

**Agenda For The Meeting of Otago Fish & Game Council
On Tuesday 22nd July 2025
At Tapanui
Starting 12 pm with a light lunch**

Timetable	Council Meeting
11:00am	Executive only meeting
12:00pm	Lunch
12.30 pm	Meeting Begins
1.00 pm	Public Excluded Session
2.30 pm	Open Meeting Resumes
2.45 pm	Afternoon Tea
3.00 pm	Public Forum and continuation of meeting
5.00 pm	Welcome Southland Fish and Game Council
5.30 pm	Light Dinner
6.00 pm	Joint meeting with Southland Council (separate agenda to be circulated)

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1.0 Present and Apologies

2.0 Matters to be raised not on the agenda

3.0 Declarations of Interest

4.0 Confirmation of Previous Minutes

**Minutes For The Meeting of Otago Fish & Game Council
Tuesday 20th May 2025
At Information Centre, Council Rooms
120 Scotland Street, Roxburgh**

1.0 Present and Apologies

Present: Adrian McIntyre (Chair), Mike Barker, John Cruden, John Highton, Vicky May, John Preedy, Colin Weatherall.

In attendance: Ian Hadland (CE), Jamie Ward (Operations Manager), Bruce Quirey (Communications Officer).

Apologies: Blair Trevathan, Conservation Board Neil Harraway.

The meeting opened at 12.30pm.

Moved: Cr Weatherall, Cr Highton

That apologies be accepted.

Carried.

2.0 Matters to be Raised Not on Agenda

- Access strategy feedback completed
- Last Council meeting covered building matters, NZC chair letter and the Council's governor vacancy – advised to leave position unfilled.
- Wānaka section sale
- North Canterbury proposal discussion carried over.

3.0 Declarations of Interest

None declared.

4.0 Confirmation of Previous Minutes

Moved: Cr Highton, Cr Barker

That the minutes of the Council meeting held on 18th March 2025 be confirmed as a true and correct record.

Carried

5.0 Matters Arising from the Minutes

None

6.0 Health and Safety Report - April/May 2025

Discussion on social media matters affecting staff. The report highlighted support provided to other F&G regional staff.

Moved: Cr May, Cr Weatherall

**That Council receive the health and safety report for April/May.
Carried.**

7.0 Items Requiring Decisions

7.1 Licence Fee Recommendation 2025-26

Council considered NZC's proposed licence fee increases:

- Adult Whole Season Sports Fish licence: \$161 (increase of \$5)
- Adult Whole Season Game licence: \$120 (increase of \$4)
- Non-Resident Whole Season Fishing licence: \$300 (increase of \$30)
- Sea-run salmon licence endorsement: \$5 (no change)
- Designated Waters Licence: \$5 annual/\$40 day (no change)

Concerns raised about lack of transparency in NZC expenditure and inadequate justification for non-resident fee increases. If fees were not increased, operational expenditure would need to come out of Council reserves. An NZC-commissioned cost-optimisation report was expected to be completed in June. Council expressed need for mutual transparency and bird flu contingency planning.

Moved: Cr Highton, Cr Preedy

That Council support the proposed licence fee structure as outlined in the NZC paper.

Carried (Cr May against)

7.2 Bendigo Wildlife Management Reserve Draft Management Plan

The Operations Manager said two submissions were received focusing on opportunities to showcase biodiversity and maximise hunting access. It had been agreed a yet-to-be-completed cycle trail would be closed for the first nine days of the waterfowl season.

Moved: Cr Highton, Cr Barker

That Council adopts Draft Plan v14 as the Final Plan and submits to Minister of Conservation.

Carried

7.3 Family Licence Modernisation

There was extensive discussion on an NZC proposal to allow two primary licence holders with equal rights and independent fishing privileges. Concerns were raised about revenue impacts, administrative complexity, and lack of detailed modelling.

Cr May favoured the changes to the family licence, because the current family licence did not reflect modern family dynamics. Primary and secondary licence holders should have the same rights – both required to fish with dependents, she said. She noted that only the primary could vote and suggested both primary and secondary should vote. She wanted no restrictions to the number of dependents.

Other Councillors expressed support in general to changes but said costings were not clear enough. More research was needed. F&G had virtually reached carrying capacity of male licence holders. There was a disconnect between equality and equity. Bringing more women would be better for revenue. Equity for female anglers should be progressed with urgency. The limit on the number of dependents on family licence should be retained. It was suggested a question about the family licence could be added to the licence holder perceptions survey.

The CE said the original concept of the family licence was based on research that most people learned from family members. Since then, it had been extended to grandparents. Proposed changes would essentially provide discounted opportunities and weaken licensing. Junior and adult whole season licences would be lost. Licence category optimisation report was coming from USA. **Agreed** the timing for change was not right.

Moved (Cr Cruden, Cr Preedy)

That Council urge NZC to proceed with caution and defer decision until detailed revenue modelling, broader analysis of current licence holders, and full review by National Licence Working Party is completed.

Carried (Cr May opposed)

Moved (Cr Cruden, Cr Highton)

That the meeting move into Non-Public. - Carried.

8.0 Public Excluded Items

8.1 Draft Public Excluded Minutes 18th March 2025

Moved (Cr Highton / Cr Weatherall)

**That the Public Excluded Minutes of the Otago Fish & Game Council meeting held on 18 March 2025 be confirmed as a true and correct record.
Carried.**

8.2 Report on Health and Safety Incident

8.3 Draft Sports Fish Game Management Plan Review and Progress

Report received.

8.4 Property Update

9.0 Financial Report

Report to 30 April 2025 received. Discussion on Clutha Mata-Au Sportsfish and Habitat Trust expenses (since recovered), RMA cost reimbursements, and notable increase in Otago game licence sales (300 increase) corresponding to Southland decrease.

Moved (Cr Highton, Cr Barker)

**That the Finance Report and Licence Report to 30th April 2025 be received.
Carried**

10.0 Chief Executive's Report

The CE highlighted some key points:

- Successful opening weekend with good compliance
- Educational approach taken on lead shot regulations
- Clutha Fisheries Trust species interaction meetings progressing despite some academic resistance. Their galaxiid management discussions scheduled for July/August

Moved: Cr May, Cr Weatherall

**That the CE's report be received.
Carried**

11.0 RMA Planning and Consents Report

The CE said Regional Policy Statement submissions were progressing well through mediation. Regarding the Green Island Landfill hearing, the commissioner confirmed the need for ecotoxicology monitoring.

Moved: Cr Preedy, Cr Cruden

That the RMA Planning and Consents Report be received.

Carried

12.0 Committee & Delegate Reports

12.1 Clutha Fisheries Trust

Summary by Trust Chair received.

12.2 New Zealand F&G Council

Cr Barker reported on NZC meeting #174 including licence discussions, family licence feedback, game bird monitoring standards, and upcoming licence survey. RMA reform concerns were raised regarding the removal of environmental bottom lines.

12.3 Clutha Mata Au Sportsfish and Habitat Trust

The Trust had found a student for their scholarship for part-time PhD over five years. A research proposal development was underway.

12.4 Ngai Tahu – Paulette Tamati-Eliffe

None.

12.5 Conservation Board

Apology received. Submission made to SPGFMP.

Moved (Cr Cruden, Cr Barker)

That all committee reports be accepted.

Carried

13.0 Correspondence

13.1 NZC to Otago - Policy Feedback

13.1.1 Resource Management & Legislation Policy

The CE raised concerns about major changes to NZC's approach to RMA cases. Previously regions conducted their own RMA cases, but NZC proposed a centralised fund for smaller regions. The policy was morphing beyond RMA into other policy submissions to government.

Key concerns identified:

- Confusion between policy vs funding strategy
- Fund allocation process was unclear
- NZC might lack requisite technical skills to analyse cases compared with existing regional expertise
- Policy needed third-party technical assessment rather than NZC direct evaluation
- Current RMA reform environment might limit effectiveness of legal challenges
- The fund might be inadequate for significant regional cases

Moved: Cr Highton, Cr Barker

That Council provide feedback requesting policy edits for clarity and third-party technical assessment.

Carried

13.1.2 Draft Lone Worker Policy

The CE said the policy was not fit for purpose in its current form. Council noted this was an operational issue. Regions should maintain own H&S policies with appropriate lone worker provisions. CE would be happy to provide feedback to NZC and help to rewrite policy in a way the document could be adopted by regions.

Moved (Cr Weatherall, Cr Preedy)

That Council does not support policy in current form and authorises the CE to provide feedback.

Carried

13.1.3 Draft Health and Safety and Wellbeing Policy

No discussion on above. CE noted that the paper had been withdrawn by NZC because NZC had adopted similar policy 12 months ago.

13.2 General Correspondence In

QEII National Trust correspondence regarding covenant management was discussed.

14.0 Items to be Received or Noted

14.1 Paradise Shelduck Special April 2025

Moved (Cr Highton/ Cr Preedy)
That the report be received.
Carried.

14.2 Summary of Fishing Competitions 2024/25 Season

Moved (Cr Cruden/ Cr May)
That the report be received.
Carried.

14.3 Creel Survey and Fishing Competition Analysis of Lake Hawea

The report was returned for revision due to Council concerns about conclusions, data presentation, and historical comparison analysis.

15.0 General Business

- Discussion on karakia at meetings - no consensus reached.
- Queenstown effluent discharge inquiry requested.
- Aukaha consultation fee for SPGFMP input to be considered via email circulation.

The meeting concluded at 5pm.

Confirm Minutes

Mover:

Seconded:

Carried/Not Carried:

Recorded against (if any):

5.0 Matters Arising from the Minutes

6.0 Health and Safety Report June/July

Events/Work Requiring OHS Planning – Job hazard sheets completed.

- Spawning surveys, aerial and ground
- Wetland planting and weeding
- Contracted works concreting at Cromwell office

OHS Audits - Internal

Completed audits:

- Hazardous substances
- Staff training register
- Vehicle Hazards and safety
- Work Shops, Field equipment and PPE
- Main Hazard Register
- Ranger Support

Next audit areas:

- Boat Safety
- Office Audits

Incidents/Accidents/Near Misses/New Hazards – discussed with mitigation at weekly meetings and recorded on file if needed.

- Dunedin office – Hanover Street and path is closed for maintenance. Obey instructions and work from home if noise too great – Work now complete
- Water in board room ceiling light, stay away from it until fixed. - Landlord notified
- Outside slips and falls noted (1x)
- Minor Back Strain (1x)

Training Completed

- Staff working on VHF radio qualifications – 2 completed course
- New staff member inducted into hatchery site
- New casual staff member induct to Dunedin office

General Discussions, Actions

- Reminder of extra care on the roads due to danger from weather changes. (Frost/snow/ice)
- AED machine in Dunedin office serviced

Recommendation

- 1. To receive the health and safety report for June/July**

Sharon Milne
Administration Officer
13th July 202

Receive Report

Mover:

Seconder:

Carried/Not

Carried:

Recorded against (if any):

7.0 Items Requiring Decisions

7.1 Legislative Compliance 2024-25 Financial Year

Introduction

Council adopted a Legislative Compliance Schedule in August 2015 (see below) and continues to update this as significant legislation impacting on the organisation is adopted. The purpose of this schedule is to provide a framework for reporting on legislative compliance across relevant Acts and Regulations.

Compliance summary

Resource Management Act (RMA)

The Council holds RMA resource consents (water permits to dam, take and discharge water) for its Takitakitoa wetland. Staff report annually to the Otago Regional Council as per the consent conditions. A copy of that report is in this agenda. There have been no serious compliance issues raised to date.

Holidays Act , Parental Leave, PAYE thresholds and minimum pay changes

The Councils payroll package Xero automatically adjusts for these changes as they come into effect. The living wage also rose and that is the minimum that the Council pays any employee, including its students so it easily complies.

Amendments to Employment Relations Act

90 day trial periods are back. Any new staff have had this provision added to contracts. None exercised to date.

Financial Reporting Act 2013

As noted last year, Councils status has changed in April 2024 due to a change to the thresholds for reporting standards. The Council now needs to only comply with Tier 3 which is less onerous than the Tier 2 for public entities.

Legislative Compliance Statement

In my opinion the Council has been compliant with its legal obligations under the Acts and Regulations listed.

Recommendation

That Council notes that the Council currently complies with the relevant legislation described below.

Ian Hadland
Chief Executive
15 July 2025

OTAGO FISH AND GAME COUNCIL - LEGISLATIVE COMPLIANCE SCHEDULE			
The Council has to comply with all relevant legislation. This schedule includes the main Acts and Regulations relating to Fish and Game Council activities but is not exhaustive.			
Act or Regulations	Key provisions	Comments	Responsibility
Conservation Act 1987	S 17 s26 R, s26S s26T, s26X s26ZD, s40 (1) (5)	Council responsible for: preparation of Fish and Game Plan; compliance with Conservation Act and Wildlife Act, regulations and gazette notice conditions; preparation of Anglers Notices; appointment of staff; production of annual report; holding at least 6 meeting PA.	Chief Executive
- Fish and Game Council Election Regulations 1990	Regulation 3, 20, 26	Council responsible for: appointing a returning officer; returning officer responsible for preparing rolls and conducting elections. Council responsible for meeting post election and appointment of NZ Council member	Council Chief Executive
Criminal Procedure Act 2011		Sets out prosecution processes and procedures	Operations Manager
Evidence Act		Processes and requirements relating to prosecution processes, preparation and admissibility of evidence	Operations Manager
Public Finance Act 1989	S 43, Part 5, subpart 2, Schedule 4	Council responsible for preparation of annual report including financial statements and statement of service performance	Chief Executive Administration Officer Accountant

Public Audit Act 2001	S4	Council defined as a public entity	
Wildlife Act 1953 - Wildlife Regulations	s15, s39 (1), s44, s53, s54 Parts 2 and 3	Council responsible for: annual game season recommendations; day to day management of Wildlife Management Reserves under delegation from the Minister [Inch Clutha, Little Hoopers Inlet, Styx Basin]; exercise any written authority from the DG for taking or killing of game	Chief Executive Fish and Game Officers Rangers
Local Government Official Information and Meetings Act	Parts 2 and 7	Council responsible for conduct of meetings in accordance with Act and responses to OIA requests	Council Chief Executive
Resource Management Act 1991	Parts 3 and 6	Council responsible for compliance with the Act in terms of buildings, structures and land and water use.	Chief Executive
Employment Relations Act 2000 huma		Amended 2018 for clarity around meal breaks and 90 day trials. Further amended in 2022 to provide for 10 days sick leave.	Council (CE) Chief Executive (staff)
Parental Leave and Employment Protection Act 1987	Parts 1 and 2	Employment contract obligations in respect of parental leave. Parental leave extended to 26 weeks in 2020	Council (CE) Chief Executive (staff)
State Sector Act 1988	s 56, s58	Council responsible for being a good employer	Council (CE) Chief Executive (staff)
Health and Safety at Work Act 2015	Part 2	Council responsible for taking all practicable steps to: <ul style="list-style-type: none"> • Provide and maintain a safe working environment for employees • Ensure employees are not exposed to hazards while at work 	Chief Executive Council

		<ul style="list-style-type: none"> • Develop emergency procedures • Ensure employees are trained and supervised • Provide employees with information on hazards • Record, report and investigate accidents • Systematically identify and assess hazards • Control significant hazards 	
Maritime Transport Act 1994	Part 2	Council responsible for boat certification and safe use by staff	Operations Manager
Privacy Act 2020		Council responsible for appropriate handling of personal information notably licenceholder data; compliance reports; mail lists. CE appointed as 'Privacy Officer' in 2021	Chief Executive Administration Officer
Human Rights Act 1993		Council responsible for compliance with human rights obligations under the Act	Chief Executive Compliance Coordinator
Protected Disclosures Act 2022		Council responsible for compliance with obligations under the Act	Chief Executive
Search and Surveillance Act	S3, Part 4, s169 (2) (3), s171, s172`	Council responsible for compliance with obligations under the Act including annual reporting on exercise of surveillance powers during ranging.	Rangers and F&G and staff. Chief Executive
Holidays Act 2003		Employment contract obligations in respect of annual leave and public holidays. Changes proposed next year	Administration Officer Chief Executive
Crown Entities Act 2004	s25	Council responsible for exercise of its powers and performance of functions under the Act and other Acts	Chief Executive Council

Income Tax Act 2007	Parts CX and RD	Council responsible for FBT returns and PAYE deductions and returns	Administration Officer Chief Executive
Goods and Services Tax Act 1985	Parts 2 and 3	Council responsible for GST payments, deductions and returns	Administration Officer Chief Executive
KiwiSaver Act 2006	Parts 2 and 3	Council responsible for enrolment of staff in Kiwisaver	Administration Officer Chief Executive
Financial Reporting Act 2013	Part 2	Council is responsible to ensure it meets the requirements of Teir 3 reporting standards for public entities	Council Chair/CE

Otago Fish and Game Decision

Mover:

Seconder:

Carried/Not Carried:

Recorded against (if any):

8.0 Public Excluded Items

- 8.1 Draft Public Excluded Minutes for 20th May 2025**
- 8.2 Ratification of Extraordinary Meetings and Confirm Draft OF&GC Public Excluded Minutes from 11th June and 24 June 2025**
- 8.3 Building Update**
- 8.4 Otago Property Reserve Expenditure**
- 8.5 Report on the Bendigo Ophir Gold Project**
- 8.6 Update on the Collaboration Agreement between Otago Fish and Game Council and Friends of Bullock Creek Trust**
- 8.7 Habitat Enhancement Fund Application – Hill**
- 8.8 Opening Weekend Incident Update**

9.0 Financial Report

Draft Finance and Licence Sales to 30th June 2025

9.1 Finance Reports

The financial Profit and Loss report and Balance sheet for the period from 1st September 2024 to 30th June 2025 for the 2024/25 financial year are below.

Profit and Loss

Income

Licence Income

Fish licence revenue from the profit and loss statement 30th June 2025 totals \$2,120,159 (Fish sales \$2,078,142 + Designated Water licence \$42,017) compared with \$2,068,510 for the same period of the 2023/24 season. Licence revenue is ahead 2023/24 season by \$51,649.

These figures include both resident and non resident sales.

The budget for fish licence sales is \$2,090,400 for the full year.

Central South Island Fish and Game and North Canterbury Fish and Game's Councils have a sea run Salmon Endorsement Project. We have sold 382 Sea Run Salmon endorsements with a value of \$1,660.87 (GST excl). These funds will be returned to them.

Game licence revenue from the profit and loss statement 30th June 2025 totals \$412,698 compared with \$368,679 for the same period of the 2024 season. Game licence revenue is ahead by \$44,019.

The budget for game licence sales is \$380,682 for the full year.

Other Income

Total other income to 30th June 2025 is \$180,566.

Areas of interest are:

- Clutha Mata-Au Trust – is reimbursed OF&GC work done on the trust research projects.
- Interest - Extra term deposits from the sale of Dunedin office has kept good interest income, even with falling rates.
- Rent Received is from yard lease in Cromwell. Budgets have not yet been adjusted for the sale of the Dunedin office and associated loss in rental returns.
- RMA costs Reimbursed is NZC payment towards Regional Policy Statement work. There is no more to claim.

Donations and Grants (not in budget)

Donation/Grant from	For	Amount GST excl
Otago Community Trust	Take A Kid Fishing	\$2,900
Ricoh		\$1,000
Bayfield High School	Rod Hire	\$50
Total		\$3,950

Expenses

Expenditure at the 30th June for the 2024/25 financial year is \$3,113,243 against a year-to-date budget of \$2,675,036.

The budget was approved before expenses of Dunedin rental and building costs were planned and this includes the cost of the new build.

The main reasons for any variances are:

- Species Management – Populations Monitoring – This includes the Central Lakes acoustic survey and bird count flights.
- Habitat Protection – RMA spending includes that claimed from NZC for Regional Policy Statement work.
- Participation – Most fish training events and gun club shoots for the year have been attended, we had a grant of \$2,900 from Otago Community Trust towards Take A Kid Fishing events. Back country surveys have cost less than expected.
- Public interface. Weekly fishing newsletters have been extend to non budgeted fortnightly game hunting news. Communications strategy has a budgeted reserve to spend from.
- Compliance – No court costs to date. Ranger training has not yet occurred.
- Licencing – Commission is made up from 5% agent sales commission and bank fees associated with online sales.
- Council expenses – five council meetings and two extra ordinary meetings have been held, plus a meeting with the minister. Travel and accommodation cost have increased. This project area will be overspent by some margin at year end.
- Planning and Reporting – Some end of year accountancy assistance and the audit.
- Over Heads/Administration- Staff expenses - Staff training cover new staff training, boat masters and VHF radio courses plus some university studies, Staff clothing shirts and jerseys, Staff employment expense is high from assistance in employing new staff members.
- Office premises – This now includes office rent in Dunedin, not part of the approved budget. Also includes office insurance, cleaning, power, rates and rental of off site storage. Office equipment – Two chest freezers purchase as extras.
- General Expenses – includes extra payment approved in confidential agenda.
- Approved Reserves Expenses - \$30,952. This is expenditure approved by the council for the Bendigo, Bullock Creek, some Otago Property and RMA Reserves.
- Approved Building costs – Not in the standard budget. Costs are as planned.
- Depreciation – Depreciation year to date is \$49,667.
- Levies to NZC – paid monthly as per budget. \$1,004,906 excl GST.

