

**Agenda For The Meeting of Otago Fish & Game Council
And AGM
On 28th November 2024
At Otago Fish and Game Council Office
Cnr Hanover and Harrow Streets, Dunedin
Starting 12.00 noon with a light lunch**

| Timetable | Council Meeting |
|------------------|-------------------------|
| 11.45 am | Lunch |
| 12.15 pm | Councillor Only Session |
| 12.30 pm | Meeting Begins |
| 2.00 pm | Public Excluded Session |
| 2.45 pm | Afternoon Tea |
| 3.00 pm | AGM and Public Forum |
| 5.00 pm | Meeting Ends |

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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 31st October 2024 At 120 Scotland Street, Roxburgh

1.0 Present and Apologies

Present: Colin Weatherall, Mike Barker, John Cruden, John Highton, Adrian McIntyre, John Preedy.

In attendance: Ian Hadland (CE)

Present via video conferencing: Blair Trevathan (part meeting)

Apologies: Vicky May

The meeting opened at 3:00pm

Cr Weatherall, as outgoing Chair, opened the inaugural meeting. He welcomed new Councillors John Preedy and John Cruden to the Council table and encouraged them to participate as fully as possible.

Cr Weatherall said that he would not be seeking re election as chair. He remarked that he had enjoyed his time in the chair and he was very proud of where we were positioned with a healthy set of accounts, a good range of assets which had been brought up to date, and that the Council was well set up for the future. He thanked Councillors and the CE for their support and commended members for performing as a united team and remaining positive.

Moved Cr Barker/Highton that the council commend Cr Weatherall on his past chairmanship and note his significant contribution to the organisation both here and on New Zealand Council and that be recorded in the minutes.

Carried

2.0 Matters to be raised not on the agenda

Cr Highton requested to speak briefly to his pre circulated paper on landowner relationships.

3.0 Declarations of Interest

The Cr Weatherall asked Councillors to update and sign Declarations of Interest.

4.0 Confirmation of Previous Minutes

Some minor grammatical errors were noted.

Moved (Cr Barker/Cr Highton)

That the minutes of the Council meeting of Otago Fish & Game Council held on 26th September 2024 be confirmed as a true and correct record.

Carried unanimously.

5.0 Matters Arising from the Minutes

The CE was asked to check if NZC had been invited to review the hunting and angling code of conduct documents. The CE would check but was confident he had written to NZC on the matter.

[3:25pm Cr Trevathan Joined the meeting via audio conferencing]

6.0 Items Requiring Decisions

6.1 Election of officers

Chairperson: As per the standing orders, the CE assumed the role of chair and called for nominations for chairperson.

Cr Barker nominated Cr McIntyre, seconded by Cr Weatherall

There being no further nominations for chair **Cr McIntyre was declared to be Chairperson.**

Cr McIntyre thanked the Councilors for their confidence in him and said he looked forward to their ongoing support as he works his way into the role.

Executive Committee: The CE explained the role briefly and one to two further Councilors could be added to the Chair and NZC rep who were automatically part of the executive under the governance rules.

Cr Weatherall was nominated by the Chair, seconded by Cr Barker.

Carried. **Cr Weatherall was declared the third executive member.**

Deputy Chair: The Chair Nominated Cr Trevathan

It was agreed that the roles, with the exception of Chair and NZC role could be reconsidered at the January planning meeting.

6.2 2025 Meeting schedule

The draft meeting schedule was discussed including the move to Tuesday meetings. Afternoon meetings, rather than evening meetings were still considered appropriate and allowed for sensible travel times.

The Council Planning meeting to be held in January 25/26th was agreed to be shifted from Cromwell to Dunedin.

Moved (Weatherall/Barker)

That the 2025 meeting schedule, subject to the change in location for the Planning Meeting be adopted.

Carried

[4:10pm Cr Trevathan left the meeting]

Moved (Highton/Barker)

That the meeting move into public excluded session.

Carried

7.0 Public Excluded Items

7.1 Draft Public Excluded Minutes of Meeting 26th September 2024

Moved (Cr Boyd/Cr Barker)

That the Public Excluded Minutes for 26th September 2024 be confirmed as a true and correct record.

Carried unanimously.

7.2 Otago Regional RMA planning update

7.3 Council Property Update

Moved (Barker/Weatherall)

That the meeting move out of public excluded session.

Carried

15.0 General Business

Cr Highton spoke to his pre circulated paper.

Meeting closed at 5pm

5.0 Matters Arising from the Minutes

6.0 Health and Safety Report- October/November

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

- Spawning surveys
- Learn to soft bait fish classes
- Wetland planting and weeding
- Designated waters compliance work

OHS Audits - Internal

Completed audits:

- Staff training list updated
- Cromwell office audited

Next audit areas:

- Main Hazard Register
- Boats
- Vehicle hazards

Incidents/Accidents/Near Misses/New Hazards

- Near miss with livestock on the road
- Drift diving bruising from shallow water dives
- Damage to personal truck on the Dunedin garage pillars

Training Completed

- VHF radio course
- One staff member completed refresher first aid course

General Discussions, Actions

- NZC soon to send round a survey on regions health and safety practices. This is to confirm all regions have sufficient policy and practice in place.
- A reminder was expressed for staff to update truck first aid kits and prepare for summer work with sun lotion, glasses and hats etc.
- Discussion on the use and safety of the quad bike.
- Back up key inside Dunedin office for anyone locked in.
- Herbicide spraying – updated safety equipment required.

Recommendation

- 1. To adopt the H&S Policy and authorise the Chairperson and CE to sign**
- 2. To receive the health and safety report for October/November**

Sharon Milne
Administration Officer
18th November 2024

Otago Fish and Game Council Meeting & AGM 28th November 2024



OTAGO FISH AND GAME COUNCIL

HEALTH AND SAFETY POLICY

Introduction

The Otago Fish and Game Council (the Council) is a 'person conducting a business or undertaking' (PCBU) in terms of the Health and Safety at Work Act 2015 (HSWA) and associated regulations - Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

The Council is committed to maintaining a safe and healthy work environment for its workers - staff, councillors, volunteers and other persons (visitors, clients and contractors) in its 'workplace' and to complying with relevant legislation, New Zealand standards and approved codes of practice.

The Council has a 'primary duty of care' or the primary responsibility for the health and safety of workers and others influenced by its work.

Scope

This policy applies to all Otago Fish and Game Council 'workers' and others influenced by its work in any place a worker or other person goes or is likely to be while at work or where work is carried out be it permanent or intermittent.

Key elements of the policy

The Council will comply with the provisions of legislation dealing with health and safety in the workplace, by:

- providing a safe physical and emotional work environment;
- ensuring a health and safety strategy/plan is in place and that engagement and consultation with staff on the strategy occurs;
- providing adequate facilities and any safety equipment deemed necessary, including ensuring access and ensuring property and equipment is safe to use and workers are not exposed to hazards;
- ensuring there is an effective method in place for identifying, assessing and controlling hazards. This includes the recording and investigating of injuries, and reporting serious harm incidents;
- having a commitment to a culture of continuous improvement.

Liability and Personal Liability

The Council, its chief executive (CE) and staff are responsible for implementing health and safety policy. Councillors and the CE are 'officers' in terms of the legislation and while the Council may be liable, and the CE and workers may be personally liable, for a failure to meet health and safety obligations an individual councillor cannot be prosecuted under the HSWA for failing to comply with his or her duties because they are volunteer officers.

The CE has primary responsibility for implementing this policy including:

- exercising due diligence in accordance with the provisions of the health and safety legislation;
- taking all reasonable steps to protect workers, volunteers and visitors in the workplace from unsafe or unhealthy conditions or practices;
- ensuring there are effective processes to deal with unacceptable behaviour, such as non compliance;
- providing information and training opportunities to workers;
- keeping the Chair and Council fully informed, including reporting at bi-monthly meetings, and advising them of any emergency situations as soon as possible.
- Resourcing Health and Safety appropriately.

Everyone is responsible

All workers (employees, contractors, and volunteer workers) are expected to play their role in maintaining a safe and healthy workplace through:

- being involved in improving health and safety systems at work;
- following instructions, rules, procedures and safe ways of working;
- reporting all injuries, incidents and near misses;
- reporting any pain or discomfort as soon as possible;
- helping new staff members, trainees, volunteers and visitors to the workplace understand the risks and hazards and why they exist;
- reporting any hazards, new hazards or health and safety issues through the reporting system;
- keeping the workplace tidy to minimise the risk of any trips and falls;
- wearing or using protective clothing and equipment when required to minimise exposure to workplace hazards;
- taking reasonable care for the health and safety of themselves and of others in the workplace.

All others (e.g. visitors) in the workplace must:

- follow all instructions, rules and procedures while in the workplace;
- report all injuries, incidents and near misses to the Chief Executive;
- wear or use protective clothing and equipment as an when required to minimise their exposure to hazards.

Signed: _____ (Chief Executive)

Signed: _____ (Chairman)

Adopted: 28th November 2024

7.0 Items Requiring Decisions

7.1 Draft Game Notice 2025 (Gamebird hunting regulations)

Purpose

The purpose of this report is to recommend the draft 2025 Game Gazette Regulations to Council.

Changes proposed

The Council generally aims for consistency of regulations between seasons. This, alongside general alignment of regulations between regions, seeks to reduce the confusion associated with small one-off changes on an annual basis. Therefore, there are no changes proposed for the 2025 season.

Paradise shelduck limits are subject to the January 2025 aerial moult counts.

Gamebird Species Monitoring

Greylands

Aerial surveys were completed in April 2024 and reported to Councils May 2024 meeting. This year's Greyland aerial count was 5,130, almost matching last year's count of 5100. This year's result is lower than the average of previous surveys (nearly 5,700). However, if the anomalously high count in 2022 is excluded, this year's total is slightly above average. In 2024, the greyland harvest was 38,500 birds, the third lowest on record, approximately 6,400 fewer than last year, and significantly below the long-term average of 57,300 birds.

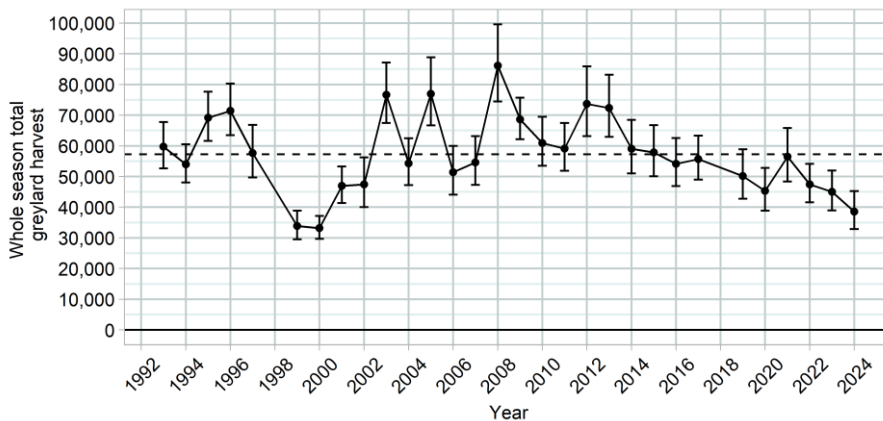


Figure1: Whole season total greyland harvest from 1993 to 2024, with 95% confidence intervals and the long-term average indicated by a dotted line.

Paradise Shelduck/Pūtangitangi

January's aerial trend counts (reported in February 2024) showed a decrease in the Paradise shelduck population from 20,800 to 18,180 (figure 2). The long-term trend indicates a stable to increasing population. This is still in line with maintaining the long-term range of between 16,000 and 23,000 birds. Paradise Shelduck trend counts will be completed in January 2025, with the final bag limits confirmed against the population trend.

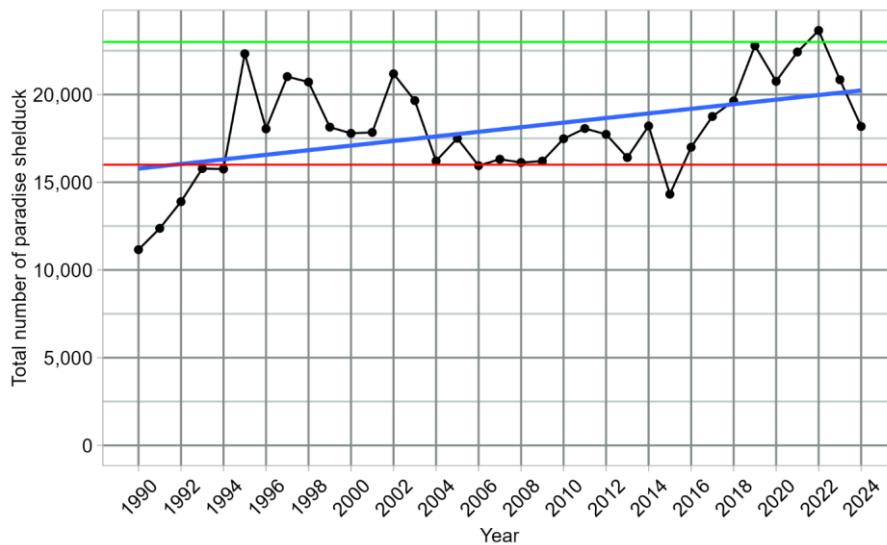


Figure 2. Long-term (1990-2024) count totals for paradise shelduck. Long-term linear trend shown in blue. The management bands of 16,000 and 23,000 shelduck shown in red and green respectively.

The 2024 paradise shelduck harvest was estimated to be 11,650 birds, which is 1,500 below the long-term average and 5,700 fewer than the previous season (see Figure 3). Since 1993, paradise shelduck harvests in the Otago Region have shown a modest but statistically significant upward trend ($p = 0.01$), indicating either an increased availability of paradise shelducks or a greater interest among hunters. If the summer moult trend count exceeds 23,000, the daily bag limit should be raised from 12 to 15 birds. Conversely, if the moult count falls below 16,000 birds, suspending the 2025 summer hunt should be the first regulation change considered to manage the harvest.

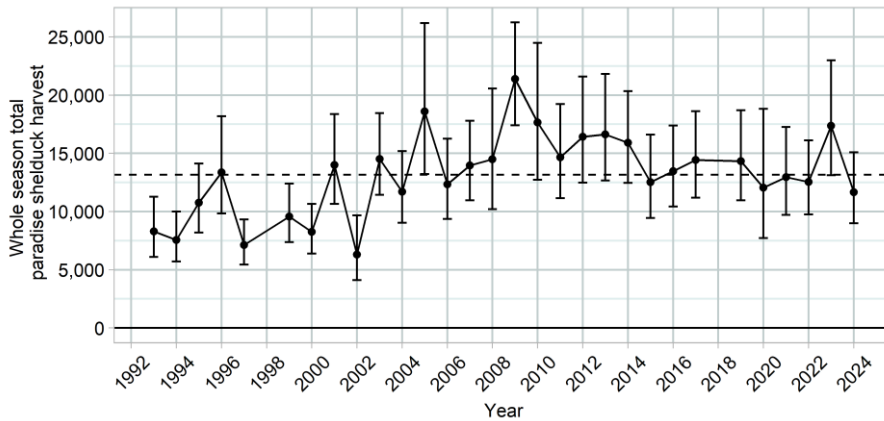


Figure 3. Whole season total paradise shelduck harvest for 1993-2024 with 95% confidence intervals and the average for the period shown as a dotted line.

Black swan/Kakiānau

The aerial count conducted in January 2024 showed a significant increase in black swan numbers, rising from 2,500 birds in 2023 to 4,850 in 2024—double last season's count. Overall, monitoring data indicates an upward trend in the black swan population over time. An estimated 1,740 birds were harvested in 2024, more than triple the previous season's harvest of 570, although part of this increase can be attributed to series of surveys with one ultra successful swan hunter.

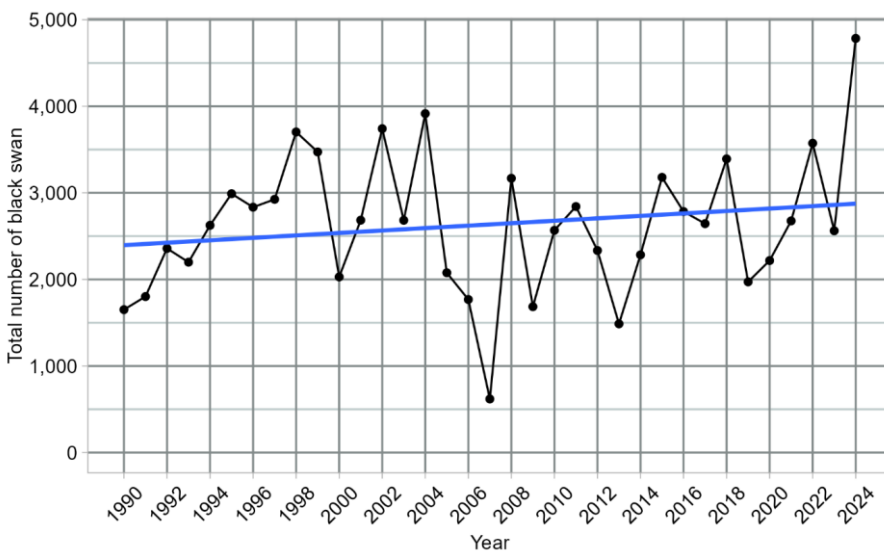


Figure 4. Long-term (1990-2024) count totals for black swan. Long-term linear trend shown in blue.

The black swan bag limit was raised in 2022 to help address crop and pasture damage in areas where black swans congregate in large numbers during spring. This adjustment does not appear to have impacted the overall population. If the population continues to rise and complaints increase, a further review of the bag limit may be recommended.

Pūkeko

Counts are undertaken annually to understand trends in the population and for setting game regulations. The population surveys for pūkeko last season had 9 extra transects added to attempt to better understand the pūkeko dynamics in the region. There has only been two years of surveying the new transects and as such there is not enough data to indicate a stable and expanding population of pūkeko, therefore no change to the 2025 regulations is proposed for pūkeko.

Shoveler/Kuruwhengi

“There has been a noticeable downward trend in the total number of shoveler harvested in the Otago Region since 1993, a pattern that is consistent with other regions and the nationwide trend. This decline in harvest numbers should not be seen solely as an indicator of a decrease in the shoveler population. It is likely influenced by a combination of factors, particularly changes in hunting practices such as a shift away from traditional large coastal ponds and alterations to bag limits and season lengths over time.

Trend analysis of shoveler suggests a slight long-term decline in shoveler populations in the Otago Region however this trend is reversed more recently, none of the trends are strong or statistically significant suggesting relative stability.

All trend indices for the national monitoring aside from this year compared to last suggest that the population is stable.

Although based on limited data, the 2023 Gazette review change to the shoveler bag limit has been effective in reducing the harvest in the Otago and Southland regions well as nationally due to the high proportion of shoveler harvested in the lower South Island. It is recommended that the bag limits are reviewed in the upcoming triennial review.”

Shoveler and Grey Teal Monitoring. J Couper. 2024

No change to the current one drake shoveler per day limit is proposed. Measures implemented in 2023 to reduce the shoveler harvest are recommended to be maintained for three to five years to monitor the effectiveness of the bag limit reduction at reducing shoveler harvest.

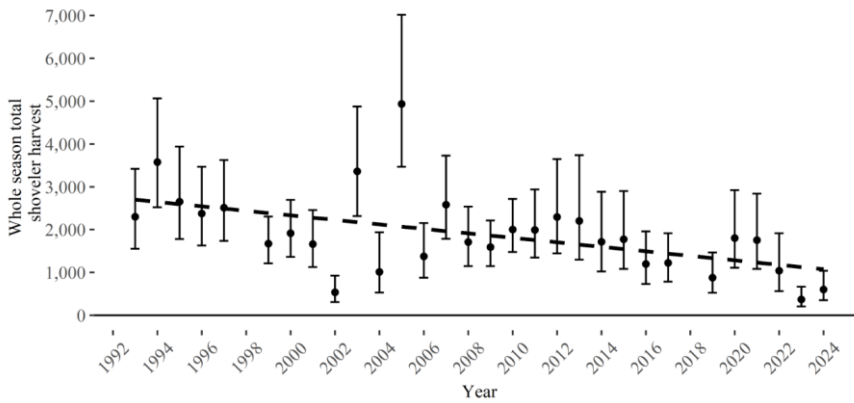


Figure 5. Whole season total shoveler harvest in the Otago Region. Long-term trend line shown as a dotted line.

Hunter Harvest

The 2024 season saw a notable reduction in the total harvest of greylards and paradise shelduck. We estimate that 38,500 greylards and 11,650 paradise shelduck were harvested.

Monitoring has shown that paradise shelduck harvest has had a small but statistically significant increasing trend since 1993, suggesting a possible rise in paradise shelduck availability or hunter interest. Greylard harvest in terms of both total harvest and hourly rates have shown a slight, statistically insignificant downward trend.

2409 JC Whole Season Gamebird Harvest. J Couper. 2024.

Commented [IH1]: may need to state that is from monitoring?

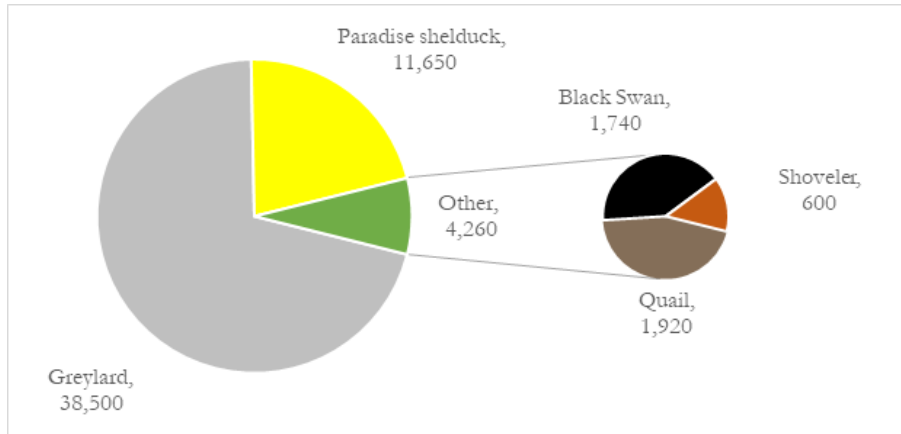


Figure 6: Whole season waterfowl harvest broken down by species in the Otago Region for 2024.

Just over 54,400 game birds were harvested this season in the Otago Region (Figure 6), a significant decrease from last year's total of 64,500. Greylards were the most common game bird, comprising over 70 percent of the total season waterfowl harvest, with paradise shelduck making up a further 21 percent. Due to the extremely low harvest, the survey did not identify any pheasant or chukar taken this season.

