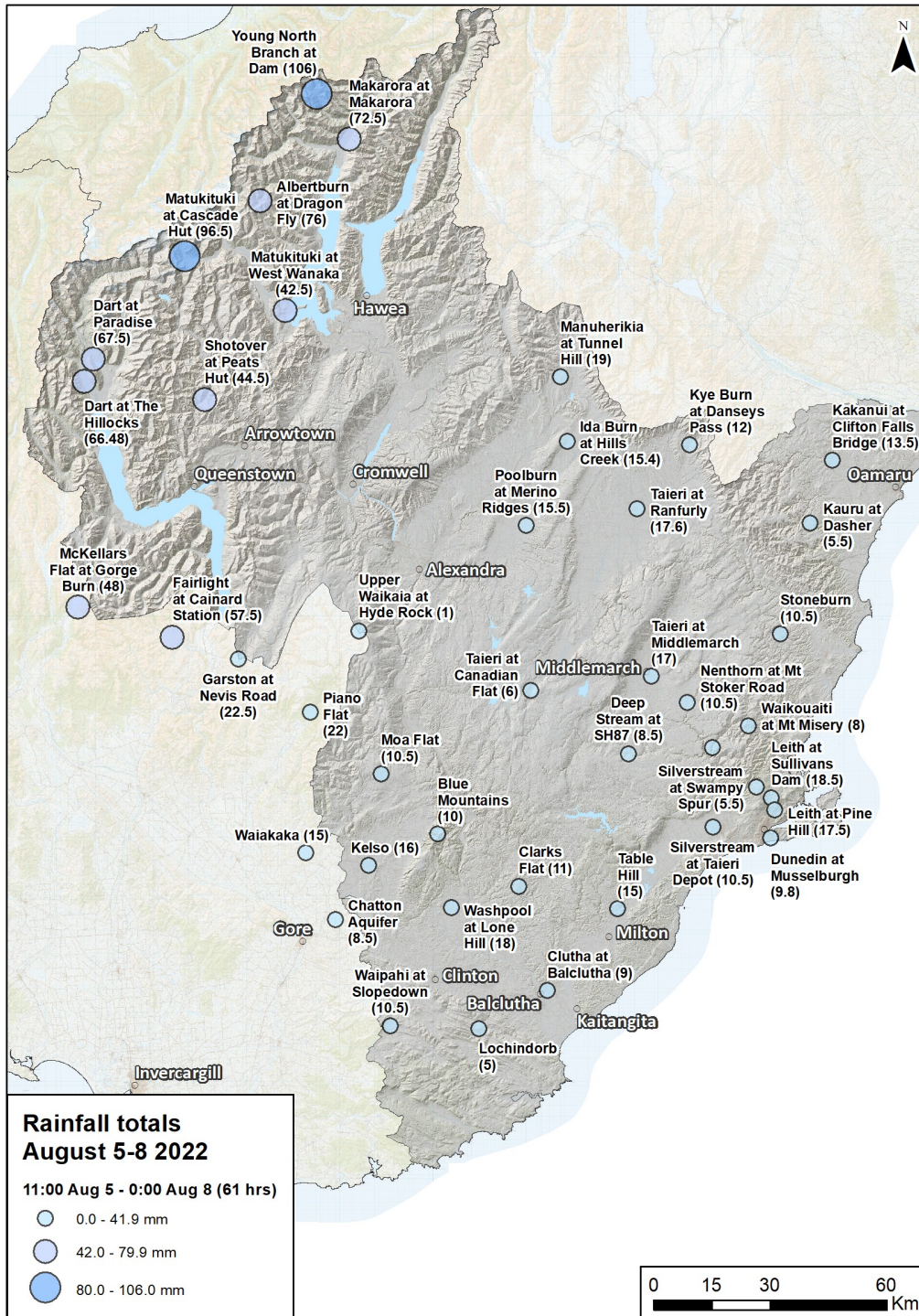
1. Appendix A July weather events [7.4.1 - 4 pages]

Appendix A: July/August 2022 Weather Events









7.5. Climate Resilience Program Update

Prepared for: Implementation Committee
Report No. OPS2235
Activity: Governance Report
Author: Michelle Mifflin, Manager Engineering
Brett Paterson, Team Leader Project Delivery
Endorsed by: Gavin Palmer, General Manager Operations
Date: 14 September 2022

PURPOSE

- [1] To provide an update on the progress of the Otago Regional Council Climate Resilience Programme which comprises four (4) flood protection projects.

EXECUTIVE SUMMARY

- [2] Four flood protection related projects (shovel-ready projects) received approval for Provincial Growth Fund (PGF) funding valued at \$5.44 million, per the Funding Agreement signed between Otago Regional Council and the Ministry of Business, Innovation and Employment (MBIE) on 20 November 2020.
- [3] Otago Regional Council approved funding of up to \$3.2 million towards these projects at the Council Meeting (public excluded) of 23 September 2020.
- [4] The four projects are:
- i. West Taieri Contour Channel and Bridges Upgrade (Contour Channel project),
 - ii. Upgrade and installation of flow management structures at Robson Lagoon (Robson Lagoon project),
 - iii. Riverbank Road floodbank stabilisation (Riverbank Road project),
 - iv. Outram Flood Protection (Outram project).