The profit and loss for the 10 months ended 30th June 2025 shows a deficit of (\$406,380).

New Zealand Fish and Game Council Legal Fund Grant – Paid as Required

Agreed by the NZC June 2024 \$37,500

	To Use 2024/25	Used	Remaining
Regional Policy Statement	\$20,510	\$20,510	\$0.0
NZC Legal Fund			

Balance Sheet

Bank Funds Position at 30th June 2025

Bank	Value
ANZ 00 Account	\$155,826.01
ANZ 70 Account	\$681,394.87
ASB Account	\$75.57
Cash On Hand	\$50.00
Total	\$837,346.45

Term Investments as at 30th June 2025

Investment Bank	Amount	Rate	Maturity
ANZ 1002	\$206,150	5.15%	22 th Sept 2025
ANZ 1003			Closed June 2025
ASB 81	\$212,264	4.85%	2 nd Aug 2025
ASB 82	\$500,000	5.40%	10 th Sept 2025
ASB 83			Closed May 2025
Total	\$918,414		

Fixed Assets and Capital Expenditure

\$37,190 remained from the previous year, \$2,835 extra was budgeted for 2024/25. The asset replacement fund is at \$13,161. The total includes the purchase of a ford ranger truck and computer laptop and sales of ford ranger truck and a 4 wheel drive bike.

Land and building transactions are not part of the asset replacement fund.

Drone Purchase – Appendix 1 to this report has a funding request for a Drone purchase. At present it is an unbudgeted item. Staff seek approval for that purchase from the Councils *asset replacement fund*. Alternative sources of funding for the purchase could be the *Communications strategy reserve* and *designated waters fund*. Both of these funds have sufficient freeboard to make the purchase and the drone will obviously be used in these project areas.

Liabilities

Total Liabilities at 30th June are \$447,149.

- Other payables include visa card spending, accrued accounting and audit fee expenses and income in advance.
- Employee Entitlements includes \$47,642 of outstanding leave entitlements and accrued leave reversal from the previous year.
- Designated Waters and Salmon Endorsement liabilities are money owed to other regions for licences relating to their regions but sold in Otago.

Equity**Otago Fish and Game Reserves 30th June 2025**

Otago Reserves Movements	Balance 1 st September 2024	Income (To) Reserve	Note	Outgoing (From) Reserve	Balance 30 th June 2025
Non-resident DW Levy	\$314,913	\$42,017	1	\$17,801	\$339,129
Habitat Enhancement & Research	\$22,692	\$3,830	2	\$3,000	\$23,522
Bullock Creek Reserve Restricted Reserve	\$1,776	\$0	3	\$1,614	\$162
Bendigo Reserve Restricted Reserve	\$22,508	\$0	8	\$4,120	\$18,388
Priority Consents Reserve	\$34,190	\$0	7	\$0	\$34,190
Otago Property Reserves	\$1,008,566	\$421,843	4	\$903,104	\$527,305
Priority Plan Changes	\$24,539	\$0	6	\$4,337	\$20,201
Communications Strategy		\$62,700	5	1,458	\$61,242
Total	\$1,429,184	\$530,390		\$935,345	\$1,024,139

Note 1 Income is from designated water licence sales. \$5000 a year for five years for the Dr Donald Scott University Fund. Agreed by Council May 2021. 2024/25 is year four. 2024/25 Budget allows for \$23,000 for designated waters monitoring.

Note 2 Balance is \$23,522. Less committed but not yet paid out of \$3,000 so balance of \$20,522 available for dispersal by way of grants.

Note 3 Bullock Creek council approved OF&GC HEF funding February 2024 \$3,500.

Note 4 Otago Property Reserve – Funds from historical and recent property sales, dedicated to acquiring and maintaining land and building assets in Otago. Wanaka subdivision \$18,390 + Office build and rent \$469,020 + Cromwell drive \$4,381 + others \$2,227. Council Approved \$401,316 extra March 2025.

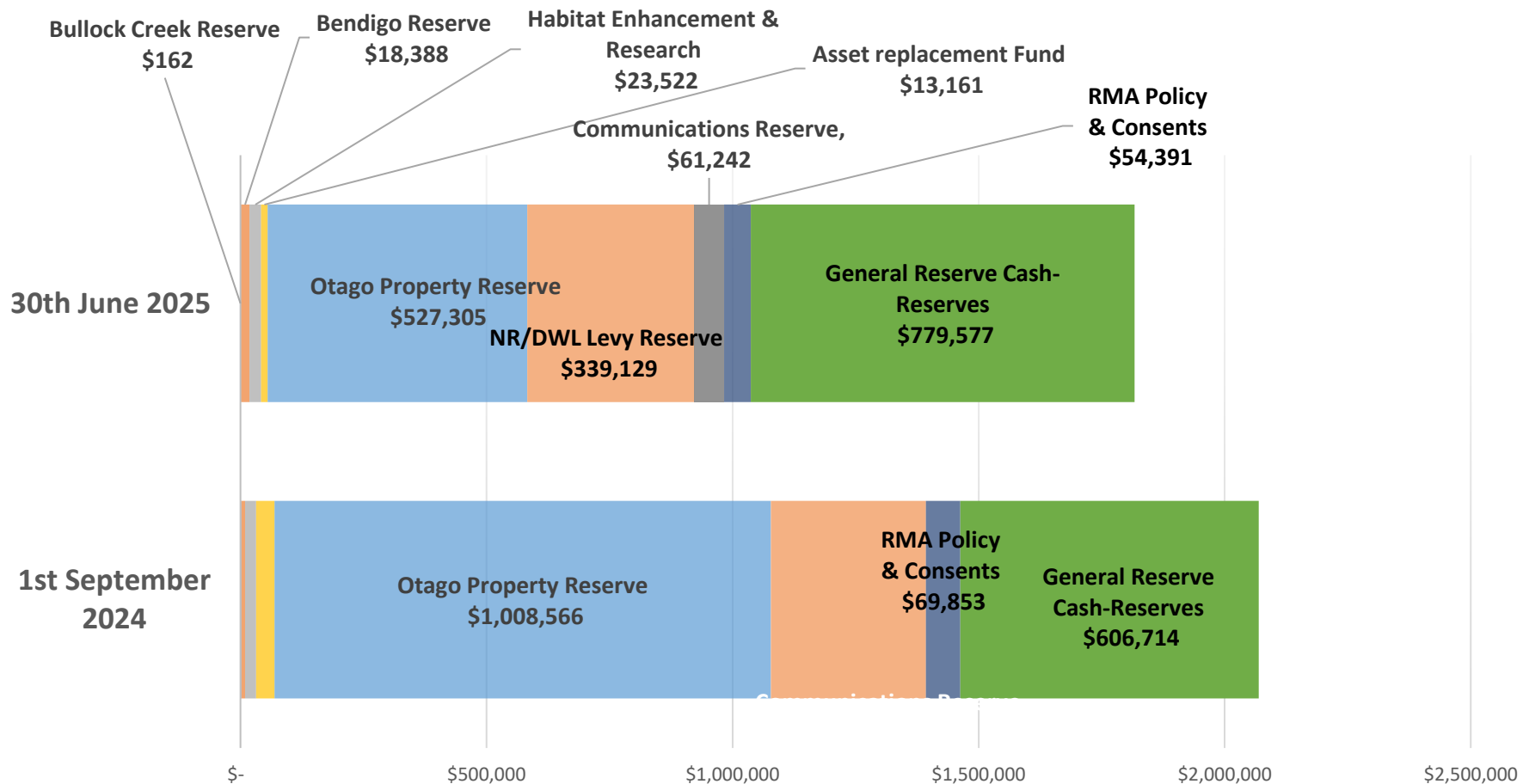
Note 5 Communications Strategy - Council approved September 2024. New Reserve.

Note 6 OF&GC agreed to \$120,000 May 2020. NZC notified. \$81,000 agreed to be spent by council September 2020. This reserve is not required now and has been agreed by council (May 2024) to be used by Regional Policy Statement.

Note 7 OF&GC agreed to \$60,000 May 2020. NZC notified. This reserve is not required now and has been agreed by council (May 2024) to be used on Regional Policy Statement work.

Note 8 Bendigo May 2022 \$3,414 and March 2023 \$3,000 council agreed to Habitat Enhancement funds. ORC 2nd Eco Fund \$5,000 June 2024

MOVEMENT IN RESERVES FROM 1ST SEPTEMBER 2024 TO 30TH JUNE 2025



Balance Sheet

Otago Fish and Game Council As at 30 June 2025

	30 JUN 2025	31 AUG 2024
Assets		
Current Assets		
Bank	837,346	1,663,253
Receivables		
Accounts Receivable	132,723	202,738
Total Receivables	132,723	202,738
GST	69,687	32,465
Investments	918,415	406,083
Inventory	27,710	27,710
Accrued Interest	6,523	6,523
Total Current Assets	1,992,404	2,338,773
Fixed Assets		
Property Plant & Equipment	2,097,339	2,124,360
Total Fixed Assets	2,097,339	2,124,360
Total Assets	4,089,743	4,463,133
Liabilities		
Current Liabilities		
Accounts Payable	198,367	80,178
Other Payables	197,283	243,926
Employee Entitlements	47,642	90,055
Rounding	-	-
Salmon Endorsement	1,661	-
Designated Waters other regions	2,195	-
Total Current Liabilities	447,149	414,159
Total Liabilities	447,149	414,159
Net Assets	3,642,595	4,048,974
Equity		
Accumulated Funds		
Accumulated Funds	3,204,580	1,548,016
Current Year Earnings	(406,380)	1,656,565
Transfer (To)/From Reserves	(192,905)	(621,979)
Total Accumulated Funds	2,605,295	2,582,601
Dedicated Reserves		
Non Resident Levy Reserve	339,129	314,913
Habitat Enhancement & Research	23,522	22,692
Priority Plan Changes Reserve	20,201	24,539
Priority Consents Reserve	34,190	34,190
Otago Property Reserve (was Historical Property Reserve)	527,305	1,008,566

	30 JUN 2025	31 AUG 2024
Communications Strategy Reserve	61,242	-
Asset Replacement Funding	13,161	37,190
Total Dedicated Reserves	1,018,749	1,442,089
Restricted Reserves		
Bullock Creek Reserve	162	1,776
Bendigo Reserve	18,388	22,508
Total Restricted Reserves	18,550	24,285
Total Equity	3,642,595	4,048,974

Profit and Loss

Otago Fish and Game Council For the 10 months ended 30 June 2025

	MAY 2025	JUN 2025	YTD ACTUAL	YTD BUDGET	VARIANCE	% OF YTD BUDGET	ANNUAL BUDGET	LAST YEAR
Income								
Licence Sales								
Fish Licence Sales	18,527	11,748	2,078,142	2,074,399	3,743	100%	2,090,400	2,052,245
Non-Resident Licence Revenue	-	-	-	-	-	-	-	1,909
Designated Water Licence Sales	152	-	42,017	-	42,017	-	-	40,340
Game Licence Sales	121,789	2,335	412,698	380,682	32,016	108%	380,682	370,260
Total Licence Sales	140,468	14,083	2,532,857	2,455,081	77,776	103%	2,471,082	2,464,754
Other Income								
Wages Reimbursement	-	-	4,691	-	4,691	-	-	15,743
Contact Energy Mitigation Income	-	-	-	-	-	-	-	90,868
Clutha Mata-Au Trust	31,000	31,296	93,296	-	93,296	-	-	-
Govt Grants	-	-	-	-	-	-	-	5,000
Interest Income	8,127	559	28,565	48,306	(19,741)	59%	57,966	59,739
Interest Income Building	-	20,527	20,527	-	20,527	-	-	-
Fines - Fishing & Game Offences	-	-	-	420	(420)	-	500	2,700
Rent Received	500	500	6,311	35,376	(29,065)	18%	42,450	45,207
Fishing Competitions	-	-	1,287	-	1,287	-	-	1,119
Depreciation Recovered on Sale of Fixed Assets	-	-	-	-	-	-	-	475,880
Donations ,bequests and other Fundraising	-	-	1,050	-	1,050	-	-	17,929
Merchandise Sales/Other	-	-	-	-	-	-	-	42
RMA Costs Reimbursed	-	-	20,537	-	20,537	-	-	16,990
Sundry Income	-	174	470	-	470	-	-	2,227

	MAY 2025	JUN 2025	YTD ACTUAL	YTD BUDGET	VARIANCE	% OF YTD BUDGET	ANNUAL BUDGET	LAST YEAR
Diversion - Habitat Enhancement and Research Fund	1,320	-	3,830	-	3,830	-	-	15,100
Total Other Income	40,947	53,056	180,566	84,102	96,464	215%	100,916	748,544
Capital Gains on Sale of Assets	-	-	(6,560)	-	(6,560)	-	-	1,202,472
Total Income	181,415	67,139	2,706,863	2,539,183	167,680	107%	2,571,998	4,415,771
Gross Profit	181,415	67,139	2,706,863	2,539,183	167,680	107%	2,571,998	4,415,771
Expenses								
Species Management								
Population Monitoring	-	-	12,236	12,500	(264)	98%	13,000	9,311
Monitor key fisheries/Research Liaison	-	-	-	1,000	(1,000)	-	1,000	-
Harvest Assessment	-	-	-	-	-	-	-	4,200
Hatchery Operations	-	-	6,243	9,278	(3,035)	67%	10,000	(6,597)
Releases	-	-	679	750	(71)	91%	1,000	951
Game Bird Control compliants	-	-	68	-	68	-	-	2,241
Total Species Management	-	-	19,226	23,528	(4,302)	82%	25,000	10,106
Habitat Protection & Mngt								
Contact Sports Fish Management Plan	-	-	-	-	-	-	-	50,492
Clutha Mata-Au Trust expenses	11,471	12,401	43,086	-	43,086	-	-	-
Resource Mngt Act	-	-	21,718	834	20,884	2,604%	1,000	17,970
Works & Management	-	(145)	6,909	10,418	(3,509)	66%	12,500	9,846
Assisted Habitat	-	-	170	-	170	-	-	-
Habitat Enhancement Research Fund Grants	2,870	-	2,870	-	2,870	-	-	21,649
Total Habitat Protection & Mngt	14,341	12,256	74,752	11,252	63,500	664%	13,500	99,957
Participation								
Access and Signage	91	75	1,726	2,484	(758)	69%	3,000	1,061
Back Country Surveys/Monitoring	3,558	-	12,801	25,000	(12,199)	51%	25,000	20,259

	MAY 2025	JUN 2025	YTD ACTUAL	YTD BUDGET	VARIANCE	% OF YTD BUDGET	ANNUAL BUDGET	LAST YEAR
Promotion Articles and Advertising	-	-	-	500	(500)	-	500	241
Publications and Web Site	-	-	120	-	120	-	-	924
OF&G Training Events	-	33	2,307	2,000	307	115%	2,000	3,020
Club Relations and Grants	-	-	899	1,000	(101)	90%	1,000	1,650
Wetland Reserve Ballots	-	-	-	-	-	-	-	22
Total Participation	3,649	108	17,854	30,984	(13,130)	58%	31,500	27,177
PUBLIC INTERFACE								
Liaison								
Liaison DoC Unin Govt CFT IWI	6	14	39	900	(862)	4%	1,000	41
Total Liaison	6	14	39	900	(862)	4%	1,000	41
Communication								
World Wetlands	-	-	97	200	(103)	49%	200	27
Total Communication	-	-	97	200	(103)	49%	200	27
Media Releases								
Advocacy Statutory	-	-	-	500	(500)	-	500	-
Weekly Fishing Reports/ social media	280	280	4,900	6,000	(1,100)	82%	6,000	4,375
Communications Strategy	-	150	1,458	-	1,458	-	-	15,398
Media Release	-	-	140	-	140	-	-	-
Total Media Releases	280	430	6,498	6,500	(2)	100%	6,500	19,773
Total PUBLIC INTERFACE	286	444	6,634	7,600	(966)	87%	7,700	19,841
COMPLIANCE								
Ranger Training and Expenses	816	-	2,282	5,000	(2,718)	46%	5,500	2,828
Compliance	-	-	-	10,000	(10,000)	-	10,000	8,250
Total COMPLIANCE	816	-	2,282	15,000	(12,718)	15%	15,500	11,078
LICENCING								

	MAY 2025	JUN 2025	YTD ACTUAL	YTD BUDGET	VARIANCE	% OF YTD BUDGET	ANNUAL BUDGET	LAST YEAR
Designated Waters IT Build	-	-	-	-	-	-	-	21,023
Agent Servicing	17	-	137	250	(113)	55%	250	252
Commission/Fees	5,227	506	87,817	98,843	(11,026)	89%	98,843	89,251
Total LICENCING	5,245	506	87,954	99,093	(11,139)	89%	99,093	110,525
COUNCIL								
Elections Council	-	-	-	500	(500)	-	500	-
Council Meetings and Agendas	227	1,972	16,281	12,500	3,781	130%	15,000	14,103
Total COUNCIL	227	1,972	16,281	13,000	3,281	125%	15,500	14,103
PLANNING & REPORTING								
Reporting/Audit	845	-	18,863	18,000	863	105%	18,000	16,156
National Liason	-	-	-	500	(500)	-	500	266
Total PLANNING & REPORTING	845	-	18,863	18,500	363	102%	18,500	16,421
ADMINISTRATION								
Salaries	74,887	74,504	740,116	818,207	(78,091)	90%	981,843	951,670
Staff Expenses								
ACC Levy	-	-	-	-	-	-	2,500	1,931
Fringe Benefit Tax	-	9,064	9,064	8,000	1,064	113%	8,000	6,156
Staff Training	1,887	748	7,883	7,000	883	113%	8,000	6,765
Staff Clothing Branded	1,235	-	1,581	-	1,581	-	-	1,358
Staff Personal Expenses	-	-	-	-	-	-	-	-
Staff Expenses	476	399	4,287	8,000	(3,713)	54%	8,000	9,120
Staff Employment Expenses	-	43	7,458	1,000	6,458	746%	1,000	5,488
Employee Assistance	-	-	-	-	-	-	-	16,000
Total Staff Expenses	3,598	10,254	30,273	24,000	6,273	126%	27,500	46,818
Office Premices	13,447	13,167	153,605	76,233	77,372	201%	87,689	91,664
Office Equipment	66	45	2,195	2,000	195	110%	2,000	3,463

	MAY 2025	JUN 2025	YTD ACTUAL	YTD BUDGET	VARIANCE	% OF YTD BUDGET	ANNUAL BUDGET	LAST YEAR
Communications	1,325	1,013	14,579	19,420	(4,841)	75%	23,200	19,740
General Exp (incl Insurance)	1,144	7,815	10,337	3,600	6,737	287%	3,600	14,350
General Field Equipment	-	-	639	2,968	(2,329)	22%	3,300	2,769
Vehicles	2,639	3,649	41,510	47,668	(6,158)	87%	55,000	51,560
Total ADMINISTRATION	97,106	110,448	993,253	994,096	(843)	100%	1,184,132	1,182,034
Approved Reserve Expense	610	2,864	30,952	-	30,952	-	-	43,052
Approved Building WIP Mosgjel	235,933	155,315	787,962	-	787,962	-	-	-
Depreciation	5,071	5,071	49,667	48,940	727	101%	58,724	56,784
Gain on Disposal	-	-	(2,342)	-	(2,342)	-	-	-
Loss on Disposal	-	-	-	-	-	-	-	1,169
NZ Fish & Game Levies	100,491	100,491	1,004,906	1,004,907	(1)	100%	1,205,887	1,161,958
University of Otago Research Grant	-	-	5,000	-	5,000	-	-	5,000
Total Expenses	464,620	389,473	3,113,243	2,266,900	846,343	137%	2,675,036	2,759,206
Net Profit	(283,205)	(322,334)	(406,380)	272,283	(678,663)	-149%	(103,038)	1,656,565

9.2 Debtors

No doubtful debts from agents.
No doubtful debts in the general accounts

9.3 Licence Sales

Fish Licence Sales 2024/25 Season to 30th June 2025

See table following for fish licence sales numbers and categories for the 2024/25 and 2023/24 season sales to the 30th June of the season.

Fish licence sales for the 2024/25 Season were delayed. Sales began on 22nd July 2024 for both online and in agencies. Prices have increased for each category and there are no category changes.

Designated Waters are \$5 per region for the season for residents and \$40 a day for Non Residents (with a limit of 5 per region)

Note that DWLR and DWLN relate to resident and non resident designated water licences (DWL) sold in Otago, some are for other regions.

In summary, 2024/25 fishing licence sales, in whole season licence equivalents (LEQs), 15,282, LEQs this season compared with 15,245 LEQs to the 30th June of the season - 37 LEQs ahead of last year.

Short term fishing license numbers have increased in all categories. All non resident licences categories have also increased.

Game Licence Sales 2024/25 Season to 30th June of the Season

See table following for fish licence sales numbers and categories for the 2024/25 and 2023/24 season sales to opening day of the season.