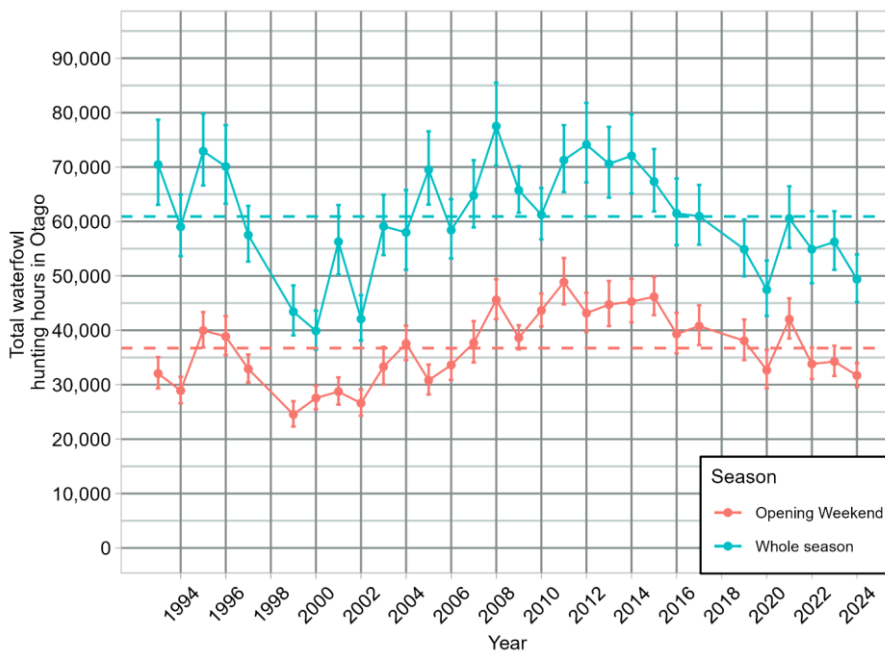


Figure 7: Total number of hours spent hunting in Otago on Opening Weekend and the whole season for 2014–2024 and the average number of Opening Weekend and whole season hours for the period (dashed lines).

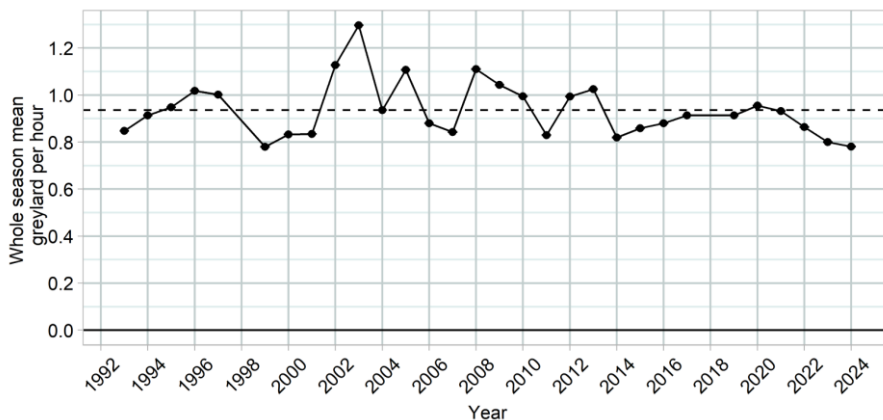


Figure 8. There has been a slight and statistically insignificant downward trend ($p=0.17$) over the survey period. This season, the average greyland harvest rate was 0.78 birds per hour, slightly below last year and under the long-term mean of 0.94. This rate is the second lowest on record, following 1999.

2409 JC Whole Season Gamebird Harvest. J Couper. 2024.

Ngāi Tahu ki Ōtākau

This draft report has been provided to Ngāi Tahu to review and provide comment.

Liaison with neighbouring Fish and Game Regions

We have communicated with both Central South Island and Southland staff over proposed regulation changes for their respective regions.

Central South Island are not considering any changes and will remain status quo

Southland are not considering any changes, due perceived risk of avian influenza may have on the gamebird populations.

Further discussion is required at a national level to align measures for harvest reduction of shoveler.

Recommendations for the 2025 game bird hunting season:

- 1. That the draft game regulations be adopted subject to Paradise shelduck trend counts and the population falling between 16,000 and 23,000 birds.**
- 2. If the Paradise Shelduck trend count exceeds 23,000 birds that the daily bag limit for that species to be increased to 15/day region wide, if the count is less than 16,000 the summer season for paradise shelduck should be suspended for 2026.**

Commented [IH2]: 2026. 2025 is already gazetted

A draft set of Game Regulations have been attached as Appendix 1.

Mason Court
Fish & Game Officer
November 2024

Appendix 1 – Draft Game Notice

OTAGO FISH AND GAME REGION

1 Game That May be Hunted or Killed—Duration of 2025/2026 Season

| Species | Season Duration (Dates inclusive) | Daily Bag Limit | Hunting Area |
|---|--------------------------------------|-----------------------|--|
| Grey/mallard duck and any hybrid of those species | 3 May to 27 Jul 2025 | 25 | All areas |
| NZ shoveler duck | 3 May to 27 Jul 2025 | 1 Drake only | All areas |
| Paradise shelduck | 3 May to 31 Aug 2025 | 12 | All areas |
| | 7 Mar to 15 Mar 2026 | 5 | All areas (refer to clause 5(4) for this Region) |
| Pūkeko | Closed season | 0 | All areas |
| Black swan | Closed season | 0 | Area A |
| | 3 May to 31 Aug 2025 | 10 | Area B |
| California quail | 31 May to 31 Aug 2025 | 10 | All areas |
| Chukar | 31 May to 31 Aug 2025 | 2 | All areas |
| Cock Pheasant | 31 May to 31 Aug 2025 | 5 | All areas |

Commented [IH3]: Check dates should be 2026

Commented [MC4R3]: Roger, have double checked and those date are now the correct ones for the first two full weekends in March 2026

2 Definition of Areas

- (1) **Area A:** The Clutha River catchment upstream from the Clyde Dam.
- (2) **Area B:** The Clutha River catchment downstream from the Clyde Dam; the Taieri River catchment and all the coastal catchments between Shag Point and The Brothers Point on the east coast of the South Island.

3 Shooting Hours

- (1) **Area A:** 7.00am to 6.45pm
- (2) **Area B:** 7.00am to 6.30pm

4 Decoy Limit

No limit.

5 Special Conditions

- (1) No person shall use or cause to be used on any water within the region for the hunting or killing of game, any fixed stand, pontoon, hide, loo or maimai, except within a distance of 10 metres from the water margin in non-tidal waters, or from the low water mark in tidal waters, or from the outside edge of the raupō growth where raupō abounds, without the prior consent of the Otago Fish and Game Council.
- (2) No person may leave on the hunting ground the bodies or parts of bodies of Black swan or other game shot in the Otago Fish and Game region.
- (3) Shooting from a boat is prohibited on the Clutha River from 3 May to 11 May 2025 (refer to First Schedule clause 6).
- (4) The summer paradise shelduck season is open from 7 March to 15 March 2026. Hunting is restricted to locations 200 metres or more from open water.

6 Refuges and Closed Game Areas

The following wetland refuges and closed game areas are closed to hunting:

Refuges Location

- (1) Lake Hayes - Queenstown/Arrowtown highway
- (2) Hawksbury Lagoon, Waikouaiti– East Otago
- (3) Finegand - Balclutha

Closed Game Areas Location

- (4) Tomahawk Lagoon, Dunedin
- (5) Kawarau River outlet from Lake Wakatipu downstream to the Shotover River confluence

Page Break

7.2 Sports Fish & Game Management Plan Guidelines

Overview

The New Zealand F&G Council (NZC) has asked for feedback on the following documents related to Sports Fish and Gamebird Management Plans (SFGMP) which they intend to adopt as policy.

1. **Policy for drafting sports fish and game management plans** – contains a summary of the steps to adoption of a new ten year SFGMP.
2. **Key elements in a SFGMP** – Descriptor of the various chapters in a SFGMP
3. **SFGMP Consultation** – An outline of the steps to ensure that the consultation provisions under the Act are met.
4. **Mana Whenua engagement guideline** - Overview and guidance on how to effectively engage with Mana Whenua.

Otago SFGMP 2015-2025

As you will be aware, our own SFGMP expires next year. The Environmental Officer is presently reviewing the document but is being held up due to his commitment to the Regional Policy Statement hearings and the Otago Land and Water Plan.

Early in the new year it is intended to move fully into the rewrite and consultation phases of our ten year SFGMP replacement.

Helpful, but should it be NZC Policy?

You will note that nature of the documents is in the form of advice, best practice or guidance. It should be questioned whether it needs to be policy and binding on regional F&G councils.

There is little in the Conservation Act (below) which prescribes what specific form SFGMP's should take, or their contents, so apart from creating consistency via the template provided, there is no statutory obligation to comply with the NZC guidance.

17L Sports fish and game management plans

- (1) The purpose of a sports fish and game management plan is to establish objectives for the management of sports fish and game, or both, within any region or part of any region.
- (2) Each Fish and Game Council shall prepare for approval by the Minister such sports fish and game management plans as are necessary for the management of sports fish and game within its area of jurisdiction.
- (3) Nothing in any sports fish and game management plan shall derogate from—
 - (a) any provision in this Act or any other Act; or
 - (b) any policy approved under this Act or any other Act in respect of the area to which the plan relates, or any part of that area; or
 - (c) any provision in any conservation management strategy or conservation management plan or freshwater fisheries management plan.
- (4) When preparing a draft sports fish and game management plan, the Fish and Game Council shall—
 - (a) have regard to the sustainability of sports fish and game in the area to which the plan relates; and
 - (b) have regard to the impact that the management proposed in the draft is likely to have on other natural resources and other users of the habitat concerned; and
 - (c) include such provisions as may be necessary to maximise recreational opportunities for hunters and anglers.

Section 17L: inserted, on 10 April 1990, by [section 13\(1\)](#) of the Conservation Law Reform Act 1990 (1990 No 31).

In saying that the documents will be helpful in the development of our own SFGMP plan which will begin in earnest early next year.

Conclusion

The content is adequate so my advice is to simply note the guidance material and feedback to the NZC:

- *Communicate appreciation for exercising their coordination role in collation and circulation the of the guidance material.*
- *that it needn't be National Policy as its largely guidelines*
- *Otago Council note the guidance, and use it in developing its next SFGMP.*

For discussion and decision

Ian Hadland
Chief Executive

Draft SFGMP Consultation Policy

The development of a Sprots Fish and Game Management Plan (SFGMP) is carried out under the Conservation Act 1987, in accordance with the Conservation Management Strategy and Conservation General Policy. The following guidelines provides a number of steps relating to consultation for developing new SFGMP.

In addition to this policy, we are developing a mana whenua engagement guideline and have developed SFGMP key elements & guidance.

This consultation policy is designed specifically to provide a good practice process to assist with developing SFGMP rather than general public consultation.

Step 1 Engage with mana whenua

Each region is responsible for the development of relationships with key mana whenua with interests in the Fish and Game region. Discussions with mana whenua could include the extent to which they want to be included in the process and what issues are key to them. Supplementary guidance for mana whenua engagement is provided in Draft Fish and Game Mana Whenua engagement guidelines.

Consultation should be consistent with the mana whenua engagement advice provided (Kahu Environmental August 2023) and legal advice “Giving Effect to Treaty Principles, advice on the application of s4 of the Conservation Act 1987” (Rachel Ennor and Elana Geddis Feb 2023).

Step 2 Discussion with key stakeholders

Regions should seek input from the following organisations prior to drafting:

- Department of Conservation and Conservation Board
- Regional council / district council
- herengaanuku (walking access NZ)
- Game Animal Council
- Other bordering fish and game councils
- NZC
- Licence holders

The focus on this round of consultation is to ask who wants to be involved in the build and to discuss what values everyone would expect to see.

Early discussions may also start conversations about key issues.

Step 3 Drafting

This step ideally commences after a number of meetings with key stakeholders and ideally collaborative drafting is undertaken where possible. Section 17L of the Conservation Act prescribes minimum requirements of a SFGMP. Our Key Elements and Guide document also covers what SFGMP should contain.

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 - (c) any provision in any conservation management strategy or conservation management plan or freshwater fisheries management plan.
- (4) When preparing a draft sports fish and game management plan, the Fish and Game Council shall—
 - (a) have regard to the sustainability of sports fish and game in the area to which the plan relates; and
 - (b) have regard to the impact that the management proposed in the draft is likely to have on other natural resources and other users of the habitat concerned; and
 - (c) include such provisions as may be necessary to maximise recreational opportunities for hunters and anglers.

Section 17L: inserted, on 10 April 1990, by [section 13\(1\)](#) of the Conservation Law Reform Act 1990 (1990 No 31).

Step 4 Adoption of draft SFGMP for consultation and provide draft SFGMP to NZC**Step 5 Statutory Consultation process 40 working days**

Formal consultation of draft must adhere to section 17M of the Conservation Act. This includes a notice of the draft plan in newspapers and notice of the draft plan to the director general (which is delegated to the local DOC office). Notice of the draft plan should also go to iwi authorities and regional councils or territorial authorities. The fish and game council may give further notice of the draft plan as the Fish and Game Council thinks fit.

Step 6 End of submission period and summary of submissions

Hearings can be carried out by a sub-committee of the region.

Significant changes may require a second consultation period of 40 days

Step 7 Final draft SFGMP must be adopted by the regional F & G council**Step 8 Provide copy of SFGMP to NZC along with summary of submissions¹**

Section 26C Functions of New Zealand Fish and Game Council include (k) to perform such other sports fish and game functions as the Minister may require. The minister will usually request comments from NZC regarding the SFGMP.

Step 9 Region to provide SFGMP to the Minister of Conservation

Region to provide Draft SFGMP with outcome of consultation to go to the minister of conservation.

Step 10 The Minister of Conservation can request changes or approve the SFGMP**Step 11 Approval**

Once the SFGMP is approved, circulate to those who participated in the process, NZC and other regions for information. The approved plan should also be added to the F&G web page so the public can easily obtain a copy of the SFGMP.

Sports Fish and Game Management Plans

Giving Effect to the Principles of Te Tiriti o Waitangi

- Engagement with mana whenua must happen before F&G Councils start drafting SFGMPs to allow mana whenua interests and aspirations to be actively taken into account during the planning and drafting process. This should be undertaken in accordance with the F&G Guide for Engaging with Mana Whenua. *[Under development]*
- The structure and content of SFGMPs will therefore be determined as part of engaging with mana whenua.
- It will be important to comply with and refer to relevant Treaty Legislation and have regard to iwi planning documents.
- Examples of issues that have arisen in the past include:
 - Intrinsic value of waterways vs utility for fishing and hunting
 - Customary use of indigenous species
 - Māori Rights to non-indigenous species
 - Predation of indigenous species by sports fish
 - Prosecution of Māori for hunting or fishing without licences
 - Concessionary licences for Māori to fish and hunt introduced species
- Note that some issues raised may be beyond the scope of a SFGMP. Discussing the issues however, will likely be important to mana whenua, and F&G may want to consider other avenues to address any matters raised.

Approval Page

- This section confirms the SFGMP has been approved by the Minister.

[See Appendix One: Example of an Approval Page.](#)

Introduction

- Consider the following elements for an Introduction:
 - Role of F&G – opportunity to tell F&G's story
 - Vision for the region
 - Legislative Context
 - Consistency with law and relevant planning documents
- Key questions to consider:
 - Does this information help achieve one or more of the purposes of the SFGMP?

State of the Environment – Species, Habitats and Threats

- Consider including a section on the state of the environment, covering the sports fish and game bird resource, habitat values, as well as threats to those values.
- Consider including maps of sports fish and game habitat and spawning areas.
- Consider identifying significant fishing values of waterways, including for outstanding waterways consistent with resource management legislation. Also identify resource by locally, regionally and nationally significant.

- Make explicit links to objectives and policies and significant values of waterways
- Key questions to ask:
 - Is there a link to between significant values of waterways and the objectives and policies?
 - Is the description of the state of the environment based on evidence, including mātauranga Māori and science?
 - How will the description assist in resource management and conservation advocacy?

Community Engagement

- Consider including issues, objectives and policies that relate to how F&G engages with diverse members of the community.
- Include licence holders, iwi, DOC, local councils, conservation boards, private landowners, New Zealand Walking Access Commission/Ara Hiko Aotearoa.

Sustainability of Sports Fish and Game Bird Populations

- Include issues, objectives and policies that will help F&G manage sports fish and game bird populations.
- Consider addressing the following matters, amongst others:
 - Data requirements
 - Appropriate angling and hunting conditions
 - Planned release/s
 - Degraded fisheries or game bird resources requiring restoration
- Including issues, objectives and policies on monitoring that:
 - Provide direction for monitoring priorities for operational workplans
 - Implement national species monitoring programmes and Standard Operating Procedures (if any).
- Consider what impacts F&G management decisions could have on other natural resources and other users of the habitat concerned, including in relation to:
 - Risks to aviation safety from game birds
 - Impacts on crops from game birds

[See Appendix Two: Example of issues, objective and policies for Sustainability of Sports Fish and Game Birds Populations](#)

Habitat Protection

- Include issues, objectives and policies that address habitat protection.
- Consider including issues, objectives and policies that address the following matters:
 - Priority outcomes for resource management and conservation advocacy to influence planning documents
 - Climate change impacts on habitat values
 - Degraded wetlands requiring restoration.
- Consider what impacts F&G management decisions could have on other natural resources and other users of the habitat concerned, including in relation to:
 - Interactions between sports fish and indigenous fish

- Fish passage and impacts on indigenous fish

[See Appendix Three: Example of issues, objective and policies for habitat protection](#)

Recreational Opportunities for Hunters and Anglers

- Include issues, objectives and policies that address the following:
 - Protecting and improving access to recreational opportunities
 - Maintaining and improving awareness of existing recreational opportunities for hunters and anglers
 - Guiding
 - Ethical behaviour of anglers and hunters
 - Equitable access to the resource for all licence holders
- Consider including issues, objectives and policies that address how F&G involves licence holders in decision-making.
- Consider what impacts F&G management decisions could have on other natural resources and other users of the habitat concerned.

Compliance

- Consider including issues, objectives and policies on compliance.
- Key issues to consider:
 - Training for F&G rangers
 - Monitoring requirements to assist compliance activity. Monitoring is key to the work we do so we can set bag limits and know when there are adverse changes to bird and fish populations. A Standard Operating Procedure is currently being developed to set a framework for monitoring work. We would expect to see the following monitoring work as a minimum:

-Annual long running game bird counts and banding.

-Water quality monitoring, investigations to fish passage obstructions, drift diving / electric fishing population monitoring, trout spawning surveys, gravel maintenance to enhance spawning where applicable, sports fish tagging programme, participate in fish screen working party / advocacy where applicable,

Plan Implementation and Review

- Consider including a section describing how the plan will be implemented and reviewed.
- Key questions to consider:
 - Is making links to the Operational Work Plan helpful?
 - Would identifying targets and timeframes be helpful?

General

- Engagement with mana whenua and stakeholders will identify additional elements.
- Be brief, don't repeat issues.
- Think high level, 10 year-horizon.

Appendix One – Template for Approval

APPROVAL

The purpose of this sports fish and game management plan is to establish objectives for the management of sports fish and game within the **[Name]** Region as per section 17L(1) of the Conservation Act 1987 (the Act).

This sports fish and game management plan was prepared by the **[Name]** Fish and Game Council in accordance with sections 17L(2), 17M, and 26Q(1)(e)(iii) of the Act.

This plan was approved by **[Name]**, Minister of Conservation, under sections 17M(2)(g) and 26A(1)(a) of the Act.

..... / /

Minister of Conservation

Appendix Two: Example of Issues, Objective and Policies for Sustainability of the Resource

Issues:

[Issue defined as: problem requiring action]

There is an ongoing need for information on sports fish and game populations dynamics and factors affecting their abundance, including harvest, to develop appropriate management responses. There are growing concerns that the sea-run salmon fishery and the sea-run trout fishery are in decline, as there are fewer fish returning to sustain the population.

Sports fish and game bird populations can also impact other users of the resource, including potential risks to aviation safety and impacts on crops.

Objective:

[Objective defined as: what F&G would like to achieve to resolve an issue]

Achieve sustainability of sports fish and game bird species through management, and support anglers and hunters enjoying a sustainable and highly valued recreational experience.

Policies:

[Policy defined as: action to achieve the objective:

1. Maintain information in an up-to-date database detailing sports fish species, population monitoring, trends and harvest.
2. Draft angling and hunting conditions and recommendations that:
 - a. Manage angler and hunter harvest at sustainable levels
 - b. Are based on the best available information
 - c. Adopt a precautionary management approach in the absence of reliable information
3. Undertake the following in relation to the sea-run salmon fishery and the sea-run trout fishery:
 - a. Identify highly-valued areas
 - b. Monitor the resource to determine whether it is in decline

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- c. If resource is declining, investigate factors contributing to the decline
 - d. Consider management options to improve the fishery
4. Prioritise sports fish and game bird species management activities through:
 - a. Population trend monitoring
 - b. Angler and hunter harvest and surveys
 - c. Identification of species management threats and opportunities assessments of the effectiveness of species management activities.
5. Stock fish stocks through the planned release of species, only in waterbodies where:
 - a. sports fish species are already present
 - b. they will not have significant adverse effects on indigenous species
 - c. habitat is deemed suitable, and/or
 - d. limitations on natural spawning and/or rearing habitat limit adult sports fish populations below their carrying capacity.
6. Recognise the potential risks to aviation from game birds in the vicinity of airports and work with airport managers and hunters to provide for aviation safety, whilst protecting established game bird populations.
7. Assist landholders where there is a conflict between game birds and agricultural production to minimise impacts.
8. Improve the skills of hunters in hunting for individual game species with potential to cause adverse impacts.

Appendix Three: Example of Issues, Objective and Policies for Habitat Protection

Issues:

[Issue defined as: problem requiring action]

Almost half of the country's lakes are in poor health, vast lengths of our rivers are adversely impacted by nitrogen and phosphorous inputs, with almost a fifth severely degraded by nutrient pollution. Overallocation of water in rivers is causing the ecology in the rivers to decline and degrading the habitats of sports fish and game birds. Major impacts result from:

- Intensification of land use including forestry, dairying, mining (including gravel extraction) and urban development
- Nutrient and sediment discharges to waterways and non-point source pollution
- Flood control works in rivers and streams
- Wetland drainage and modification of wetland vegetation
- Damming of rivers and lakes
- Development of rivers for the generation of hydroelectricity or alteration of flows through irrigation
- Introduction of unwanted organisms such as didymo (*Didymosphenia geminata*) and other aquatic pests.
- Mining or gravel extraction
- Climate change

Advocacy is an essential management tool, because other statutory bodies are responsible for the control and management of water and land resources.

Objective:

[Objective defined as: what F&G would like to achieve to resolve an issue]

Legislation, policy and plans enable the quality, water levels and natural characteristics of rivers, lakes and wetlands to support natural ecosystems and productive and diverse fish and game bird populations.

Policies:

[Policy defined as: action to achieve the objective]

1. Advocate in legislative and policy development, resource management and conservation statutory processes, and community-based processes, for the protection, maintenance and enhancement of the quality and extent of sports fish and game bird habitats, including for the following:
 - a. Water quality standards and flow regimes in plans that reflect the requirements of healthy and productive sports fish and game populations and the different stages in their life cycles.
 - b. Identification and protection of sports fishing values of waterways in Freshwater Management Units in regional plans, including significant values in outstanding water bodies.
 - c. Eradicating or effectively managing the risks posed by pests and diseases to sports fish and game bird habitats.
 - a. Wetlands are identified, maintained, improved and restored, in terms of quality, diversity and species productivity and the overall area of wetlands is increased, underpinned by the regional focus on protection of regionally significant and other smaller wetlands.
 - b. A holistic assessment of the catchment's ecosystem values and needs.
 - c. Effects of climate change are considered in decision-making.
 - d. Water conservation orders.
2. Press for appropriate action by agencies directly responsible where non-compliance with resource management, conservation, or other laws, and plans and policies written under these laws is detected.
3. Assess and monitor the condition and trend of sports fish and game bird habitat in the region, prioritising habitat with resource and use issues, consistent with a national monitoring approach.