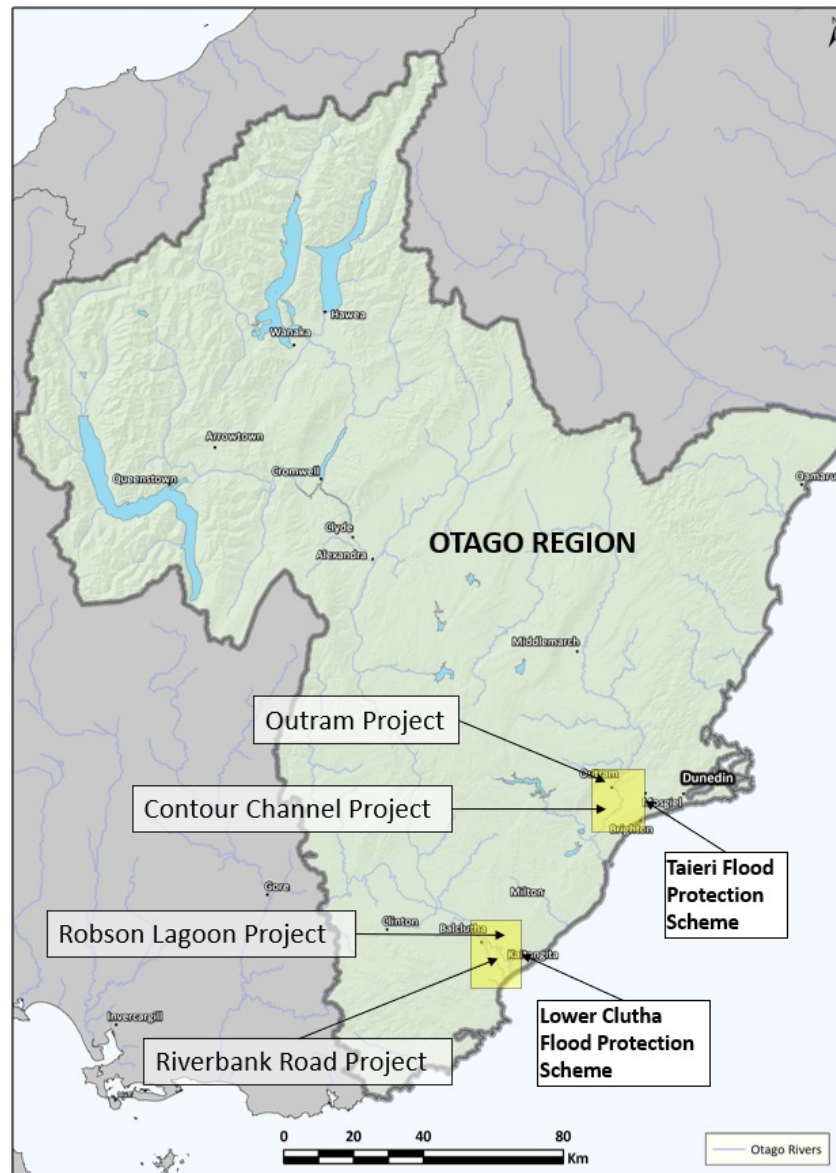


Figure 1. Project location map

- [5] A high-level summary showing the component timing for each project and overall expected funding payments from MBIE is shown in Appendix 1. The purpose of each project with a summary of progress follows, with further detail in the “Project Progress” section.
- [6] The Contour Channel project will upgrade the existing Contour Channel floodbank and three ORC-owned farm bridges, all part of the Lower Taieri Flood Protection Scheme. The project is progressing according to schedule. Stages 5-6 of the floodbank were completed in April 2022. The tender for stages 7-10 and bridges 11, 12 and 14 is expected to be on the market in September 2022 for construction over the 2022/2023 and 2023/2024 construction seasons.
- [7] The Robson Lagoon project will upgrade flow control structures to assist with flood management in the Robson Lagoon area, whilst protecting its natural and cultural

values. All instream structures were installed in Robson Lagoon during the first consented construction window (January – February 2022) and the project is expected to be completed well ahead of the original project schedule.

- [8] The Riverbank Road project included repairs to 2020 flood damage to the Lower Clutha Flood Protection and Drainage Scheme floodbank at five locations along Riverbank Road using a mixture of vegetation planting, rock rip-rap and floodbank reshaping. The Riverbank Road project has been completed on time and under budget in December 2021.
- [9] The Outram project will mitigate seepage through the Outram floodbank that occurs during high river flows. This seepage threatens the integrity of the floodbank, which forms part of the Lower Taieri Flood Protection Scheme. This project has experienced delays through the design and consenting process due to the technical complexity of the seepage issue and potential solutions. Consenting is progressing and construction is anticipated to take place over the 2022 / 2023 construction season.
- [10] The Robson Lagoon project has forecast an additional cost of \$280,000 over the original \$500,000 budget. The additional cost is largely due to the inclusion of telemetry and automation equipment which will enable better management of environmental effects.
- [11] A \$50,000 cost saving from the Riverbank Road project has been transferred to the Robson Lagoon project. Cost savings on other projects may be able to be transferred to meet the additional costs of the Robson Lagoon project, subject to MBIE approval, however these cost savings will only be known at the end of each project.

RECOMMENDATION

That the Committee:

- 1) **Notes** this report.
- 2) **Notes** the progress with ORC's Climate Resilience Programme.

BACKGROUND

- [12] Initially submitted as “shovel ready” projects to the Infrastructure Industry Reference Group (IRG), four ORC projects had funding approved as part of the combined regional council River Managers package. These projects which specifically related to flood protection, were successful in receiving PGF funding of a \$5.44 million. The regional council sector received government funding of approximately \$210M for 55 projects. The total programme cost, inclusive of regional council funding, is approximately \$300M.
- [13] ORC selected these projects because they, with the assistance of central government funding, would:
 - Stimulate the local economy, especially for Clutha district,
 - Create jobs in the region,
 - Benefit lifeline utility assets owned by or under the control of central government (State Highways, Dunedin International Airport),
 - Achieve immediate reduction in flood risk and increased resilience to future climate change,

- Enhance water quality and ecosystem health in a regionally significant wetland (Robson Lagoon, South Otago).

[14] The final funding agreement with MBIE Provincial Development Unit (PDU) was signed on the 20 November 2020 and work on the projects begun.

PROJECT PROGRESS

Contour Channel

[15] The Contour Channel project location and a photo summary of progress are included in Appendix 2.

[16] The contour channel intercepts runoff from the various steep streams located on the Maungatua Range and conveys this runoff by gravity to the Waipori River. The contour channel floodbank has an undulating longitudinal profile, which promotes concentration of overtopping during flood events, potentially exposing parts of the floodbank to relatively rapid failure. This project is staged, with stages 5 – 10 being included in this project.

[17] Work on the Contour Channel project begun with the engagement of required professional services to provide geotechnical and earthworks design for the floodbank works, structural design for the bridge replacements and planning support to obtain the required RMA consents. Work was initially focussed on Stage 5 and 6 of the floodbank to allow construction work to progress within the 2021/2022 construction season. This package of work was delivered in November 2021 in time for construction to begin in January 2022. All packages of preconstruction professional services have now been delivered in line with the project schedule.

[18] Contract negotiations for Stage 5 and 6 with the physical works contractor concluded in December 2021 and construction started on site on the 24 January 2022. The works progressed well with only minor disruption due to poor weather. The site works were completed 6 May 2022 and practical completion was issued for the contract on 2 June 2022 following receipt of the final contract deliverables and completion records.

[19] With design and consenting now complete, the tender for stages 7 - 10 and bridges 11, 12 and 14 is expected to be on the market from in September 2022, allowing lead time for procurement of materials ahead of the construction over the summer of 2022 / 2023. This will be the largest package of work to be tendered under ORC's Climate Resilience Programme and will include significant weighting within the non-price attributes towards broader social outcomes.

Robson Lagoon

[20] The Robson Lagoon project location and a photo summary of progress are included in Appendix 3.