Sales began on the 13th March. Season prices have increased by \$3 for adults and \$1 for Juniors. The gamebird habitat charge has remained the same at \$5 per licence.

In summary, 2025 game licence sales, in whole season licence equivalents (LEQs), 4,281, LEQs this season compared with 3,932 LEQs of the previous season - 349 LEQs ahead of last year.

Otago Region Fish Licence Sales to the 30th June of the Season

2024/25

Sales	FWFA	FWA	FWNA	FSLA	FLAA	FWIA	FLBA	FSBA	FDA	FDNA	FWJ	FWNJ	FDJ	FDNJ	FWNC	FDNC	SRSE	DWLR	DWLN	Total	Fish LEQ
Public	2025	2622	618	363	421	181	45	530	2956	2803	799	66	404	142	28	100	0	1616	655	16374	8,702
Agency	1768	2613	208	816	156	95	24	154	496	671	450	23	61	49	7	33	382	1160	269	9435	6,580
Total	3793	5235	826	1179	577	276	69	684	3452	3474	1249	89	465	191	35	133	382	2776	924	25809	15,282

2023/24

Sales	FWFA	FWA	FWNA	FSLA	FLAA	FWIA	FLBA	FSBA	FDA	FDNA	FWJ	FWNJ	FDJ	FDNJ	FWNC	FDNC	SRSE	DWLR	DWLN	Total	Fish LEQ
Public	1938	2388	595	375	361	151	41	417	2714	2433	590	44	414	134	18	85	0	1531	644	14873	7,997
Agency	2074	2955	212	755	153	86	19	154	518	737	387	12	66	41	12	34	512	1397	138	10262	7,247
Total	4012	5343	807	1130	514	237	60	571	3232	3170	977	56	480	175	30	119	512	2928	782	25135	15,245

FWFA (Family), FWA (Adult season), FWNA (Non Resident season), FSLA (Senior Loyal), FLAA (Local Area),FWIA Winter, FLBA (long Break), FSBA (Short Break), FDA (Adult Day), FDNA (Non Resident Adult Day), FWJ (Junior Season) FWNJ (Junior non resident season), FDJ (Junior Day), FDNJ (Non Resident Junior Day), FWNC (non Resident Child season) FDNC(Non Resident child Day),SRSE(Salmon Endorsement),DWLR(Designated Waters Resident),DWLN(Designated Waters Non Res) Some of the DWLs sold are for other regions, and other regions have some of ours

Otago Region Game Bird Licence Sales to the 30th June of the Season

2025							
Sales	GWA	GWJ	GWC	GDA	GDJ	Total	Game LEQ
Public	1041	165	74	41	2	1323	1,082
Agency	3147	244	94	21	1	3507	3,200
Total	4188	409	168	62	3	4830	4,281

2024							
Sales	GWA	GWJ	GWC	GDA	GDJ	Total	Game LEQ
Public	766	109	58	53	5	991	798
Agency	3087	229	80	12	0	3408	3,134
Total	3853	338	138	65	5	4399	3,932

GWA Full Season Adult, GWJ Full season Junior, GWC Full season Child
 GDA Adult Day, GDJ Junior Day

- Species Monitoring
 - [Salmonid spawning and population counts](#)
 - Gamebird pond counts
 - Conduct nest and brood surveys with the use of thermal cameras
 - Investigate potential for quail and chukor population monitoring
- Communications / Landowner liaison
 - High quality aerial shots for communicating ideas and [emphasising the importance of habitats and species](#)
 - Assisting catchment groups, farmers and iwi with high quality maps for shared projects
 - Quantifying extent of crop depredation.

Scope of Use

Drones are often proposed as alternatives to ground, plane, and helicopter counts. It is important to define their specific role. Current uncertainties in our large-scale population monitoring are primarily due to the proportion of habitat that can be surveyed within time and budget constraints. Present drone technology does not resolve this issue, as consumer-grade drones have a range of under 10 km, and commercial drones are limited to roughly 20 km.

For comparison, our region-wide mallard monitoring—a relatively small programme—requires approximately 4.5 hours to cover nearly 500 km of flight. Paradise shelduck counts require travel of about 1,250 km. Using drones with current technology would significantly increase the time required for these broad-scale surveys.

In terms of fish and redd counts, staff experience from helicopter surveys is while colour differential is part of identification, the 3d aspect of surveying is important. This is noted that obvious redds, spotted in person from the bank are harder to distinguish when looking at photos of the same perspective.

Therefore, a drone is not a replacement for existing helicopter or fixed-wing aircraft surveys. Instead, it creates a new capability: repeatable, high-resolution monitoring at the single-site or small catchment scale, providing data that is currently too costly or impractical to obtain.

Analysis of Options

The [DJI Matrice 4 series](#) provides a balance between cheaper consumer-grade drones and high-end commercial drones. They offer good quality cameras, easy controls and modern collision avoidance. This series comes in two main models, either of which would cover most F&G use cases:

Option 1: [DJI Matrice 4e \(Mapping Focused\)](#)

Cost: \$9,999 for a combo that includes four batteries, mapping software (DJI Terra Pro for 12 months) and one year of insurance (DJI Care Enterprise Plus).

Primary Function: The 4e is optimised for creating high-quality, [GPS-referenced maps \(photogrammetry\)](#).

Advantages:

Superior mapping quality due to:

High sensor size (4/3-inch).

Mechanical shutter that prevents motion blur, enabling greater area coverage per battery.

RTK module as standard for higher-precision mapping, although this would require an additional base station in most areas

Lower purchase price.

Consideration: This model has a separate zoom camera but no integrated thermal sensor.

Option 2: [DJI Matrice 4t](#) (Thermal/Species Focused)

Cost: \$13,199 for a combo that includes four batteries, mapping software (DJI Terra Pro for 12 months) and one year of insurance (DJI Care Enterprise Plus).

Primary Function: The 4t uses a [thermal camera alongside a standard camera](#), which could assist species detection.

Advantages:

Thermal imaging capability allows for:

Easier detection of warm-bodied animals (e.g., game birds), which can then be identified using the main camera.

[The ability to find and count broods under wetland cover.](#)

The mapping of thermal refuges in rivers.

The potential to identify wetland damp spots on high evapotranspiration days.

Disadvantages:

Lower quality mapping sensor, meaning flights need to be flown lower and slower, limiting the quality and area covered per battery.

Higher purchase price.

Implementation and Associated Costs

Insurance: The recommended packages provide one year of DJI Care Enterprise Plus. This allows for two drone replacements for a set fee (~\$500 for damage and ~\$2,500 for an unretrievable drone). This coverage can be extended for up to three years at an approximate cost of ~\$1,300 per year.

Software: Mapping software is expensive however free open-source options exist. The provided options come with a year's subscription to top of the line software giving us time to investigate cheaper alternatives. Hosting layers to share with licence holders and other stakeholders may have costs associated.

Training and Certification: There will be time (~25 hr pp) and costs associated with staff training. To fly over private land without landowner authority or beyond the operator's line of sight requires Civil Aviation Authority (CAA) Part 102 certification, which costs approximately \$1,300 - \$1,800 per operator.

Data Management: Drone operations will generate large data files. Adequate computer processing power and digital storage solutions will be required to manage and analyse the imagery and maps effectively.

Risks

Drone Loss or Damage: This is mitigated at least initially by the DJI Care package detailed above.

Technological Obsolescence: While drone technology evolves rapidly, the proposed enterprise-grade model will likely remain a capable and relevant tool for its core functions for many years.

Regulatory Changes: Central or local government may impose further flight restrictions. Staff will be required to remain current with all CAA, DOC, and local authority regulations.

Discussion

Both models cover most identified F&G use cases, with the key choice being between thermal capabilities or improved mapping capabilities. North Canterbury F&G currently run the previous model of thermal, the 3t, and are very happy with its performance. They make use of the thermal camera to help find ducks on some of their paradise shelduck counts however do not currently make use of the mapping functions.

For Otago, the expected primary use is to establish robust, long-term monitoring of our key habitats. This concentration on habitat first will support secondary applications, such as counting gamebirds in high-density areas and other species monitoring. It is expected that there would be more focus on mapping to create long-term, comparable datasets on our wetlands and river systems. High-quality maps are a foundational tool that can support a wide range of projects, from riparian health assessment to monitoring the success of habitat enhancement work. Consequently, we recommend the purchase of a mapping-focused drone to maximise the quality and coverage of these essential datasets.

While more advanced modular systems exist (costing upwards of \$20,000), that could cover all use cases, including, mapping, thermal, multi spectral and LIDAR, they would require further investigation to recommend.

Recommendation

Council purchase a DJI Matrice 4e combo for \$9,999 (inc GST)

10.0 Chief Executives Report

10.1 SPECIES MANAGEMENT

Monitor fisheries

Spawning surveys have been undertaken for both trout and salmon. Two rounds of aerial flights of the Clutha River/Pomahaka have been completed with plenty of trout spawning being noted. No salmon were seen.

A report on drift dive results from Lakes tributaries is presented in this agenda and has a number of recommendations to discuss.

Gamebird monitoring

Shoveler and Pukeko monitoring is due to be completed in August. These will be reported on in the new year alongside harvest information which helps inform decision making for the Game Regulations.

Regulations

The changes to the Anglers Notice for Otago has been forwarded onto New Zealand Council and now awaits Minister signoff. The triennial review for the gamebird gazette notice has begun with initial correspondence being distributed seeking early feedback, including to iwi. There has been no feedback to date.

Species interaction

We have been supporting the Clutha Fisheries Trust in trying to bring together a group of practitioners and academics to discuss future galaxiid protection in Otago. The initial proposal was met with some resistance which was unfortunate. It is now scheduled for September.

A cover note in this agenda summarises the ORC report on galaxiid protection in Otago and trout removals. The full report has been circulated to Crs. I suggest we invite Mr Ravenscroft to present his findings to the council at the next meeting.

Harvest Assessment

Staff (including the CE!) have been making the fortnightly calls to hunters this year as part of the national harvest survey, and also asking additional questions related to satisfaction and the regulations. The results will be reported to the next meeting of Council.

Hatchery Operations

The consenting, or otherwise, of additional mining ground at Macraes by OceanaGold may have an impact on our joint venture hatchery. Staff are watching the matter closely to see if there will be a need to relocate the Trout hatchery at short notice. Alternative sites of a hatchery are being explored.

10.2 HABITAT PROTECTION AND MANAGEMENT

Mata Au Sportsfish and Habitat Trust

As you know, our staff have been contracted to undertake a number of salmon related projects on behalf of the Trust. Angler surveys around the Roxburgh Dam are complete and eDNA kits have been deployed and retrieved to help better understand salmon spawning in the upper Clutha lakes tributaries.

RMA (Resource Management Act) planning and Consents

See separate report

Clutha Lagoon

One meeting has been held with ORC staff on a potential enhancement project for Clutha Lagoon. Even at this early stage it appears to be a very complex site with drainage schemes, flood schemes, water quality and hydrology issues. Add in planning issues such as being a regionally significant wetland, housed in the designated coastal marine and natural hazard area and you can begin to see how this project will be far from straight forward.

10.3 USER PARTICIPATION

Designated Waters implementation

The Designated Waters monitoring is nearly complete for the season. Use of our controlled fishery has again been light, but this will be confirmed when the final reporting is completed for the September meeting.

Access

Staff have been reviewing current access points and looking for gaps in the access network to rivers and lakes. A core part of this is inspecting the current signage and documenting this electronically. It is progressively being added to the access layer (web map) which appears on the home page of the F&G website.

Newsletters

Our fortnightly ezine *'The Game Call'* has been distributed to game licence holders during the season and has an open rate of 64% which is very good. The content has been excellent and a great way to directly engage with our hunters.

The second direct e-newsletter to F&G stakeholders showcasing recent Otago F&G Council activity has also had a very good open rate of 64%. This is also well above the industry standard.

The content for the next fishing issue of the Fish & Game magazine has been written and the magazine will be distributed in mid August.

10.4 PUBLIC INTERFACE

Media

It has been a busy period media wise, especially with print media. The articles on social media content continues to attract good audiences and positive feedback. The article on the upper Clutha native fish work funded through the Donald Scott Memorial Fund was particularly popular with the story being reported nationally.

Communications Strategy

The communications implementation plan is presently being followed and the output has been strong across all of our priority areas.

Staff have been attending catchment group meetings and the operations manager has had regular dialogue with the Otago Catchments Community group, a coordinating body for all Otago catchment groups. The Communications Officer has managed to get a positive F&G article about our wetland enhancement work into their Otago newsletter.

10.5 COMPLIANCE

Prosecutions

All offences to date have now been resolved via diversion with no cases progressing to court hearings.

10.6 LICENCING

Licence sales

Gamebird season sales were well up in Otago this year. Some of that is likely to be Southland hunters buying in Otago.

Family Licence changes

The NZC resolved to change the family licence structure, and pricing, with little or no modelling on the impact. If the Minister approves the changes, this could have an impact on compliance, customer behaviour in terms of switch categories, and revenue. These were issues Otago (and other regions) highlighted in its submission to NZC on the proposed changes. We will need to watch this closely. Staff look forward to further advice on the roll out of the changes, including how NZC propose to update our agents.

10.7 COUNCIL

Next Council Meeting

The next Council meeting is on **23rd September 2025** in Cromwell.

Otago Fish and Game Council Meeting 22nd July 2025

Meeting with the Minister

There is an online meeting proposed with the Minister of Hunting and Fishing on the for the **29th July from 7pm**. Staff will open the office in Dunedin for Councillors to attend as a group and I'll try to get additional links to the meeting for remote access of out-of-town councillors. The chair will canvas Cr's for questions ahead of the meeting.

Property Update

Renovations to the Cromwell yard space which were approved in March will be complete by the time of the meeting.

The Wanaka section sale is now complete and the Dunedin office shift is progressing (see separate report in confidential agenda)

10.8 PLANNING AND REPORTING**Audit**

The contract with BDO for the next four years of audits has been signed off - not that there was a choice as these auditors are appointed by the Auditor General so there is no opportunity to shop around. Audit costs are projected to rise from \$16,800 to over \$18,000 in the next 4 years.

Recommendation

That this report be received

Ian Hadland
Chief Executive
July 2025

Otago Fish and Game Receive Report

Mover: _____ **Seconder:** _____

Carried/Not Carried: _____

11.0 RMA Planning and Consents Report

9 May – 15 July 2025

Current Legislation, Policy and Planning Processes

Otago Regional Policy Statement (ORPS)

An update can be provided in the public excluded section of the meeting if required, as RPS processes are being mediated. However, I can relay that the mediation sessions have wrapped up and the remaining mediation work is in sorting paperwork to go to the Court.

Aside from staff attending mediation, there has been no significant progression since the Council last met to discuss these processes.

Sports Fish and Game Management Plan (SFGMP) 2025

Staff are still awaiting a response from the Minister about the proposed delay. Letters to the parties who participated in the early consultation process have been held off until the Council receives confirmation from the Minister of this approach.

Macraes Mine – Phase 4

Oceana Gold has applied for a resource consent to re-mine tailings at its Macraes Mine. This will expand the life of the mine from its planned imminent shutdown – intended to be around this year – until around 2030. The plan involves moving waste rock stacks and alterations to existing pits, as well as ancillary actions like working on silt ponds and constructing roading.

The mine is located in the headwaters of the Taieri, Waihemo/Shag and Waikouaiti Rivers.

The adverse effects of the project are significant, including on surface water where there are fishable populations of trout. In her analysis based on expert advice, the ORC's s42A author states her opinion that:

- the current consent conditions for the operation will impose significant adverse effects on surface water and aquatic ecosystems in mainstem rivers downstream of the mine due to the discharge of contaminants;
- surface water discharges of contaminants will peak up to 200+ years in the future;
- the modelling underpinning the predicted discharges is not reliable; and
- there is considerable uncertainty about whether even partial mitigation of future adverse effects will ever be enacted.

There are additional significant adverse effects closer to the mine site where terrestrial aquatic ecosystems will be lost completely and endangered animals placed at potential risk. These have been more closely reported, such as the observation of an endangered moth and the loss of skink habitat.

A significant complicating factor that the timeframe of the contaminant discharges is hundreds of years. The s42A author has stated uncertainty in modelling across this timeframe, uncertainty about what Oceana Gold intends to do in the timeframe in terms of mitigation and an inability to hold them to certain actions across such a long timeframe because of limitations in the RMA.

The phase 4 application will need a raft of consents from the Otago Regional Council, Dunedin City Council and the Waitaki District Council in order to proceed. To date, s42A authors from each consenting authority have recommended declining the respective consents.

F&G submitted in a neutral capacity to raise concerns about the about issues and the impact on licence holders. Staff made contact with Oceana Gold prior to the submission being made so it was not a surprise.

Councillors should also be cognisant of the impact that mine closure will have on the operation of the F&G hatchery at the site. This is not an RMA matter but I understand that the CE has covered this in previous Council meetings.

National Direction

The Central Government is currently consulting on an immense raft of changes to national policy direction documents, such as National Policy Statements, National Environmental Standards and regulations made under the Resource Management Act. The scale of these changes is unprecedented and they precede a re-writing of the Resource Management Act. They include significant changes which will impact upon the fish and game resource and licence holders and there is a wide scope within the changes that will affect the degree of that impact.

RM staff from across the country have been putting together a joint submission on these changes.

Current Notification Processes

Applicant	Activity	Outcome
Otago Regional Council notifications		
Oceana Gold (New Zealand) Limited	For the site wide expansion of mining activities at Macraes Gold Mine, including the discharge of contaminants to the Taieri, Shag and Waikouaiti catchments.	Please see the above section on Macraes Mine – Phase 4.

Written approval provided during the period

Applicant	Activity	Outcome
Otago Regional Council applications		
Ben Hohneck and Murray Sarginson	To suction dredge in the Shotover River	Conditions to protect spawning in the tributaries of the Shotover were agreed with the applicant and affected party approval was provided.
Blackhead Quarries Limited	To discharge water and contaminants from stormwater runoff and truck washing at the Logal Point Quarry to the Ōpoho Creek	After discussing the adverse effects with the applicant, affected party approval was provided. This consent is a continuation of a previous consent, in which F&G had already negotiated discharge standards intended to protect the values of the creek and the Water of Leith.

No written approvals were provided during the period for consents from the following bodies:

- Queenstown Lakes District Council
- Central Otago District Council
- Dunedin City Council
- Clutha District Council
- Waitaki District Council

Recommendation:

- 1. That this report be received.**

Nigel Paragreen
Environmental Officer
15 July 2025

Otago Fish and Game Receive Report

Mover:

Seconder:

Carried/Not Carried:

12.0 Committee & Delegate Reports

12.1 Clutha Fisheries Trust

- Re inviting to potential participants of Strategic workshop for protection of non migratory galaxiids . Looking at mid November
- Trustees to continue to support Donald Scott Memorial
- Trust continued support for Bendigo Wildlife Reserve works
- In the interest of trustee succession Trust looking at appointing/ recommending for appointing at least two more trustees - looking for younger, passionate/energetic and suitably qualified members that recognize and want to protect and enhance the values of the trust deed
- Some trustees attended Murray Neilson's funeral. In accordance with family wishes Trust has donated \$500 to Sinclair Wetlands Trust
- Next meeting September

12.2 New Zealand Fish and Game Council

Meeting #175 Summary

1. Licence fee consultation.

All regions aside from Northland had recommended the proposed licence fee increase be accepted

Passed unanimously

2. Family Licence Modernisation:

Approved Option 2: Modified Implementation with Financial Safeguards Beginning 2025/26

Approach: Implement changes with pricing adjustments to mitigate revenue risk:

Phase 1 (2025/26 season - immediate):

- Change field names to "Adult 1" and "Adult 2"
- Require at least one child on the licence
- Update licence description for equal fishing rights
- Price at same ratio as the Taupō fishery at 1.52 of two adult licences (increase from current \$203 to approximately \$245, our current rate is 1.3)
- Single email address for 2025/26 only

Phase 2 (2026/27 season):

- Individual communications and voting registration

Advantages:

- Immediate action on discrimination issues
- Significantly reduces financial risk through pricing
- Maintains family focus of licence
- Allows phased technical implementation
- Addresses regional concerns about revenue

Disadvantages:

- Higher price may deter some families

Risk mitigation:

- Monitor price elasticity closely
- Review pricing after one year
- Clear communication about value proposition
- Consider targeted promotions for families

3. Anglers Notice regulation Changes

All proposed regional changes accepted

4. Mallard Grey duck monitoring policy

Put on hold until development of a SOP for game bird monitoring is in place.

5. Draft policy consultation.

Resource Management and Legislation

Health, Safety and Wellbeing

Fatigue Management and Support

Lone Worker Support

Feedback on these four policies has raised some significant issues and staff believe that the creation of a revised draft policy is warranted. This will allow an opportunity for the input to be considered and incorporated and for regions to comment again.

6. Rebalancing Governance and Management Functions

Purpose

This paper addresses the need to clarify decision-making accountability between Fish & Game governing councils and their managers and to promote greater national/regional collaboration. To that end, it identifies the need to rescind a previous NZC decision (2004) to endorse a so-called 'Managers Accord' and to consider a more formal arrangement for the 'Regional Chairs Forum'.