Appendix Four: Example of Issues, Objective and Policies for Access**Issues:**

[Issue defined as: problem requiring action]

Access to sports fish and game bird hunting opportunities is a significant factor limiting participation. Much of the sports fish and game bird resource is on private land, or only accessible by crossing private land. Restricted or preferential access arrangements across private land can result in 'exclusive capture' of fishing and hunting and reduces overall opportunities to licence holders. Having the correct legal and physical works in place is crucial to providing access to angling and game bird hunting areas.

Objective:

[Objective defined as: what F&G would like to achieve to resolve an issue]

Maintenance and improvement of public access to a wide range of sports fishing and game bird hunting opportunities within the region.

Policies:

[Policy defined as: action to achieve the objective]

1. To advocate and negotiate for the protection and creation of access on public and private lands to and along rivers, lakes and wetlands and to upland game hunting areas.
2. Work with landowners and other agencies to promote access to angling and game bird habitats.
3. Continue communication and advocacy work to raise the awareness of angling and game bird habitats both for recreation, food gathering and amenity.
4. Work with landowners and other agencies when access is closed (which was previously provided for) to see if alternative access can be established and or issues can be resolved.
5. Work with landowners to minimise the problem of “exclusive capture” which is the restriction on access to fishing and hunting opportunities through restricted or paid access across private property.
6. Work with the Walking Access Commission to utilise mapping resource and work with them to create new legal and physical public access.
7. Work towards developing online mapping showing legal and physical access to fishing and hunting areas.
8. Identify Treaty of Waitangi settlements that have resulted in loss of Crown and Forest lands that have previously been available for public access. Initiate discussions with a view to securing ongoing access.

Policy to Drafting Sports Fish and Game Management Plans

Introduction

1. The guidance document identifies statutory requirements for Sports Fish and Game Management Plans (SFGMPs) and identifies additional optional elements that could be included to help achieve the purpose of SFGMPs.
2. At the outset, F&G Councils will need to engage early with mana whenua¹ at the beginning of the process of preparing SFGMPs in order to give effect to the principles of the Treaty of Waitangi.² Accordingly, this Guide does not pre-determine specific content or format that would necessarily meet Mana Whenua aspirations. This will need to be determined after genuine engagement with mana whenua and as set out in the Mana Whenua engagement guidelines consultation should commence with a blank page, rather than with a drafted document.
3. This document should be read in conjunction with the document, “Draft Elements – Sports Fish & Game Management Plans” that sets out key elements to consider including in SFGMP based on this guidance.
4. This guidance document is structured as follows:
 - a. Context
 - b. Te Tiriti o Waitangi
 - c. Purpose of SFGMPs
 - d. Statutory requirements of SFGMPs
 - e. Optional elements to consider including in SFGMPs.

Context

5. In considering what elements to recommend for inclusion in a Guide to Drafting SFGMPs, I have reviewed the SFGMPs for CSI 2022-2032, West Coast (draft), Auckland Waikato 2021-2031, and Otago 2015-2025.
6. I have also considered the Review of the Governance of Fish and Game New Zealand and the Regional Fish and Game Councils prepared for the Minister of Conservation, Engaging with Mana Whenua, A Discussion Document Exploring Best Practice For Fish & Game.
7. Based on reviewing those documents, the legislative requirements and discussions with F&G planning staff, key context is set out below.

Public process for developing SFGMPs

8. The process for developing SFGMPs is set out in s 17M of the Conservation Act 1987. Key elements include the requirement to publicly notify draft SFGMPs, provide copies to iwi authorities and local authorities, and invite written submissions. F&G Councils must give full consideration to submissions and provide opportunities for any person to appear before F&G Council representatives to be heard in support of their submission.
9. The F&G Council must send the draft SFGMP, a summary of submissions received, and of public opinion made known about the draft SFGMP to the Minister of

Conservation. The F&G Council must also send the Minister a written statement of any matters of content on which the Director-General of Conservation and the F&G Council are unable to agree.

10. In addition to the specific steps outlined in the legislation, F&G is developing guidelines for engaging with mana whenua and stakeholders.

Ministerial approval

11. The Minister must approve a draft SFGMP or send it back to the F&G Council for further consideration before approving it.³ There is no legislative requirement to make any changes sought by the Minister.⁴ The F&G Council will however, need to demonstrate that they have properly considered any comments or recommendations from the Minister before re-submitting the SFGMP for approval. If the F&G Council does not make any changes sought by the Minister, this may lead to the Minister declining to approve the SFGMP.⁵

10-year timeframe

12. The Conservation Act requires F&G Councils to review SFGMPs no later than 10 years after the date of approval.⁶ It can take 1-3 years from initial engagement to final approval of a SFGMP. The time taken to prepare a SFGMP can mean that issues become outdated by the time the SFGMP is approved. While the SFGMP, or part of the SFGMP can be reviewed more frequently than 10 years,⁷ the same process for developing a SFGMP applies to any review.

Implementation of SFGMPs

13. While there is no explicit provision in the Conservation Act requiring F&G Councils to comply with SFGMPs, it is implied from the provisions governing SFGMPs that F&G Councils will exercise their functions in accordance with SFGMPs. The Ministerial Review recommended however, that the Minister should have the power to require adherence to an approved SFGMP.
14. New Zealand Fish and Game have adopted an Organisational Strategy, and in accordance with that each region should have a SFGMP. F&G Councils are required to prepare operational work plans annually. If there is no approved SFGMP for the region, the OWPs require Ministerial approval. The Minister can amend OWPs.

Users of SFGMPs

15. F&G operational teams appear to be the primary users of the SFGMPs, although it is unclear how often SFGMPs are referred to and how they impact F&G Councils' day-to-day work. For some regions, the SFGMP may not serve any purpose beyond meeting the statutory requirement to prepare them. Some F&G Councils use SFGMPs' schedules of significant waterbodies to determine whether a F&G Council is an affected party in relation to applications for resource consent. Many of the SFGMPs I reviewed are lengthy. For example, the CSI SFGMP (approved in 2022) is 78 pages, which can impact on its usability.

Key stakeholders need to state their values and work out where they align and where they don't. SFGMP can be useful for regional council to "have regard to" in Resource Management processes. SFGMP can also be useful for DOC work as it confirms where valued introduced species are located.

Purposes of Sports Fish and Game Management Plans

Legal requirements

16. F&G Councils are required under s 17L of the Conservation Act to prepare such SFGMPs as are necessary for the management of sports fish and game in their region.

Guide operational work plans

17. F&G Councils are required to prepare OWPs annually.⁸ While there is no explicit legal requirement for an OWP to be consistent with a SFGMP, if there is no SFGMP, then the OWP requires approval from the Minister of Conservation.⁹

Engagement with licence holders

18. SFGMPs provide an opportunity to connect with licence holders and reflect their interests and aspirations relating to managing sports fish and game birds.

Engagement with mana whenua

19. SFGMPs provide an opportunity to engage with mana whenua on their rights, interests and aspirations in relation to managing sports fish and game birds. Refer also to the SFGMP Consultation Guidelines and Draft Fish and Game Mana Whenua engagement guidelines.

Planning tool to assist F&G Councils meet functions

20. SFGMPs could be used to guide F&G work to meet their statutory functions and help prioritise work programmes.

Transparency

21. As set out in the context, SFGMPs must go through a public process before approved by the Minister. This provides for transparency in terms of how F&G Councils exercise their statutory functions.

Influence conservation planning documents

22. Under the Conservation Act, the Director-General of Conservation must consider SFGMPs in developing freshwater fisheries management plans¹⁰ and conservation management plans.¹¹ It is important that SFGMPs include provisions covering how sports fish and game birds are managed in conservation areas, to ensure that F&G's interests will be properly taken into account on conservation planning documents.

Identification of spawning areas

23. It is an offence to carry out an activity that disturbs or is reasonably likely to disturb a declared spawning area of sports fish, unless authorised by the Director-General of Conservation.¹² The Director-General may declare areas to be spawning areas on the recommendation of the New Zealand Fish and Game Council in relation to sports fish.¹³ While it is not uncommon to disturb sports fish spawning areas, and prosecutions are not brought, identifying spawning areas in SFGMPs that are important to F&G will lay the foundation for better protection.

Influence resource management planning documents

24. Advocating for the protection of sports fish and game bird habitats in resource management processes is one of F&G most effective tools.¹⁴ In addition to making submissions on plans and resource consents, F&G Councils can influence planning documents through SFGMPs as decision-makers must consider SFGMPs in preparing or changing policy statements and plans under the RMA.¹⁵ Key areas are set out below in relation to the National Policy Statement for Freshwater Management 2020 (NPS-FM):
- When developing fish passage provisions regional councils must take into account any SFGMPs approved by the Minister.¹⁶
 - Fishing is relevant to compulsory value human contact and fishing is an optional value for Freshwater Management Units, requiring the identification of an environmental outcome.¹⁷
 - The fishing value of a waterway can be used to identify outstanding water bodies.
 - Regional councils must identify and map natural wetlands in their region.¹⁸
25. Where SFGMPs identify values consistent with the framework in the NPS-FM, it will provide a strong basis to advocate for the protection of those values. Conversely, if the SFGMP does not align with the statutory requirements or identify areas requiring protection for their fishing values, it may undermine subsequent submissions on planning documents or resource consents.

Statutory Requirements for Sports Fish and Game Management Plans

26. This section outlines the statutory requirements of SFGMPs.

Giving effect to Treaty Principles

27. To meet the requirements of s 4 of the Conservation Act, F&G Councils must take account of, and give weight to, Treaty rights and interests alongside its statutory responsibilities to manage, maintain and enhance the sports fish and game resources in the interests of anglers and hunters.
28. In relation to developing SFGMPs, the legislative requirements in relation to iwi (summarised above) do not represent the principles of Te Tiriti o Waitangi.¹⁹ F&G Councils need to develop ways to engage with mana whenua as partners, rather than stakeholders in developing SFGMPs. Kāhu Environmental advise F&G should assess ways to involve mana whenua in the development of SFGMPs, and in particular to start by asking mana whenua about what role they should have in the process. Initial conversations should explore common objectives e.g. habitat/wetland restoration, water quality and freshwater management.
29. This engagement needs to happen before F&G Councils start drafting SFGMPs to allow iwi/hapū interests and aspirations to be actively taken into account during the planning process.
30. The Ministerial Review also recommended that F&G NZ develop, in collaboration with Māori, a national policy on consultation and engagement with Māori and a

standing advisory panel on Treaty issues and engagement with Māori. Engagement with mana whenua should utilise those resources when available.

31. F&G Councils must do the background mahi before engaging with mana whenua. This includes being familiar with relevant Treaty Settlement Acts, Waitangi Tribunal Reports, iwi management plans, environmental management plans, statutory acknowledgements and sites of significance to iwi in the region. Reference to relevant Treaty Settlement Act is particularly important, as many include specific obligations in relation to SFGMPs.
32. F&G Councils should also be familiar with key issues likely to be raised by iwi in relation to managing sports fish and game and Treaty interests, and have an open mind when discussing those issues with mana whenua in terms of possible ways to provide for those interests. Potential issues include:²⁰
 - a. Intrinsic value of waterways vs utility for fishing and hunting
 - b. Customary use of indigenous species
 - c. Māori Rights to non-indigenous species
 - d. Predation of indigenous species by sports fish
 - e. Prosecution of Māori for hunting or fishing without licences
 - f. Concessionary licences for Māori to fish and hunt introduced species
33. Note that some of these issues may be beyond the scope of a SFGMP. Discussing the issues however, will likely be important to mana whenua, and F&G Councils may want to consider other avenues to address matters raised in discussion with mana whenua if possible.

Issues, Objectives and Policies

34. SFGMPs must include objectives for the management of sports fish and game birds, within any region or part of any region.²¹ In the SFGMPs that I reviewed, issues, outcomes and objectives and policies were all included to help guide F&G Council actions. Current SFGMP however contained considerable overlap in content between issues, outcomes, objectives and policies. There needs to be a clear link between the issues, objectives and policies.
35. **Guidance:**
 - a. *Consider including, issues, objectives and policies that all directly relate to each other, using the following definitions:*

- i. **Issue: problem requiring action**

e.g. Issue for Sustainability of the Resource: There are growing concerns that the sea-run salmon fishery and the sea-run trout fishery are in decline, as there are fewer fish returning to sustain the population.

- ii. **Objective: what F&G Council would like to achieve to resolve an issue**

e.g. Achieve sustainability of sea-run salmon fishery and the sea-run trout fishery through management, and support anglers and hunters enjoying a sustainable and highly valued recreational experience.

iii. **Policy: action to achieve the objective**

e.g. Policies for Sustainability of the Resource: Undertake the following actions in relation to the sea-run salmon fishery and the sea-run trout fishery:

- *Monitor the resource to determine whether it is in decline;*
- *If resource is declining, investigate factors contributing to the decline; and*
- *Consider management options to improve the fishery and or game resource.*
- b. *When considering objectives and policies to include in SFGMPs, consider the long-term (i.e. 10 years) vision for the region, to avoid the SFGMP becoming outdated too quickly.*

Consistency with Legislation

36. SFGMPs must not derogate from the Conservation Act or any other Act.²² As noted above, there are a number of Treaty Settlement Acts that confer specific obligations on F&G Councils, including in relation to developing SFGMPs.

37. **Guidance:**

- a. *Ensure all applicable references to Treaty Settlement Acts are included in SFGMPs.*
- b. *Engage with mana whenua on the provisions referencing Treaty Settlements.*

Conservation Policy

38. SFGMPs cannot derogate from policy approved under the Conservation Act or any other Act in respect of the area to which the plan relates, or part of that area.²³

39. **Guidance:**

- a. *Consider all relevant policies in the CGP; and*
- b. *Include a clear statement in SFGMPs that it is consistent with the CGP.*

Conservation statutory planning documents

40. SFGMPs cannot derogate from any provision in any conservation management strategy or conservation management plan or freshwater fisheries management plan.²⁴

41. **Guidance:**

- a. *Review conservation management strategies and conservation management plans applicable to your region when drafting SFGMPs.*
- b. *Include a clear statement in the SFGMP that it is consistent with applicable conservation statutory planning documents.*

Sustainability of sports fish and game

42. When preparing a draft SFGMP, F&G Councils must have regard to the sustainability of sports fish and game in the area to which the plan relates.²⁵ Existing SFGMPs generally include a separate section on the sustainability of sports fish and game birds that sets out objectives and policies. This approach is useful.

43. The content of this section, (i.e. issues/objectives/policies) will be driven by engagement with mana whenua, views of stakeholders and the local situation. There

are however, some issues that are likely to be relevant across the country. For example, monitoring the sports fish and game bird resource to understand the state of the resource is an issue relevant to all regions.

44. Guidance:

- a. *Consider the following matters when considering issues, objectives and policies to include in a SFGMP in relation to the sustainability of the resource:*
 - i. *Ensure appropriate angling and hunting conditions in Anglers Notice and Open Season for Game Notice to ensure the sustainability of the resource*
 - ii. *Planned releases of sports fish consistent with the CGP*
 - iii. *Potential areas of high use requiring more intense management*
 - iv. *Degraded fisheries and game bird populations requiring restoration*
 - v. *Risks and opportunities from fishing competitions and organised culls*
 - vi. *Airspace, e.g. wind turbines and bird strike*
- b. *Consider including issues, objectives and policies on monitoring that:*
 - i. *Provide direction for monitoring priorities for operational workplans*
 - ii. *Work towards a national species monitoring programme and standard operating procedures.*

Impact on other natural resources and other uses of the habitat concerned

- 45. When preparing a draft SFGMP, F&G Councils must have regard to the impact that the management proposed in the draft is likely to have on other natural resources and other users of the habitat concerned.²⁶ This requirement has two distinct parts. F&G Council must consider the impact that the management proposed has on both:
 - a. Other natural resources
 - b. Other users of the habitat concerned.
- 46. The Ministerial Review noted that it appears F&G Councils "rarely if ever take into account of the impact or concerns of other users."²⁷ The SFGMPs I analysed did include some specific provisions addressing impacts on other natural resources. For example, in the CSI SFGMP there is a policy that provides for remediating fish passage barriers, recognising the potential for adverse effects on indigenous fish populations from, and where it would not significantly impact on rare or threatened indigenous fish species.²⁸ Similarly, in the Otago SFGMP there is a policy to manage hunting in reserves or other wetlands in ways which minimise effects on habitat quality.²⁹
- 47. One objective is worded "To have regard to the effects of fish and game management activities on other natural resources and resource users." This objective repeats the statutory direction, and should not be included in SFGMPs.
- 48. Rather, when drafting SFGMPs, you must consider for every objective and policy whether it will have an impact on other natural resources or other users of the habitat concerned. If there is an impact, F&G Councils should consider whether the management measure is appropriate to discharge F&G statutory functions, and if yes, whether any mitigation measures could be implemented.

49. Guidance:

- a. *When developing SFGMP objectives and policies consider the likely impact of proposed management on both:*
 - i. *other natural resources; and*
 - ii. *other users of the habitat concerned.*
- b. *Consider the following issues, amongst others, in relation to impacts on other natural resources:*
 - i. *Interactions between indigenous fish and sports fish*
 - ii. *Potential impacts of loss of fish passage barriers on indigenous fish*
- c. *Consider the following issues in relation to impacts on other users of the resource:*
 - i. *Risks to aviation safety from game birds*
 - ii. *Impacts on crops from game birds*
- d. *Include a clear statement that the impacts of proposed management on other natural resources and users of the habitat concerned has been considered.*

Recreational opportunities for hunter and anglers

50. SFGMPs must include such provisions as may be necessary to maximise recreational opportunities for hunters and anglers.³⁰ Current SFGMPs sections included separate sections covering angler and hunter participation in fishing and game bird hunting. Some also included provisions on angler and hunter participation in F&G management. Both issues are important.

51. Guidance: *Consider including issues, objectives and policies in SFGMPs on:*

- a. *Maximising recreational opportunities for hunters and anglers; and*
- b. *Involving anglers and hunters in F&G decision-making. Evidence of this wider consultation will be needed for ministerial sign off. This is one of the steps of the consultation policy.*

Optional Elements

52. This section provides guidance on optional elements. These are elements that F&G Councils could consider raising for discussion with mana whenua and stakeholders for inclusion in draft SFGMPs. Mana whenua and stakeholders may also have other elements they wish to see included.

Background

53. Having background information in the SFGMP is useful, although brevity is key to ensure the SFGMP is user-friendly. It will be important to tell F&G's story, including the legislative role of F&G Councils, past achievements and future aspirations.

54. Guidance: *Consider including critical background information in a background section such as:*

- a. *Mission statement*
- b. *Role, Term or Intent of the Plan*
- c. *Role of F&G Councils*
- d. *Legislative context (see discussion below)*

Partners and Stakeholders

55. The two most recent SFGMPs I analysed³¹ both included a section on Partners and Stakeholders. It is important to acknowledge mana whenua as Treaty partners, and not equate mana whenua with stakeholders in the same section.
56. In terms of mana whenua, the SFGMPs I analysed included a description of the F&G Council relationship with local iwi. In my view, this is consistent with the F&C Council's Te Tiriti obligations, but will need to be considered as part of engagement with mana whenua.
57. In terms of stakeholders, this includes DOC, local councils, New Zealand Walking Access Commission/Ara Hiko Aotearoa and the local Conservation Board. Some SFGMPs included descriptions of the statutory functions of these stakeholders. Other stakeholders could include land owners, including farmers.
58. Including descriptions of stakeholders doesn't contribute to any of the purposes of the SFGMPs identified above. There may be value however, in including descriptions of stakeholders in terms of relationships with those stakeholders. This could be addressed in a separate section on community engagement (see discussion below). Community engagement is important to understanding the impacts of F&G Council management on other users of habitat.
59. **Guidance:**
 - a. *Discuss with mana whenua including information on F&G's relationship with iwi and reference to iwi management plans in SFGMPs.*
 - b. *Consider describing the relationships with diverse members of the community in a Community Engagement section (see discussion below).*

Habitat protection

60. One of the purposes of SFGMPs identified above is influencing both resource management and conservation planning documents. F&G advocacy for habitat protection in particular, is essential to the viability of sports fish and game bird resources, as it is dependent on habitat values. Habitat protection is also an area where F&G Councils could work with mana whenua, as well as stakeholders where there are shared interests.
61. **Guidance:**
 - a. *Consider including issues, objectives and policies in relation to habitat protection.*
 - b. *Ensure provisions on habitat protection align with:*
 - i. *Conservation planning documents*
 - ii. *Resource management decision-making framework under the RMA and NPS-FM, including for regional plans:*
 - iii. *F&G priorities for habitat protection*
 - iv. *F&G practice notes for RMA advocacy see <https://www.waiqoodpolicy.org.nz/>*
 - c. *Consider including issues, objectives and policies that address the following matters:*
 - i. *Impacts of pest control on sports fish and game bird habitats*
 - ii. *Climate change impacts on habitat values*

- iii. *Monitoring priorities*
- iv. *Degraded wetlands requiring restoration and removal of wetlands requiring re-establishment*
- v. *Reverse sensitivity effects*

Public Relations/Public Advocacy and Education

62. The SFGMPs I analysed all included a section on public interface, recognising that protecting sports fish and game birds requires the support of government, local councils and the wider community. The elements of this section could be included in a broader community engagement section, i.e. how F&G Councils engage with mana whenua, DOC, local councils, landowners, local conservation boards, and the wider community.
63. **Guidance:** *Consider including issues, objectives and policies in relation to community engagement.*

Administration

64. The SFGMPs I analysed all include a section covering how the F&G Council manages its financial resources and performs its statutory functions in line with legal requirements. This is not a statutory requirement of SFGMPs.
65. **Guidance:** *Do not include provisions relating to how F&G manages its financial resources and performs its statutory functions in SFGMPs.*
66. The CSI SFGMP also included an objective and policy on climate change. The provisions relate to how the CSI F&G Council will reduce its emissions (e.g. through purchasing decisions). This is not relevant to managing sports fish and game birds. This is best addressed through developing a national policy on how F&G will reduce its emissions to meet the 2050 climate target.
67. **Guidance:** *Do not include provisions on how F&G Councils will reduce emissions to meet the 2050 climate target in SFGMPs.*

Compliance

68. All of the SFGMPs I looked at had compliance sections. Compliance is essential to the management of sports fish and game birds. The compliance section should not include objectives and policies relating to conditions addressing the sustainability of the resource.
69. **Guidance:**
- a. *Consider including in SFGMPs issues, objectives and policies related to compliance.*
 - b. *Consider including provisions on conditions relating to the sustainability of the resource in the section of the SFGMP dealing with sustainability of the resource.*

Resource Summary

70. All of the SFGMPs I analysed include detailed sections describing the sports fish and game resource within their region. Describing the state of the sports fish and game resource, including habitat values is essential to set objectives and policies.

71. The resource summary sections include a Recreational Opportunity Spectrum (ROS) and Significance Criteria, with waterways identified in the appendices according to how they rate using the ROS and Significance Criteria. Some of the resource descriptions also identified spawning areas.

72. The SFGMPs also included policies that link management to the resource classification. For example, in the CSI SFGMP, Policy 9.4.4 provides:

Give priority to the monitoring and management of fish and game bird habitats within the CSI Fish and Game Region which are of national or regional significance and those that have the highest levels of angler and hunter participation.