[21] The regionally significant Lake Tuakitoto Wetland complex, which includes Robson Lagoon, is located in the Clutha/Mata-Au catchment, approximately 7km east/northeast of Balclutha.

[22] Developed design and consenting for the upgrades to the flow management structures in Robson Lagoon was completed with RMA consent being issued in September 2020.

- [23] The consent for the project imposes restrictions on when instream construction work can be undertaken onsite. Works are restricted to two windows - January to February 2022 and January and February 2023.
- [24] The final design was completed, and the construction contractor was engaged in July 2021.
- [25] Off-site manufacture of components including the control gate, precast concrete culverts and flap gates was completed ahead of the first consented on-site construction window of January – February 2022.
- [26] The contractor established onsite on 10 January 2022 and commenced installation of the instream structures.
- [27] Over January and February 2022 work progressed onsite at pace with fair weather condition providing stable water levels within the lagoon. This allowed all the instream work to be completed within the first consented construction window well ahead of the MBIE project plan schedule.
- [28] Equipment for the automation of the control gate is sourced for overseas and has been affected by covid related supply chain issues. The delay in this supply has meant that the automation could not be installed when the control gate was installed in February. The control gate has been manually operated awaiting the supply, installation, and commissioning of the automation equipment.
- [29] The required equipment has now been delivered and installation is planned for September 2022. This work can be undertaken outside of the consented construction window as it does not require any instream works.
- [30] The installation of the automation equipment will complete the project.

Riverbank Road

- [31] Following the February 2020 flood, repairs were required at several sites along Riverbank Road in the Lower Clutha Flood Protection and Drainage Scheme. Four of these sites were originally included as part of ORC's Climate Resilience Programme. Refer to Appendix 4 for the site locations and an executive summary of Riverbank Road repairs.
- [32] Damage at three of the sites was repaired using an environmentally friendly vegetative solution, while repair at the site adjacent to the Riverbank Road bridge at Stirling, required detailed investigation, design, and repair using approximately 3,500 cubic metres of rock to re-establish protection of 300m of floodbank.
- [33] A budget of \$1.0 million was included for floodbank stabilisation at the four sites, however when these repairs were completed under budget for approximately \$850,000 a fifth flood damage site on Riverbank Road was added to the project.
- [34] The overall project at the five sites was completed at the end of December 2021 for \$950,000 securing a 64% contribution from MBIE of \$608,000.

Outram

- [35] The location of the Outram floodbank seepage mitigation and a photo summary of progress are included in Appendix 5.
- [36] The Outram project was the least developed of ORC's four Climate Resilience projects at the time of signing of the MBIE funding agreement.
- [37] The project required design to be undertaken from the concept stage including site geotechnical investigation and seepage modelling, discussion and negotiation with affected landowner and leases, RMA consenting with affected party approval before a construction contractor can be engaged and construction can begin.
- [38] The project has experienced delays during the design and consenting process owing to landowner approvals being sought, environmental investigations, agreement on ponding mitigation options and geometric design.
- [39] Draft consenting conditions have now been received and the preferred tenderer for the construction works has been selected.
- [40] Contract negotiations with the preferred tenderer will take place once consents are granted and accurate timelines can be established.
- [41] At this stage it is anticipated that construction works will take place over the summer construction season 2022/2023 and will be completed by the planned completion date in the MIBI funding agreement of June 2023.

FINANCIAL UPDATE**Summary**

- [42] A summary of status of the ORC Climate Resilience Programme funding is included in Table 1 below. The total budget as set out in the ORC/MBIE Funding Agreement is \$8.5 million.
- [43] MBIE has committed 64% or \$5.44 million towards this programme and ORC is committed to providing the remainder of the funding of \$3.06 million.
- [44] The breakdown by project showing expenditure to date for each project is included in Table 1. To date \$3.07 million has been spent and ORC has claimed \$1.62 million from MBIE.

Table 1. Climate Resilience funding summary

Climate Resilience Programme as at 31 July 2022						
PROJECT	Project Budget Million \$	MBIE Funding Committed Million \$	Expenditure to Date Million \$	Funding Received Million \$	Est. Cost at Completion Million \$	Est. Budget / Contingency Remaining Million \$

Contour Channel	5.00	3.20	1.12	0.60	4.70	0.30
Robson Lagoon	0.55	0.35	0.70	0.10	0.78	-0.23
Riverbank Road	0.95	0.61	0.93	0.61	0.95	0.00
Outram	2.00	1.28	0.32	0.31	1.73	0.27
TOTAL	8.50	5.44	3.07	1.62	8.16	0.34

Contour Channel

[45] The Contour Channel Project is expected to be completed within its budget of \$5.0 million. An estimate of any potential project underspent or overspend will be able to be made when the project is closer to its target completion date of June 2025.

Robson Lagoon

[46] The Robson Lagoon Project is expected to cost approximately \$280,000 more than budgeted. Initial project costs were underestimated since they were based on quotes for construction received several years prior to the application being made to MBIE for "Shovel Ready" funding. There has also been a requirement for automated monitoring necessitating a variation to the electrical costs for ongoing monitoring.

[47] The increased cost of the Robson Lagoon Project was highlighted to MBIE in April 2022, when a variation to the programme was requested. A transfer of unspent budget of \$50,000 (\$32,000 of MBIE funding) was requested to be made from the Riverbank Road Project. This request was granted.

[48] If either the Contour Channel or Outram Floodbank Mitigation projects are completed underbudget, there may be a further opportunity to transfer additional MBIE committed funding to cover the remainder of the Robson Lagoon Project overspend.

[49] Any overspend in the Robson Lagoon Project, unable to be funded by transfers from other ORC Climate Resilience Projects, will need to be covered through Council funds.

Riverbank Road

[50] The Riverbank Road project was completed for \$950,000 under the budget of \$1.0 million. The underspend of \$50,000 has been transferred to the Robson Lagoon Project as indicated above.

Outram

[51] The Outram Project is expected to be completed within its budget of \$2.0 million. An estimate of any potential project underspend or overspend will be able to be made in early 2023 before the project completion date of June 2023.

BROADER OUTCOMES

[52] The funding agreement with MBIE requires ORC to give effect to Broader Outcome considerations within the Climate resilience programme. These include:

- Partnering with Aukaha to provide a targeted approach to engage with Māori and Pasifika to enhance employment opportunities for them within the Climate Resilience programme and broader ORC activities.

- Including requirements in request for tender (RFT) documents that will actively promote contractors to engage with Māori owned business and/or employ Māori and Pasifika within their operation. These requirements have been given significant weighting within the tender evaluation which will provide contractors who strive to achieve the required broader outcomes a tangible business advantage.
- Working proactively with Aukaha to enable opportunities for apprenticeships or cadetships directly with ORC or within our supplier organisations.