Barrie also mentioned that the Chairs meetings are somewhat unstructured, have no agenda and no minutes are taken. He suggested that these meeting could/should be better managed. In addition a better Chairs forum structure, the minutes of which could be reported back to the NZC, might provide a mechanism to convince the minister that there is stronger liaison between the Chairs and the NZC removing the need for the NZC to be made up of only regional chairs.

Passed unanimously

7.0 National Fish & Game Health, Safety & Wellbeing Framework

Advice from a HS&W specialist is that we do not currently meet legislative requirements with our H&S committee or our national framework.

The current method of developing policy for HS&W is ineffective and fails to meet the legislative requirements for employee engagement.

Engagement at the regional level with national policy is fragmented, and there is little sharing across regions with effective systems such as TrackMe or learnings of best practice.

It is more than timely that we establish a practical framework that is sustainable and establishes a culture of continuous improvement and accountability.

NZC is required to provide a national policy on HS&W and to consult with regions on this. This proposal recommends that policy be developed with staff in each region trained in employee engagement, alongside a HS&W specialist enabling the consultation phase be one of working together to develop policy rather than review after the fact. This should result in better alignment of a framework with regional needs.

Determine the cost of engaging a HS&W consultant to provide advice, ensuring the framework meets best practices, most recent legislative requirements, and incorporates learnings from incidents such as Whakaari / White Island.

8.0 Governance Training Report

A report was tabled from Dr Andrew West on the governance training that he has provided to Councils.

These workshops were originally timed to be held across an intensive period of November-December 2024, coming reasonably soon after the ward elections of a number of new-to-governance Regional Councillors, the intention being to ensure a base degree of understanding across the Councils of all Regions of the roles, responsibilities and accountabilities assumed by Regional Councillors.

The following Regions that requested & attended a Governance Workshop

Auckland-Waikato Nov 24
Wellington + Taranaki Jan 25
Eastern Feb 25
Southland May 25

Regions that did not requested a Governance Workshop

Northland
Hawke's Bay
Nelson-Marlborough
North Canterbury
Central South Island
Otago
West Coast

There may still be a possibility for those Council that did not take up the offer of Dr West's training the opportunity to do so.

Several Chairs have asked requests a workshop focussed on Governance training specifically for Chairs and this will be provided at the Chairs meeting to be held in parallel with the NZC meeting next February.

9.0 RMA Update

The New Zealand Council:

1. Approved 4 new RMA of \$30,403, \$23,845, \$46,000 and \$12,000 from the RMA fund.

As of 30 April 2025, the RMA fund has committed funds of \$428,426. The remaining uncommitted funds of \$192,303 are available for new cases, including the above applications. This is aside from the proposed (to be approved) RMA top up of \$100k in the new financial year (1 September 2025)

10. Southwick report

An explanation of price significance in NZ's fishing and game licences

– This report was presented but not discussed at the meeting uses 2006-2024 license sales data provided by the NZ F and G Council to model the effect of price on four selected fishing license types, as well as the game bird hunting license. These were all licenses that account for a significant amount of revenue plus had sufficient years of sales data necessary to develop reliable price models. The goal was to determine the expected impact of price hikes on license sales in terms of units and dollars.

Their conclusions “Price changes do not appear to have affected sales of any of the five selected licenses. The demand for licenses has remained stable even considering inflation. Therefore, revenues after future price increases can be expected to increase proportionally with any price changes, as long as they are within the range of past price changes which by policy generally mirrors inflation and were never greater than 9.6% during the study period. For example, a 5% increase in the price of the Whole Season Adult fishing license should result in a 5% increase in revenue from that license”.

Summary from Richie Cosgrove:

- *In no cases was price determined to have a significant effect on Licence demand*
- *Charts show that the real inflation-adjusted price has changed less over time compared to the nominal price.*
- *More commonly than price , external and uncontrollable variables had significant effects on licence demand such as rainfall and temperature.*

In a teams meeting with the researchers, they stated that our method of annual increases and ratios of different licence types has kept us (in most instances) up with inflation and is a much better approach than American agencies. They also stated that pretty much all American

agencies will be wanting to use this data to move from a somewhat sporadic licence fee increase regime to an annual one because of the benefits that our modelling has shown them.

My colleague in the NZC Research Sub Committee (also a statistician of some note) states *“The conclusion that “so long as future price rises stay within the past range of increases (less than 9.6%) we can expect sales to be unaffected” while it may be true, is a stronger conclusion than is supported by the evidence Southwick have provided”*

A couple of my own views on this report:

1. I cannot understand why Southwick included rainfall as a variable in day licence sales. Surely there would need to be long periods of rain and those would need to be very regionally specific to influence day licence sales?
2. I note that in Table 1 the lowest, [and only significant P value (0.029)] is for the whole season Family Fishing licence yet this is the same licence we have just decided to increase the price for on the assurance (from Maggie?) that this increase will have no effect on revenue!

11. Meeting with Minister Meager.

The minister answered some pre-prepared questions put through the Chair (Barrie Barnes) and this was followed by a presentation by Patrick West-Oram one of the Minister’s staff summarising the legislation covering the proposed new Bill and further questions were answered by Sam Thomas the Policy Director for DOC.

Mike Barker
Otago NZC Delegate

12.3 Ngai Tahu

12.4 Conservation Board

12.5 Clutha Mata Au Sports Fish and Habitat Trust

12.6 Tiaki Maniototo

13.0 Correspondence

13.1 NZC to Otago



9 July 2025: Summary of F&G NZC meeting 175.

The F&G NZC meeting 175 was held in Wellington on the 28/29JUN25. It was Richie's first meeting as ACEO. We had a substantive agenda and a visit from the Minister, and for Richie it was something of a baptism of fire.

The key issues on the agenda were confirming the licence fees and anglers notice, changing the definition of a family licence, discussion of the continued applicability of a managers accord, consolidated annual reporting, councillor training, developing a shared understanding of the health and safety framework and our current level of health and safety compliance. We also had past CEO Corina Jordan attend to present the draft outcome of the Cost Optimisation work and to discuss issues for the wider sector. The Minister and his DOC staff visited following the meeting to discuss the reforms. Plus, we finally approved the 2023/24 Annual Report and Audit letter.

The licence fee was set at \$161 for an adult whole season sports fish licence and \$120 for an adult whole season game licence. While the non-resident whole season fish licence was set at \$300. While there was general comfort that these rates still offer good value for money there is a concern regarding the budget setting process. Work will be done to refine the budget process for next financial year and considering the Ministerial reforms. The NZC had previously requested the development of a budget policy. This meeting resolved that the process should include time for regions to answer written questions ahead of the NZC Budget meeting.

The angler's notice was agreed, with substantive changes to last year's notice being made by Auckland/ Waikato and Central South Island. The Auckland/ Waikato changes will increase the number of waters available for fishing, while CSI introduced a range of changes to conditions and bag limits. Changes for other regions were minor. Due to the collapse of the sea-run salmon population the season bag limit for salmon has been reduced to one salmon. More information on this issue shortly.

Changes to the family licence have been agreed to modernise the system and recognise the equal contribution of female anglers. The new family licence will allow both named adults on the family licence to fish independently, to supervise the kids fishing and to have voting rights. The presence of a child or youth on the licence is a mandatory component of a family licence, but all family members can go fishing independently. Changes were made to the fee structure so that the ratio to the regular adult licence fee matches those in the Taupō fishery (an increase from 1.3 to 1.52). This will mitigate the risk of revenue loss from introduction of the new system.

New Zealand Council

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The Manager's Accord was put on the agenda. Originally intended to improve operational efficiency and effectiveness, the 2004 Accord led to decisions being classified as operational when they really fell within the realm of governance, a blurring of governance and management roles, and weakened accountability across the organisation. There was also uncertainty about the continuing and current status of the Accord. For this reason, the Council has clarified that the accord no longer is relevant in the modern Fish and Game environment, and it was rescinded. In answer to the minister's proposal that regional chairs make up the NZC the concept of a chair's accord was also considered by NZC to meet the minister's consideration. It was agreed to pursue this.

One of the changes that has been signalled in the Ministerial reforms is the need for Fish and Game to move to consolidated annual reporting. Once this has been implemented, Parliament and the New Zealand public will find it much easier to assess the performance of the organisation as a whole and compare and contrast different activities and capabilities. In preparation for the mandatory consolidated reporting from 2026, it was agreed that it would be helpful if we began to determine what a set of consolidated metrics might look like. We will soon be consulting on a trial set of metrics for implementation in the new financial year. This will tell us what information people are collecting already so we can see the quality of the data being collected and where we need to improve on data consistency or fill data gaps.

Councillor training was also discussed by the Council. A report, including recommendations, by Dr Andrew West was tabled. Dr West had been previously engaged to undertake Governance training with all regional councils across the country. The Council received the information but felt that, moving forward, training could be more effectively delivered by Fish & Game Governance Advisor Graham Nahkies and HR manager Adrienne Murray. The Department of Conservation is keen that a programme of training is delivered and attended by as many governors as possible. I am going to work with Graham and Adrienne to develop a plan to ensure we meet the Department's expectations in this regard.

A conversation on the Health and Safety Framework was led by HR Manager Adrienne Murray. Despite our federal structure and regional autonomy, a national approach to health and safety is required because regulators treat us as one entity. The Council agreed that a national approach was necessary and desirable, and we would look to engage a consultant to advise on the development of a national framework. Regions

were also keen for NZC to facilitate the delivery of Health and Safety audits so we can get a clear picture around the current levels of compliance.

The CE's report mentioned that the final version of the Southwick Report arrived in the week prior to NZC meeting. This is a report looking at the impact of licence fees on licence demand and consequently, whether we can expect an increase in price to lead to a proportionate increase in revenue. The high-level findings of the report are that previous price changes have not influenced demand for any of the five selected licenses studied. The report concludes that so long as future price rises stay within the past range of increases (less than 9.6%) we can expect sales to be unaffected. More commonly than price, external and uncontrollable variables had significant effects on license demand, such as rainfall and temperature.

Corina Jordan, now CEO of GAC, provided an update on the wider sector and encouraged us to submit on the Game Animal Council (Herds of Special Interest) Amendment Bill (submissions close on 24 July). Corina was also available to talk to the cost optimisation project. A draft of the cost optimisation report was shared with NZC. There was a general feeling that this draft report may have lost some relevancy because of the amount of time taken for the report to be delivered. NZC had concerns that the draft report was overly general in its findings and that it raised more questions than solutions. However, for the records, and in order to capitalise on the insights contained in the report, the NZC was keen that the document gets finalised. The plan is to engage the support from financial advisors Leech and Partners.

Following the close of the meeting, the Minister for Hunting and Fishing, Hon James Meager, met with the NZC and quite a few visitors (including three former Fish & Game Chief Executives). This was an opportunity for the council to ask questions about the timing and content of the reforms and get an understanding of the Minister's vision for the sector. Minister Meager stayed for over an hour before having to head off to other engagements. However, his officials stayed longer and ran through a presentation. The slide show presented by officials has been circulated to Chairs and regional managers if you are interested in the contents.

There are many actions that came out of this meeting. The NZC team, led by Richie, will start working through the number of actions that came out of the meeting. Please remember I am always available for a chat.

Barrie Barnes
Chair – Fish & Game NZ

13.2 Otago to NZC

13.2.1 Feedback to Family Licence Change Proposal

25 May 2025

Chair, New Zealand Fish & Game Council - Via email

RE: Feedback on Proposed Family Licence Modernisation

Dear Barrie,

At our meeting on 20 May 2025, the Otago Fish & Game Council considered the proposal from NZC to modernise the Family Licence category. The Council appreciates the opportunity to provide feedback and welcomes the intention to review any barriers to participation.

A range of views were expressed at our meeting. One Cr felt strongly that the family licence is in urgent need of revision and any change should be made for the 2025/26 season. That person also thought that principle and secondary should be changed to Spouse 1 and Spouse 2, as one licence holder should not be viewed as being a secondary person. This Cr also feels that only currently allowing 4 children on the licence is too restrictive, as families can have more than 4 children and that grandchildren should be included in the family group.

However, the more widely held view within the Council is that while F & G should be exploring ways to encourage greater family and female participation in fishing, the current proposal lacks sufficient evidence, analysis, and planning to support implementation at this time and that the proposed changes require substantially more investigation before proceeding. The proposal, as presented, does not provide adequate clarity around its expected outcomes, financial implications, or alignment with the original intent of the Family Licence. It appears to conflate promotional strategies with structural reform of licence categories, when in fact these are separate issues that should be treated distinctly.

Purpose and Evolution of the Family Licence

The Family Licence was originally introduced to encourage shared family participation in fishing, with a particular emphasis on supporting the role of experienced anglers (often fathers or male relatives) to introduce younger family members to the sport. Over time, the category has become more flexible, but its core intent remains enabling collective participation, not offering two adults independent, full-access licences at a discounted rate.

The proposal to allow two equal primary holders, each with independent fishing and voting rights, fundamentally shifts the purpose of the licence from a family access opportunity to what is effectively a discounted double-adult licence. Otago Council is concerned this shift undermines the original purpose of the category and may introduce significant unintended consequences.

Financial and Behavioural Impacts

The consultation material suggests that revenue loss from switching behaviour (estimated at \$149,501 annually) could be offset by increased female participation. However, the supporting analysis is limited, and no modelling has been presented to validate this assumption. There is also no information on how Junior licence holders might be affected or how licence structures might change more broadly.

Otago Council considers it premature to propose major structural changes to licence categories without a comprehensive understanding of potential impacts. In particular:

- **No modelling** of switching behaviour or financial scenarios has been provided.
- **No input** appears to have been sought from the **Taupō Fishery**, which has implemented similar provisions. Their data and experience could provide important insights into revenue effects and any changes in participation patterns.
- The proposal relies heavily on a small 2025 survey of 51 members from “Women on the Fly NZ,” which, while valuable, does not represent a broad or statistically significant sample of current or potential licence holders. A small survey of secondary licence holders would have been more useful.

Concerns About Process and Timing

The Council is also concerned that the proposal is being advanced ahead of the tabling of the *Licence Category and Pricing Optimisation Report*, which is specifically intended to address these types of issues. It is difficult to understand why changes of this magnitude are being considered without reference to that body of work.

We also note that there has been no review or recommendation from the National Licence Working Party, which would ordinarily be tasked with considering category changes of this nature, and investigating implications.

Recommendations

Otago Fish & Game Council urges the New Zealand Council to take a measured and evidence-based approach to this issue. Specifically, we recommend that NZC:

1. **Defer any decision** on the proposed Family Licence changes until:
 - Detailed modelling of potential revenue impacts and switching behaviour (including Juniors) is completed.
 - A broader analysis of current Family Licence holders and their likely behavioural responses is undertaken.
 - Advice is sought from Taupō Fishery staff on their implementation experience and any resulting trends in revenue or participation.
 - The National Licence Working Party has reviewed and provided recommendations.

- The forthcoming Licence Category and Pricing Optimisation Report has been received and considered.
2. **Separate the promotional goal** of increasing female participation from structural changes to licence categories. These are both worthy initiatives, but they require different approaches, evaluation methods, and metrics for success.

Conclusion

Otago Council supports efforts to enhance participation in freshwater angling—especially among underrepresented groups—but we believe that licence category reform must be grounded in robust data and guided by a clear understanding of its fiscal and operational consequences. We are not confident that the current proposal meets that standard.

Yours sincerely,

A handwritten signature in black ink that reads "Adrian D McIntyre". The signature is written in a cursive style with a large initial 'A' and 'D'.

Adrian McIntyre,

Chairperson

Otago Fish & Game Council

13.2.2 Feedback to NZC on Lone Worker Policy

20 May 2025

CEO, New Zealand Fish & Game Council - Via email

RE: Feedback on Draft Lone Worker Policy

Dear NZC CE,

At its meeting on 20 May 2025, the Otago Fish & Game Council considered the draft Lone Worker Policy circulated for regional consultation. We appreciate the effort to enhance staff safety across the organisation. Council considered that this was an operational matter so have tasked me to prepare a response. That said, it was still discussed and our Council concluded that it does not support the draft policy in its current form and believes significant amendments are required before it can be considered for adoption – locally or nationally.

Existing Regional Systems

Otago Fish & Game currently has a well-developed and functioning lone worker system embedded within our Health and Safety (H&S) plan. While we acknowledge there is always room for improvement, the current system is effective and tailored to the risks specific to our region's operations.

We question the need for a standalone national policy when the same objectives could be more effectively achieved by supporting regions to incorporate appropriate provisions within their own H&S frameworks. A centralised policy risks duplicating existing procedures, introducing inefficiencies, and creating confusion where regional systems are already fit-for-purpose. If regions do not have those systems in place then the NZC should use its resources to support their development.

Roles, Liability, and Use of Terminology

Otago Council has consistently raised concerns about ambiguity around liability and responsibility in national policy documents, particularly where the New Zealand Fish & Game Council is not the *Person Conducting a Business or Undertaking* (PCBU) for regional councils.

This draft continues to refer generically to "Fish & Game New Zealand," a term that has no legal status under the Conservation Act or other relevant legislation. This language introduces confusion about accountability and could render the policy unenforceable. Any national guidance must clearly define the roles and responsibilities of regional councils and NZC, using statutory terminology that aligns with legal obligations.

Lack of Definition and a Blanket Approach

The draft policy does not define "lone worker," making it difficult to assess its scope and practical application. In Otago, we manage lone worker risks using a tiered, risk-based

approach based on location, activity, and duration on a project by project basis. For example:

- Overnight solo fieldwork in remote areas requires satellite communication and scheduled call-backs.
- Low-risk day trips (e.g., a local spawning survey) require recorded intentions and return confirmation.
- Office-based tasks, including working from home, require minimal oversight.

The absence of such a framework in the draft results in a one-size-fits-all policy that is likely to over-regulate low-risk tasks while offering insufficient flexibility for region-specific contexts. A more effective approach would be to define “lone worker” and provide a matrix-based model that allows regions to assess risk and apply appropriate control measures.

Recommendations

Otago Council recommends the following changes before the policy is progressed further:

1. Withdraw the current draft and recirculate a revised version that:
 - Encourages regional councils to incorporate lone worker procedures into their existing Health and Safety Plans;
 - Recognises regional councils as the appropriate PCBU;
 - Uses correct statutory titles and language throughout;
 - Defines “lone worker” in a way that reflects practical fieldwork realities;
 - Includes a risk matrix or decision-making framework to guide appropriate responses based on activity type, location, and duration.
2. Consider referring this back to the Health and Safety working group to ensure the revised policy is practically workable, legally sound, and adaptable to a variety of operational environments.

Conclusion

Otago Council supports a shared commitment to staff safety, but we do not support the draft Lone Worker Policy as currently written. We urge NZC to prioritise flexibility, legal clarity, and regional relevance in the next iteration. We remain willing to contribute to its further development and to share our region’s experience in managing lone worker risks effectively.



Yours sincerely,
Ian Hadland
Chief Executive

13.2.3 Feedback to NZC on Resource Management & Legislation Policy

27 May 2025

Chair, New Zealand Fish & Game Council - Via email

RE: Feedback on Resource Management & Legislation Policy.

The Otago Fish & Game Council discussed this paper at its May 20th meeting. Following our review, we raise the following key concerns and recommendations:

Purpose and Scope of the Legal Fund

The original purpose of the regional legal pool fund was to support RMA-related case costs at the regional level. This was a targeted and practical use of funds to assist councils engaged in statutory processes under the Resource Management Act.

The proposed renaming and reframing of the fund indicates a shift in focus toward national-level advocacy. While national advocacy is important, it should be supported through other New Zealand Council (NZC) budget lines specifically allocated for national work. Redirecting this fund from its original intent risks undermining the ability of regional councils to respond to regional statutory challenges a core function under the Act.

2. Policy vs Strategy Confusion

There is a fundamental lack of clarity around whether the proposed changes constitute a policy or a funding strategy. In practice, this operates as a funding strategy - that is, a framework for prioritising limited resources at the national level.

The proposed prioritisation matrix is helpful in theory, but its effectiveness is constrained by the ad hoc manner in which applications are received. Typically, applications are submitted one at a time throughout the year, and if funding is available, they are granted without being assessed against other potential initiatives. Rarely are multiple projects available simultaneously for comparative analysis. This undermines the utility of the prioritisation matrix as a decision-making tool.

3. Funding Process and Decision-Making

The process by which applications are evaluated and recommendations made to NZC lacks transparency and structure. Notably:

- It is unclear who is responsible for assessing applications.
- NZC appears to be making decisions without detailed analytical input.

- The organisation already has an **RMA group** with relevant expertise, yet their involvement seems limited or absent.

We recommend that the process be amended to include a **formal assessment stage** carried out by qualified staff or external contractors. This would ensure that all applications are subject to a consistent, robust evaluation before being considered by NZC.

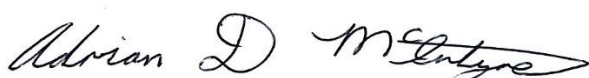
Recommendation

Otago Fish & Game Council recommends that NZC:

- Retain the original intent of the legal fund as a tool for regional statutory support.
- Fund national advocacy through other designated NZC budget lines.
- Clarify whether this is a **policy or funding strategy** and reflect that in naming and documentation.
- Introduce a structured application and assessment process, including the use of the RMA group or other expert support.