73. Policy 8.4.2 of the draft West Coast SFGMP provides:

Establish and maintain an inventory of sports fish and game resources in the West Coast including:

a) classification of individual sports fisheries and game habitats to allow management based on significance, key characteristics and the recreational opportunity provided within a spectrum.

74. Despite the policy direction in the SFGMPs, feedback from F&G planners is that the classification of waterways based on the ROS and significance criteria didn't necessarily determine management decisions. For at least one region however, the classification did determine affected party status in terms of resource consent processes under the RMA.

75. The classification system used in the SFGMPs does not directly link to the protection of habitat values in the RMA and NPS-FM, and planning documents, in particular in relation to the outstanding values of waterways for fishing (see purposes of SFGMs outlined above).

76. There are no maps of the habitat of sports fish and game birds in the SFGMPs I analysed, or of spawning areas. Including mapped areas that are important to F&G Councils will enhance F&G resource management advocacy for habitat protection. Maps of spawning areas will assist with ensuring those areas are protected.

77. It will be important to engage with mana whenua on describing the resource to ensure mātauranga Māori and Māori values are appropriately reflected.

78. **Guidance:** Consider including the following in SFGMPs:

- a. *Description of the State of the Environment – Species, Habitat and Threat*
- b. *Maps of sports fish and game bird habitat, including on public conservation land and private land. We note that some regions have this in their work programme to deliver over a two year period.*
- c. *Maps of spawning areas - We note that some regions have this in their work programme to deliver over a two year period.*
- d. *Criteria for identifying the values of the sports fish and game resource that aligns with resource management national direction and regional plans, including fishing values in freshwater management units in regional plans and outstanding natural waterways and identifying waterways that meet the criteria*
- e. *Maps of wetlands that are game bird habitat*
- f. *Explicit links to objectives and policies and significant waterways*

Legislative context

79. The SFGMPs I analysed all include a section describing relevant legislation, usually in an appendix. Some also included summaries of the wider legislative context, e.g. the National Parks Act, Public Works Act and Local Government Act. Including a description of all relevant legislation does not directly achieve any of the purposes of SFGMPs as outlined above.
80. Including a description of the relevant provisions of the Conservation Act, in terms of the functions of F&G, the legislative basis for SFGMPs and the relationship between SFGMPs and conservation planning would however, assist in terms of the purpose of influencing conservation planning documents. So too does including any Water Conservation Orders in the Region.
81. Resource management legislation is also directly relevant to the purpose of influencing resource management planning documents, particularly in relation to habitat protection and public access to recreational resources
82. **Guidance:** Consider including legislative context in relation to:
 - a. *Conservation Act, in terms of F&G Council functions, SFGMPs legislative direction and relationship with conservation planning documents.*
 - b. *Resource management provisions that support F&G's advocacy for habitat protection.*

Plan Implementation and Review

83. The CSI SFGMP includes a section that identifies key actions and target dates for implementing key actions. It is important to have a road map to implement the SFGMP. Setting targets with specific timeframes for achieving them may assist. Additionally, SFGMPs should include provisions relating to reviewing the SFGMP to ensure it is fit for purpose over time, and the objectives are being met.
84. **Guidance:** Consider including in SFGMPs:
 - a. *Plan Implementation section that refers to key objectives and policies, including targets and timeframes.*
 - b. *Consider including review provisions.*

Appendices

85. The SPFGMPs I analysed all included a variety of appendices.
86. **Guidance:**
 - a. *Consider including the following appendices in SFGMPs:*
 - i. *Map of the region*
 - ii. *Access points for angling and hunting*
 - iii. *Reserves Owned or Managed by the F&G Council – including, and linking to specific objectives*
 - b. *Consider not including the following in SFGMPs:*
 - i. *Prioritisation Principles – as these could change within the 10-year timeframe*
 - ii. *Recreational Opportunity Spectrum – unless tied to objectives*

Guidance to Engaging with Mana Whenua on the Preparation of Sports Fish and Game Management Plans

Purpose

This guidance is for regional fish and game staff to help them fulfil their statutory and Te Tiriti obligations when preparing Sports Fish and Game Management Plans (SFGMP). This guidance sets out best management practice that will assist regional staff engaging with mana whenua.

This guidance isn't meant to be a one size fits all. Each iwi and hapu around the country will have differing views on issues and different needs, aspirations and interest in being involved in our SFGMP processes.

This guidance is not a comprehensive overview of all statutory obligations and Te Tiriti principles. You can find that here: [[Legal Advice - application of s4 \(FINAL\).pdf](#)] Being a good Te Tiriti partner involves long term relationship building and a commitment to working together. Engaging on a SFGMP should be seen as part of that ongoing process, not as the end point or focus of that relationship.

Review

This guidance is interim. This document is intended to provide guidance to assist with the short term need to prepare SFGMP. Ultimately what is needed, is working towards ongoing and long term relationships. This guidance has been developed internally, based on expert advice, but tangata whenua have not been engaged with its preparation. We acknowledge that engagement and co-development of an integrated approach is the next important step and we intend to undertake that step. This guidance will be reviewed and updated by August 2025 (1 year from adoption).

Context

Section 4 of the Conservation Act requires our organisation to be good treaty partners. This requires going further than sending copies of a draft SFGMP to iwi for comment. This guidance forms part of a suit of policy and guidance to assist the regions to prepare SFGMP. Other relevant guidance includes :

- Cover report
- SFGMP Consultation Guidelines
- SFGMP guide
- SFGMP Key Elements

Guidance

We anticipate that you have the following (and other) questions in mind. Central to any work we do is the idea that good communications, whakawhanaungatanga and partnership provides a good starting point. Relationship building is central to this guidance.

When should I start?

Now! Before you start preparing the SFGMP. The earlier you begin engagement the better the opportunity to ensure mana whenua interests are reflected in the structure and content of the plan. If mana whenua want to be involved in writing the management plan, giving them that opportunity before the content has been written better reflects a good faith approach to the partnership.

What should I do before I start?

Start by building your knowledge. A basic background to Te Ao Māori and how it relates to the work of Fish and Game can be found in [kāhu report link]. You should Identify the iwi and hapū groups that are in your region (see 'Who should I talk to?' for more information) and in particular the groups associated with any particularly significant waterbodies from Fish and Game's perspective. Next learn about the history, context and aspirations of these groups – many Māori groups find it frustrating to have to articulate again and again their values or aspirations when these are clearly set out in publicly available documents. Useful documents for building this knowledge include:

- Treaty of Waitangi Deeds of Settlement, Settlement acts and Waitangi Tribunal reports.
- Statutory acknowledgments.
- Environmental management plans.
- Iwi management plans.

Who should I talk to?

- If you do not already have a good database of your own contacts, a good place to begin is [Te Kahui Mangai which is a database of all iwi, hapu and marae contacts maintained by Te Puni Kokiri. Your local regional or district council should also have a register of contacts and iwi planning documents.](#) Your local DOC office will also have contacts for mana whenua engagement. You should be prepared to consult with more than one mana whenua group as there are often overlapping interests within a particular location.

How should I engage?

- Initial contact could be by email or phone call, but should include a face to face meeting early on appropriate tikanga should be included in these meetings – this can include karakia and kai. Tikanga varies from place to place – the guidelines in the references section give a good generic background, but if you are unsure find someone in Fish and Game, DOC or a local contact to guide you.
- Begin by starting a whakawhanaungatanga

Whakawhanaungatanga is the process of establishing good relationships and understanding about each other. This is an opportunity for you to connect with mana whenua to build a relationship based on mutual understanding. Ideally this will happen at each level of the organisation; governance, management, and on the ground staff – but don't hold off on engagement at one level waiting for the other – relationship building is ongoing and not hierarchical.

- Engagement should be ongoing. Early on in the process you should ask the best way to continue the engagement (who, how, how long) and whether you need to provide any resources or funding to support that engagement.

What should I be prepared to discuss?

- You should be prepared to discuss the history, structure and responsibilities of Fish and Game – some mana whenua have a good idea of what Fish and Game does, and some have none.
- You should be prepared to hear about past practices or relationships that have not gone well, and the possibility that harm may have been done by Fish and Game or previous organisations to places and values that mana whenua hold dear. You may need to acknowledge, apologise or discuss what can be done to restore/reciprocity/ any past harms before moving into discussions about future shared values or working relationships.
- There is an opportunity to explore shared goals, expertise and working together on future processes. Protection of the natural environment and harvesting food from it are shared values for both Fish and Game and mana whenua – this can form a firm base for a future relationship if you develop a shared understanding of each others priorities and support each other in partnership..
- You should be prepared to discuss what Fish and Game can bring to the partnership with mana whenua – are there opportunities to share information, resources, monitoring programmes? Can Fish and Game support mana whenua in RMA processes? Is there opportunity to provide mana whenua with training, information or fishing licences to support their aspirations? If there is a lot of work to do before any of these options can be implemented, but a real desire to work towards them a Relationship Agreement or Memorandum of Understanding that sets out how the organisations will work together could be a useful tool and first step in that work.

What about the formal consultation part?

Section 17M (2) (a) (v) of the Conservation Act requires you to “consult with such other persons or organisations, in such manner, as the Fish and Game Council considers practicable and appropriate;” Our previous advice notes therefore that you should:

- After meeting with iwi to discuss topics relevant to them,
- Invite iwi to be involved with drafting the plan
- Or provide a copy of the draft plan to iwi
- Receive written submissions from iwi
- Give iwi the opportunity to be heard on their submission
- Present summarised iwi submissions to the Minister of Hunting and Fishing.

It is important you see these as minimum requirements, not what’s needed to fulfil your Treaty partnership responsibilities. In order to fulfil these minimum requirements you should:

- Let your mana whenua partners know well in advance when they should expect the draft SFGMP so they can plan their time and resources.
- Allow sufficient time for them to make comments. Take into account that they may need to have a board approve their submission, so find out when their board meetings are and plan around those.
- Schedule a meeting to discuss the draft SFGMP before comments are due, if mana whenua would like that. It's a good opportunity to discuss any issues and potential solutions before formal submissions are made.

- Offer to hear their submissions at the place of their choosing – this may be at a marae or other place close to the waterbodies being discussed.
- Take time to consider their submission and respond in detail to each point raised, with reasons for your decision. If its within your powers to accept any points, you should seriously consider doing so. Send mana whenua your response and the reasons for your decision.
- Include that detailed response and reasons in the summary you send the Minister.

What else can I offer into the partnership?

- Are there any projects that mana whenua are interested in eg Wetland restoration work. Is there any monitoring projects that mana whenua are interested in. Can we share any of the work that we have been doing on a particular consent or project?

What can I give mana whenua?

- Is there a particular issue or grievance that mana whenua would like acknowledged? Are there conflicting interests on any issues that we need to re-consider our stance on?

What can we do together?

- If the relationship is a new one ideally you can find a project to work on to build trust and good working relationships.

Useful references

The following links provide some useful background reading:

chrome-

extension://efaidnbmnnnibpcajpcgicfindmkaj/https://knowledgeauckland.org.nz/media/1265/lessons-for-successful-mana-whenua-engagement_final-print.pdf

[Fish Game NZ mana whenua engagement FINAL .pdf](#)

Need help?

We are working on the idea of identifying Māori liaison staff and or Te Ao Advisors within Fish and Game. For further specific information we may also be able to get further assistance from Kahu and DOC staff regarding Treaty Settlements.

8.0 Public Excluded Items

- 8.1 Confirm Public Excluded minutes of meeting 26th September 2024**
- 8.2 Otago Regional Policy Statement Appeal to High Court**
- 8.3 Minister Request for Feedback**
- 8.4 Otago Property Update**

9.0 Financial Report

Draft Finance and Licence Sales 31st October 2024

9.1 Finance Reports

The financial Profit and Loss report and Balance sheet for the period from 1st September 2024 to 31st October 2024 for the 2024/25 financial year are below.

Profit and Loss

Income

Licence Income

Fish licence revenue from the profit and loss statement 31st October 2024 totals \$950,222 (Fish sales \$941,901 + Designated Water licence \$8,322) compared with \$1,006,973 for the same period of the 2023/24 season. Fish licence revenue is behind 2023/24 by \$56,751.

These figures include both resident and non resident sales.

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

Fish licences include designated water licences for specialist fisheries. Some of these are sold for other regions and other regions sell ours. Funds are sent to the appropriate region at the end of the 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 279 Searun Salmon endorsements with a value of \$1,213 (GST excl) these funds will be returned to them.

Other Income

Total other income year to 31st October is \$17,605.

Areas of interest are:

- Wages Reimbursement is for work done for other regions. This includes RMA assistance to NCF&GC.
- Interest is under budget as interest rates have fallen. More term deposits will provide more interest income in the future.
- Rent Received is from yard lease in Cromwell. Budgets have not yet been adjusted for the sale of the Dunedin office.
- RMA costs Reimbursed is NZC payment towards Regional Policy Statement work.

Donations and Grants (not in budget)

| Donation/Grant from | For | Amount GST excl |
|-----------------------|--------------------|-----------------|
| Otago Community Trust | Take A Kid Fishing | \$2,900\$ |
| | | |
| Total | | \$2,900 |

Otago Fish and Game Council Meeting & AGM 28th November 2024

Expenses

Expenditure at the 31st October for the 204/25 financial year is \$476,649 against a year to date budget of \$487,178. Expenditure at 98%.

The budget was approved before expenses of Dunedin rental and building costs were planned.

The main reasons for any variances are:

- Species Management – Hatchery operations are high from a large fish food purchase. Most work on species management at this stage of the year is labour.
- Habitat Protection – RMA spending includes that claimed from NZC for Regional Policy Statement work.
- Participation – Training events and club relations look overspent but we had a grant of \$2,900 from Otago Community Trust towards Take A Kid Fishing events.
- Public interface. No spending in this area yet only work hours.
- Licencing – Commission is made up from 5% agent sales commission and bank fees associated with online sales.
- Council expenses – Two meetings have been held.
- Planning and Reporting – Some end of year accountancy assistance.
- Over Heads/Administration- Salaries -One less salary for the start of the year. Role advertised and now new person appointed.
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 storage space.
- Approved Reserves Expenses - \$13,909. This is expenditure approved by the council for the Bendigo, Bullock Creek and some Otago Property and RMA Reserves.
- Depreciation – Depreciation year to date is \$9,257.
- Levies to NZC – paid monthly as per budget. \$200,981 excl GST.

The profit and loss for the 2 months ended 31st October 2024 shows a surplus of \$491,179.

Balance Sheet

Bank Funds Position at 31st October 2024

| Bank | Value |
|----------------|---------------------|
| ANZ 00 Account | \$ 62,032.13 |
| ANZ 70 Account | \$422,974.47 |
| ASB Account | \$75.57 |
| Cash On Hand | \$50.00 |
| Total | \$485,132.17 |

Term Investments as at 31st October 2024

| Investment Bank | Amount | Rate | Maturity |
|-----------------|--------------------|-------|----------------------------|
| ANZ 1002 | \$206,150 | 5.15% | 20 th Sept 2025 |
| ANZ 1003 | \$500,000 | 5.55% | 6 th June 2025 |
| ASB 82 | \$500,000 | 5.40% | 10 Sept 2025 |
| ASB 81 | \$206,083 | 5.95% | 2 nd Feb 2025 |
| Total | \$1,412,233 | | |

November 2024 and extra \$300,000 was made into a new ASB term deposit.

Fixed Assets and Capital Expenditure

The asset replacement fund is at (\$10,413) negative. \$2,835 extra was budgeted for 2024/25. The total includes the purchase of a ford ranger truck. One truck is now for sale and this will reinstate the fund.

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

Liabilities

Total Liabilities at 31st October are \$423,807.

- Other payables include visa card spending, accrued accounting and audit fee expenses and income in advance.
- Employee Entitlements includes \$49,402 of outstanding leave entitlements
- Designated Waters liabilities are money owed to other regions for licences relating to their regions but sold in Otago.

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 NZC Legal Fund | \$20,510 | \$4,404 | \$16,106 |

Equity**Otago Fish and Game Reserves 31st October 2024**

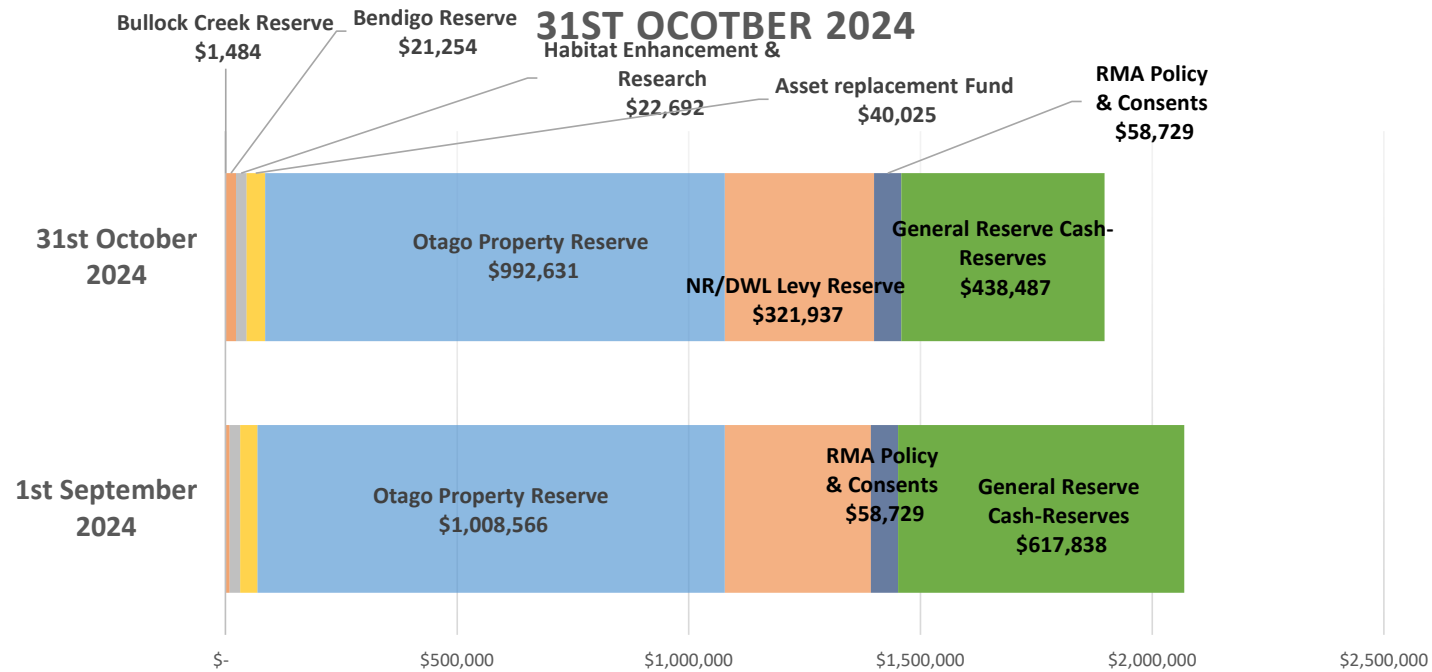
| Otago Reserves Movements | Balance 1 st September 2024 | Income (To) Reserve | Note | Outgoing (From) Reserve | Balance 31 st October 2024 |
|--|--|---------------------|------|-------------------------|---------------------------------------|
| Non-resident DW Levy | \$314,913 | \$7,157 | 1 | \$133 | \$321,937 |
| Habitat Enhancement & Research | \$22,692 | \$0 | 2 | \$0 | \$22,692 |
| Bullock Creek Reserve Restricted Reserve | \$1,777 | \$0 | 3 | \$292 | \$1,484 |
| Bendigo Reserve Restricted Reserve | \$22,508 | \$0 | 8 | \$1,254 | \$21,254 |
| Priority Consents Reserve | \$34,190 | \$0 | 7 | \$0 | \$34,190 |
| Otago Property Reserves | \$1,008,566 | \$0 | 4 | \$15,935 | \$992,631 |
| Priority Plan Changes | \$24,539 | \$0 | 6 | \$0 | \$24,539 |
| Total | \$1,429,185 | \$7,157 | | \$17,614 | \$1,418,727 |

- Note 1 Income is from late 2022/23 season non resident fishing licence and 2023/24 season designated water licence sales. \$5000 a year for five years is to be taken from this fund 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 \$22,692. Less committed but not yet paid out of \$4,000 so balance of \$18,692 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.
- 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 for Bendigo. ORC 2nd Eco Fund \$5,000 June 2024

Otago Fish and Game Council Meeting & AGM 28th November 2024

DRAFT MOVEMENT IN RESERVES FROM 1ST SEPTEMBER 2024 TO

31ST OCTOBER 2024



Balance Sheet

Otago Fish and Game Council As at 31 October 2024

| | 31 OCT 2024 | 31 AUG 2024 |
|----------------------------------|------------------|------------------|
| Assets | | |
| Current Assets | | |
| Bank | 484,999 | 1,663,253 |
| Receivables | | |
| Accounts Receivable | 850,169 | 202,738 |
| Total Receivables | 850,169 | 202,738 |
| GST | - | 32,465 |
| Investments | 1,412,233 | 406,083 |
| Inventory | 27,710 | 27,710 |
| Accrued Interest | 6,523 | 6,523 |
| Total Current Assets | 2,781,634 | 2,338,773 |
| Fixed Assets | | |
| Property Plant & Equipment | 2,165,541 | 2,124,360 |
| Approved Building WIP Mosgiel | 26,590 | - |
| Total Fixed Assets | 2,192,131 | 2,124,360 |
| Total Assets | 4,973,766 | 4,463,133 |
| Liabilities | | |
| Current Liabilities | | |
| Accounts Payable | 111,928 | 80,178 |
| Other Payables | 175,578 | 243,926 |
| Employee Entitlements | 59,581 | 80,250 |
| Rounding | - | - |
| Salmon Endorsement | 1,213 | - |
| Designated Waters other regions | 1,656 | - |
| GST | 73,852 | - |
| Total Current Liabilities | 423,807 | 404,354 |
| Total Liabilities | 423,807 | 404,354 |
| Net Assets | 4,549,958 | 4,058,780 |
| Equity | | |
| Accumulated Funds | | |
| Accumulated Funds | 2,011,914 | 1,548,016 |
| Current Year Earnings | 491,179 | 463,898 |
| Transfer (To)/From Reserves | 638,553 | 580,493 |
| Total Accumulated Funds | 3,141,645 | 2,592,406 |
| Dedicated Reserves | | |
| Non Resident Levy Reserve | 321,937 | 314,913 |
| Habitat Enhancement & Research | 22,692 | 22,692 |
| Priority Plan Changes Reserve | 24,539 | 24,539 |

Balance Sheet

| | 31 OCT 2024 | 31 AUG 2024 |
|--|------------------|------------------|
| Priority Consents Reserve | 34,190 | 34,190 |
| Otago Property Reserve (was Historical Property Reserve) | 992,631 | 1,008,566 |
| Asset Replacement Funding | (10,413) | 37,190 |
| Total Dedicated Reserves | 1,385,575 | 1,442,089 |
| Restricted Reserves | | |
| Bullock Creek Reserve | 1,484 | 1,776 |
| Bendigo Reserve | 21,254 | 22,508 |
| Total Restricted Reserves | 22,739 | 24,285 |
| Total Equity | 4,549,958 | 4,058,780 |