[53] Social procurement benefits over the four projects are reflected in the table 2 below. These show the person months (FTE's) for each metric.

Table 2. Broader Outcomes summary

ORC Climate Resilience Programme Broader Outcomes	Project to date to 30 June 2022				
	Contour Channel	Outram	Riverbank Road	Robson Lagoon	Programme Total
Total FTE Months	38.6	13.2	25.3	21.5	98.5
NZ Residents	37.0	14.4	25.3	21.2	97.9
Non-resident	1.8	0.0	0.2	0.0	2.0
Apprentices	0.0	0.5	2.0	3.4	5.9
Previously unemployed	0.0	0.0	0.0	0.0	0.0
Local (Otago resident)	29.3	13.1	21.1	20.3	83.7
Aged 15-24	0.7	1.2	1.4	3.9	7.2
Māori	0.0	0.0	1.0	0.0	1.0
Pasifika	0.0	0.0	0.0	0.0	0.0
Women	4.1	3.0	5.5	4.7	17.3

MBIE REPORTING

- [54] Programme reporting to MBIE includes monthly and quarterly reporting according to MBIE provided templates.
- [55] ORC undertakes a review of the programme at each quarterly report. A visual of the most recent programme (Version 6, 14 April 2022) is included as Appendix 1.
- [56] More descriptive information than that requested in the MBIE templates has also been provided to MBIE together with the latest two quarterly reports. ORC Climate Resilience Programme Highlights for the end of Quarter 4, submitted 25 July 2022 is included as Appendix 6.

CONSIDERATIONS

Policy Considerations

- [57] The Ministry's requirements around social procurement need to be adhered to and incorporated into current project contracts where possible.

Financial Considerations

- [58] Discussed above.

Significance and Engagement Considerations

[59] Not applicable.

Legislative and Risk Considerations

- [60] ORC is operating under the provision of the Soil Conservation and Rivers Control Act 1941. As stated above, some of the works require resource consent which have been obtained.
- [61] Contractual obligations - the Funding Agreement extends liability to ORC through termination provisions, social procurement provisions and providing Ministry with powers to intervene at any time.
- [62] The risk of exceeding funding estimate is carried by ORC and treated through long term planning rating processes and scheme reserves.
- [63] The funding summary shown in Table 1 relies on current estimated costs to complete. Construction costs will not be known until completion of the construction works. Continued escalation across the industry and other influencing factors (such as material supply, labour, fuel and resource cost and availability) may have an impact on the cost to complete.

Climate Change Considerations

- [64] The Climate Resilience programme has been structured specifically towards addressing climate change and improving the resilience of the existing flood protection infrastructure provided by regional councils.
- [65] Opportunities will be sought moving forward to identify other projects that could increase ORC's resilience to climate change and seek Climate Resilience funding for these projects if possible.

Communications Considerations

- [66] At a high level, information provided to MBIE in the form of Climate Resilience Quarterly reporting is communicated via the LGNZ web site under the section on Resilient River Communities at:
<https://www.lgnz.co.nz/regionals/key-projects/resilient-river-communities/>
- [67] Further information on the projects in each Region can be found at:
<https://www.lgnz.co.nz/regionals/key-projects/resilient-river-communities/projects/>
- [68] And specific information about the Otago Regional Council Climate Resilience projects at:
<https://www.lgnz.co.nz/regionals/key-projects/resilient-river-communities/projects/9-otago/>
- [69] From that web site there are also links to the Otago Regional Council website which has further information on the ORC Climate Resilience Projects
<https://www.orc.govt.nz/managing-our-environment/flood-protection-and-river-management/climate-resilience-programme>

NEXT STEPS

- [70] Continue progressing Climate Resilience projects to the completion of all projects in the programme by June 2025.

- [71] Keep Council informed of progress with the programme and any possible financial implications.

ATTACHMENTS

1. Appendix 1 - ORC CR Programme Visual [7.5.1 - 1 page]
2. Appendix 2 - Contour Channel Progress Photo Summary [7.5.2 - 2 pages]
3. Appendix 3 - Robson Lagoon Photo Progress Summary [7.5.3 - 5 pages]
4. Appendix 4 - Riverbank Road Executive Summary with photos [7.5.4 - 8 pages]
5. Appendix 5 - Outram Flood Protection Photo Progress Summary [7.5.5 - 3 pages]
6. Appendix 6 - ORC Programme Highlights for Q 4 July 2022 [7.5.6 - 4 pages]