We welcome the opportunity to work collaboratively toward a funding framework that is fair, transparent, and aligned with statutory obligations and regional needs.

Yours sincerely,



Adrian McIntyre,

Chairperson

Otago Fish & Game Council

13.2.4 Feedback to NZC on Licence Fee

27 May 2025

Chair, New Zealand Fish & Game Council
Via email:

Re: Otago Response to Proposed Licence Fees for the 2025/26 Season

Dear Barrie,

Following consideration of the Licence Fee Consultation Paper at our Council meeting on 20 May 2025, Otago Fish & Game Council provides the following formal response:

Support for Licence Fee Adjustments

Otago Fish & Game Council supports the following proposed changes:

- The 2025/26 Adult Whole Season Sports Fish licence fee of **\$161** (an increase of \$5) and the Adult Whole Season Game licence fee of **\$120** (an increase of \$4), inclusive of the Game Bird Habitat Stamp and GST.
- The 2025/26 Non-Resident Whole Season Fishing licence fee of **\$300** (an increase of \$30), noting that although the paper lacks supporting analysis, such an increase aligns with previous recommendations made by this Council to increase the fees for Non-Resident anglers.
- Continuation of current pricing ratios across all licence categories.
- Retention of the **\$5 Sea-run Salmon Endorsement** as a cost-recovery mechanism.
- Retention of the Designated Waters Licence framework, with a **\$5 annual fee** for resident anglers (per region) and a **\$40 day licence** for non-resident anglers.
- Agrees with the forecasted LEQ estimates of **72,975 for fish** and **30,601 for game**. The forecasting methodology is reasonably sound.

Concern Regarding Financial Transparency

Council remains concerned about the ongoing lack of transparency in the development and presentation of NZC budgets. Specifically:

- The current process does not provide sufficient visibility into how costs are calculated or allocated.
- Regional councils are not adequately involved in the scrutiny of NZC's budgets, nor provided with opportunities to comment before decisions are finalised.

This is particularly significant given the scale of levies imposed. For Otago, the 2025/26 levy of **\$1,177,497** represents our single largest budget item.

As previous legal advice has made clear, the levy must be determined in a manner that is fair, reasonable, lawful, and consistent with the statutory purposes of the Act and the NZC has a duty to communicate that in a clear and coherent way. NZC's budget and expenditure should be subject to external scrutiny as a matter of good practice, and it should consider reinstating mechanisms that enable input from regional staff and councils.

NZC Budget Process

We hear that NZC intends to review financial policy and budgeting processes to ensure they are robust and fit for purpose. Our Council has written on that topic before and believe it is urgent. The window for policy development is now very tight if it is to be implemented before the next budget round.

Conclusion

Otago Council acknowledges the necessity of ensuring the financial sustainability of Fish & Game operations. It therefore endorses the licence fee recommendations outlined in the consultation paper, subject to the expectation that NZC will urgently address concerns around financial transparency, levy determination processes, and regional engagement. Maintaining adequate reserves as contingency for any avian influenza outbreak was also seen as important.

Yours sincerely,



Adrian McIntyre
Chairperson
Otago Fish & Game Council

**13.3 General Correspondence In
Nil**

13.4 General Correspondence Out

13.4.1 Minister Invitation to Meet with OF&G Council



13th June 2025

Hon. James Meager,
Minister for Hunting and Fishing
Parliament Buildings, Wellington 6011

Dear Minister Meager,

Re: Invitation to meet with Otago Fish & Game Council

I am writing on behalf of the Otago Fish & Game Council regarding your recently released proposals to reform the governance and structure of Fish & Game New Zealand. Thank you for your briefings to date.

We acknowledge your statement that there will be ample opportunity for feedback, including through upcoming workshops, and our Council wants to make the most of those opportunities. You will appreciate that the potential impact on Otago's capacity to deliver for licence holders is substantial, and we believe it is important to provide direct and constructive input at the earliest possible opportunity.

Accordingly, we extend a formal invitation for you to meet with our councillors and senior staff. We would greatly value the opportunity to share our perspectives and present options for the future of Fish & Game that maintain regional strengths while addressing national coherence and efficiency. Please feel free to bring any officials who are working on the drafting of the proposed legislation, as their participation would help ensure a productive and well-informed discussion.

As a side note, one of the more immediate implications of the announcement has been the pausing of the Otago Sportsfish and Game Management Plan which was due for public notification. We will be writing to you separately on that issue to seek your views on a pathway forward for our Plan.

We are relatively flexible around dates and will leave the timing in your hands. We are ready to meet at your earliest convenience and look forward to your response.

Yours sincerely

Adrian McIntyre
Chair, Otago Fish & Game Council

14.0 Items to be Received or Noted

14.1 Lake Hāwea Creel Survey 2022-2025



1 Executive Summary

Angling on Lake Hāwea in the Otago region of New Zealand, has been surveyed using creel methodology for the past three fishing seasons from September to May ending in 2025.

From September 2024 to May 2025, 108 anglers were encountered, data was analysed from 86 anglers with 22 inexperienced spin anglers on a group licence excluded for data bias reasons.

In this season 31 surveys were conducted, on 22 of those survey days no anglers were encountered. Those days when no anglers were encountered were evenly split between weekdays and weekends.

The total catch was 26 fish across the 86 anglers over 115 hours, a mean time spent fishing of 1.4 hours. These 26 fish were caught by 16 anglers, with the remaining 81% catching no fish. This was slightly higher than the previous 2 years and the mean across 3 years was 77%. Eleven fish, or 42% of the total catch, were returned, which was lower than the 2022/23 and 2023/24 release rates of 52% and 76%, respectively.

In 2024/25 the mean angler-estimated seasons of fishing experience was 12, and the anglers estimated they would spend a total of 835 days on Lake Hāwea for the season. Extrapolating this over the season would be 12,983 days, which is within the most recent National Anglers Survey estimate of 11,953 ± 1886 days.

Total catch rate (TCR) was 0.23 fish per hour in 2024/25; this was the lowest of the three years. Rainbow trout TCR was highest in all three seasons, brown trout TCR was variable, and it was consistent for salmon. Across the three seasons rainbow trout (0.17) and salmon (0.07) TCR were higher than 1998-2001 seasons, but brown trout (0.06) TCR was lower. The mean TCR across the three seasons was 0.30, which was higher than, the previous three season mean of 0.23 for Lake Wānaka.

Across the three seasons approximately 10% of angling time was spent flyfishing, 25 % spin fishing, 15 % shallow-trolling, and deep-trolling at 49%. Deep trolling was the most popular and most effective angling method this season and on average across all three seasons, spinning was the most effective in 2023/24. Down-riggers and paravanes were the most effective deep-trolling methods in 2024/25 with catch rates of >0.5 fish per hour.

The condition factor of kept fish has reduced over the past three seasons; the rainbow trout have been longer and salmon lighter. Retained fish of all species have on average been around 1kg weight. In the 2024/25 season the return rate was 42%, the mean return rate across the three seasons from the 194 fish caught was 58%, resulting in an average harvest of 42% (range 26-58%). Angler motivation appears to have changed since 1990's, they are now tending to fish for longer and return a greater proportion of fish.

All anglers encountered in 2024/25 held resident licences, two thirds were adults and one third children or juniors. Family Season licence holders were half of the licenced anglers encountered, Full Season were 30%, followed by Loyal Seniors and Day Licence Holders at 8% each. Family licence anglers made up a higher percentage of anglers at Lake Hāwea in the 2024/25 season, than they do nationally. The proportions of anglers from different regions aligned well with the 2021/22 National Anglers Survey, the majority (72%) were from Otago, and of these 69% were from Wānaka.

Anglers were predominately encountered in the three most accessible zones with boat ramps, Campground Harbour, The Neck and Timaru River.

It is recommended to record some extra demographic and environmental data in future creel surveys to increase the utility of the survey to understand anglers, angler motivation and environmental, particularly weather impacts on angling and the fishery.

The Lake Hāwea fishery remains popular, particularly with family anglers. Anglers consistently catch fish, the fishery is scenic and diverse, offers a variety of angling methods from boats or the shore and the opportunity to target three species of salmonids. This diversity in both species and techniques make Lake Hāwea an attractive destination for anglers of all skill levels.

2 Introduction

Lake Hāwea, located in the Otago region of New Zealand, spans 13,760 hectares and reaches depths of nearly 400 meters. The shoreline measuring 94.6 km is characterised mostly by bouldery terrain, though there are some gravelly bays. It is the fifth most popular angling water body in Otago, although the National Anglers Survey (Stoffels & Unwin 2023) has shown a fluctuating then declining trend in angler-days at Lake Hāwea (Figure 1). Lake Hāwea supports established populations of brown trout, rainbow trout, and chinook salmon, with native fish populations of common bullies, kōaro, a remnant population of longfin eel is also present in the lake. Anglers fish from both the shore and boats, they may use all legal fishing methods (i.e., fly, spin, or bait) year-round with a daily bag limit of 2 trout and 4 salmon.

The lake is primarily fed by the Hunter River, with the Dingle Burn and Timaru Creek also providing interest to anglers. In 1958, a dam was constructed at the lake's outflow, raising its level by 18 meters and turning it into a storage reservoir for downstream hydroelectric stations. This hydroelectric storage function has resource consent for an 8m variation in levels (338-346 masl) and created a maximum storage capacity of 2680 million m³. The lake is prone to strong winds that can rapidly create problematic wave conditions.

Angler (creel) surveys, provide valuable data on fishing effort, catch rates, species harvest, and compliance with regulations. Boat-based creel surveys were first conducted between November 1992 and November 1996, including winter months, to assess fishing activity and catch rates (Scott & Wright, 2007).

Creel surveys have been undertaken in the 2012-2013, 2014-2018 and 2022-2025 seasons and are part of an ongoing fisheries monitoring program in the Central Otago upper lakes. This report summarises the results from the Lake Hāwea Creel survey for the 2024/25 season, which ran from September 2024 to May 2025, and compares data with Creel Surveys from 2022-2024, Sowry (2024).

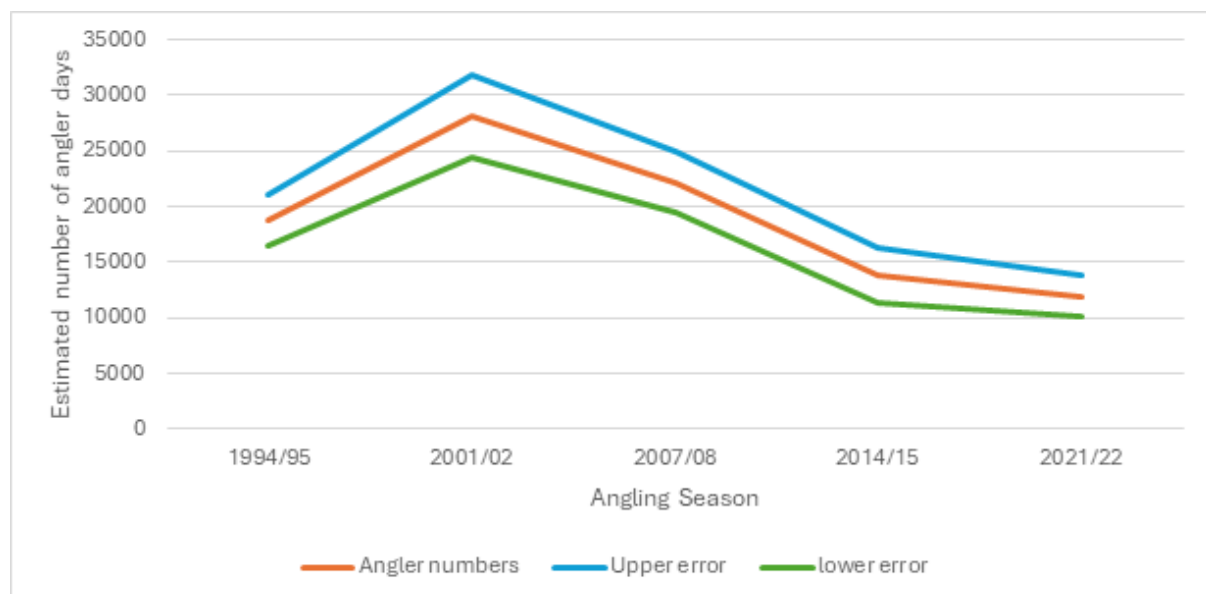


Figure 1. Estimated Annual Angler Effort (days) from National Angler Surveys for Lake Hāwea.

3. Methodology

Creel Survey

The creel survey employed a randomised design, with surveys conducted four times monthly, with two week and two weekend days per month. Days and whether the survey occurred in the morning or afternoon were randomly selected. This approach aligns with the methodology of a randomised stratified roving creel survey, as described by Pollock et al. (1994). The surveys were conducted between September and May, inclusive, to align with historic peak use.

The survey start times were either morning at 0900 hours or afternoon at 1200 hours. A detailed schedule was created to outline the survey days and start times, and each survey was conducted within a three- to five-hour window, depending on the day.

To support staff, volunteers were often enlisted to assist with the boat-based surveys. Creel survey sheets and a questionnaire were designed to capture all relevant data (Appendix 1). The surveys were conducted using the Otago Fish & Game boat (OFG7), a 5.5-meter Kiwi Kraft equipped with a 115hp four-stroke Suzuki engine. The boat would circumnavigate the lake, departing from either of the two main boat ramps (the Campground or the Neck), and the direction of the trip was randomly chosen.

In adverse weather conditions, especially high winds, surveys were shifted to shore-based interviews due to the challenges of approaching vessels and safely mooring. In these cases, staff would drive to popular land-based fishing areas to conduct surveys from the vehicle. Additionally, even in good weather conditions if no boat trailers were present at either of the two main boat ramps the OFG7 boat would not be launched, as this indicated that no boats were on the water.

All anglers on the lake were approached for interviews. To minimize disruption to shore anglers the boat was beached at a distance from their fishing position, and they were approached on foot. For boat anglers, interviews were conducted while the Fish & Game boat remained alongside boats could either remain moving or not, depending on the fishing circumstances and wishes of the angling skipper. Fenders were deployed to protect both vessels, and boats were approached from the starboard side to avoid any damage.

Anglers were asked a series of questions about their fishing activity for the day, including a standard set of creel questions (Appendix 2). Additionally, anglers were asked about their experience on the lake, such as how many years they had been fishing there and how many days per year they typically fished. All available fish harvested were weighed and measured, condition factor (CF) was calculated as $\text{weight(g)}/\text{length}^3 \text{ (cm)} \times 3612.8$ (Appendix 3). The lake was divided into eight zones (Appendix 4) and that generalised location of each fishing area was also recorded (Appendix 1). Time spent angling was estimated by the angler to the nearest half hour, with 25 who had only just commenced angling, or had not started angling allocated zero hours angling time.

Unfortunately, the fishery data collected during the 2014-2018 seasons, Halford (2018), was inconsistent with the data from the 1992-1996, 2012-2013, and 2022-2025 seasons. As a result, these 2014-2018 data were excluded from the comparisons in this report.

Due to staffing changes within Otago Fish & Game, the May 2025 surveys were omitted from the 2024/25 survey period. During the 2022/23 and 2023/24 survey periods, no anglers were encountered during May in these two survey seasons. To maintain consistency in reporting and align all three years the May data were excluded.

4. Results from 2024/25

A total of 108 angler interviews were conducted across 31 sampling periods. During the 2024/25 creel survey season, there were 22 survey days on which no anglers were interviewed, these days were evenly split 11 each between weekends and weekdays. Although not formally recorded, notably adverse weather conditions were more frequently encountered this season compared to the previous two. On the days when no anglers were encountered, high winds or heavy rain likely often contributed to the lack of angling activity, although there were some notable days where good weather conditions also aligned with no fishing activity.

On one survey day there were 22 inexperienced anglers spin fishing at Campground Harbour for an hour on a group licence. These anglers heavily bias the dataset and have been excluded from the catch and effort reporting leaving a total of 86 anglers in the primary reporting dataset.

Of the anglers interviewed, 70 (81%) reported catching no fish, a slightly higher percentage than in the previous two survey periods (76% and 73%). Sixteen anglers caught the 26 fish, 12 anglers caught a single fish, while individual anglers each reported catching two, three, four, and five fish each.

Most of the surveying occurred on the southern half of the lake, which aligned with where most anglers were located. The Neck and the western shoreline, between the campground and the Neck, emerged as the most popular angling areas, contributing 81% of the anglers encountered. Surveys included the mouths of Timaru River and Dingle Burn and less frequently the head of the lake towards the Hunter River as weather and lake conditions permitted. The Timaru River zone had 15% of anglers encountered, this zone which included the popular John Creek area where boats can be launched. Only 3% of anglers were encountered in the northern half of the lake in the Station Road zone, on the Western side of the Lake above the Neck (Appendix 4).

The total catch across the 86 anglers was 26 fish, achieved over 115 hours of fishing effort, with a mean time spent fishing of 1.4 hours when surveyed. The mean angler-estimated seasons of fishing experience was 12, the median 5 and the range 1-50 seasons. The anglers estimated they would spend a mean of 11 days on Lake Hāwea for the season, with a median of 5, and a range of 1-200 days. Eleven fish, or 42% of the total catch, were returned, lower than the 2022/23 and 2023/24 release rates of 52% and 76%, respectively.

4.1 Catch Rate

The Total Catch Rate (TCR) is calculated from the total number of fish caught over the total length of angling time. In the 2024/25 season this was 0.23 fish per hour (Table 1), or one fish for every 4.4 hours angling effort. This was lower than the previous two survey seasons, with 0.35 fish caught per hour in 2022/23, and 0.33 fish per hour in 2023/24. For the 16 anglers catching fish the TCR was 1.00, or 1 fish per hour.

Of the 26 fish caught, only one was a brown trout, 18 were rainbow trout, and were 7 salmon. The brown trout, 7 rainbow trout and 3 salmon were returned. The harvest rate (HR) is calculated from fish kept divided by total angling effort and shown as fish per hour.

Table 1. Numbers of fish caught by species, released and kept with total catch rates (TCR), return rates (RR) and harvest rates (HR) from Lake Hāwea Creel 2022-25 seasons.

Season	Species	Fish caught (TCR)	Fish released (RR) and % returned	Fish kept (HR)
Sept 2022-May 2023	Brown	15 (0.05)	12 (0.04) 80%	3 (0.01)
Sept 2023-May 2024	Brown	22 (0.12)	17 (0.09) 77%	5 (0.03)
Sept 2024-May 2025	Brown	1 (0.01)	1 (0.01) 100%	0 (0.00)
Sept 2022-May 2023	Rainbow	65 (0.21)	31 (0.10) 48%	34 (0.11)
Sept 2023-May 2024	Rainbow	25 (0.13)	19 (0.10) 76%	6 (0.03)
Sept 2024-May 2025	Rainbow	18 (0.16)	7 (0.06) 39%	11 (0.10)
Sept 2022-May 2023	Salmon	25 (0.08)	12 (0.04) 48%	13 (0.04)
Sept 2022-May 2023	Salmon	16 (0.08)	11 (0.06) 69%	5 (0.03)
Sept 2024-May 2025	Salmon	7 (0.06)	3 (0.03) 43%	4 (0.03)

During the 1998-2001 seasons Scott & Wright (2007), recorded (TCR) for brown trout at 0.14, 0.14 and 0.10, respectively. For rainbow trout it was 0.10, 0.16 and 0.08 and for landlocked salmon TCR was 0.04, 0.01, and 0.04 for the respective years. For the past three seasons results indicate that brown trout TCR is lower than 1998-2001, but that rainbow trout and salmon TCR are similar or slightly higher. There appears to be a tendency for anglers to return a greater proportion of brown trout, than rainbow trout or salmon, which anglers tend to return at similar rates (Table 1).

Table 2. Number of Fish Caught and Catch Rate (CR) by angling method as fish per hour.

Year	Fish caught fly (CR)	Fish caught spin (CR)	Fish caught surface trolling (CR)	Fish caught deep trolling (CR)
Sept 2022-May 2023	14 (0.05)	11 (0.04)	3 (0.01)	75 (0.25)
Sept 2023-May 2024	9 (0.05)	27 (0.14)	13 (0.07)	15 (0.08)
Sept 2024-May 2025	1 (0.08)	1 (0.05)	6 (0.31)	18 (0.28)

Deep trolling includes down-rigger, lead line and paravane angling techniques, it accounted for 18 fish which was 69% of the total catch (Table 2). Down-rigger and paravane were the most effective types of deep-trolling catching 5 and 4 fish respectively with CR of 0.53 and 0.57 whereas 9 fish were caught lead-lining at a CR of 0.19 fish per hour.

Surface trolling was the next most effective, with six fish (24% total catch), however this was heavily biased by one angler. Five of these fish were caught by one angler in 3 ½ hours harling in the Neck zone with a CR of 1.43. This shows how effective this underutilised method can be in the right conditions with an experienced angler. Without that harling angler only one fish CR of (0.06) was caught across the other 14 anglers shallow-trolling (all top-lining). This was the same for spin angling and flyfishing methods which caught one fish each (5%) with CR or 0.05 and 0.08 respectively. Only one angler was encountered using bait with no fish caught.