Profit and Loss

Otago Fish and Game Council For the 2 months ended 31 October 2024

| | SEPT 2024 | OCT 2024 | YTD ACTUAL | YTD BUDGET | VARIANCE | % OF YTD BUDGET | ANNUAL BUDGET | LAST YEAR |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|------------------|------------------|
| Income | | | | | | | | |
| Licence Sales | | | | | | | | |
| Fish Licence Sales | 410,348 | 531,553 | 941,901 | 846,800 | 95,101 | 111% | 2,090,400 | 2,052,245 |
| Non-Resident Licence Revenue | - | - | - | - | - | - | - | 1,909 |
| Designated Water Licence Sales | 4,539 | 3,783 | 8,322 | - | 8,322 | - | - | 40,340 |
| Game Licence Sales | - | - | - | - | - | - | 380,682 | 370,260 |
| Total Licence Sales | 414,887 | 535,336 | 950,222 | 846,800 | 103,422 | 112% | 2,471,082 | 2,464,754 |
| Other Income | | | | | | | | |
| Wages Reimbursement | - | 2,783 | 2,783 | - | 2,783 | - | - | 15,743 |
| Contact Energy Mitigation Income | - | - | - | - | - | - | - | 90,868 |
| Govt Grants | - | - | - | - | - | - | - | 5,000 |
| Interest Income | 7,905 | 1,080 | 8,985 | 9,660 | (675) | 93% | 57,966 | 59,739 |
| Fines - Fishing & Game Offences | - | - | - | 84 | (84) | - | 500 | 2,700 |
| Rent Received | 500 | 500 | 1,000 | 7,074 | (6,074) | 14% | 42,450 | 45,207 |
| Fishing Competitions | - | 434 | 434 | - | 434 | - | - | 1,119 |
| Profit on Sale of Fixed Assets | - | - | - | - | - | - | - | 475,880 |
| Donations ,bequests and other Fundraising | - | - | - | - | - | - | - | 17,929 |
| Merchandise Sales/Other | - | - | - | - | - | - | - | 42 |
| RMA Costs Reimbursed | 2,003 | 2,401 | 4,404 | - | 4,404 | - | - | 16,990 |
| Sundry Income | - | - | - | - | - | - | - | 2,227 |
| Diversion - Habitat Enhancement and Research Fund | - | - | - | - | - | - | - | 15,100 |
| Total Other Income | 10,408 | 7,197 | 17,605 | 16,818 | 787 | 105% | 100,916 | 748,544 |
| Total Income | 425,295 | 542,533 | 967,828 | 863,618 | 104,210 | 112% | 2,571,998 | 3,213,299 |

| | SEPT 2024 | OCT 2024 | YTD ACTUAL | YTD BUDGET | VARIANCE | % OF YTD BUDGET | ANNUAL BUDGET | LAST YEAR |
|--|--------------|--------------|--------------|--------------|----------------|-----------------|---------------|---------------|
| Gross Profit | 425,295 | 542,533 | 967,828 | 863,618 | 104,210 | 112% | 2,571,998 | 3,213,299 |
| Expenses | | | | | | | | |
| Species Management | | | | | | | | |
| Population Monitoring | - | - | - | 500 | (500) | - | 13,000 | 9,311 |
| Monitor key fisheries/Research Liaison | - | - | - | 334 | (334) | - | 1,000 | - |
| Harvest Assessment | - | - | - | - | - | - | - | 4,200 |
| Hatchery Operations | 2,886 | 129 | 3,015 | 4,222 | (1,207) | 71% | 10,000 | (6,597) |
| Releases | 217 | 42 | 259 | 500 | (241) | 52% | 1,000 | 951 |
| Game Bird Control compliants | - | - | - | - | - | - | - | 2,241 |
| Total Species Management | 3,104 | 171 | 3,275 | 5,556 | (2,281) | 59% | 25,000 | 10,106 |
| Habitat Protection & Mngt | | | | | | | | |
| Contact Sports Fish Management Plan | - | - | - | - | - | - | - | 50,492 |
| Resource Mngt Act | 2,003 | 2,401 | 4,404 | 170 | 4,234 | 2,590% | 1,000 | 17,970 |
| Works & Management | - | 720 | 720 | 2,082 | (1,362) | 35% | 12,500 | 9,846 |
| Habitat Enhancement Research Fund Grants | - | - | - | - | - | - | - | 21,649 |
| Total Habitat Protection & Mngt | 2,003 | 3,121 | 5,124 | 2,252 | 2,872 | 228% | 13,500 | 99,957 |
| Participation | | | | | | | | |
| Access and Signage | 54 | 75 | 129 | 516 | (387) | 25% | 3,000 | 1,061 |
| Back Country Surveys/Monitoring | - | 2,651 | 2,651 | 2,500 | 151 | 106% | 25,000 | 20,259 |
| Promotion Articles and Advertising | - | - | - | 100 | (100) | - | 500 | 241 |
| Publications and Web Site | - | 120 | 120 | - | 120 | - | - | 924 |
| OF&G Training Events | 1,823 | (98) | 1,725 | 1,300 | 425 | 133% | 2,000 | 3,020 |
| Club Relations and Grants | - | 249 | 249 | 200 | 49 | 124% | 1,000 | 1,650 |
| Wetland Reserve Ballots | - | - | - | - | - | - | - | 22 |
| Total Participation | 1,877 | 2,997 | 4,874 | 4,616 | 258 | 106% | 31,500 | 27,177 |

| | SEPT 2024 | OCT 2024 | YTD ACTUAL | YTD BUDGET | VARIANCE | % OF YTD BUDGET | ANNUAL BUDGET | LAST YEAR |
|--------------------------------------|-----------|----------|------------|------------|----------|-----------------|---------------|-----------|
| PUBLIC INTERFACE | | | | | | | | |
| Liaison | | | | | | | | |
| Liaison DoC Unin Govt CFT IWI | - | - | - | 200 | (200) | - | 1,000 | 41 |
| Total Liaison | - | - | - | 200 | (200) | - | 1,000 | 41 |
| Communication | | | | | | | | |
| World Wetlands | - | - | - | - | - | - | 200 | 27 |
| Total Communication | - | - | - | - | - | - | 200 | 27 |
| Media Releases | | | | | | | | |
| Advocacy Statutory | - | - | - | 100 | (100) | - | 500 | - |
| Weekly Fishing Reports/ social media | 175 | 875 | 1,050 | 1,200 | (150) | 88% | 6,000 | 4,375 |
| Communications Strategy | 1,100 | - | 1,100 | - | 1,100 | - | - | 15,398 |
| Total Media Releases | 1,275 | 875 | 2,150 | 1,300 | 850 | 165% | 6,500 | 19,773 |
| Total PUBLIC INTERFACE | 1,275 | 875 | 2,150 | 1,500 | 650 | 143% | 7,700 | 19,841 |
| COMPLIANCE | | | | | | | | |
| Ranger Training and Expenses | 225 | 22 | 246 | 1,500 | (1,254) | 16% | 5,500 | 2,828 |
| Compliance | - | - | - | - | - | - | 10,000 | 8,250 |
| Total COMPLIANCE | 225 | 22 | 246 | 1,500 | (1,254) | 16% | 15,500 | 11,078 |
| LICENCING | | | | | | | | |
| Designated Waters IT Build | - | - | - | - | - | - | - | 21,023 |
| Agent Servicing | - | - | - | - | - | - | 250 | 252 |
| Commission/Fees | 13,792 | 18,998 | 32,789 | 33,446 | (657) | 98% | 98,843 | 89,251 |
| Total LICENCING | 13,792 | 18,998 | 32,789 | 33,446 | (657) | 98% | 99,093 | 110,525 |
| COUNCIL | | | | | | | | |
| Elections Council | - | - | - | 500 | (500) | - | 500 | - |

| | SEPT 2024 | OCT 2024 | YTD ACTUAL | YTD BUDGET | VARIANCE | % OF YTD BUDGET | ANNUAL BUDGET | LAST YEAR |
|---------------------------------------|----------------|---------------|----------------|----------------|-----------------|-----------------|------------------|------------------|
| Council Meetings and Agendas | 1,738 | 474 | 2,212 | 2,500 | (288) | 88% | 15,000 | 14,103 |
| Total COUNCIL | 1,738 | 474 | 2,212 | 3,000 | (788) | 74% | 15,500 | 14,103 |
| PLANNING & REPORTING | | | | | | | | |
| Reporting/Audit | 4,300 | - | 4,300 | 6,000 | (1,700) | 72% | 18,000 | 16,156 |
| National Liason | - | - | - | 100 | (100) | - | 500 | 266 |
| Total PLANNING & REPORTING | 4,300 | - | 4,300 | 6,100 | (1,800) | 70% | 18,500 | 16,421 |
| ADMINISTRATION | | | | | | | | |
| Salaries | 74,964 | 60,318 | 135,282 | 163,636 | (28,354) | 83% | 981,843 | 941,864 |
| Staff Expenses | | | | | | | | |
| ACC Levy | - | - | - | - | - | - | 2,500 | 1,931 |
| Fringe Benefit Tax | - | - | - | - | - | - | 8,000 | 6,156 |
| Staff Training | 1,497 | - | 1,497 | 1,000 | 497 | 150% | 8,000 | 6,765 |
| Staff Clothing Branded | - | - | - | - | - | - | - | 1,358 |
| Staff Personal Expenses | - | - | - | - | - | - | - | - |
| Staff Expenses | 137 | 154 | 291 | 1,000 | (709) | 29% | 8,000 | 9,120 |
| Staff Employment Expenses | 2,878 | 122 | 3,000 | 1,000 | 2,000 | 300% | 1,000 | 5,488 |
| Employee Assistance | - | - | - | - | - | - | - | 16,000 |
| Total Staff Expenses | 4,512 | 276 | 4,788 | 3,000 | 1,788 | 160% | 27,500 | 46,818 |
| Office Premices | 24,542 | 12,666 | 37,209 | 26,456 | 10,753 | 141% | 87,689 | 91,664 |
| Office Equipmemt | 805 | 49 | 854 | 1,100 | (246) | 78% | 2,000 | 3,463 |
| Communications | 962 | 1,620 | 2,582 | 3,784 | (1,202) | 68% | 23,200 | 19,740 |
| General Exp (incl Insurance) | 134 | 335 | 469 | 1,450 | (981) | 32% | 3,600 | 14,350 |
| General Field Equipment | - | - | - | 682 | (682) | - | 3,300 | 2,769 |
| Vehicles | 12,103 | 4,245 | 16,348 | 18,332 | (1,984) | 89% | 55,000 | 51,560 |
| Total ADMINISTRATION | 118,023 | 79,508 | 197,532 | 218,440 | (20,908) | 90% | 1,184,132 | 1,172,228 |
| Approved Reserve Expense | 4,496 | 9,413 | 13,909 | - | 13,909 | - | - | 43,052 |

| | SEPT 2024 | OCT 2024 | YTD ACTUAL | YTD BUDGET | VARIANCE | % OF YTD BUDGET | ANNUAL BUDGET | LAST YEAR |
|------------------------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|------------------|------------------|
| Depreciation | 4,208 | 5,049 | 9,257 | 9,788 | (531) | 95% | 58,724 | 56,784 |
| Loss on Disposal | - | - | - | - | - | - | - | 1,169 |
| NZ Fish & Game Levies | 100,491 | 100,491 | 200,981 | 200,980 | 1 | 100% | 1,205,887 | 1,161,958 |
| University of Otago Research Grant | - | - | - | - | - | - | - | 5,000 |
| Total Expenses | 255,530 | 221,119 | 476,649 | 487,178 | (10,529) | 98% | 2,675,036 | 2,749,401 |
| Net Profit | 169,764 | 321,414 | 491,179 | 376,440 | 114,739 | 130% | (103,038) | 463,898 |

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 31st October 2024

See table following for fish licence sales numbers and categories for the 2024/25 and 2023/24 season sales to the 31st October 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), 6898 LEQs this season compared with 7419 LEQs to the 30th of October of the previous season. 521 LEQs behind last year. A large drop in full season and designated water licences.

9.4.1 Recommendations

That the Finance Report and Licence Report to the 31st October 2024 be received.

Sharon Milne
Administration Officer
19/11/2024

Otago Region Fish Licence Sales to the 31st October 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 | 888 | 1176 | 116 | 284 | 117 | 0 | 0 | 58 | 294 | 189 | 283 | 6 | 50 | 12 | 5 | 4 | 0 | 990 | 45 | 5082 | 3,046 |
| Agency | 1194 | 1568 | 21 | 652 | 70 | 0 | 0 | 26 | 65 | 61 | 221 | 5 | 6 | 5 | 0 | 2 | 279 | 944 | 0 | 5131 | 3,851 |
| Total | 2082 | 2744 | 137 | 936 | 187 | 0 | 0 | 84 | 359 | 250 | 504 | 11 | 56 | 17 | 5 | 6 | 279 | 1934 | 45 | 10213 | 6,898 |

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 | 944 | 1116 | 112 | 284 | 97 | 0 | 3 | 53 | 287 | 129 | 199 | 3 | 39 | 10 | 2 | 4 | 0 | 973 | 57 | 4804 | 2,992 |
| Agency | 1427 | 1878 | 33 | 609 | 61 | 0 | 0 | 17 | 71 | 81 | 192 | 0 | 11 | 12 | 0 | 6 | 387 | 1110 | 5 | 5906 | 4,426 |
| Total | 2371 | 2994 | 145 | 893 | 158 | 0 | 3 | 70 | 358 | 210 | 391 | 3 | 50 | 22 | 2 | 10 | 387 | 2083 | 62 | 10710 | 7,419 |

FWFA (Family), FWA (Adult season), FWNA (Non Resident season), FSLA (Senior Loyal), FLAA (Local Area), FWIA (Adult 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

10.0 Chief Executives Report

10.1 SPECIES MANAGEMENT

Gamebird harvest and shoveler monitoring reports

Two interesting reports on gamebird harvest and monitoring are appended to this agenda. They are there to support decision making for the new seasons gamebird regulations.

Monitor Fisheries

Early season drift diving has been completed in the Upper Lochy and Greenstone rivers. Very few trout were seen in the upper Lochy and the number in the Greenstone were also down on previous years.

Macraes Hatchery

As you are aware, the Macraes Trout Hatchery turned 20 years old recently. The TV piece on Seven Sharp didn't quite go to plan but overall it was reasonable coverage of our work.



Macraes Hatchery in 2005

Liberations for the year are complete and the fry in the hatchery are doing well. Liberations included stocking of two ponds in Central Otago ahead of take-a-kid-fishing events run by Upper Clutha Anglers and Teviot Angling Club.

Regulations

The Gamebird Gazette Notice is to be considered this meeting and as usual will be subject to Paradise shelduck trend count results analysed at the end of January. NZC has requested that the final drafts of Gazette Notices be with them by the 31st January 2025 which is a tight timeframe after the flight counts.

10.2 HABITAT PROTECTION AND MANAGEMENT

Takitakitoa Wetland Update

We have been successful in receiving another grant of 500 trees for the wetland through *Trees that Count* charity.

The wetland was impacted by the flooding back in October. Many of the tree guards were dislodged and the road to the bund had a number of slips which have blocked access. These have been cleared but the roadway remains unpassable. It is hoped it will settle and dry out over the summer as there is some additional work on the maimais planned.

10.3 USER PARTICIPATION

Designated Waters implementation

The Designated Waters licencing system is running relatively smoothly. Based on the Ministers letter, the Designated Waters system is being reviewed by staff nationally with a view to finding a consistent approach. If the present conditions to establish a Designated Water were applied to some of our present fisheries, there is a chance that some may no longer qualify.

Monitoring and compliance is underway with surveys in the Nevis and Greenstone/Caples having already been completed and no compliance issues have been detected.

Publications

The future of the F&G magazine is still being considered with most regions and staff considering that the publication is still required in its printed form. Thankfully printing costs have leveled off meaning that a printed edition is still affordable in the short term.

Take a Kid Fishing and Adult Fishing Classes

These are now complete, and two additional Soft Bait Clinics were held. These were well attended. Promotion via our social media channels has been helpful and feedback has been very good from all the events this spring.



Access Charter – Ministerial announcement

Cr's would have seen the positive news about a new Access Charter for Conservation Land which is fully welcome. While it is silent on gamebird hunting we are hopeful it is covered under 'hunting'. This will be good news for central Otago upland game hunters looking to more readily access areas which don't presently have firearms access onto DOC land which was acquired through the Tenure Review process.

Otago Fish and Game Council Meeting & AGM 28th November 2024

10.4 PUBLIC INTERFACE

Advocacy

150th Anniversary of Trout Fishing in Otago

Councillors have been kept up to date with the various limbs of the celebration. Its proving a challenge in terms of timing and resources but our Communications Officer Bruce Query and resident techy Jayde Couper have done a fantastic job with the special day licence giveaway to celebrate the occasion.



CE to update

World Wetlands Day event, Bullock Creek Wetland, 2nd February 2025

A joint effort between Friends of Bullock Creek and F&G is proposed to celebrate World Wetlands day at Bullock Creek. There will be food and addresses from FOBC and F&G and guided walks of the wetland. It would be good have some Councillors to attend.

Meeting and catchment group attendance

Staff have been attending plenty of stakeholder meetings including catchment groups in the Catlins and at angling clubs. The CE spoke at the Otago Deerstalkers Association meeting to provide an update on the Fish & Game matters.

10.5 COMPLIANCE

Prosecutions

Diversion of offenders is still the most cost effective option for dealing with non compliance and a number of early season offences have already been resolved via that method.

A legal opinion on the use of Diversion has been circulated from NZC and there may need to be changes to our well established system. Staff will report further on that when the organisation has settled on a practical and fit for purpose system. Instant fines continue to be promoted as an alternative but this has not advanced further.

10.6 LICENCING

The system seems to be running without issues and a good number of designated waters licences have been sold. Licence sales are down across the South Island but only marginally behind in Otago. (see finance report) The wet spring and high rivers is one contributing factor but reduced recreational spending overall is also a likely cause.

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10.7 COUNCIL

Parliamentary Fishing Trip

NZC have organised an outing and overnigher for parliamentarians on the 23rd November. Our staff have been asked to support the event. The chair is also been tasked to speak at the event. Other Councillors are also involved.

Chair to update

Staffing

The Cromwell based Operations Manager role has now been filled and Jamie Ward will start with us on the 9th December. That will mean we are back to a full complement of staff. He will attend the January planning meeting so Councillors will have an opportunity to talk to him there.

Property Update

The Wanaka section is still awaiting title to be issued before we can move to disposal. There is a separate report in public excluded related to the replacement building for Dunedin.

10.8 PLANNING AND REPORTING

Annual Audit and Annual Report

Attached to the AGM agenda is the statement of service performance which was sent to the Auditor. As previously mentioned, it doubles as a communication piece for licence holders so it has morphed into a more newsletter style. The format, which meets the updated accounting standard, seems to have met with the auditors approval.

At the time of writing the financial accounts are unfortunately still being finalised. They will now have to be circulated as soon as signed off by BDO. The annual report is supposed to be adopted at the Council meeting and hopefully that will still be possible.

Next Council Meeting

Just a reminder that the next Council meeting is in Dunedin on the 25-26th January. This will be the Councils planning meeting for the 25/26 workplan. With the strategic direction being set, this shouldn't be a major exercise. Please let me know if you want additional information beyond a 'where we are up to' and a 'risk and opportunities' paper.

Recommendation

That this report be received

**Ian Hadland - Chief Executive
November 2024**

Otago Fish and Game Council Meeting & AGM 28th November 2024

11.0 RMA Planning and Consents Report

Planning and Consenting Report 17 July – 11 November 2024

Current Legislation, Policy and Planning Processes

Otago Regional Policy Statement (ORPS)

An update will be provided in the public excluded section of the meeting, as RPS processes are being currently mediated.

Land and Water Regional Plan (LWRP)

During the reporting period, the Government has put in place amendments to bills which would preclude the notification of Freshwater Policy Instruments. By doing so, the Government has scuttled the ability of the ORC to notify the LWRP, which it had planned on doing in October.

The intent of the Government was to avoid plans or plan changes being notified prior to the release of their updated National Policy Statement for Freshwater Management (**NPS-FM**), which is expected in 2025.

As a result, it is uncertain when the LWRP will be notified. It must be held off until at least the release of the updated NPS-FM, or 31 December 2025. This delay further extends the time that freshwater in Otago will be managed by the Regional Plan: Water for Otago, which is over 2 decades old and has been identified as not fit-for-purpose. It is also not clear how the delay will affect the short-term consents which replaced deemed permits, as the LWRP was intended to create a fit-for-purpose policy framework to assess abstraction when they expire.

The draft LWRP that was to be notified can be found on the [ORC's website](#) and is a mixed bag for licence holders. On the one hand, it directs improvements to water quality and quantity, now and in future plans, such that “freshwater bodies support healthy and resilient freshwater ecosystems” and it adopted collaborative processes around species interaction which was championed by Fish and Game. Based on supporting ORC reports, the improvements required to achieve ecosystem health would have been systemic. However, it also identified fish passage for sports fish as “undesirable” in the short term across Otago and it directed habitat protection for juvenile and spawning trout and salmon only – omitting adult sports fish.

Akatore Creek Road Stopping

Fish and Game was approached for comment by a representative of a farm on the Southern Shore of the Akatore Creek who wanted to stop a paper road leading through the property. Staff have indicated that the road stopping would not be supported, unless there was a like-for-like swap of access mechanisms.

Current Notification processes

Nil

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Written Approval Provided During the Period

| Applicant | Activity | Outcome |
|-------------------------------------|--|---|
| Otago Regional Council applications | | |
| VC Gold Ltd | To disturb ephemeral tributaries and to take and discharge groundwater for the purpose of gold mining. | On review, the application had sufficient mitigation to protect licence holder values. Affected party approval was provided. |
| The Department of Conservation | To discharge contaminants and undertake works in tributaries of the Clutha, Manuherekia and Taieri Rivers for the purpose of maintaining bridges and culverts on the Central Otago Rail Trail. | Consent conditions were negotiated to mitigate the discharge of contaminants and require fish salvage during diversions. As a result, affected party approval was provided. |

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

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

Recommendation:

1. That this report be received.

Nigel Paragreen
Environmental Officer
11 November 2024

12.0 Committee & Delegate Reports

12.1 Clutha Fisheries Trust

12.2 NZC

12.3 Ngai Tahu

12.4 Conservation Board

12.5 Clutha Mata-Au Sportsfish and Habitat Trust

12.6 Tiaki Maniototo

13.0 Correspondence

13.1 NZC to Otago

Nil

13.2 Otago to NZC

13.2.1 Feedback on Budget and NZC Meeting Schedule

From: Ian Hadland
Sent: Tuesday, November 19, 2024 12:10 PM
To: Corina Jordan <cjordan@fishandgame.org.nz>; NZ Fish & Game Council
<nzcouncil@fishandgame.org.nz>
Cc: Sharon Milne <smilne@fishandgame.org.nz>; Adrian McIntyre
<point.farm@outlook.co.nz>
Subject: Otago Feedback on Budget and Meeting Schedule

Kia ora,

Attached for reference is Otago's 2025 Meeting Schedule.

Due to the change in budget process and timing it will be impossible for Otago to meet the 13th March deadline for budget submission to NZC. Our Council is scheduled to meet on the 18th March and will reply with its confirmed budget the following day.

Aside from that, there is no issue with the NZC budget and meeting schedule.