Implementation Committee Agenda - 14 Sept 2022 - MATTERS FOR CONSIDERATION

Appendix 1 - ORC CR Programme Visual

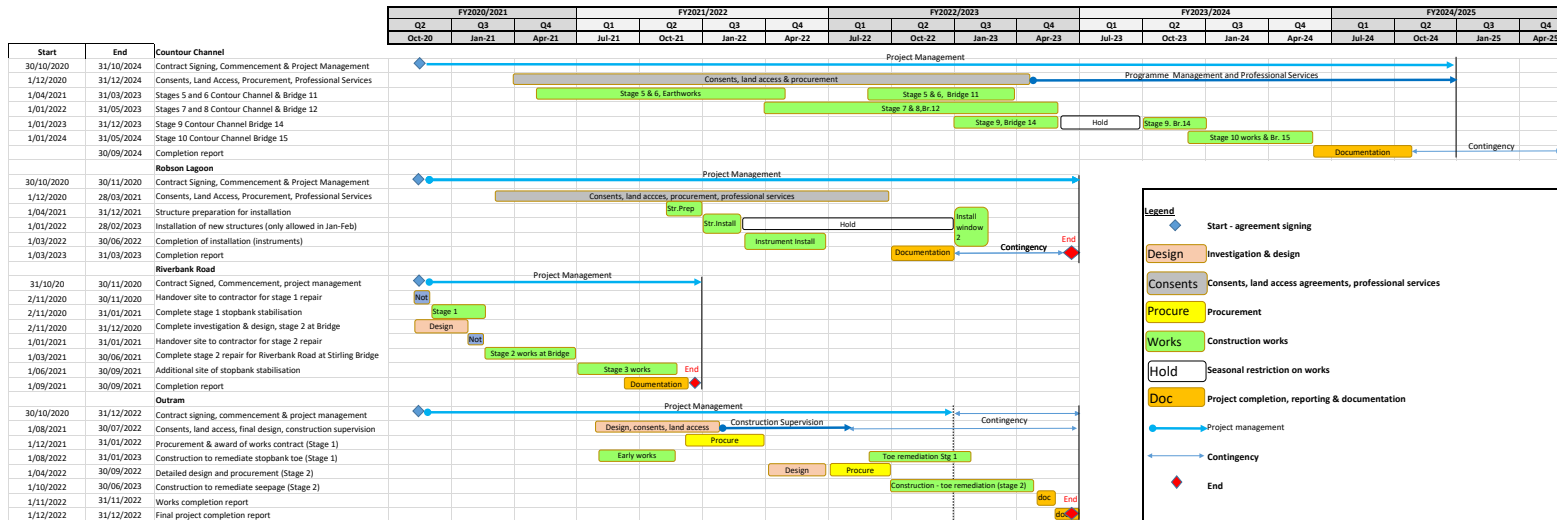
CLIMATE RESILIENCE PROGRAMME

Version 6 14/04/2022

Programme Name	OTAGO REGIONAL COUNCIL Programme of Floodplain Risk Management
Locations	Lower Clutha and Taieri Plains
PROGRAMME DESCRIPTION	Flood Protection upgrade and resilience program to improve resilience of existing flood protection, strengthen bank protection and provide erosion control.
R13.02841	West Taieri Contour Channel and Bridges Upgrade
R13.02853	Robson Lagoon Flow Control Structures Upgrade
R13.02862	Riverbank Road Flood Protection Stabilisation
R13.02869	Outram Floodbank Seepage Mitigation

Commencement Date	Completion Date	Project Deliverable As per Funding Agreement executed by both parties. 20 November 2020.	MBIE Contribution	ORC Contribution
20 October 2020	30 June 2025	West Taieri Contour Channel and Bridges Upgrade	\$3,200,000	\$1,800,000
20 October 2020	30 June 2023	Robson Lagoon Flow Control Structures Upgrade	\$320,000	\$180,000
20 October 2020	31 December 2021	Riverbank Road Flood Protection Stabilisation	\$640,000	\$360,000
20 October 2020	30 June 2023	Outram Floodbank Seepage Mitigation	\$1,280,000	\$720,000
TOTAL			\$5,440,000	\$3,060,000

FINANCIAL YEAR	FORECAST SCHEDULE OF PAYMENTS (by Quarter)												Total							
	FY2020/2021			FY2021/2022			FY2022/2023			FY2023/2024				FY2024/2025						
QUARTER	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
Work Programme	Oct-20	Jan-21	Apr-21	Jul-21	Oct-21	Jan-22	Apr-22	Jul-22	Oct-22	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24	Jul-24	Oct-24	Jan-25	Apr-25	
West Taieri Contour Channel and Bridges Upgrade	\$480,000	\$0	\$0	\$0	\$0	\$0	\$0	\$118,400	\$236,800	\$480,000	\$312,000	\$38,080	\$280,693	\$206,080	\$230,827	\$276,480	\$344,320	\$0	\$0	\$3,200,000
Robson Lagoon Flow Control Structures Upgrade	\$32,000	\$0	\$36,978	\$34,755.56	\$48,586.00	\$0.00	\$199,680.00													\$352,000
Riverbank Road Flood Protection Stabilisation	\$96,000	\$192,000	\$288,000	\$32,000	\$0	\$0	\$0													\$608,000
Outram Floodbank Seepage Mitigation	\$128,000	\$0	\$0	\$0	\$0	\$0	\$0	\$76,800	\$182,400	\$489,600	\$224,000	\$179,200								\$1,100,800
Programme Quarterly Payments excluding GST	\$736,000	\$192,000	\$324,978	\$66,756	\$48,586	\$0	\$404,800	\$300,800	\$726,400	\$772,000	\$491,200	\$38,080	\$280,693	\$206,080	\$230,827	\$276,480	\$344,320	\$0	\$0	\$5,440,000