Across the last three seasons, there appears to be general trends based on CR that spin, fly and topline (i.e. surface-trolling excluding the harling angler) have similar success per time spent, while deep-trolling is 2-3 times more effective mean CR ~ 0.21 (Table 2).

Table 3. Total Angler numbers and effort as percentage of total time spent across the four main angling methods encountered.

Year	Angler numbers and (%) time flyfishing	Angler numbers and (%) time spinning	Angler numbers and (%) time surface-trolling	Angler numbers and (%) time deep-trolling
Sept 2022-May 2023	13 (7%)	60 (26%)	26 (16%)	92 (50%)
Sept 2023-May 2024	17 (14%)	46 (34%)	18 (13%)	39 (42%)
Sept 2024-May 2025	4 (10%)	12 (16%)	15 (17%)	54 (56%)

Over the 2024/25 season trolling (surface and deep) was the most popular method, used by 80% of anglers (Table 3) it was also the most productive (Table 2). Deep trolling was the most popular sub-method being used by 63% of anglers, within that lead-lining was the most popular type of deep-trolling used by 53% of anglers, down-rigger and paravane were only used by 6 and 3% of anglers respectively. Scott & Wright (2007) also reported trolling being the most popular method and between 57-68% of the angling effort for the three survey years from 1998-2001.

Half of the spin angling from the shoreline was concentrated in the Campground Harbour zone, with the rest evenly spread between the Neck and Station Road zones. Flyfishing was only encountered once in the latest season, by a family group of four fishing the Neck. One bait angler was also recorded.

When comparing the percentage of time spent across the four main methods across the latest three seasons of creel there are some general trends emerge and a fair degree of consistency across the years. Approximately 10% of angling time was spent flyfishing, spin fishing at 25% was more variable, shallow-trolling was 15% and deep-trolling at 49% (Table 3).

4.2 Catch Details

Table 4. Mean length, weight and condition factor of each sports fish species recorded during 2022-2025 Lake Hāwea creel surveys.

Season	Mean length (mm)			Mean weight (g)			Mean condition factor		
	Brown	Rainbow	Salmon	Brown	Rainbow	Salmon	Brown	Rainbow	Salmon
Sept 2022-May 2023	458	402	378	1290	920	764	47.9	51.9	50.3
Sept 2023-May 2024	419	413	339	860	817	518	41.9	42.8	47.6
Sept 2024-May 2025	-	466	376	-	1160	420	-	41.5	28.5

In the 2024/25 season 10 rainbow trout and four salmon were measured.

The average length of salmon and rainbow trout were both higher than in previous seasons, however the weight and subsequently the condition factors were notably lower for salmon.

No harvested brown trout were encountered during the 2024/25 survey.

4.3 Angler Demographics 2024/25

All anglers encountered listed their home as New Zealand, and no non-resident licences were encountered. The majority (72%) were from Otago, 13% from Southland, 10% from North Canterbury, 2% Central South Island and 2% from the North Island, 1 angler each from Wellington and Auckland/Waikato. These regional usages align well with the 2021/22 National Anglers Survey (NAS) (Stoffels & Unwin 2023 (Table3-5)) for anglers fishing in Otago and out of their home region for Otago, Otago 69%, Southland 11%, North Canterbury 5%, Central South Island 3%, Wellington and Auckland/Waikato 2% each.

For the Otago Region anglers 36 identified Wānaka (n=34) or Albert Town (n=2) as their hometown, 8 were directly local to the Lake Hāwea and 8 from Queenstown.

The total number of days all anglers planned to spend fishing Lake Hāwea during the 2024/25 season was 835, averaging 11 days on the Lake. The NAS (Stoffels & Unwin 2023) estimated that anglers spent a total or $11,953 \pm 1886$ days fishing Lake Hāwea in the 2021/22 season.

Making some rough assumptions that from the 31 survey half days of the 241 full days available during the survey period would suggest about 6% of the available angling time had been surveyed, which could be extrapolated to 12,983 angling days, which is within the NAS estimated range.

All licences were resident licences, and two anglers were encountered without licences. These two thought they had a legal family licence at the time; they have been excluded from the licence analysis. This 2% non-compliance is within the recent historic levels on the Central Otago lakes.

Table 5. Licence type and licence holder age-class numbers and percentages (bracketed) for anglers encountered during Lake Hāwea Creel 2024/25 season.

Licence type	Number of licenced anglers (% of licenced anglers)			
	Adult	Junior	Child	Total
Family Season	30 (36%)	3 (4%)	10 (12%)	43 (51%)
Full Season	11 (13%)	4 (5%)	10 (12%)	25 (30%)
Day	6 (7%)	1 (1%)		7 (8%)
Local area	2 (2%)			2 (2%)
Loyal Senior	7 (8%)			7 (8%)
Total	56 (67%)	8 (10%)	20 (24%)	
Group*		22		22
Unlicenced	1	1		2

*Again, note that the Group of 22 inexperienced anglers spin fishing has been excluded from the analysed data.

Angler age-class consisted of two thirds' adults and one third juniors and children, with Family Season licence holders making up half of the licenced anglers encountered (Table 5). Nationally Family licences made up 32% of Stratum 1, in the current Creel they made up 49% (19/39) of Stratum 1 and 38% of all purchased licences encountered. This indicates that Family licence anglers made up a higher percentage of anglers at Lake Hāwea in the 2024/25 season, than they do nationally.

Full Season licence holders were the next largest licence holder type at 30%, followed by Loyal Seniors and Day Licence Holders at 8% each (Table 5).

Those anglers of all age classes with family licences had been fishing on average for 1.8 hours, which was 50% longer than the 1.2 hours for all other adult licence classes. The average experience of family licence holding anglers of 14 years did not differ too much to all other

adult licence classes of 15 years, but they did catch proportionately more fish per hour at 0.44 per family licence angler vs 0.28 per angler for all other adult classes.

4.4 Historical comparisons

Data collected from surveys conducted between 1992-1996, 2012-2013, and 2022-2025 has been compiled to investigate long-term trends. Catch rates by method, release rates, and the percentage of angling time spent using the four main methods have been plotted to highlight broader trends over time.

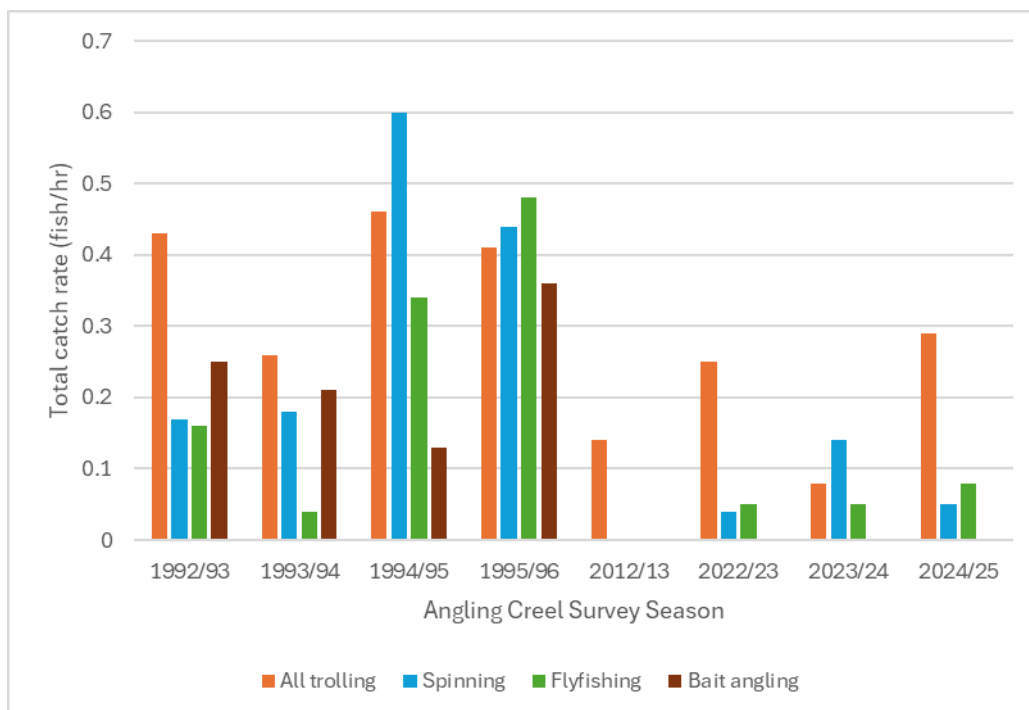


Figure 2. Total catch rate (fish/hour) by angling method for Lake Hāwea

The total catch rate is calculated based on the number of fish caught per hour of fishing. A distinct contrast in success per hour is observed in recent years compared to the early surveys. Total catch rates have declined since from those of 1990's, and trolling has come to dominate angling success (Figure 2). There may be very different angler motivations compared with 30-years ago, as it seems that anglers in the 1990s were catching fewer fish, but more per hour. Release rate is much higher in recent years (Figure 3). The higher catch rate with less time spent angling could be explained by anglers in the 1990s harvesting fish and ending their fishing sessions sooner, while now anglers tend to fish longer, catch more fish per session, but release a sizeable portion of their catch.

There is a trend over time towards releasing a higher percentage of the catch across all species, with the most consistent increase seen in brown trout. While there is no specific year marking the start of the catch-and-release trend for trout angling in New Zealand, the practice

gained significant traction in the late 1990s and early 2000s. Roger Young's 1999 paper on catch-and-release for Fish and Game NZ played a key role in this shift.

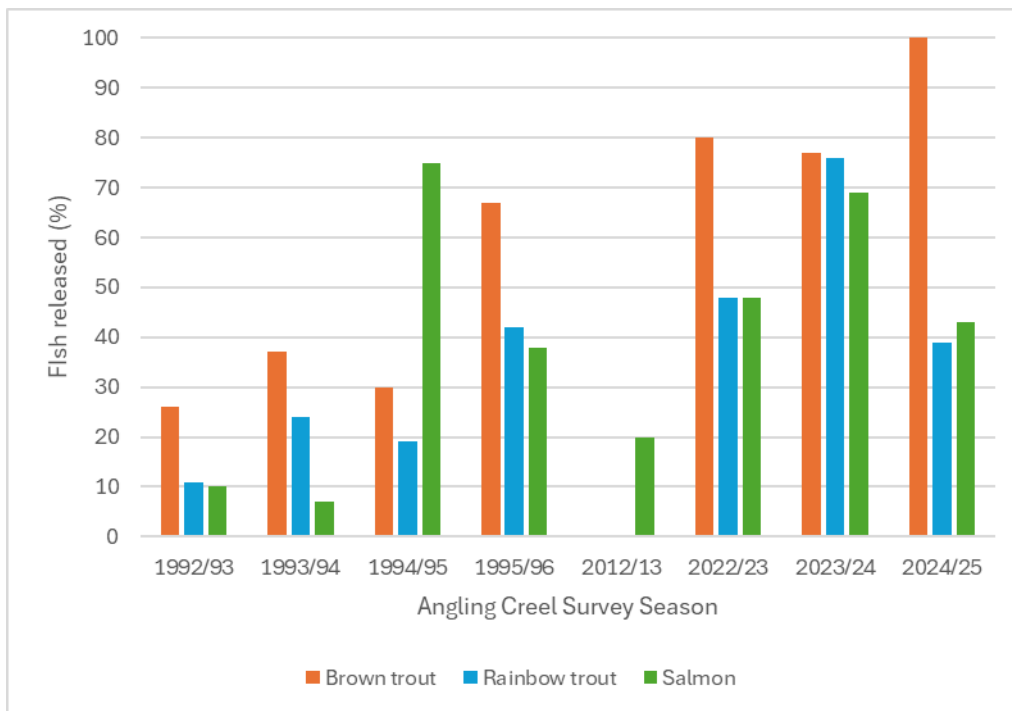


Figure 3. Percent of fish released after capture by species for Lake Hāwea.

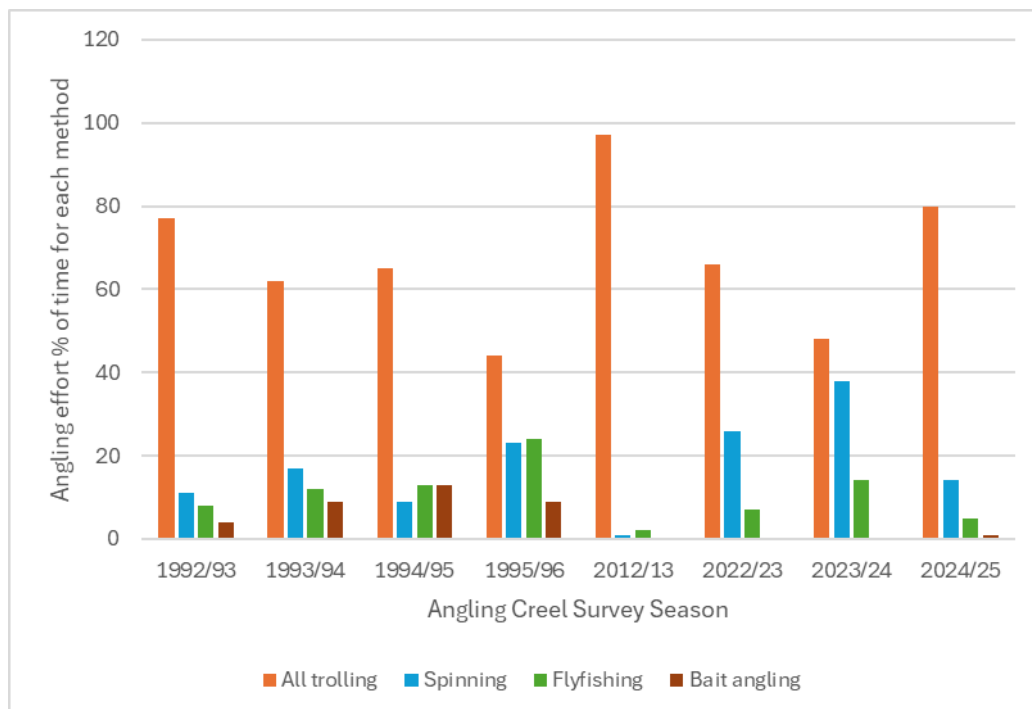


Figure 4. Angling effort as percentage of total angling time for each angling method

There is a strong preference for trolling among anglers on Lake Hāwea, trolling consistently accounts for more than half of all angling hours on the lake. The popularity of spin fishing has steadily increased, while bait fishing has nearly disappeared. Fly fishing, on the other hand, has seen fluctuating popularity, with a peak followed by a decline over time. There is not necessarily an obvious link between angling success and angling effort across the angling types (Figures 2, 4).

4.5 Three-season summary

Over the three seasons of the Lake Hāwea creel there has been 402 anglers encountered, catching a total of 194 fish over 608 hours, giving a mean total catch rate of 0.30 fish per hour (Table 6). There was a notable reduction in the total number of anglers encountered and an increase in the days no anglers were encountered across the three years.

Table 6. Number of anglers encountered, surveys, surveys with no anglers encountered (bracketed), mean number of anglers on angling encounter days, total time spent fishing, mean time spent fishing on encounter days, total fish caught, catch rate (fish/hour) for 2022-2025 Lake Hāwea Creel Surveys Seasons.

Season	2022/23	2023/24	2024/25	Total	Mean
Number of anglers	196	120	86	402	134
Number of surveys (surveys with no anglers)	32 (2)	32 (12)	31 (22)	95 (36)	32 (12)
Mean number of anglers on days anglers were encountered	6.5	6.0	9.6	22.1	7.4
Total time spent fishing (hr)	304	189	115	608	203
Mean time spent fishing on angler encounter days (hr)	10.1	9.5	12.8	32.4	10.8
Total number of fish caught	105	63	26	194	63
Total catch rate (fish/hr)	0.35	0.33	0.23	0.91	0.30

Table 7. Number of anglers encountered, surveys, surveys with no anglers encountered (bracketed), mean number of anglers on angling encounter days, total time spent fishing, mean time spent fishing on encounter days, total fish caught, catch rate (fish/hour) for 2019-2021 Lake Wānaka Creel Surveys Seasons.

Season	2019/20	2020/21	2021/22	Total	Mean
Number of anglers	141	250	211	602	201
Number of surveys (surveys with no anglers)	27 (7)	27 (1)	32 (5)	86 (13)	29 (4)
Mean number of anglers on days anglers were encountered	7.1	9.6	7.8	24.5	8.2
Total time spent fishing (hr)	174	436	234	844	281
Mean time spent fishing on angler encounter days (hr)	8.7	16.8	8.7	34.1	11.4
Total number of fish caught	56	103	32	191	64
Total catch rate (fish/hr)	0.32	0.24	0.14	0.69	0.23

Aggregated from Halford 2020, and Sowry 2021, 2022

Comparing the three-years of Lake Hāwea creel surveys (Table 6), with the previous three-years of its nearest neighbour Lake Wānaka (Table 7), undertaken using a very similar methodology showed a higher mean total catch rate for Lake Hāwea. The proportion of days no anglers were encountered was higher on Lake Hāwea, although on days when anglers were encountered, the mean number of anglers encountered and the time they had spent fishing were similar at around 7-8 anglers and 11 hours respectively. Across individual years both lakes recorded quite variable total numbers of anglers encountered but the total catch rate for Hāwea was more consistent than for Wānaka. It should be noted that the Lake Wānaka data was very likely influenced by human behaviour change during the Covid and post-Covid periods from March 2020, which may have flowed through to the start of the Lake Hāwea creel.

5. Discussion

Overall, the Lake Hāwea fishery is a popular fishery, particularly with family anglers and it may be preferred by some Wānaka anglers to Lake Wānaka, which in part be due to the higher catch rates in Lake Hāwea. Anglers consistently catch fish, and the fishery is diverse, offering a variety of angling methods from boats or the shore and the opportunity to target three species of salmonids. This diversity in both species and techniques should make Lake Hāwea an attractive destination for anglers of all skill levels. During summer holidays Lake Hāwea tends to have proportionately less pleasure watercraft and more angling traffic. It may be

Hāwea is more of an angler's lake than Wānaka during this period, which could explain the high number of anglers from Wānaka?

While trends in the data have varied across all measured indicators (such as catch rates, release rates, and angler effort), there have been no noted peaks or troughs that would raise any immediate concerns about the long-term sustainability of the fishery.

The most notable point of potential concern was the low brown trout catch (n=1) in 2024/25; however, this is contradicted by the two prior seasons and the larger dataset from the Lake Hāwea fishing competition which shows brown trout catch increasing from 2023-2025 (B Sowry, Unpublished). It may also reflect a sampling bias based on the angling methods or types used in 2024/25. Between 2022/23 and 2023/24 seasons overall total catch rates were essentially the same, however acoustic surveys estimated a reduction in salmonid populations from 7.4 per ha to 6.1 per ha in February 2023 and 2024 respectively (Couper 2024). This suggests that the overall fish population of the lake is likely stable.

Reduction in catch rate, but a lack of strong association with angling method or method success and/or the increase in release rate over time, may reflect a change in angler motivation. This is notable in the latest season as only 1%, 6% and 3% of anglers used the most effective trolling techniques harling, down-rigger or paravane with catch rates of 1.43, 0.53 and 0.57 fish per hour respectively. Lake angling has historically focused on harvesting fish for the table, maybe now it is more focussed on spending time recreating and the choice of method does in-part relate to the overall recreational experience rather than the catching experience?

During the most recent survey season, there was a noticeable decline anglers encountered and increase in days with no anglers. Without corroborating data, it is difficult to explain this trend as the mean number of anglers encountered on a day with encounters (AAD) was not dramatically different across years. A potential factor contributing to this increased in no angler days could be the unpredictable and often harsh weather conditions on the lake. The geographical features surrounding Lake Hāwea, particularly the surrounding mountains, cause wind to funnel through the area, resulting in frequent and intense winds. These conditions may have deterred anglers from venturing out on certain days. However, there were days of very favourable weather conditions during the 2024-2025 season when no anglers were encountered, and no-angler days were evenly split between weekend and weekdays.

Angler activity on Lake Hāwea has clearly declined over the past three decades. While numerous variables make it difficult to identify a definitive cause, there is no considerable evidence of a decline in fishery health that would likely deter angler participation. Some other factors that may influence angler participation, include seasonal trends, fishing preferences, or economics. Perhaps the sharp end of the cost-of-living was having a negative impact on recreational time in the most recent surveys? Culture and recreational household expenditure has reduced 1.3% from 9.6-8.3% in 2019 compared to 2023 (Stats NZ).

It was heartening to see that the angler data from the most recent survey relating to both the estimated time spend on Lake Hāwea and the angler region of origin aligned well with

National Angler Survey estimates for Lake Hāwea. This should give some assurance that even from the small number of angler encounters in the past season that the data appears to be a representative sample of anglers. The notable deviations were from National Angler Survey national estimates which indicate that Lake Hāwea attracts more Family Licence holding anglers compared to the national average of purchased licences.