Otago Council has already highlighted (in a letter dated 29th September) the need for urgent development of financial policy for the organisation but appreciates that this will be too late coming for this next budget round which it is treating as business as usual.

Thank you

Ian Hadland | Chief Executive
Otago Fish and Game Council
PO Box 76, Dunedin

Cell: (027) 254 9700
Office: (03) 477 9076

13.3 General Correspondence In
13.3.1 Hon Todd McClay

Hon Todd McClay

Minister of Agriculture
Minister of Forestry
Minister for Hunting and Fishing
Minister for Trade
Associate Minister of Foreign Affairs



25 October 2024

Adrian McIntyre
240 McIntyre Road
5 RD
Gore

TM02353 / 24-B-0530

Dear Adrian McIntyre

I would like to take this opportunity to congratulate you on your election to your region's Fish and Game Council. I appreciate your commitment to this volunteer position, and the invaluable contribution your local knowledge and experience will make.

Supporting Fish and Game New Zealand is one of my top priorities as the Minister for Hunting and Fishing.

Fish and Game Councils are public sector agencies by virtue of being listed in schedule 4 of the Public Finance Act 1989. The Councils play an essential role in managing, maintaining, and enhancing sports fish and game for anglers and hunters across New Zealand, while preserving the natural environment and habitats.

In undertaking your duties, I would ask you to continue to consider how we can best enhance and make it easier for hunters and fishers to enjoy their recreational activity more.

I am currently considering ways to re-focus Fish and Game to further contribute to hunting and fishing experiences. I will be writing to Councils soon, in respect of the government's expectations and seeking their and your views on a number of reforms that we might consider together.

Congratulations again, and I hope to have a chance to meet you soon.

Warm regards,

Hon Todd McClay
Minister for Hunting and Fishing

13.3.2 Hon Todd McClay

Hon Todd McClay

Minister of Agriculture
Minister of Forestry
Minister for Hunting and Fishing
Minister for Trade
Associate Minister of Foreign Affairs



4 November 2024

Ian Hadland
Acting Chair
By email: ihadland@fishandgame.org.nz

TM02435 / 24-B-0525

Dear members of Otago Fish and Game Council,

I would like to welcome you as a Council. I recognise and thank you for giving your time on a voluntary basis and look forward to working with you to advance the interests of anglers and hunters.

Parliament have entrusted you with a pivotal role. The decisions you make will have a direct impact in your region for licence holders, the environment and wider communities, and will reflect more broadly on Fish and Game. Your efforts should be focussed on making it easier for licence holders to hunt and fish, and your decisions based on sound evidence.

As a public sector agency, I expect that you will act professionally, and observe appropriate standards of ethics and conduct, equivalent to the Standards of Integrity and Conduct (the Code) issued by the Public Service Commissioner. I expect you to review your internal policy and practices to ensure they align with the Code, and to provide copies to the New Zealand Fish and Game Council (NZC) as my statutory advisors. Where significant issues persist after your Council has exhausted its internal avenues, I expect these to be raised with me.

More widely, I believe there are improvements that we could make to address some long-standing challenges. Fish and Game could be modernised and made more effective to help it refocus on its primary responsibilities and prepare for future challenges. I am committed to working with you over the course of your term to make improvements.

While the 2021 Governance Review was useful, it also had limitations, and time has passed since its recommendations were made. I therefore want to seek your views on a number of questions to help inform our next steps together:

1. What opportunities are there to make efficiencies, reduce duplication and ensure economies of scale across Fish and Game (e.g. shared services) to improve value for money for licence holders? How could these be best achieved?
2. What do you think about the Governance Review recommendation to merge regions, and on what basis would this be appropriate?
3. What would better support you as councillors and as Fish and Game generally:
 - a. would a reduced number of councillors on each council improve effectiveness and decision making?
 - b. would a modest honorarium for councillors recognise and support your voluntary role?

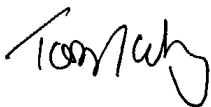
- c. how can the relationship between your Council and the NZC be improved to support the organisation and licence holders? Is the current way of nominating your representative to the NZC working? How can there be stability for the NZC over the whole term?
- d. what other measures would support your Council to be more effective and trusted (e.g. wider eligibility to stand and vote in elections, a fit and proper person test)?
- e. should the criteria under which the Minister currently has the power to remove elected members be reviewed?

I welcome your views as a Council and encourage you to consider and reflect the views of licence holders, Māori interests, and other interested parties in your region in your responses.

Please provide your responses to my office by 16 December 2024.

I intend to visit your region to meet with your Council early in the new year. I look forward to discussing opportunities for the future further then.

Warm regards,



Hon Todd McClay
Minister for Hunting and Fishing

13.4 General Correspondence Out

Nil

14.0 Items to be Received or Noted

14.1 Shoveler and Grey Teal Trend Monitoring October 2024

Summary

There has been a noticeable downward trend in the total number of shoveler harvested in the Otago Region since 1993, a pattern that is consistent with other regions and the nationwide trend. This decline in harvest numbers should not be seen solely as an indicator of a decrease in the shoveler population. It is likely influenced by a combination of factors, particularly changes in hunting practices such as a shift away from traditional large coastal ponds and alterations to bag limits and season lengths over time.

Trend analysis of shoveler suggests a slight long-term decline in shoveler populations in the Otago Region however this trend is reversed more recently, none of the trends are strong or statistically significant suggesting relative stability.

All trend indices for the national monitoring aside from this year compared to last suggest that the population is stable.

Although based on limited data, the 2023 Gazette review change to the shoveler bag limit has been effective in reducing the harvest in the Otago and Southland regions well as nationally due to the high proportion of shoveler harvested in the lower South Island. It is recommended that the bag limits are review in the upcoming triennial review.



Photo 1: Male shoveler- left, female shoveler- centre, grey teal – right (Photo – B Quirey).

Introduction

Shoveler/ kuruwhengi (*Anas rhynchos*) are a native game bird that predominantly occupies fertile, lowland, still water habitats. They congregate on certain sites in early August before pairing off for breeding and nesting (Caithness 1982, Holden 1990, Williams 1981).

Shoveler are extremely mobile and move rapidly throughout the region and country, consequently shoveler are monitored through a national program that counts the birds throughout the country on the same day.

Shoveler are highly valued by hunters and make up a small (just over one percent in 2024) but important part of the waterfowl bag. The daily bag limit for shoveler in Otago has been set very conservatively at two shoveler per day over the medium term however in reaction to a potential slight decrease in long term national populations it was reduced to one drake only for the 2023 and 2024 seasons.

Grey teal / Tētē-moroiti (*Anas gracilis*) numbers are also monitored through this program. Grey teal are not game birds instead falling under Schedule 3 of the Wildlife Act as “Wildlife that may be hunted or killed subject to conditions imposed by the Minister of Conservation”.

Methods

Harvest estimates in this report are calculated from an ongoing national phone survey of licenced hunters, full details on methods available in the Whole Season Game Bird Harvest and Activity report (Couper 2024).

Shoveler and grey teal were counted at 45 sites throughout the region (Figure 1) this included a return to some historically counted sites and the addition of two new sites; Catlins Lake and the pond to the north of Taieri Lake. Birds were counted using a combination of binoculars and spotting scopes. Counts were conducted on the 5th of August 2024 to align with the national count. Otago Fish & Game staff were assisted by Councillor Adrian McIntyre.

Surveyors also record a number of environmental variables including, wind direction and strength, rain, cloud cover and tides where relevant.

To account for variations in the sites being monitored, the data have also been analysed using route regression, a Fish & Game standard operating procedure detailed in Teal (2003). This method reduces the impact of annual fluctuations by calculating the average of long-term trends in naturally logged counts across each monitored site over specified time frames (Stevens, 2021). The natural logarithmic transformation of counts ensures that high-variability sites, like Lake Tuakitoto, do not skew the overall data. One issue with this methodology is the lack of a standardised way to handle zero counts, as the natural log of zero is undefined (Bellégo et al., 2022). This year, we switched from adding a very small number to the counts to adding one, aligning with the national survey methodology. This adjustment has slightly affected previous estimates of trends.

An extensive scientific assessment by Sauer & Droege (1990) showed that “route-regression methodology is most efficient in the estimation of long-term (>5 year) trends and tends to provide conservative results for low-density species”.

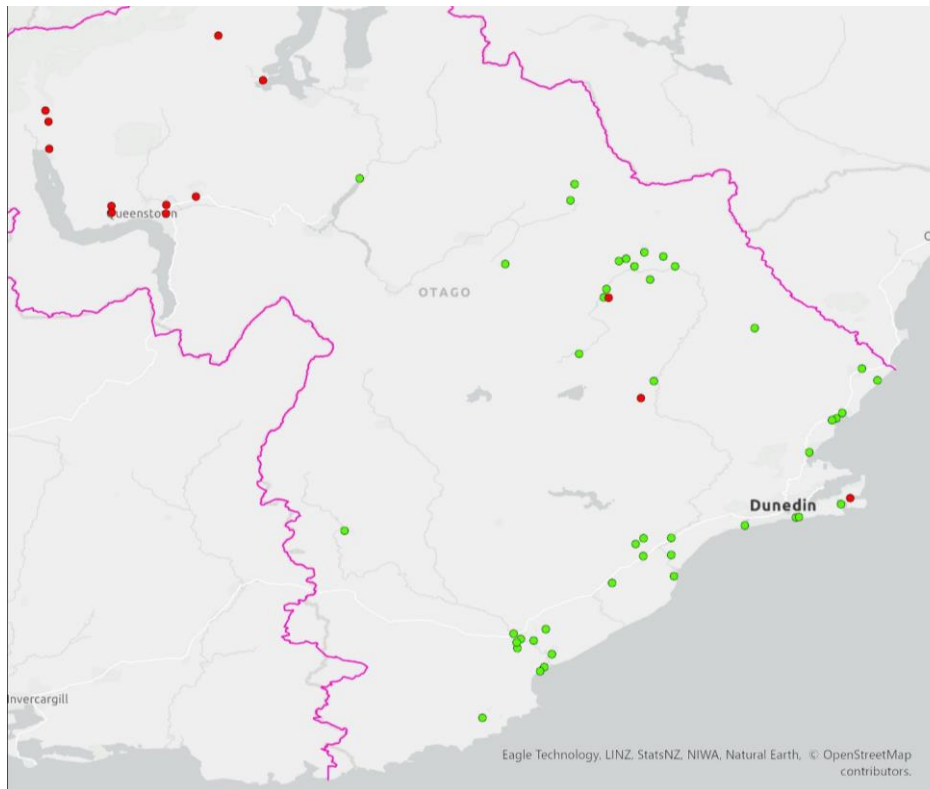


Figure 1: Map of historical shoveler survey sites. Sites surveyed this year shown in green, otherwise in red. Otago Fish & Game regional boundary shown in pink.

Commented [JC5]: Map needs an update when arc is back

Results

Otago Region Hunter Harvest

Since 1993, there has been a downward trend in the total number of shoveler harvested in the Otago Region, as shown in Figure 2.

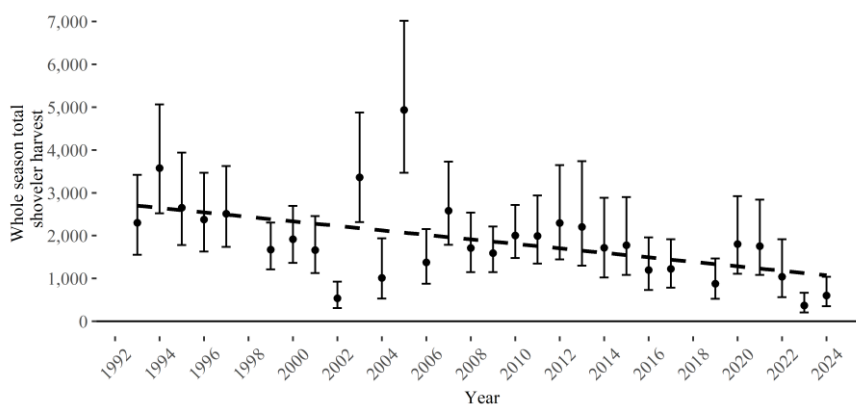


Figure 2: Whole season total shoveler harvest in the Otago Region. Long-term trend linear shown as a dotted line.

This trend aligns with patterns observed in all other regions and the nationwide trend. However, this decline should not be interpreted as a definitive indication of a population decrease, as it is likely attributable to a combination of factors, especially changes in hunting practices. These include a shift away from traditional large coastal ponds and alterations in bag limits and season lengths over time. For instance, in 2008, the bag limit in Otago was reduced from five to two, which could have significantly impacted the harvest numbers, although this has not been tested.

More recent regulatory changes for the 2023 season saw the Otago Fish and Game Council revising the bag limit from two shoveler in total to only one drake shoveler, while the Southland Fish and Game Council moved from two shoveler in total to two drake shoveler only. These adjustments in bag limits appear to have achieved their intended effect, as both regions reported their lowest total shoveler harvests in the 2023 seasons and very low harvest for the 2024 season.

As there has been two years of data gathered with the lower limit, it would be sensible to review the shoveler limit as part of the upcoming triennial game review.

Otago Region Count Results

Figure 3 shows the number of shoveler counted per site across the Otago Region. The average for 2024 fell below the long-term average. It appears that this is at least partly due to staff returning to some sites that had only been counted intermittently in the past. These

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additional sites had varying numbers of shoveler present. Although the chart indicates relative stability it does not reflect changes in monitoring sites over time due to alterations in habitat and staff workloads. Moreover, the data does not account for the probable significant movement of shoveler into and out of the Otago Region.

As shoveler cluster on specific habitats and there is currently no database of the extent of this habitat, sites have been selected by staff as known shoveler congregation spots. This non-randomised survey means that we are unable to make strong judgments on the total regional or national population based on this survey.

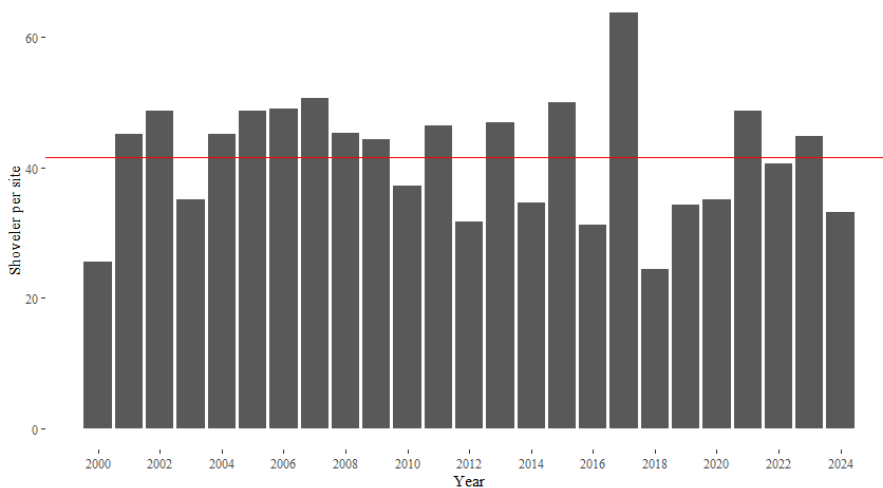


Figure 3: Average number of shoveler per Otago site. Long term mean shown in red.

Grey teal numbers per site were slightly below the long-term average (Figure 4). Although sites have been selected to monitor shoveler, grey teal occupy similar habitats, meaning this survey is a useful tool to monitor their numbers. There is a general but weak trend where shoveler and grey teal follow the same pattern, rising and falling together, presumably in response to weather and habitat conditions.

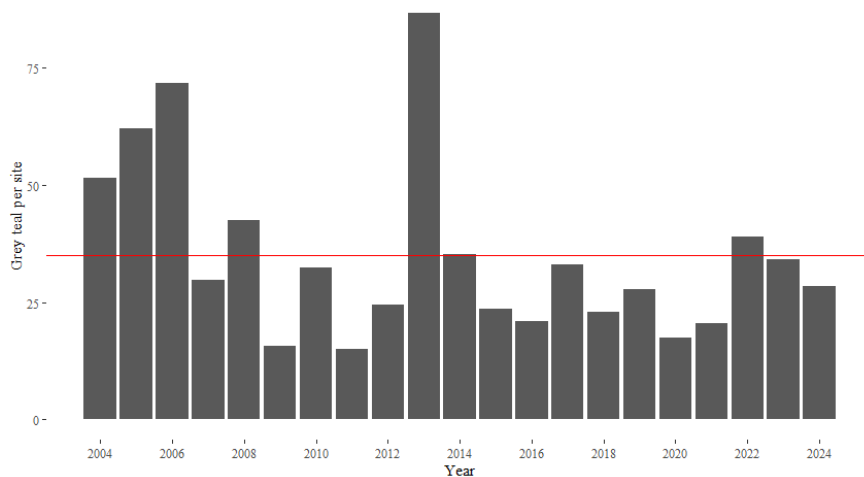


Figure 4: Average number of grey teal per Otago site. Long term mean shown in red.

Figure 5 presents the results of the route regression analysis, illustrating fluctuations in the Otago shoveler populations across various prolonged periods, expressed as a percentage change over time. The data indicate a marginal, though not statistically significant, decline in the Otago shoveler numbers over the long term.

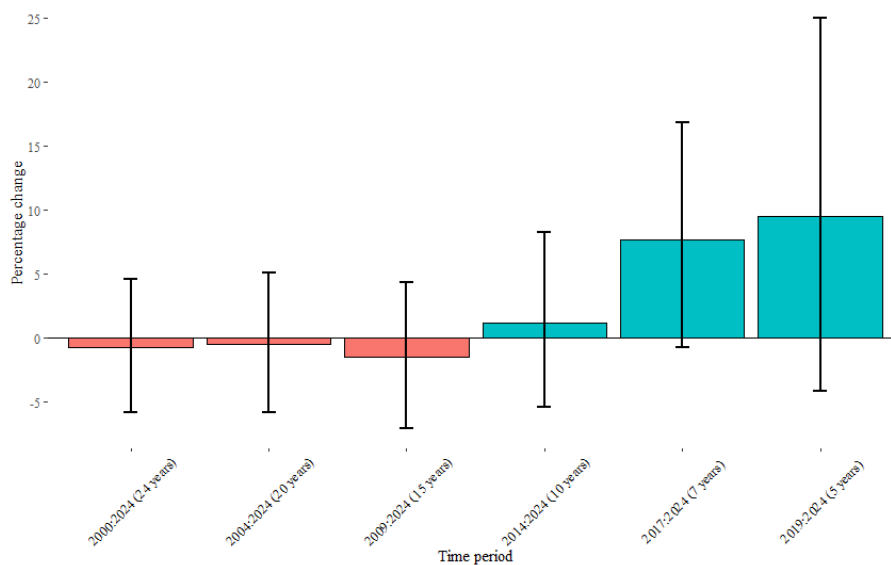


Figure 5: Percentage change in Otago Region shoveler numbers over varying periods with 95% confidence intervals. Increasing trend for period shown in blue, decreasing trend in red.

National Results

This trend discussed above however, does not take into account the migratory nature of shoveler and may represent a shift in bird behaviour rather than a change in the population. To account for the highly migratory nature of shoveler, all region's counts are jointly analysed by Matt McDougall of Eastern Fish & Game.

The draft report for 2024 states that:

Fish and Game New Zealand conducted a national count of kuruwhengi, Australasian shoveler duck (Spatula (Anas) rhynchotis) on 5 August 2024. This is the 25th annual count (2000 – 2024) to monitor change in the New Zealand shoveler duck population.

Four indices were examined, (1) total national count (n=277 survey sites), (2) the sum of counts from sites that have been counted every year (n=73), (3) a two-year trend of each site (2023–2024; n=250) and (4) a 25-year trend of each site (2000–2024; n=268). The trends are derived from a regression line, i.e., a linear slope, fitted to the annual log count for each site.

The 2024 total count (12,514) was the 20th highest ranked count in the 25 years and similar to last year's count of 12,359 (n=259). There were however 18 more sites counted in 2024 cf. 2023.

The long-term trend indicates a stable population (average change = -0.006; 95% CI -0.087 – 0.075) despite a decrease in the last two years (average change = -0.09; 95% CI -0.17 – -0.015).

The total counts at the 73 sites that have been counted every year was the fourth lowest (4,350; last year was the lowest at 3,884 shoveler duck) since 2000. A linear regression line fitted to these 73 sites suggest no change in the shoveler population at these count sites over the 25 years ($\beta_{\text{year}} = -2.82$; $P = 0.948$).

Sex ratios were examined using a chi-squared test. Reported observations of females were significantly fewer ($P < 0.0001$) than males with a ratio of 0.59 females to males. This sex imbalance is consistent with ratios from previous years (0.63 females to males).

The national survey is an index of population change. Count sites were not randomly selected so inference about national shoveler populations must be made with caution.

All indices, except the short term (2023 – 2024) counts, point to a stable shoveler population. Following a small decrease detected in the 2022 count Southland and Otago Fish and Game regions introduced more restrictive conditions (daily bag limits) which may explain the change in population trends.

The 2024 national shoveler trend count report is available by request.

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Recommendation

That the report is received

Jayde Couper
Fish & Game Officer

References

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14.2 Clutha Anger Survey

As part of the 2023-24 sports fisheries mitigation programme, which forms part of Contact Energy's consent conditions for operating the Clutha River/Mata-Au hydroelectric dams, Fish & Game Otago conducted a year-long survey on angling activity in the lower river. The dataset is extensive, with almost 6,000 interviews over the year meaning there is scope for further data exploration in future.

In line with the Council's strategic direction to enhance licence holders' understanding of Otago Fish & Game's role and activities, and to provide tangible "evidence of service" through regular communication, staff have prepared this report in a modern, interactive newsletter style to increase engagement and readership.

The report is designed to be straightforward and visually appealing, optimised for viewing on phones and tablets, as these are the platforms most likely used by readers. It will be shared with current licence holders through established channels, and a press release will be issued to reach a wider audience beyond the licence holder database.

[The report can be read in its distribution form here.](#)

A non-interactive copy has been included in overleaf for convenience.

Recommendation

This report be received.

Jayde Couper
Fish & Game Officer
November 2024

Lower Clutha / Mata-Au Angler Survey 2023-24



Clair Kennedy with a nice brown trout caught on fly in the lower reaches of the Clutha River/Mata-Au. Photo: Ian Hadland

Introduction

Every seven years, New Zealand Fish & Game (F&G) commissions a National Angling Survey to estimate usage across all F&G-managed fisheries. The survey measures usage in "angler days" with each angler day representing one angler's visit to a fishery on a single day, regardless of the hours fished. The most recent survey confirmed that the lower Clutha River/Mata-Au remains a major fishery, ranking as the second most visited F&G-managed river, with just over 20,000 angling days recorded for the 2021/2022 season.

[You can read the full 21-22 National Angling Survey here.](#)

To expand on the insights from the National Angling Survey, Otago Fish & Game designed an additional project to gather more specific data on angler activity in the lower Clutha. This includes estimates of hours fished, the total catch per species, catch-and-release data, and how anglers use different parts of the river.

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The survey was funded by Contact Energy through the sports fisheries mitigation programme, part of the consent conditions for operating the Clutha River/Mata-Au hydroelectric dams.

Read more about other projects in the [sports fisheries mitigation programme by clicking here](#).



If you want to jump straight to the results, use the table of contents box in the bottom right.