Appendix 2 - Contour Channel Progress Photo Summary

**CONTOUR CHANNEL AND BRIDGES UPGRADE, WEST
TAIERI
CLIMATE RESILIENCE PROJECT**

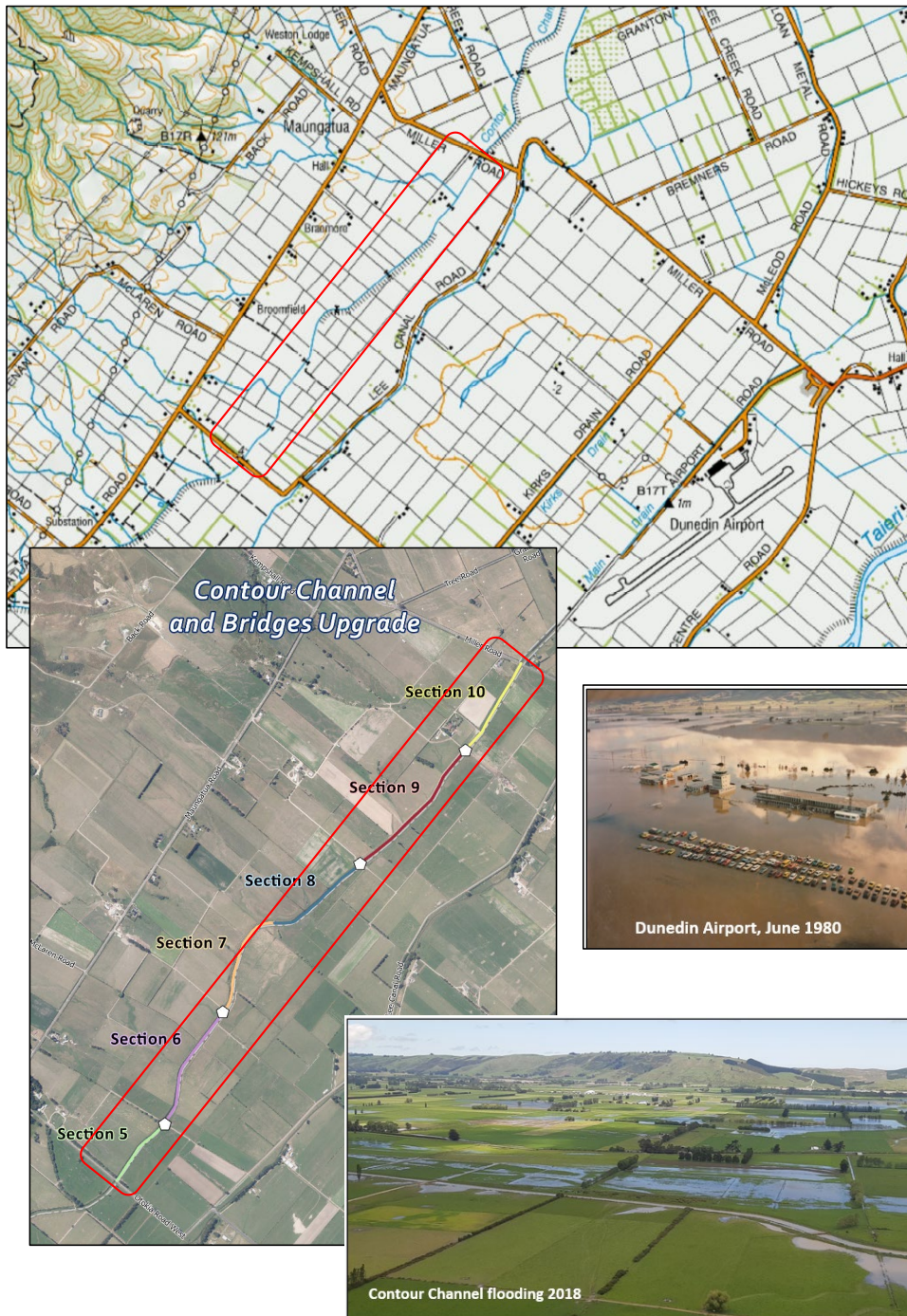


Figure 1. Location of Contour Channel and Bridges Upgrade sites, and historic flooding.

Contour Channel and Bridges Upgrade
Photo Summary of Progress

23 August 2022



Figure 2. Topsoil being removed during the deconstruction of stage 5.



Figure 3. The insertion of geotextile fabric ensure ongoing stability of floodbank.



Figure 4. Stage 5 complete. Silt fence to be removed once grass seeding has fully established itself.

Appendix 3 - Robson Lagoon Photo Progress Summary

ROBSON LAGOON FLOW STRUCTURES UPGRADE
CLIMATE RESILIENCE PROJECT
Photo Summary of Progress – 23 August 2022



Figure 1. Location of Robson Lagoon.

Robson Lagoon Flow Structures Upgrade
Photo Summary of Progress

23 August 2022



Figure 2. Plan of proposed flow structures upgrades.

Appendix 3 - Robson Lagoon Photo Progress Summary

Robson Lagoon Flow Structures Upgrade
Photo Summary of Progress

23 August 2022



Figure 3. Flow control structure before upgrade (upper) and after upgrade (lower).

Appendix 3 - Robson Lagoon Photo Progress Summary

Robson Lagoon Flow Structures Upgrade
Photo Summary of Progress

23 August 2022



Figure 3. Crossing culvert, before upgrade (upper) and at completion (lower).

Appendix 3 - Robson Lagoon Photo Progress Summary

Robson Lagoon Flow Structures Upgrade
Photo Summary of Progress

23 August 2022



Figure 4. Flow culverts, before upgrade, during works and on completion.

Appendix 4 - Riverbank Road Executive Summary with Photographs

**RIVERBANK ROAD FLOODBANK STABILISATION****CLIMATE RESILIENCE PROJECT***Executive Summary 22 December 2021*

The significant rainfall event of February 2020 resulted in flood damage to 27 areas in the Lower Clutha area of Otago, including 5 areas of significant damage on Riverbank Road (Figure 1). Stabilisation of flood damaged sites on Riverbank Road has been partially funded through the Provincial Development Unit of the Ministry for Business, Innovation and Employment (MBIE), as one of the post-Covid19 Shovel Ready Projects to stimulate economic development.

Funding initially covered stabilising critical infrastructure on four flood damage sites on Riverbank Road. Physical works on these sites were successfully completed ahead of schedule and under budget, providing employment opportunity within the local region and achieving significant environmental flood protection benefits. Following discussion with Kānoa it was confirmed that this additional work could be undertaken within the scope, budget and timeframe of the original funding agreement.

Investigation of options for floodbank stabilisation at the riverbank road sites determined that three of the sites could be repaired using environmentally friendly bank shaping and stabilisation using bank planting (i.e., a vegetative solution). These sites were designated Lower Clutha 17, 18 and 20 (located as in Figure 1, and also referred to as LC17, LC18 and LC20). Contracts for construction were in place when Otago Regional Council (ORC) signed the Climate Resilience funding agreement with MBIE. In other words, these sites were truly "Shovel Ready". Works on these sites started in November and initial bank reshaping and stabilisation was completed in December 2020 (see photos in Figures 2-4). Vegetation planting was undertaken in the winter of 2021 at these sites.

Stopbank stabilisation at the fourth Riverbank Road site, immediately upstream of the Stirling Bridge near Balclutha, was more complex. It is situated on the outside of a ninety-degree bend in the Clutha River at a pinch point between the river and the Kaitangata Highway. With very little space, the steep rock lined stopbank had scoured away and was collapsing upstream of the Riverbank Rd bridge at Stirling putting the bridge at risk. Geosolve Consulting engineers were engaged to undertake the stability assessment, design and works supervision. Design was completed by mid-November 2020 and works procurement completed, following an open tender process, in January 2021. The main works contract was awarded to SouthRoads who commenced work in February 2021. The repair involved re-lining the toe of the stopbank with rock riprap and keying this into the riverbed to prevent any further slumping. An access track was initially created at the waterline to allow for excavation into the riverbed and laying of the rock foundation. The access track was later reshaped back into the existing floodbank. Approximately 3,500 cubic metres of rock was used for these works to re-establish rock protection along 300m of floodbank (Figure 5).

During excavation of the riverbed, timber beams from an historic, pre-1900's bridge were uncovered (Figure 6). Works stopped for a week and an archaeological assessment of the beams was undertaken. The part of the river where the discovery was made, was determined as being owned by the Crown (LINZ). The beams were subsequently donated to the South Otago Museum. Despite the delay, works were completed in mid-May, two weeks ahead of schedule.

Floodbank stabilisation at the fifth site (LC14) involved a combination of rock to stabilise the toe of the stopbank from slumping and shaping back the bank and revegetating it to further stabilise it long term. There was some further slumping at this site in July 2021, following initial work. The contractor needed to wait until the end of November 2021 to complete the work when the ground conditions were sufficiently dry and river levels low enough to undertake the remedial work (Figure 7).

All work was completed by the project end date of 31 December 2021 at a cost of \$932,124 (as at end December 2021). The final cost will be approximately \$940,000 once retentions are returned and final project reports completed. Council has received \$608,000 from MBIE (64% of the revised budget of \$950,000).