The creel survey needs to collect data that is simple and quick to accurately record, to minimally disrupt anglers recreational time but also to inform fishery management decisions and understand angler motivation and experience. We recommend minor changes to the recording form (Appendix 1), these changes in overall recording should add value. In the angler demographics it would be worthwhile recording: the gender breakdown of those angling to better quantify the female angling demographic, the group status (i.e., how many anglers and non-anglers per party (e.g. boat) to quantify the nature of angling as a recreation (e.g. family), and incorporating the first fishing trip question (Appendix 2) into the experience recording if it is still a relevant question.

Along group data, it should be recorded whether anglers are fishing from shore or from a boat. The fishing zone and time in and out of each zone should be recorded as it was pre-2020. While the current surveys record angling methods, certain techniques, such as trolling, are exclusively boat-based, but others such as spin fishing is unclear of the access method. Collecting this additional data would provide important insights into the separate ways anglers access the fishery, along with the zones used. It could also reveal trends in shore versus boat access over time, helping to identify potential shifts in angler preferences or access points. This information could be particularly useful in managing the fishery and ensuring or enhancing access for all anglers.

Additional environmental data, such as wind speed, precipitation, air temperature, cloud cover percentage, and water temperature should also be recorded at the start of each survey. By gathering this information, it provides corroborating information on the influence of weather conditions on angler participation and success rates. Understanding the relationship between weather patterns and angler activity could help refine future survey strategies and provide more accurate data about how these factors influence the fishery and angler behaviour and experience.

6. References

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7. Recommendation

**That the creel survey for the next three seasons planned for Lake Dunstan is planned and recorded implementing the recommendations proposed in the discussion.
The report be received by the Council.**

**Jamie Ward and Ben Sowry
09/07/2025**

Report as Received

Mover:

Seconder:

Carried/Not Carried:

Recorded against (if any):

14.2 Re Consent Reporting on Takitakitoa Wetland Restoration Project

The information below is presented to satisfy the conditions of consent **RM14.043.03** granted to Otago Fish & Game Council to restore and enhance the Takitakitoa Wetland.

Both Condition 4 and 5 of the consent are being answered under each subheading.

1. Water Levels

Staff gauges above and below the bund wall are being used to monitor water levels in the wetland (Figure.1)

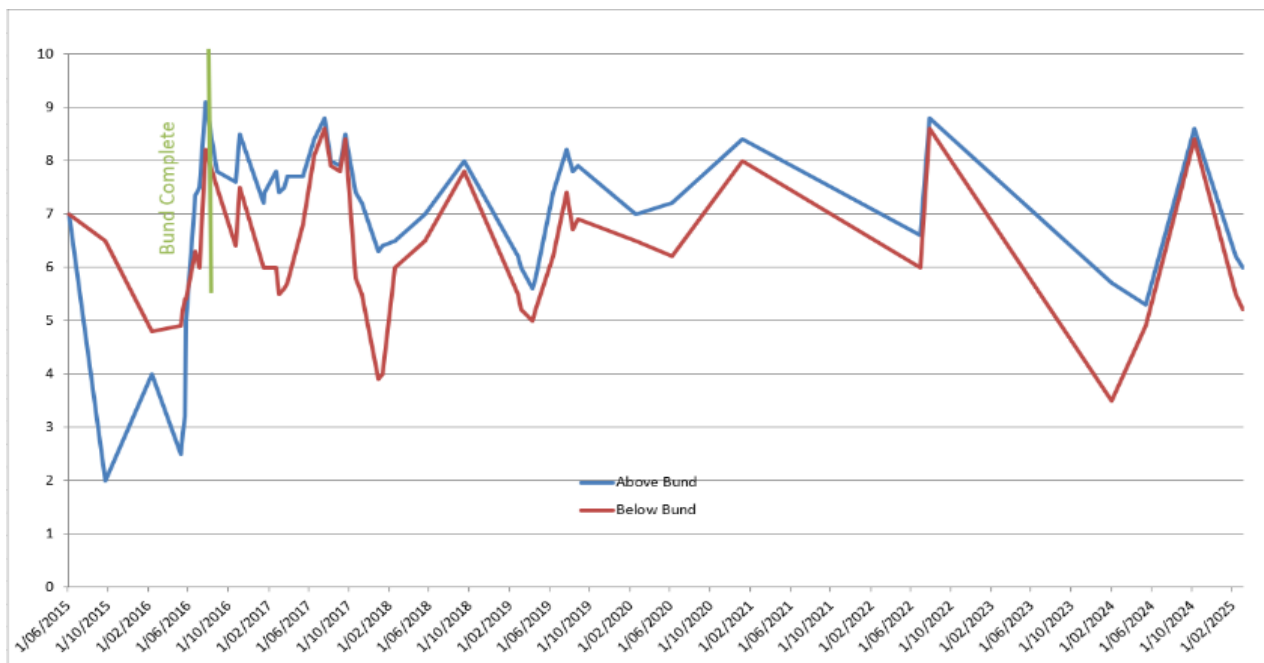


Figure.1 Water levels above and below the bund wall (units in decimetres)

The bund, and the blocking of the deep drains which dissected the upper part of the wetland has resulted in much improved hydrological regime.

Water levels are higher than the lower part of the wetland and are much more consistent.

Manually read staff gauges are the most cost effective and efficient way to measure water levels in the wetland so this monitoring will continue at least quarterly (or better) for the next twelve months.

2. Flow Through Fish Pass

Due to a dry summer the boards were removed on the western culvert to allow for fish passage during the new moon high tides. A new design of fish pass was tried this year (photo below).



Fish Pass (above Bund)



Fish Pass (below bund)

Fish Pass Check	Flowing?	Depth	Dam WL	Video
24/10/2016	yes	+35mm	7.6	
3/03/2017	Yes	+30mm	7.4	
19/03/2017	yes	+30mm	7.4	Yes
08/03/2019	No	0mm	6.0	
10/04/2019	No	0mm	5.6	
08/06/2020	Yes	+5mm	7.2	
06/01/2021	yes	+20mm	8.4	
02/07/2022	No	0mm	6.6	
20/06/2023	Yes	+30mm	7.9	
11/03/2024	Yes	5mm	5.6	Yes
14/03/2025	Yes	5mm	7.2	

Fish pass flowing data.

3. Eel Abundance

One fyke net (baited with a can of cat food) was set on the 27/03/2025 upstream of the bund which is shown in red (figure 2). The next day the net was checked, nothing was caught. This maybe due to the bait used.



Figure 2

4. Inanga Abundance Above the Dam

Inanga were in very low abundance in the upper part of the wetland before it was enhanced. Electric Fishing surveys in Surprise Stream (near the maximum upstream extent of the wetland) recorded a single fish, and even then, it was not captured.

One minnow trap (baited with vegemite) was set on the 27/03/2025 upstream side of the bund wall (Figure 3). The trap was checked the next day, and no fish were caught.



Figure 3.

5. Vegetation Changes

Six monitoring sites have been established and from these the vegetation is photographed annually. This photo monitoring is going to continue annually. No alteration to the methodology is proposed.

City Forests have stopped harvesting pine trees at this stage. There are a small number of trees on the western boundary still to be felled at a later date.

6. Effectiveness of Plant Pest Control

- Crack Willow control – ongoing monitoring.
- Broom, Gorse and Blackberry - has been sprayed where possible along roadsides and bund wall and follow up knapsack spraying will be conducted again in Jan - Feb 2026.
- Glyceria – there is still ongoing monitoring and spraying on both banks of Surprise Stream below the bund.

7. Gamebird Harvest

The monitoring method for gamebird harvest is simply to record the opening day harvest from each allocated mai-mai of which there are five. **Note:** in 2016 only mai-mai 5 had any water near it as the impoundment had not filled at that point in time.

Opening day results	Mai-mai #1	Mai-mai #2	Mai-mai #3	Mai-mai #4	Mai-mai #5
7 th May 2016					11 Mallards
6 th May 2017	1 Mallard 5 Parries 2 Shoveler	16 Mallards 12 Parries 2 Shoveler	7 Mallards 12 parries 1 Shoveler	25 Mallards 5 Parries	33 Mallards 2 Swans 6 Parries
5 th May 2018	6 Parries 1 Mallard	6 Swans 20 Parries 12 Mallards	3 Mallards	1 Parries	115 Parries
4 th May 2019	1 Mallard 6 Parries 2 Shoveler	25 Mallard 5 Parries	0 birds shot	2 Parries	34 Mallard 46 Parries 2 Shoveler 2 Swan
23 rd May 2020	5 Parries	1 Mallard	Not shot	Not shot	2 Mallard 6 Parries
1 st May 2021	3 Parries	Not shot	0 birds shot	10 Mallard	25 Mallard 2 Parries
7 th May 2022	6 Parries 13 Mallards	1 Mallard	Not shot	0 birds shot	Not Shot

6 th May 2023	4 Parries 1 Shoveler	0 birds shot	0 birds shot	2 Mallards 1 Parry 1 Shoveler	5 Parries
4 th May 2024	0 birds shot	1 Mallard 1 Parries	4 Mallard 1 Parries	3 Parries	6 Mallards 2 parries
3 rd May 2025	4 Parries	0 birds shot	1 Mallard	0 birds shot	6 mallards 1 Parries

No changes to this monitoring approach are proposed. There is not a better-known monitoring tool for harvest and the results can depend a lot on the conditions, and the ability of the hunter.

8. Shoveler Abundance

Takitakitoa is counted as part of the “National Shoveler Survey” conducted in the first week of August 2024 - there were 43 noted in this survey. It was also noted the birds seem to congregate in the area just above the bund wall, this is probably due to a large area of open water and is the most undisturbed corner of the wetland.

9. Paradise Shelduck Abundance

Paradise shelduck accumulate together in the last week of January to moult flight feathers. 47 known sites have been recorded in Otago with the nearest to Takitakitoa being Lake Waihola. Bird numbers at the wetland in January were low with only 38 being counted.

10. Abundance of Native Avifauna

A combination of observations and counts have been used to note changes in abundance of all avifauna present in the wetland. The table below shows the relative changes over time.

*Denotes ‘gamebirds’ as defined by the Wildlife Act 1953

Species	Pre bunding	Post Bunding	April - 2025
Pukeko*	Rare	Common	8 below the bund
Mallard*	Occasional	Common	Large numbers
Black Swan*	Not recorded	Occasional	6 seen but they come and go
Grey Teal	Rare	Abundant	400+
Scaup	Not Recorded	Occasional	Not seen this time
P. Shelduck*	Rare	Common	yes
Shoveller*	Rare	Common	9 counted
Harrier Hawk	Rare	Common	Seen occasionally
Fernbird	Common	Common	Still present
Bittern	Not Recorded	Not Recorded	Unseen
Pied Stilt	Not recorded	Occasional	Not seen this inspection
Royal Spoonbill	Not Recorded	Rare	Not seen this inspection

14.3 Otago Regional Council Galaxiid Restoration and Salmonid Removal Report (2024–2025)

The full ORC report prepared by Pete Ravenscroft has already been circulated to Councillors via email. It presents a detailed account of the salmonid control and eradication operations carried out across multiple Otago catchments as part of the region's galaxiid restoration programme. The report details the third consecutive year of effort in waterways and fulfils the reporting obligations required under the Special Licence issued by Otago Fish & Game for the project.

Trout Removal Summary

The salmonid removal programme targeted seven waterways, using a combination of control and eradication approaches via electric fishing. Notably:

- *Thomson's Creek*: Brown trout numbers declined significantly over two years (from 332 to 59 fish), with no young-of-year trout detected in the second year. The weir appears to be functioning as a barrier, although further monitoring is needed during high flows.
- *Boundary Creek*: Following three years of eradication work (2,746 trout removed), only 27 brown trout were captured in the latest survey. eDNA results confirm extremely low residual trout presence. Galaxiids are recolonising previously unoccupied areas.
- *Pigroot and Siberia Creeks*: Marked reductions in trout densities were recorded (Pigroot: 2,648 to 180; Siberia: 929 to 634), with galaxiid abundance increasing at multiple monitoring sites.
- *Nevis tributaries and Spec Creek*: Brook char and brown trout control continued, with some effort shifting due to habitat access constraints.

Compliance with Special Licence Conditions

The report largely meets the reporting requirements set out in the Special Licence:

- Full spatial and temporal detail of removal operations is provided
- Quantitative data on fish caught, removed, or euthanised is included
- Detailed monitoring of galaxiid response is presented and shows encouraging signs of recolonisation and increased densities.
- The report discusses long-term success prospects and evaluates the function of installed fish barriers.

Future Work

The report also outlines ongoing requirements to consolidate the gains achieved. These include continued trout removal in priority reaches (e.g. West Branch of Boundary Creek and Nevis

tributaries), further refinement of eDNA sampling to guide effort, and maintenance of existing infrastructure such as the Thomson's Creek weir and water level logger. Importantly, trout control should continue to target key periods to suppress potential spawning and sustain low densities, allowing native fish populations to recover and establish resilience.

Presentation

I suggest that the author, Pete Ravenscroft, be invited to present his findings at the September Otago Fish & Game Council meeting to further inform the Council on the progress and future direction of the programme.

Ian Hadland
Chief Executive
14/07/2025

14.4 Preliminary Drift Dive Report 2025



Executive Summary

Drift diving has historically been used in Otago as an intermittent method for assessing trout populations, with surveys conducted sporadically over past decades. In an effort to rebuild and standardise Otago's drift dive dataset, a selection of priority rivers was surveyed during the 2024/25 season in response to recent angler concerns regarding declining trout numbers.

Successful surveys were completed on sections of the Greenstone, Makarora, and upper Lochy Rivers. Among these, the Makarora River recorded the highest trout density (22.3 trout per kilometre), while the upper Lochy River exhibited the lowest density (0.47 trout per kilometre). Results from the Greenstone River indicate a continued decline in trout abundance compared to previous surveys.

A planned survey of the Caples River could not be completed due to unfavourable weather conditions and limited staff availability.

These surveys provide important baseline data to inform future monitoring and management decisions. The findings underscore the value of ongoing drift diving to track population trends

Introduction

Drift diving has been utilised in Otago as an intermittent method for monitoring trout populations, with surveys conducted sporadically over several decades. Drift diving is a widely accepted technique for estimating fish abundance in clear-water rivers and is regarded as one of the primary methods for assessing adult trout populations in New Zealand (Teirney & Jowett 1990). This non-invasive method enables repeated annual surveys, facilitating the detection of temporal trends in trout abundance and distribution.

Surveys are typically conducted during summer low-flow conditions when water clarity is optimal, and trout are more likely to occupy well-defined habitats. While this method is subject to limitations, including variable detection rates and observer bias, it remains a cornerstone of freshwater fisheries monitoring programmes throughout New Zealand.

In response to recent angler concerns regarding declining fish numbers, efforts have been made to baseline, rebuild and standardise the Otago drift dive dataset to support more robust long-term monitoring on several rivers. As part of this project, a select group of rivers was prioritised for surveying during the 2024/25 season.

Upper Lochy River

Prior to a series of significant flood events during the mid to late 1990s, the upper Lochy River supported a highly valued backcountry trout fishery. This fishery was primarily dominated by medium and large rainbow trout and was chiefly utilised by adventurous backcountry anglers. Following these flood events, upstream migration of trout became effectively impossible, resulting in a decline in the self-sustaining population in the upper reaches.

In response, Otago Fish & Game undertook translocation efforts, transporting spawning populations of rainbow trout from the lower Lochy River into the upper reaches in an attempt to sustain the fishery (Gabrielsson 2008).

The upper Lochy River was subsequently carried over into the new designated Regime in the 2023/2024 season. The primary objective of the 2024/25 drift dive survey was to assess whether any individuals from the original translocated population, or other adult trout, remained present in the upper Lochy.

Greenstone River & Caples River

During the 2023/2024 season only 21% of the total beats available for booking in the Greenstone Controlled Fishery were allocated (Court, 2024). Many anglers who fished these beats reported observing low numbers of trout throughout the fishery when surveyed. The Greenstone River was most recently drift dived in 2021, with that survey indicating that the trout population had significantly decreased compared to previous surveys (van Klink, 2022).

With the apparent ongoing decline in the Greenstone fishery, many anglers have shifted their focus to the Caples River. However, based on communications with anglers, the Caples River is also beginning to show signs of population decline, possibly due to increased angling pressure.

The primary objective of the 2024/25 drift dive surveys in the Greenstone and Caples rivers was to assess whether the Greenstone trout population had stabilised, increased, or continued to decline, and to establish a baseline dataset for the Caples River to support future monitoring and management efforts.

Makarora River

When the Designated Waters regime was implemented for the 2023/2024 season, there was concern that the Makarora River would experience increased angling pressure. This concern arose because non-resident anglers were restricted in the number of days they could fish its two key tributaries—the Young and Wilkin Rivers—which were designated as designated waters fisheries.

It was anticipated that this regulatory change would redirect anglers to the Makarora River as it would provide a similar experience, potentially resulting in increased fishing effort and subsequent declines in trout abundance. In response to concerns expressed by local anglers and fishing guides regarding the potential negative impacts on the trout population, the Makarora River was selected for drift diving during the 2024/25 season.

The primary objective of this survey was to establish a baseline dataset on trout abundance and distribution within the Makarora River to support future monitoring and inform management decisions.

Methods

A team of divers wearing wetsuits, booties, flippers, gloves, masks and snorkels drift downstream from a designated start point, count and speciate any salmonids that they pass before a designated end point is reached. To ensure accurate counts the following rules are observed:

- 1) A designated lead diver monitors and instructs the divers to maintain a straight line across the river.
- 2) Only salmonids that pass directly underneath, or to a predetermined side of a diver, are recorded.
- 3) Where large schools of fish move rapidly back upstream divers communicate to clarify the number, size class and who has counted them.

Before a dive is undertaken water clarity is measured by recording the distance in metres a 200mm black disc can be observed horizontally through the water column. More divers are required if water clarity is low to ensure adequate coverage, ideally visual contact can be maintained between divers.

Salmonids are divided into three size groups;

Large: over 450mm in length.

Medium: less than 450mm and greater than 150mm in length.

Small: less than 150mm in length.

Each diver recorded the number and species of salmonids observed within each size class. Data were periodically collected by the team leader during the dive and compiled at the conclusion of each survey.

Dive Locations

Upper Lochy River

A section of the upper Lochy River was drift-dived on 22th October 2024, covering 8.5 km from the confluence with Cascade Creek downstream to below the confluence with Billy Creek.

Upper Makarora River

Two sections of the Makarora river were drift dived on the 13th of March 2025, section one start at Rainy Flat and finished at the confluence of the Young River. Section two started at the confluence of the Young River and ran to the access location to Mt Albert Station below the Makarora township.

Greenstone River

Three sections of the Greenstone River which had have previously been described in drift dive surveys as section 1, 2 and 3 were dived on the 23 October. Section 1 starts where many small meandering channels converge into a main river channel and goes downstream to the Greenstone Walkways smoko shed which is approximately 3km. Section 2 starts at the Greenstone Walkways smoko shed and ends at the top of the gorge upstream from Steele Creek (approximately 6km). Station 3 starts at the confluence of Steele Creek and goes downstream to the top of the gorge at Greenstone Hut (approximately 4km).

Results

Upper Lochy River

A total of four trout were observed throughout the surveyed reach, comprising three brown trout and one rainbow trout. Of the brown trout, two were classified as large and one as medium. The single rainbow trout was classified as medium. Overall, the Upper Lochy had a total trout density of 0.47 trout per kilometre (Figure 1).

Upper Makarora River

A total of 166 trout were observed across two sections, with Section One recording 105 trout — the highest count of any drift dive this year. Of the total trout observed, 95 were rainbow trout and 71 were brown trout. The Makarora recorded the highest trout density, with 22.3 trout per kilometre (Figure 1). Size classifications included 135 large trout, 20 medium, and 11 small fish (Figure 3).

Greenstone River

A total of 72 trout were counted across three surveyed sections of the Greenstone River, comprising 59 rainbow trout and 13 brown trout. Fifty trout were classified as large and 22 as

medium, with no small fish encountered. The Greenstone River recorded a trout density of 5.5 trout per kilometre.

The count from the 2021 survey, which had decreased from the 2002 survey in Sections 1 and 2 combined (Figure 4). Specifically, 21 fewer rainbow trout and 2 fewer brown trout were counted compared to 2021 data (Section 3 was excluded due to limited historic data).