Methods

The survey is stratified by drive time to the fishery and relies on the latest National Angling Survey dataset. Findings showed that anglers in Otago and Southland with family, adult whole-season, winter, local area, loyal senior, junior, and junior winter licences living within half an hour's drive of the river accounted for 35% of angling activity. Those within 65 minutes contributed an additional 45%. The results are then scaled up to account for the remaining 20%. This pattern, where anglers closest to the waterway fish it the most, aligns with previous studies and findings from other waterways (Couper, 2020; Unwin & Deans, 2003). Travel times were calculated using anglers' listed suburbs and the "gmapsdistance" package in R, with a Google Maps API.

The survey consisted of monthly phone calls, which began in late October 2023 and concluded at the end of September 2024. The proportion of each angler group to contact was initially estimated for the first call period, then allocated for each following period using Neyman allocation to maximise the precision of the total sports fish harvest estimate.

Anglers were asked about their angling activity over the previous month, including their total visits to the river, total hours spent fishing for sports fish, and the total number of salmon, perch, and brown and rainbow trout harvested and released. The activity of non-primary licence holders under family licences was combined with that of the primary angler.

Anglers also reported their activity by dividing it into seven zones: four zones on the Clutha, separated by major bridges; two zones on the Pomahaka, split into designated and non-designated waters; and the final zone covering the Waipahi River. The zones are shown in the map below; please note that the map may load slowly.

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Map showing the seven survey zones and the boundaries of each stratum, with Stratum A (within a 30-minute drive) highlighted in red and Stratum B (within a 65-minute drive) in yellow.

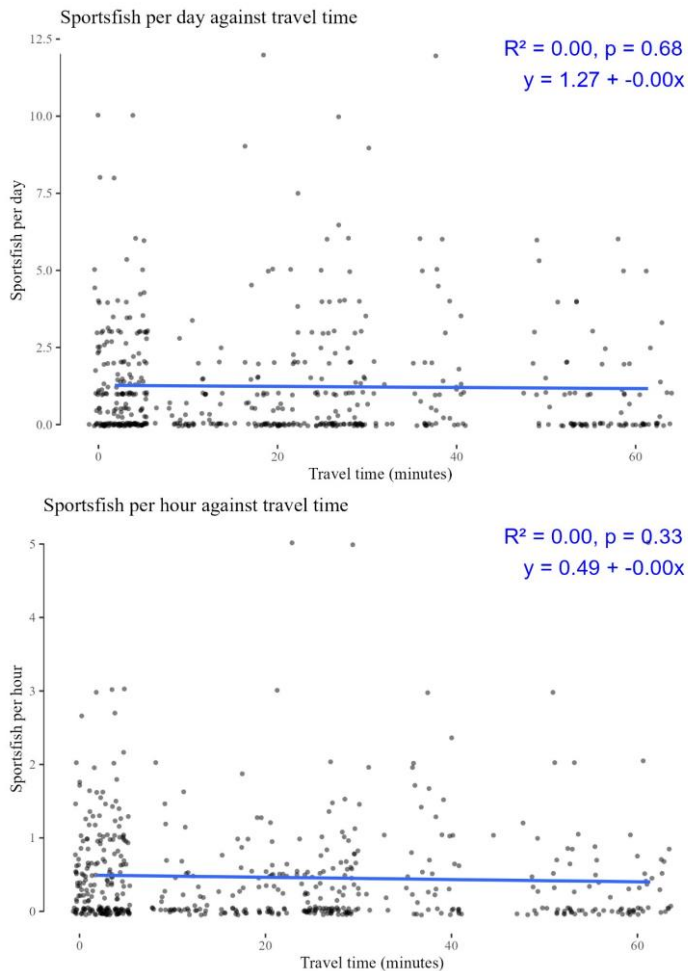
Where possible, indications of statistical confidence have been included. The 95% confidence intervals, shown with the plus or minus symbol (\pm) and depicted as lines on some graphs extending above and below estimates, represent a range of likely values. This means that if the survey were repeated, 95% of the time, the actual value would fall within this range. The length of these intervals is influenced by the number of interviews conducted, the total number of anglers in the study area, and variability among those interviewed. Additionally, “p” values have been provided, which indicate the confidence in the observed effects. A smaller “p” value signals greater confidence, with values below 0.05 typically considered significant.

Results



Method Suitability

While we have strong evidence that people living closer to the river are more likely to fish there, the first stage of analysis tested whether they also caught more fish than those living further away. The following charts show the number of sports fish caught per hour and per day relative to the angler’s drive time from home to the river. Points are semi-transparent with a slight random “jitter” to reveal overlapping points, and the linear trend is displayed in blue.

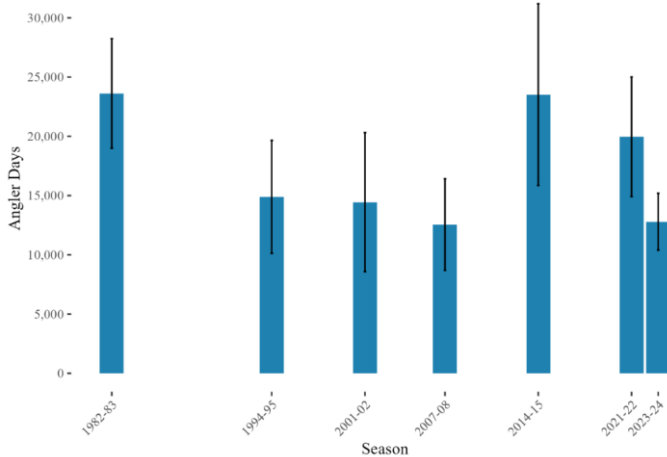


The near-horizontal blue line and high p-value indicate no strong relationship between travel time and hourly or daily catch. This allowed us to estimate the catch for anglers outside the survey area using the average catch rates of survey respondents. When only Clutha catch rates were considered, a slight negative trend appeared; however, due to the low usage by anglers far from the river and the trend's small magnitude, this effect was disregarded.

Angler Usage

Total

The 2023-24 survey estimated a total usage of $12,800 \pm 2,400$ angler days. This represents a notable decrease in usage compared with the 2021-22 season and falls near the lower end of the typical range for the lower Clutha River.



Angler usage of the lower Clutha River across time. 1982-83 estimates derived from Whiting (1986), 1994-95 to 2021-22 from Stoffels & Unwin (2023).

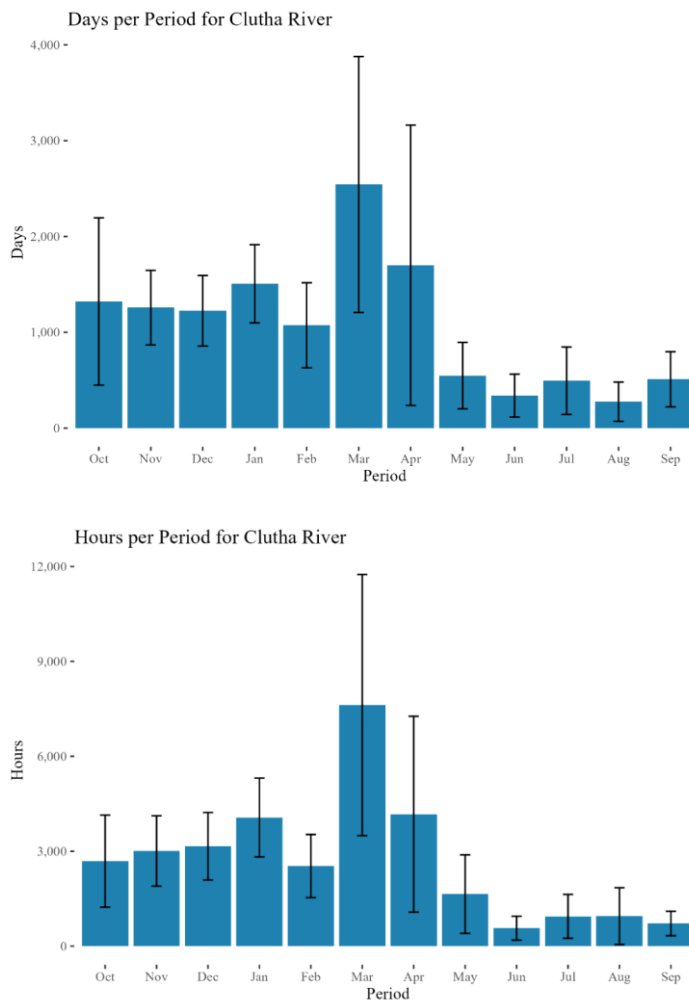
It's worth noting that Whiting's 1982-83 estimate, derived from a postal survey, initially included Lake Roxburgh. We adjusted this estimate by excluding 22% (an estimate of Lake Roxburgh usage) to provide a more conservative figure. While the accuracy of this adjustment is uncertain, it aligns well with the overall trend, with usage in the 1983-84 season closely matching that of 2014-15.

Whiting's report provides an in-depth look at river recreation in the early 80s; [read it here](#).

Comparing data across surveys poses challenges, as regulations have changed significantly. In the 80s, only the river below Balclutha was open year-round, while other sections followed an October-to-April season. In contrast, the current system opens the entire lower river for the full season. Additionally, part of the change in usage likely reflects the collapse of the salmon fishery, which once drew substantial angling activity.

Seasonal Variation in Angler Usage

As noted above, the lower Clutha River, is open year-round. The charts below display monthly usage, expressed in both "angler days" and "angler hours".

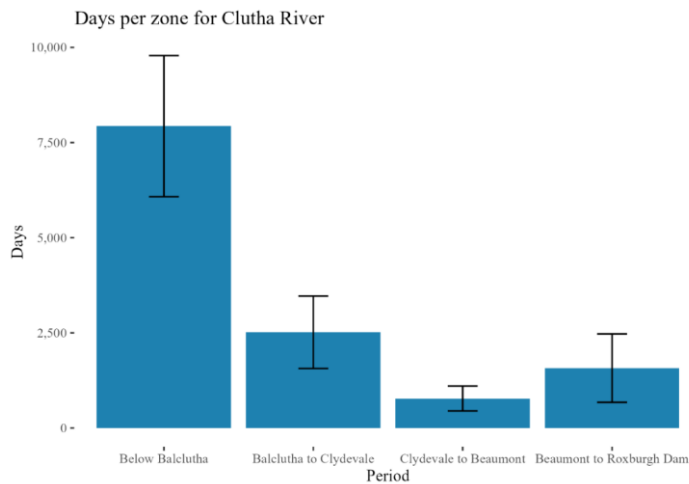


The charts indicate that the lower Clutha/Mata-Au is well utilised throughout the year. The peak in usage during March and April is unexpected and may suggest that anglers highly value late-season fishing in the Clutha. Notably, the March peak aligns with findings from a [similar survey conducted on the Waitaki River \(Couper, 2020\)](#). We tested several methods to remove outliers in the March period, but high usage persisted, indicating this effect genuinely represents angling activity rather than being a statistical anomaly.

Usage during the winter season, from May through September, is lower than in the peak summer months but still significant in aggregate. Fish & Game generally considers a fishery with over 365 angler days per year to be significant, indicating an average of one angler per day. The total of 2,170 angler days during the winter period shows that anglers highly value the Clutha's year-round accessibility and actively take advantage of this opportunity.

Geographic breakdown

To aid future management, the Clutha was divided into four zones, separated by most of the major bridges. The extent of these four zones is shown in the map further up. The usage across these zones is shown below.



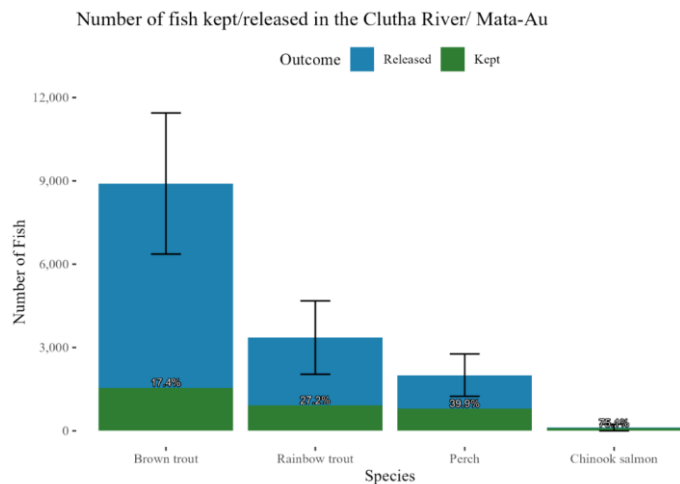
The section below Balclutha was the most popular, with over 60% of activity occurring there. Activity generally decreased upstream before increasing again at the top section, likely because the upper river is traditionally the best salmon fishing area. This usage pattern matches the one observed in the 1982-83 study.

The low usage in Zone 3 (Clydevale to Beaumont) may be due to the lack of population centres, fewer suitable angling spots, or limited access. This should be explored to better utilise the angling resource of the lower Clutha and to distribute fishing pressure more evenly.

Catch results

Total

We estimate that $14,400 \pm 3,960$ sports fish were caught on the lower Clutha River during the October 2023–September 2024 season. Of these, 3,350, or just under a quarter, were harvested for food. This highlights a significant source of affordable, healthy, free-range sustenance, particularly for the local community. The chart below shows the catch distribution by species, with the percentage of each species harvested displayed in white text.



Brown trout were the most commonly caught species, making up over 60% of the total catch, followed by rainbow trout at nearly a quarter. The proportion of brown trout kept for the table was notably lower than for other species, but due to the high numbers caught, they were the most consumed fish at $1,550 \pm 500$.

This survey is one of the few that emphasises the importance of perch as both a target for anglers and a food resource. While the total perch catch was lower than that of trout, with just over 2,000 caught for the season, the data indicate that anglers appreciate their excellent eating qualities, with almost 40% of the catch being kept.



6 - The Fahmie family, from the Clutha district, with a good haul of perch at the Lower Clutha Trout/Bluelight Fishing Competition in March 2023. Photo: Bruce Quirey

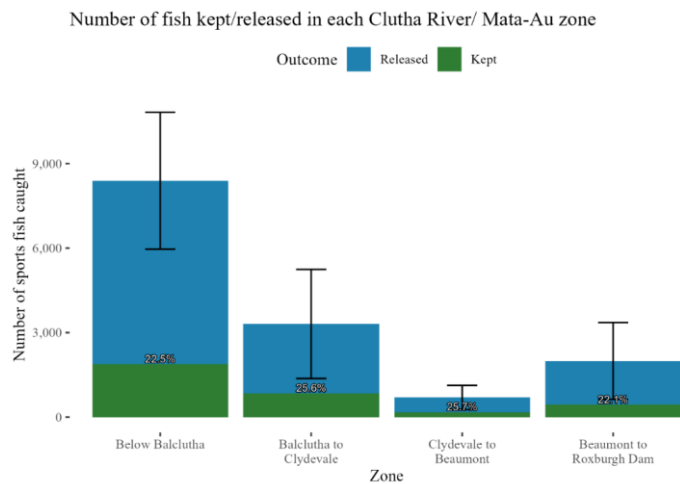
Chinook salmon numbers were very low, with an estimated 120 caught this season. Due to the small number of survey respondents catching salmon, this figure has a high margin of error, close to 100%. However, the data suggest with high confidence that very few salmon were caught this season. When a suspected species misidentification issue is removed from the data, the estimated season catch drops to only 80. As expected, a high proportion of salmon — just over three-quarters — were kept for consumption.



7 - Richard Fitzpatrick with a great Clutha salmon from the 1995/96 season, caught in the Roxburgh area, weighing around 24lb. Unfortunately, due to the strong decline in the run, more recent salmon and photos of them, especially of that size, are tough to come by.

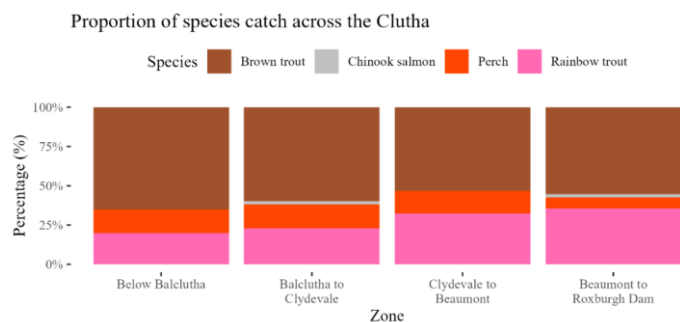
Geographic Breakdown

Similar to the usage statistics, the catch was also broken down into four zones, separated by the major bridges (see map above for more details). The chart below illustrates how the catch and harvest of sports fish were distributed across these zones. The lower river had the highest catch, with numbers decreasing further upstream until the top section above Beaumont. This pattern mirrors the usage. The daily catch per zone was relatively consistent across the zones except for Zone 3 (Clydevale to Beaumont), which was around 25% lower than the rest of the river.



No strong patterns emerged regarding whether anglers kept or released fish along the length of the river.

The following chart shows how the catch distribution changed across the four reaches.



8 - Proportion of each species caught in the four zones of the Lower Clutha.

The distribution of species catch varied up the river, with the strongest trend being an increasing proportion of rainbows heading further upstream. The percentage of perch catch was flat across the zones except for in the very upper section, where it dropped to around half of that in the lower three sections. Salmon were only detected in two of the sections, likely because very few anglers who caught salmon were detected by the survey.

Comparison to previous surveys

Comparing the catch with the last harvest survey in the 1980s is difficult. As mentioned, the season length has changed across the study period, and other regulations affecting total catch and harvest have also changed since the 1982-83 season.

The bag limits from the 1982-83 season report are hard to interpret but appear to have dropped from 10 trout to four now, and from four salmon to one, with perch having no bag

limit in either season. The 250mm minimum size for trout present in the 1980s is no longer in place.

Similar to the usage comparisons described above, catch estimates from the 1982-83 season were reduced by 22 percent to account for total catch including Lake Roxburgh. It is not entirely clear how suitable this factor is. It's likely to work well for trout estimates but overestimate lower river salmon catch due to assumed higher rates of salmon catch in Lake Roxburgh.

The bag limits from the 1982-83 season report are hard to interpret but appear to have dropped from 10 trout to four now, and from four salmon to one, with perch having no bag limit in either season.

The overall estimated brown trout catch has dropped significantly between the surveys, from $18,600 \pm 4,600$ to $8,900 \pm 2,500$.

The proportion of brown trout kept in the 2023-24 season was 17 percent compared with around 33% in the 1983-84 season, suggesting a change in practices where anglers are more likely to return their fish. This is, however, skewed by the presence of the minimum size applying to the older survey, which may mean the effect would have been stronger had the regulations stayed consistent between surveys.

An even stronger change was apparent with salmon, dropping from $1,970 \pm 1,100$ to 120 ± 120 . The report from the 1980s does not mention rainbow trout or perch catch, but it's likely that these have increased as both are described in the Whiting report as relatively uncommon in the lower Clutha.

In terms of brown trout catch per day, the rate in the 1983-84 season was 0.85, significantly higher than the 2023-24 estimate of 0.70. This estimate did not change when only the main October through April season was analysed. Unfortunately, the 1983-84 season did not estimate hours fished, so these statistics could be skewed by the number of hours per day fished changing over time.



9 - The author with a healthy Pomahaka brown trout in the 2023-24 fishing season. Photo: Bruce Quirey

Other Fisheries

The two major tributaries of the lower Clutha, the Pomahaka and Waipahi, were included for interest. As the survey was set up specifically to estimate the activity, catch, and harvest on the Clutha, estimates for these two other fisheries come with far higher uncertainty. The same scaling factor used to estimate angling activity outside the survey area in the Clutha has been used for these other fisheries, although this has not been tested against the National Angling Survey dataset. It's likely that estimates for these fisheries tend to be conservative.

Pomahaka

For the Pomahaka, we estimated a usage of $3,600 \pm 1,390$ angler days, with just 40% occurring in the upper "Designated Water" section. The winter season on the lower reaches of the Pomahaka was used infrequently, with a conservative estimate of around 50 angler days. There were an estimated $3,800 \pm 1,330$ trout caught on the Pomahaka, of which around 10% were kept.

Waipahi

The Waipahi usage was estimated at $2,060 \pm 1,900$ angler days. The very wide confidence intervals indicate that our estimate comes with a very high level of uncertainty. This is due to relatively few survey respondents fishing the Waipahi, which is expected with this survey design. There were an estimated $1,790 \pm 1,110$ trout caught on the Waipahi, of which around 8% were kept.



Summary

At almost 13,000 angler days, the usage from this survey is lower than some more recent estimates but sits within historical norms. It provides an accurate indication of when and where anglers utilise the lower Clutha/Mata-Au.

In terms of catch, this survey recognised a significant resource with almost 9,000 brown trout caught for the season.

This significant catch, however, is less than half of the estimate derived for the 1982-83 season. Differences in regulations between the surveys may explain some of this change, but it's likely also due to a decline in the brown trout fishery. This decline has been noted anecdotally by many anglers who have fished the river for decades. One major change between the two harvest surveys is the introduction of Didymo to the Clutha River. Didymo generally decreases the density of trout's main food source, invertebrates (Kilroy et al., 2009), and can directly affect salmonid fisheries by starving buried trout or salmon eggs of oxygen (Bickel & Closs, 2008). It is very likely that Didymo has contributed to the decline in catch.



10 - Kelly Maynard and John Lyall fishing for brown trout which and perch in the lower Clutha/Mata-au. Photo: Ian Hadland

The decline in salmon catch is even more apparent. Many surveys of angler catch and spawning salmon have shown a precipitous decline in the health of the salmon fishery.

This pattern is echoed up the east coast of the South Island, with almost every fishery showing a decline, though the effect on the Clutha is more pronounced than most others. One of the key goals of the recently formed Mata-Au Sportsfish and Habitat Trust is to help Contact Energy meet its consent conditions to return 5,000 adult salmon to the lower Clutha. We look forward to the trust's progress.

Although not recorded by the 1980s survey, it's likely that the rainbow trout fishery has improved over time.

This survey recognised a large rainbow trout catch throughout the river, and anglers report an increasing proportion of rainbow trout in their bags. It's likely that this increase is partly due to the development of lake fisheries upstream, with Lake Dunstan in particular having a

productive rainbow fishery that likely provides a source of small rainbow trout down through the dams.

This survey also recognised the importance of the lower Clutha perch fishery, which appears to have become stronger since previous surveys. Though not caught as frequently as trout, there was a strong tendency for anglers to keep perch for the table, with around 800 perch kept for eating across the season.

While the survey was not specifically designed to look at tributaries, it can provide some indications, albeit with less certainty. We estimated usage of the Pomahaka at $3,600 \pm 1,390$ angler days, with $3,800 \pm 1,330$ trout caught. Usage of the Waipahi was estimated at $2,060 \pm 1,900$ angler days, with $1,790 \pm 1,110$ trout caught.

Overall, this study represents a comprehensive snapshot of the Clutha fishery. The real value will come from repeating this survey in the future to determine trends.



Acknowledgments

Firstly, thanks to Contact Energy for funding this work, as an in-depth look into a single fishery would not be possible without the funding available through the sports fish mitigation programme.

Thanks also to the team of callers at the Southern Institute of Technology, who made just under 6,000 calls to licence holders throughout the 2023-24 fishing season.

Finally, thanks to the almost 4,000 Otago and Southland licence holders who answered our calls and provided information, particularly the 1,400 who answered multiple times throughout the season. The information you provided is crucial for the future management of the lower Clutha/Mata-Au.