Environmental benefits of the project include vegetative planting of 400m of riverbank and providing direct flood protection and reducing the risk of inundation to 1,300ha of productive farm land, homes

Riverbank Road Floodbank Stabilisation
 ORC. Climate Resilience Project - Summary

22 December 2021

and community assets, together with indirect benefit to the entire Lower Clutha Flood Protection and Drainage Scheme that provides flood protection to approximately 9,300ha in the Clutha delta

Social procurement benefits include 25 person months (FTE's) of time on the project. Focusing on providing employment across a socially diverse range of people was a goal of the Climate Resilience funding of this project. A good diversity was achieved with 22% of the work being undertaken by women, 8% by apprentices, 5% by youth (aged 15-24) and 4% Maori. Five direct suppliers (4 local) provided services on the project, and 84% of the work was undertaken locally, despite some project management and specialist design being undertaken by non-local providers and subcontractors to the direct providers.



Figure 1. Location of Riverbank Road floodbank stabilisation sites.

Riverbank Road Floodbank Stabilisation
ORC. Climate Resilience Project - Summary

22 December 2021



Figure 2. Riverbank Road at Renton Road (LC17) floodbank before and after reshaping and vegetation stabilisation.

Riverbank Road Floodbank Stabilisation
ORC. Climate Resilience Project - Summary

22 December 2021



Figure 3. Riverbank Road (262 or LC18) floodbank before(above) and after (below) reshaping and vegetation stabilisation.

Riverbank Road Floodbank Stabilisation
ORC. Climate Resilience Project - Summary

22 December 2021



Figure 4. Riverbank Road floodbank at Lawsons (LC20), before(left) and after (right) reshaping and vegetation stabilisation.

Riverbank Road Floodbank Stabilisation
ORC. Climate Resilience Project - Summary

22 December 2021



Figure 5. Riverbank Road floodbank at bridge near Stirling (LC21), before(left) and after (right) reshaping and vegetation stabilisation.

Riverbank Road Floodbank Stabilisation
ORC. Climate Resilience Project - Summary

22 December 2021



Figure 6. Discovery of historic (Pre-1900) bridge beams at Riverbank Road floodbank works at bridge near Stirling (LC21).

Riverbank Road Floodbank Stabilisation
ORC. Climate Resilience Project - Summary

22 December 2021



Figure 7. Floodbank stabilisation at 625 Riverbank Road (LC14), before (left) and after (right) bank stabilisation and revegetation reinstatement. One of 10 repairs at this site.

Appendix 5 - Outram Flood Protection Photo Progress Summary



**OUTRAM FLOOD PROTECTION
CLIMATE RESILIENCE PROJECT**
Photo Summary of Progress – 23 August 2022

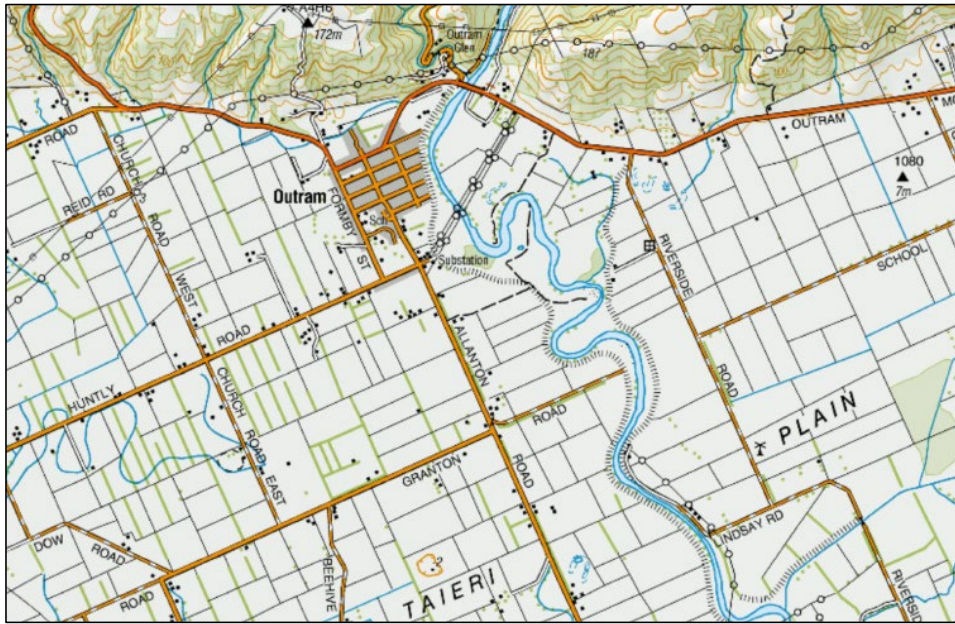


Figure 1. Outram site location and areas of investigation.

Outram Flood Protection
Photo Summary of Progress

23 August 2022



Figure 4. Areas where piping was observed in 2017 and sedimentation from piping.

Climate Resilience Programme

Quarter 4 2021-2022 Update – Submitted 25th July 2022



Executive Summary

ORC Climate resilience programme consists of four projects to the value of \$8.5M. \$3M (35%) has been spent to date.

The Riverbank Road project in lower Clutha has been completed, ahead of schedule and under budget.

The Robson Lagoon project has gone over budget, as previously reported. The overspend will be accommodated from an increase in the co-funding (ORC funding) for this project or an approved transfer of surplus funding from one of the other ORC Climate Resilience projects. The estimated total project overspend is \$270k, bringing the estimated total project expenditure to \$770k. A variation was submitted in April to request transfer of unspent funds from our completed Riverbank Road project to Robson lagoon to assist in balancing the overspend. All physical works were completed in Q3, however ORC is awaiting an actuator installation, which will complete the project. This has been delayed due to Covid-19 affecting supply chains. Installation is now expected in September, once the component has been received.

The Outram seepage mitigation project has experienced a delay in earthworks construction due to issues being encountered through the consents process. Construction started with geotechnical and environmental testing by the agreed start date however consents to allow earthwork to commence are taking longer than was anticipated. Working through concerns of landowners has required additional time and resources, including ORC commissioning a planning evaluation report to alleviate concerns. Affected party approval forms have been signed by all affected landowners, allowing consenting to progress on a non-notified basis. It is anticipated the resource consent will be granted in July 2022. The earthworks package has been tendered in anticipation of consents being granted and discussions with preferred contractor are underway. ORC is confident that even with the delay to the earthworks construction, the forecasted completion dates will not affect as the construction methodology has identified time savings that will recover the slippage.

The Contour Channel project has experienced a minor delay relating to the replacement of Bridge 11. This bridge replacement required specific consenting due to a minor amount of work required within the wet bed of the contour channel. Conditions prescribed by the resource consent limit the timing of the instream work, for environmental and ecological protection. The bridge construction can be undertaken in isolation and in parallel with the later stages of the flood bank construction, and as such has been packaged with bridges 12 and 14. This means the delay to bridge 11 will not affect the overall project completion date.