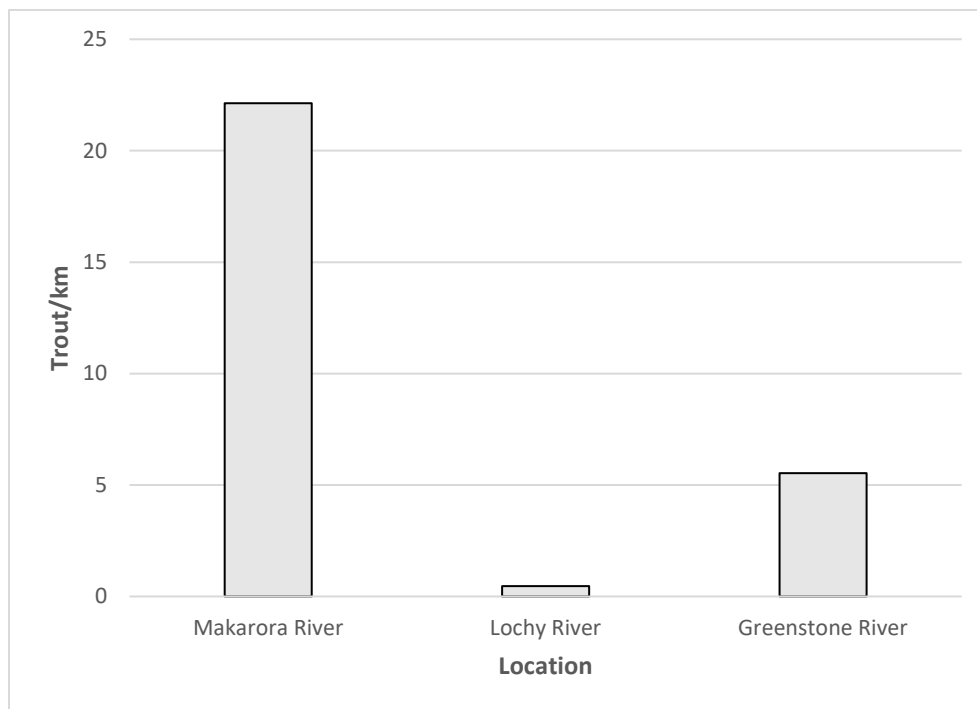


Fig 1. Number of trout observed per kilometre in river sections drift dived during the 2024/2025 season.

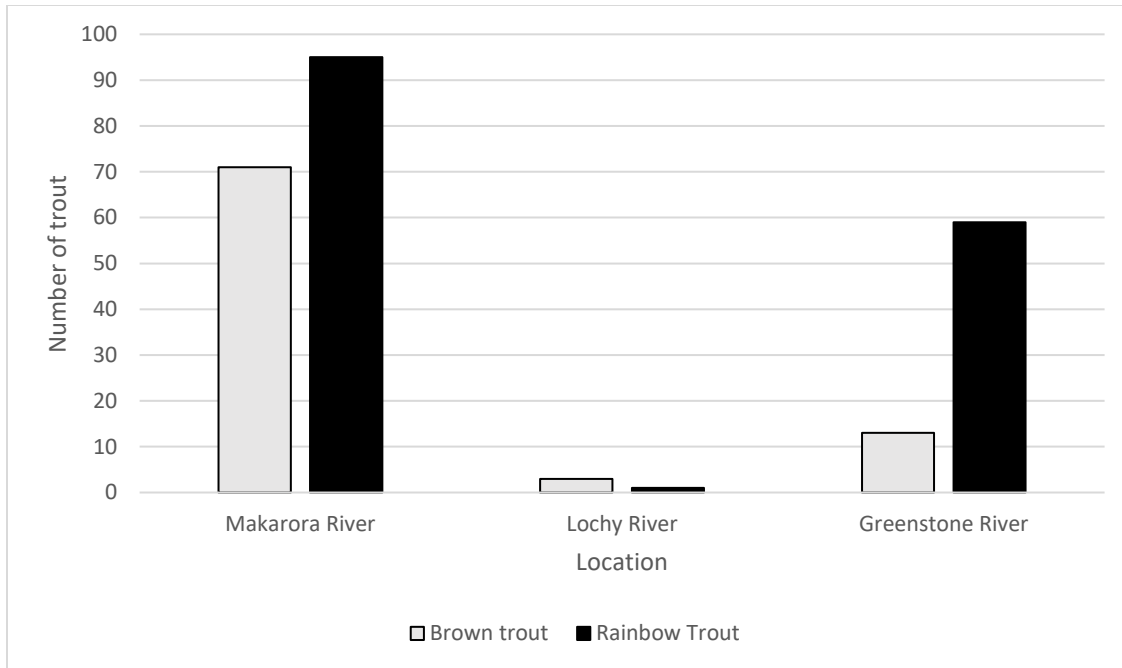


Fig 2. Species breakdown of trout in river sections drift dived during the 2024/2025 season.

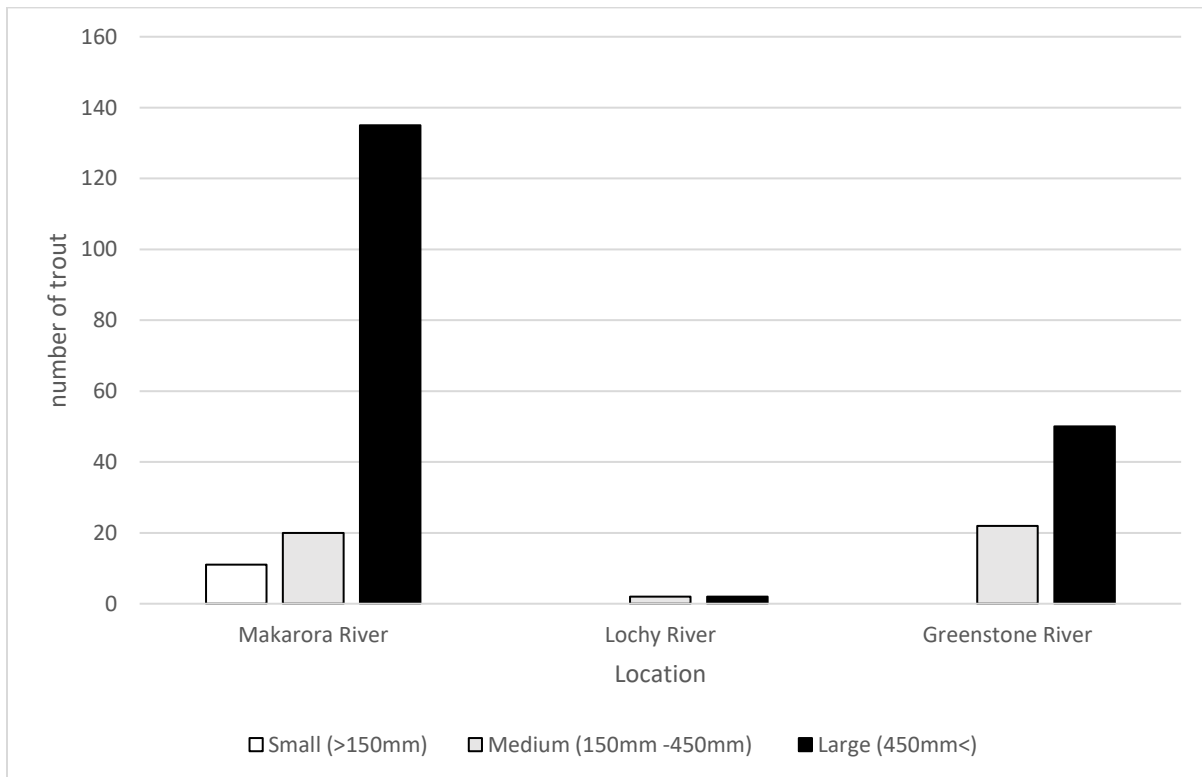


Fig 3. Size class breakdown of trout in river sections drift dived during the 2024/2025 season.

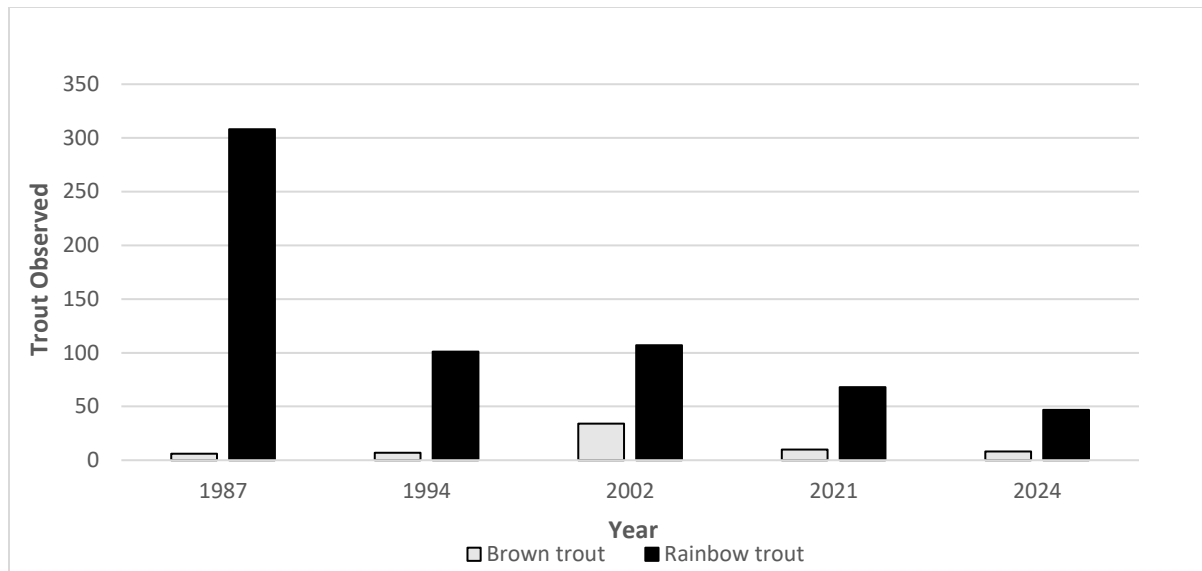


Fig 4. Showing number of trout observed during the October drift dives conducted on the Greenstone River (sections 1 & 2 combined) for years 1987-2024.

Discussion

Drift dive results are inherently variable, with previous studies highlighting the influence of water clarity, dive technique, and fish behaviour on observed counts (Jowett & Hicks, 1985). Despite these limitations, drift dives remain a valuable method for generating point-in-time estimates of salmonid species abundance and distribution, providing important insights for sports fisheries management and monitoring.

Upper Lochy

The low abundance observed in the upper Lochy River — only four trout across 8.5 km — strongly suggests a lack of upstream migration from the lower Lochy or minimal spawning success and recruitment of translocated rainbow trout. Despite the availability of suitable spawning gravel, pool habitats, and adequate macroinvertebrate communities observed during the survey, the population has not re-established. It is likely that the gorge acts as a significant barrier to upstream migration, functioning effectively as a one-way passage facilitating only downstream emigration, either via flood events or voluntary downstream movement. Notably, two large brown trout were observed and would have been classified as "extra-large," with experienced divers estimating their weight at up to or exceeding 10 lbs, indicating that the system can support substantial individual growth despite the low overall abundance.

Makarora

The Makarora River exhibited the highest trout density of all sites surveyed, with 22 trout per kilometre. However, it is important to interpret this figure cautiously, as environmental

conditions at the time may have influenced trout distribution. Specifically, the survey was conducted during a period of reduced flows in tributaries such as the Wilkin and Young Rivers, potentially prompting trout to concentrate in the Makarora mainstem to seek thermal refuge. Anecdotal feedback from anglers encountered during the dive corroborates this hypothesis, with reports of reduced trout presence in the Wilkin during the low-flow period.

Greenstone

The 2024 drift dive results for rainbow trout in the Greenstone River represent the lowest recorded October count to date (Figure 4). Historically, the mean number of rainbow trout observed during October surveys (n = 5) is 126, making this year's total of 47 substantially below average. Several factors may have contributed to this ongoing decline, including the establishment of didymo (*Didymosphenia geminata*) and *Lindavia intermedia*, both of which can negatively impact habitat quality and food web dynamics. Additionally, increasingly frequent and severe flood events during critical spawning periods — a trend consistent with climate change projections — may be further affecting survival of rainbow trout cohorts.

Recommendations

- **That this report be received.**
- **That the designated waters status of the Upper Lochy be reviewed at the next triennial fishery regulation review.**
- **Continue and expand the Otago Drift Diving project with further drift dives be planned for the 2025/2026 season, prioritising other designated waters.**

Acknowledgements

A sincere thank you to all the staff and volunteers who made these drift dives possible. In particular, we would like to acknowledge the valuable support of Honorary Rangers Jakub Kanok and Santillan De Pinto, as well as Otago Fish & Game staff members Ben Sowry and Jamie Ward. Your time, effort, and expertise were greatly appreciated.

We also extend our thanks to Glacier Southern Lakes Helicopters and Heli Glenorchy for providing aerial access to the upper Lochy and Greenstone rivers, respectively.

**Mason Court
Field Officer
July 2025**

References:

Court, M (2024) *Council report: Designated Waters Fishery and Controlled Fishery Report for the 2023/2024 Season*. Otago Fish & Game Council

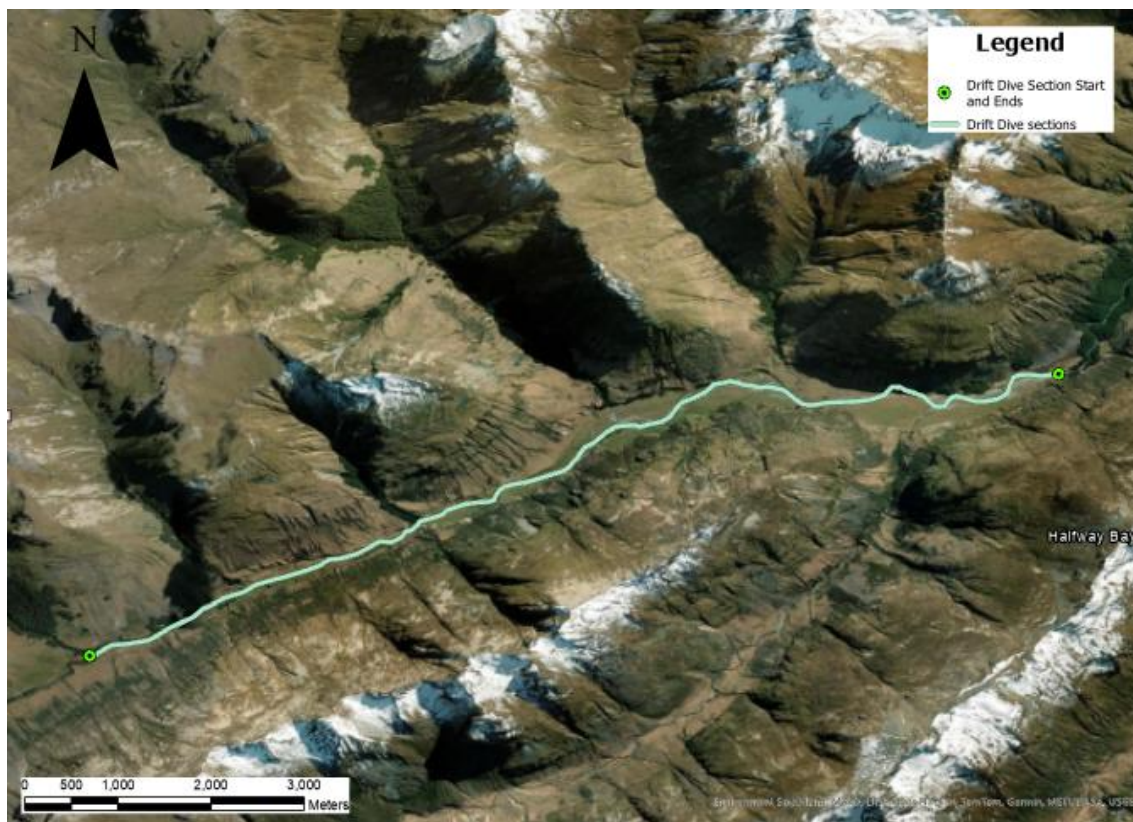
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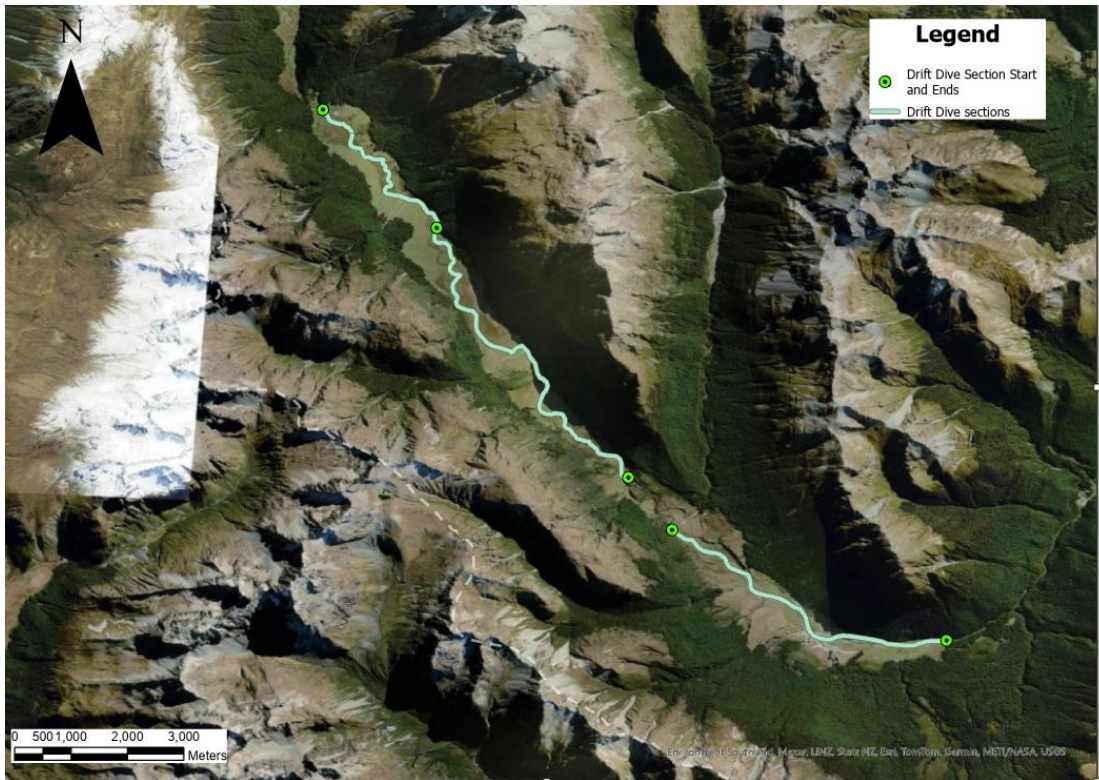
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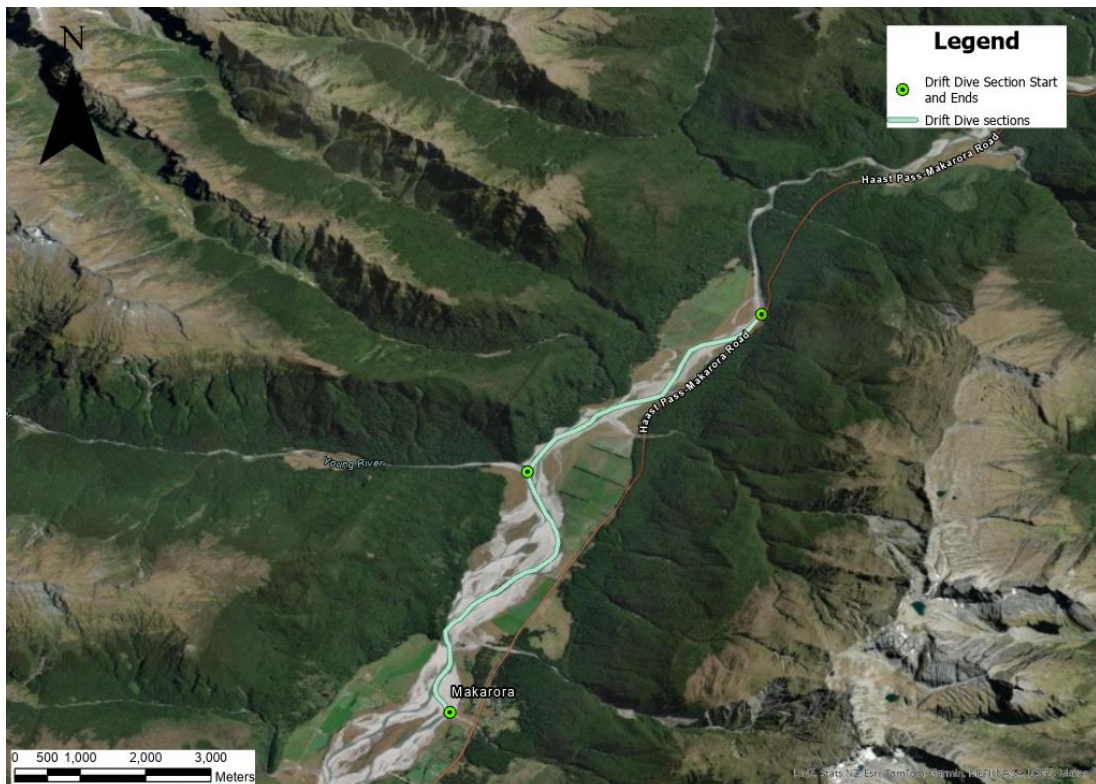
Appendix 1: Upper Lochy River drift dive sections for the 2024/2025 season



Appendix 2: Greenstone River drift dive sections for the 2024/2025 season



Appendix 3: Makarora River drift dive sections for the 2024/2025 season



15.0 General Business