Broader Outcomes

We are partnering with Aukaha to provide a targeted approach to engaging with Māori and Pasifika to enhance employment opportunities for Māori within the Climate resilience programme and broader ORC activities.

Aukaha are a Rūnaka based consultancy service with Governance from their five Rūnaka owners: (Te Rūnanga o Waihao, Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga)

More information about Aukaha's activities can be found here - <https://aukaha.co.nz/>

Aukaha are working with ORC throughout our procurement process for the next Contour Channel works package. This package is by far the largest of our Climate Resilience contracts and is due to be put to market in August. Aukaha have provided wording to be include in our RFT documents that will actively promote contractors to engage with Māori owned business and/or employ Māori within their operation. These requirements have been given significant

Appendix 6 - ORC Programme Highlights for Q4 July 2022

weighting within the tender evaluation which will provide contractors who strive to achieve the required broader outcomes as a tangible business advantage. It is intended that Aukaha will review the tender submissions received and provide guidance directly to the tender panel on the quality of the Broader Outcomes section of the submissions.

We are also exploring opportunities through Aukaha to engage apprentices or cadetships either directly with ORC or with our supplier organisations. Aukaha already have schemes in place and are actively placing people into employment (many already within our supplier organisations).

ORC's finance team is also working with Aukaha to adopt an increased consideration of broader outcome (particularly in relation to Māori) across whole of ORC procurement processes. It is intended to utilise the Climate resilience programme to pilot to implement these initiatives.

In April, ORC met with Workforce Dunedin, to improve engagement with their team to reach Māori and Pasifika, as well as youth workers/apprentices. It is envisioned that this relationship will be mutually beneficial, as the region strives to engage workers for multiple construction jobs, including the Dunedin Hospital project. Workforce Dunedin have provided ORC with some example RFT conditions to assist with wording, for future tender requests, to help potential tenderers give specific consideration to the broader outcomes in their proposals. It is intended that future tenders, including the next Contour Channel work package will include this wording.

ORC is providing its staff with the opportunity to complete Te Reo lessons, and a Certificate in Bi-Cultural Competency (Level 4). Expressions of interest are currently open, with management actively encouraging staff engagement. The Project Delivery Team have all requested to participate. The certificate will cover Te Reo in the workplace, tikanga for the organisation as well as the principals of Te Tiriti o Waitangi. This will begin in August.

1. Contour Channel Upgrade

Background

Contour Channel floodbank was originally constructed in the early 1900s using horse and cart construction techniques. The channel intercepts runoff from the various steep streams located on the Maungatua Range and conveys this runoff by gravity to the Waipori River. The floodbank has an undulating longitudinal profile, which allows the concentration of overtopping during flood events. Floodbank failure could potentially inundate 7,300 hectares of highly productive agricultural land and Dunedin International Airport.



Figure 1: Stages 5 & 6 completed.

Q4 Project Progress Highlights

ORC staff completed a walkover in early May of stages 5-6. As-built documentation, prepared by Tonkin and Taylor, has been received and the completion certificate has been granted.

Site visit with the Calibre and landowners for stages 7-10 and bridges 12 and 14. Using this opportunity to better align the bridges with the existing farm access tracks. Discussions with the legal team around updating the titles with the new bridge information.

Appendix 6 - ORC Programme Highlights for Q4 July 2022

Draft drawings of the newly aligned bridges have been sent to the landowners for comment. After some very good discussions, the landowners have signed off on the proposed alignments so the engineer can proceed with design and consent documentation.

Draft documentation and plans have been received for stage 7-10 from the design consultants, Tonkin and Taylor. These are undergoing revision following ORC comments.

Overall, the design for bridges 12 and 14, as well as for stages 7-10 is progressing well. This is to be packaged as one piece of work along with bridge 11, with the tender process on track to conclude in September 2022. Resource consent and building consent for bridge 11 have been granted.

2. Robson's Lagoon

Background

The regionally significant Lake Tuakitoto Wetland complex, which includes Robson Lagoon, is located in the Clutha-Mata-Au catchment, approximately 7km northeast of Balclutha, Otago. The upgraded flow management structures will improve flow during flood events and provide a more sustainable habitat for local wildlife, such as native fish, and will protect the cultural values associated with the area.

Q4 Project Progress Highlights

All structures were installed in the Lagoon during the consented construction window (January – February). During May, the contractors, Fulton Hogan visited the site to alter the sluice gate (below), which is to improve the seal when the gate is in the closed position. Installation of the remaining components, including automation and telemetry devices will occur outside of this window. Due to COVID-19 related supply issues, parts for automation and telemetry have been delayed. Installation is now planned for September 2022, which will complete the project works.



Figure 2: Newly installed structure.



Figure 3: Previous structure.

3. Outram Weighted Blanket

Background

Outram's flood bank has experienced seepage during high river flows, as demonstrated in the photo below, taken during the July 2017 flood event. Seepage may threaten the long-term integrity of the flood bank and create a risk to the Outram community. Seepage will be remediated through this project by extending the flood bank toe with a weighting blanket, sealing or replacing culverts, constructing bottom stormwater drains, and refilling and sealing weak zones caused by tree roots. This flood bank forms part of the Taieri Flood Protection Scheme that prevents inundation of up to 4,000 hectares of highly productive agricultural land, Dunedin International Airport, and State Highway 87.



Figure 4: July 2017 Flood Event in Outram.

Q4 Project Progress Highlights

All landowners have now signed affected party approval forms and access agreements, allowing the resource consent for the earthworks to progress on a non-notified basis. This took longer than originally anticipated, as landowner's held concerns regarding the planning implications for their property. ORC commissioned a planning report, authored by Mitchell Daysh, to address these concerns. Resource consent approval is anticipated in July. A preferred tenderer has been selected, with tender acceptance to be finalised once resource consent has been granted and a timeline for construction finalised. It is anticipated that construction will start in the next construction window, being October.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under [section 48\(1\)](#) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
<i>Minutes of the 11 August 2022 public-excluded portion of the Implementation Committee meeting</i>	<p>To protect information where the making available of the information— would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information – Section 7(2)(b)(ii)</p> <p>To enable any local authority holding the information to carry out, without prejudice or disadvantage, commercial activities – Section 7(2)(h)</p> <p>To enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) – Section 7(2)(i)</p>	<p>Section 48(1)(a) - Subject to subsection (3), a local authority may by resolution exclude the public from the whole or any part of the proceedings of any meeting only on 1 or more of the following grounds:</p> <p>(a) that the public conduct of the whole or the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist</p>

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.