Signoff

If you want to hear more about what Otago Fish & Game is up to, check out the published reports section of our webpage [here](#), subscribe to our weekly fishing report [here](#) and follow us on Facebook [here](#).

For a few tips on one of the best ways to fish the lower Clutha, check out this video by Otago F&G chief executive, Ian Hadland:

Finally, if you have any questions or would like to provide feedback on this report, please fill out the form below.

Jayde Couper
Otago Fish & Game Officer
November 2024

Otago Fish and Game Council Meeting & AGM 28th November 2024



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14.3 Pummer Leith Trout Report 2024

The effect of floods and migration on the temporally variable populations of introduced *Salmo trutta* in Ōwheo/Leith Catchment in Aotearoa: A long-term study.

Lea Pummer

4000934

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1 Abstract

The aim of this study is to contribute to our understanding of the *Salmo trutta* (brown trout) recreational fishery in the Ōwheo Catchment through the analysis of 7 years of data, as part of a long-term study collaboration with Otago Fish & Game. This study is looking into the impact of floods density-dependent factors on the spatial and temporal variation of brown trout abundance and size structure in the Ōwheo/Leith Catchment. Three pass-electrofishing was conducted in March 2024 at four sites in the Water of the Leith and Lindsay Creek to contribute to the data from 2018-2023 which had already been collected from the same sites. Brown trout captured were counted and measured in length to make minimum abundance estimates and look at size structures. Flood data was taken from the Lower Leith at Leith Street through the Otago City Council. Floods were found to have a significant effect on both brown trout density and brown trout size structure in the year following the flood event. Evidence of a migratory population in the catchment was identified and density dependant factors was hypothesised to contribute to the variation in population dynamics, although further study was needed. Management suggestions included land-use modification management, as well as stream modification minimisation.

2 Introduction

Identifying causes of variation and fluctuations of population size and composition is vital in understanding a fishery. Knowledge can then be applied for appropriate management, stream design and future studies. The brown trout (*Salmo trutta*) fishery is of massive economic and social value across Aotearoa, despite the fish being an introduced species. Brown trout populations in Aotearoa have been reported to have high temporal and spatial variation in abundance population composition with various and interacting factors coming into play (Hayes 1995).

The life history of brown trout is important to consider when looking into spatial and temporal variation of populations. Brown trout have a series of life stages, the fry and parr being the most vulnerable. Trout spawn on stone and gravel substrate, digging nests for their fertilised eggs, where they incubate for several months from autumn/winter before hatching in spring (Klemetsen 2003). Having a lifespan which exceeds 8 years, brown trout can produce hundreds of eggs each spawning season, the largest females being able to produce 300-1800 eggs each year (Colin 1996).

Size is a limiting factor of fecundity and egg production. Brown trout are phenotypically variable fish, their size ranging from around 100-1000mm (Nevoux et al. 2019).

Intraspecific competition is a density-dependent factor which has the potential to contribute to spatial and temporal variation in populations. Brown trout are highly aggressive, being known to dig out conspecific's eggs from their nests (Klemetsen et al. 2003). Competition can also be due to food or habitat limitation with high densities, resulting in reduced size and growth of individuals (Kristensen and Closs 2008). Brown trout have a plastic life history, with populations being able to harbour both anadromous and potadromous populations, plasticity advantageous in highly variable environments (Mikeev 2019). Fish migration is thought to be a trade-off with the age-specific fecundity due to migration, and the risk of reproduction effort of migration (Bohlin et al. 2001). Migration therefore tends to decrease with increasing altitude, only the biggest fish making the longest journeys due to the high energy cost (Bohlin et al. 2020). When resources decrease in abundance or densities are high resulting in increased intraspecific competition, this often results in increased smolting and 'self-thinning', the increased out-migration of fish, as the risk which comes with migration exceeds the benefits of remaining in the highly dense environment (Bohlin et al. 2001). This results in temporally and spatially variable populations resulting from the different proportions of migratory and non-migratory fish in different reaches and time periods.

An abiotic factor which often has been seen to cause variation in populations over time is water discharge. Floods particularly are density-independent influences (Solomon 1949). Unlike in the native ranges of brown trout in Europe, North Africa and Western Australia, the flow regimes of Aotearoa show little seasonality; large rainfall and subsequent flood events occurring sporadically throughout the year (Jellyman et al. 2018). While brown trout have a high tolerance to many conditions, they lack the life history strategies which enable native fauna to deal with these events, spawning only once a year with vulnerable young (Jellyman et al. 2018). Both fry and parr stages are particularly vulnerable to excessive water flow, their resulting displacement downstream or direct mortality equating to impaired survival (Kristensen and Closs 2008). Spring floods are particularly harmful, coinciding with

the emergence of juvenile brown trout from their eggs. Consequently, floods, particularly in springtime have evidence for decreasing population abundances of brown trout following the events (Kristensen and Closs 2008).

Factors like these density independent and density dependant factors often don't act in isolation, but interact, being subject to dynamics of the entire system. Literature is missing long term studies investigating the variation in abundance and size distributions of brown trout populations in Aotearoa and the correlation of this with density dependant and density independent factors. The aim of this study is to contribute to our understanding of the brown trout recreational fishery in the Ōwheo Catchment through the analysis of 7 years of data, as part of a long-term study collaboration with Otago Fish & Game, to bridge this gap in scientific literature. Effects of discharge on population dynamics in the Ōwheo Catchment was therefore investigated in upstream and downstream reaches in the Water of the Leith and Lindsay Creek. It was hypothesised that the abundance and size structure of brown trout would vary temporally, and this would correlate with floods. It was additionally hypothesised that inner-cohort competition would drive migration downstream and in good spawning years fish would over winter, resulting in larger fish the following year.

3 Methods

3.1 Study area

The Ōwheo/Leith Catchment is in Eastern Otago, New Zealand, with weak slopes and low altitude characteristics. The catchment doesn't exceed 380m elevation, its weak slopes and low altitudes making it subject to flooding year-round. It has a variation in environments, including native hardwood bush, pasture and tussock in the upper catchment and urban land use in the lower (Abu Hanipah 2013). The Leith Stream (11.6km) is the major stream and flows from northern Dunedin southeast into the Dunedin Harbour with Lindsay Creek (6.8km) as a major joining tributary (Fig. 1). The four sites with their respective 50m long reaches which were selected are consistent across the 7-year long term survey which this study is contributing to (Fig. 1).

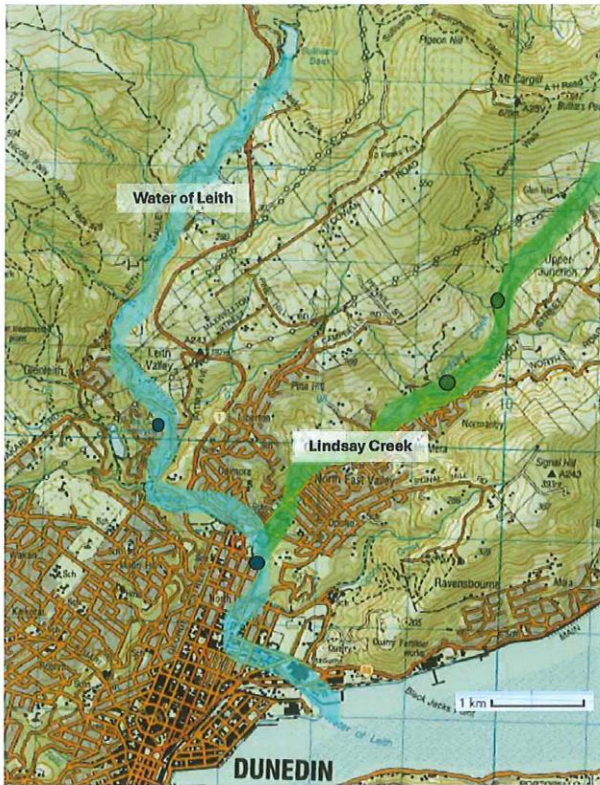


Figure 1. The Ōwheo/Leith Catchment. Highlighted lines follow the respective streams. Coloured dots indicate sampled reaches, with the closer dots to the sea being the lower reaches (NZ Topo Map).

3.2 Field Sampling

Sampling took place in March 2024. Fish abundance was sampled at the four locations of the Leith Catchment (Fig. 1). At each site, stop nets were set up and downstream of the 50m target reach and then electro fished in a downstream direction using the three-pass depletion sampling methods with a 100-600V current. All caught fish were measured in length and weighed on a portable scale. The handling and treatment of fish was carried out in compliance with the Animal Welfare Act and the University of Otago's Code of Ethical Conduct.

Water discharge data is from the Otago Regional Council Environmental Data Portal, which is measured using a flow meter. July-February was determined as being the vulnerable stage of fish, following emergence from the egg, and therefore maximum

discharge in cumecs (m^3/s) was selected for this stage for each year measured from Leith Stream at Leith Street, being the lowest point of measure in the catchment. Leith Stream was generalised for flow of the whole catchment, due to lack of data at each individual site.

3.3 Data analysis

Data was combined with data from 2018-2023 for data analysis. Data was plotted using Microsoft Office Excel. The accumulation of catch across the 3 removals was used as an estimation of minimum abundance.

To investigate the temporal variation in abundance of brown trout across the Ōwheo catchment, mean abundance per year was calculated using minimum abundance estimates from all sites and was plotted as a mean (\pm SE) bar plot. To investigate the relationship between flood and abundance and size, maximum discharge was plotted against mean abundance across all sites in a linear regression model. Mean abundance was the mean abundance of brown trout the year following the discharge period. To investigate the relationship between flood and size, maximum discharge was plotted against size across all sites in a linear regression model. Mean size was recorded as the mean size of brown trout the year following the discharge period. To investigate the relationship between abundance size, mean abundance was plotted against mean size across all sites in a linear regression model. For all linear regressions a p-value with significance level of 0.05 and a R^2 value was calculated using excel regression analysis tool.

Brown trout size frequency histograms were made for the years 2022, 2023 and 2024 to investigate any effect of flow regimes (particularly floods) on the population size structure one- and two-years post flood. Year 2022 was used as a constant for comparison, being a year with no abnormal flood in the critical period between 1-July and 31-February.

4 Results

Abundance of brown trout showed significant temporal variation in the Ōwheo Catchment. Temporal abundances fluctuating between high and low minimum abundance estimates, with years of low tending to follow years of high and vice

versa (Fig. 2). 2022 had the highest minimum abundance estimates across the four sites (Fig. 3, n=80), while 2023 had the lowest minimum abundance estimates (Fig. 2, n=17).

There was a significant correlation between maximum discharge (m^3/s) and mean abundance of brown trout. The mean abundance of brown trout decreased with increasing maximum discharge (m^3/s) (Fig. 3a., $p=0.05$, $R^2=0.758$). There was a significant correlation between maximum discharge (m^3/s) and mean size of brown trout. The highest discharge was $72 \text{ m}^3/\text{s}$ resulting in the lowest mean abundance (17) and highest mean size (119mm) in the following year. The mean size increased with increasing maximum discharge (m^3/s) (Fig. 3a., $p=0.02$, $R^2=0.877$). There was a significant correlation between mean abundance and mean size of brown trout. Mean size decreased with increasing mean abundance (Fig. 3a., $p=0.03$, $R^2=0.629$). The lowest mean abundance was 17 which correlated with the highest mean size was 119mm. The highest mean abundance was 80, which correlated with the lowest mean size of 86.6mm.

The size frequency histogram of brown trout in 2022 was more normally distributed with a right-hand skew (Fig. 4a., median=76). The size frequency histogram of brown trout in 2023 was more bimodally distributed, with a right-hand skew (Fig. 4b., median=95). The size frequency histogram of brown trout in 2024 was more normally distributed with a right-hand skew (Fig. 4c., median =). Both 2022 and 2023 had the same sized ranges (Fig. 4a., 2022: range=52-228, Fig. 4b., 2023: range=64-240).

Table 1. The total catch of *Salmo trutta* (brown trout) from 3 runs of electrofishing across four sites in the Ōwheo/Leith Catchment in Otago, New Zealand from 2018 to 2024. Each cell contains the count of brown trout recorded, with columns indicating site and rows indicating year. Data from Upper Leith in 2018 was not collected.

| Catch | Site | | | |
|-------|-------------|---------|-----------|-----------|
| Year | Lower Leith | U.Leith | L.Lindsay | U.Lindsay |
| 2018 | 8 | - | 22 | 78 |
| 2019 | 46 | 30 | 82 | 80 |
| 2020 | 33 | 92 | 41 | 31 |
| 2021 | 23 | 43 | 32 | 31 |
| 2022 | 16 | 76 | 62 | 167 |
| 2023 | 14 | 23 | 3 | 28 |
| 2024 | 21 | 50 | 30 | 88 |

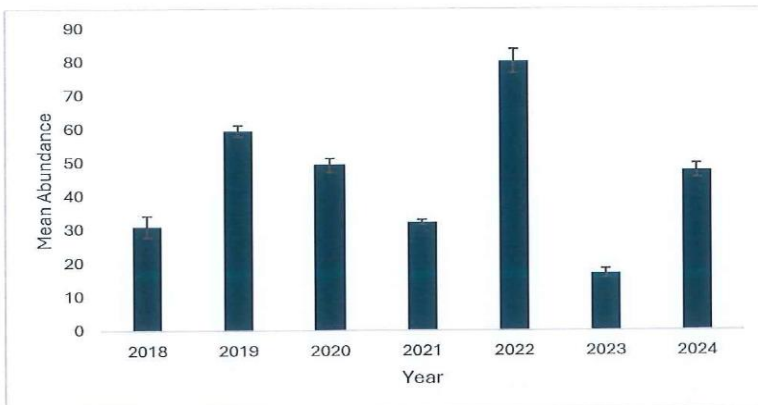


Figure 2. Bar plot (mean \pm standard error) of the minimum abundance of *Salmo trutta* (brown trout) across four sites in the Ōwheo/Leith Catchment in Otago, New Zealand from 2018-2024. Minimum abundance estimates based off 3 runs of electrofishing each year at each site, catch from 3 runs totalled and mean calculated of all sites for each year. 2018 (31 ± 3.17 ; mean \pm standard error), 2019 (59.5 ± 1.66 ; mean \pm standard error), 2020 (49.25 ± 2.05 ; mean \pm standard error), 2021 (32.25 ± 0.72 ; mean \pm standard error), 2022 (80.25 ± 3.53 ; mean \pm standard error), 2023 (17 ± 1.33 ; mean \pm standard error) and 2024 (47.5 ± 2.14 ; mean \pm standard error). Error bars made from standard error. Data from Upper Leith site in 2018 is not included

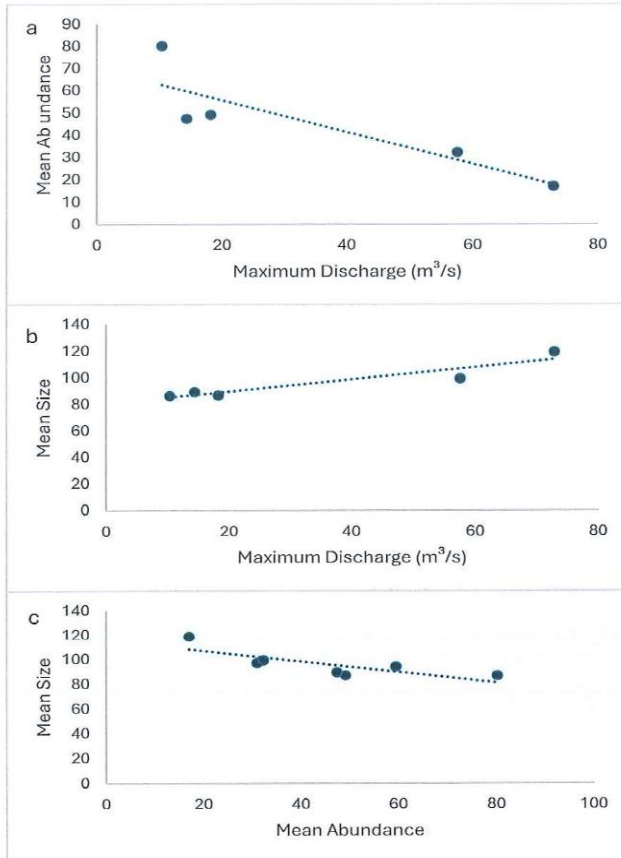


Figure 3. Linear regression plots with (a) maximum discharge (m³/s) and mean abundance of *Salmo trutta* (brown trout) ($y = -0.7176x + 70.153$, $R^2 = 0.759$), (b) maximum discharge (m³/s) and mean size of brown trout ($y = -0.4517x + 80.679$, $R^2 = 0.877$), (c) mean abundance and mean size of brown trout ($y = -0.4287x + 115.51$, $R^2 = 0.629$), in the Ōwheo/Leith Catchment in Otago, New Zealand, 2018-2024. Maximum discharge was selected from between 1-July to 31-Feb each year and plotted against the mean size and mean abundance estimates from the following year. R^2 value is the correlation coefficient. Minimum abundance estimates based off 3 runs of electrofishing each year at each site, catch from 3 runs totalled and mean calculated of all sites for each year. Data from Upper Leith site in 2018 is not included due to lack of collection.

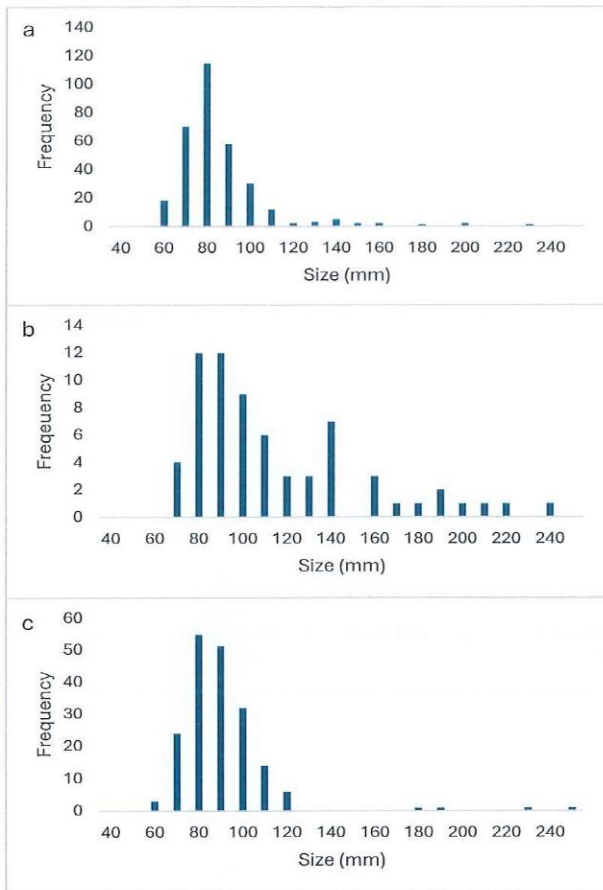


Figure 4. Size frequency histograms of the total length (mm) of *Salmo trutta* (brown trout) caught from four sites (Lower Leith, Upper Leith, Lower Lindsay and Upper Lindsay) in the Ōwheo/Leith Catchment in Otago, New Zealand for two successive years (a=2022, b=2023, c=2024) from 3 runs of electrofishing each year at each site. (a) shows the size frequency of brown trout across the four sites following a year of no flood, while (b) shows the size frequency of brown trout across the four sites following a year with a significantly large flood between 1-July and 31-Feb and (c) shows the size frequency of brown trout across the four sites two years post the significantly large flood.

5 Discussion

The results from the study show temporal variation in brown trout population composition and abundance which appears comparable to other streams near to marine environments. Evidence is supporting the variation as the result of an interaction of both density dependent and density independent factors.

Large floods tended to play a significant role in the temporal variation of trout population estimated abundance in the Ōwheo Catchment. High discharge between 1-July and 31-Feb was negatively correlated with mean abundance of brown trout across the four reaches, which indicates a negative effect of floods on fish abundance. This evidence is comparable to similar evidence from a more short term study done in the Silverstream, eastern Otago. In this study the season with the highest discharge rates recorded in December coincided with the highest loss rates (Kristensen and Closs 2008). With the population composition being majority juveniles, floods in the vulnerable post egg emergence stage results in the large loss of numbers, either due to being swept downstream or immediately killed. Consequently, we can see their population abundances fluctuating temporally. With large females able to lay hundreds of eggs each spawning season however, the populations are able to quickly increase again in response to more favourable conditions in years following, which we see evidence for in 2024.

While the results provide evidence supporting the hypothesis of juvenile vulnerability to floods, they additionally provide evidence in support of high densities driving out-migration in this catchment. The lack of large individuals and high numbers in the size frequency histograms provide evidence in support of the population being largely migratory. River discharge tended to play a significant role in the temporal variation of the size composition of the brown trout population in the Ōwheo Catchment, with large floods having a significant effect on the size of the brown trout in the following year, with the mean size as well as size structures changing. The absent characteristic peak of juveniles (present in both 2022 and 2024) and higher relative proportion of larger fish in the year following the flood could provide evidence for a couple of theories. This could be explained by the larger fish not being swept away in the flood, their lesser vulnerability to high discharge resulting in the differed size frequency distribution in the year following. Jellyman et al. (2018) found similar

results, with floods reducing small fish abundance by 90-100%, while large fish reduced only by 30-60%. Alternatively the lower abundances of juvenile fish due to the flood events at vulnerable life stages could have reduced intra-specific competition which often drives outmigration of juveniles, subsequently reducing outmigration and increasing growth of resident fish (Jones et al. 2019). In support of the latter theory, the results show evidence of a significant correlation between decrease in mean size and increased abundance, which suggests intraspecific competition is occurring and correlating with a decreasing abundance of fish. Klemetsen et al. (2003) similarly found population density to have a negative effect on growth, while Olsson et al. (2006) found that migratory behaviour could be developed in sections with high brown trout densities and low growth rates, and vice versa. Jones et al. (2019) found out-migration could be directly regulated by young of the year density and growth. Individuals without access to abundance resources should choose to migrate, while those with good feeding opportunities should remain in the stream and invest energy into continued growth or gonadal development (Olsson et al. 2006, Bohlin 2001). While in this study the limitation of food is not explicit, it can be inferred that the high abundances of juveniles in the years with no floods results in some kind of growth-limiting intraspecific competition, while in the year following a flood the lower abundances means that there is less competition and the fish do not out-migrate, resulting in the higher proportion of larger fish in the following season.

Patterns of the brown trout population in the Leith/Ōwheo Catchment give evidence which is consistent with the hypotheses. Brown trout population abundance and size structured varied significantly temporally due to flood impacts. Evidence supporting density-dependant migration suggested that density-independent and dependent factors may be interacting to cause the variation in the brown trout populations in the Ōwheo Catchment. Limitations in the study include abundance being minimum population abundance estimates, rather than population density estimates. Management suggestions include management of land-use modifications in catchments where floods may already be common, as they are in the Leith Catchment, land-use modifications being a common source of flood increase. Further study is suggested to look further into the evidence of a migratory population

and their specific migratory triggers, to further understand the fluctuating population dynamics in the catchment.

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15.0 General Business

16.0 Annual General Meeting Otago Fish and Game Council

3pm, Thursday 28th November 2024
To be held at Office of Otago Fish and Game Council
Cnr Hanover and Harrow Streets, Dunedin

Agenda

- 1. Present and Apologies**
- 3. Approve minutes of 2023 AGM**
- 4. Presentation of 2023/24 Annual Report**
- 5. Questions from the floor**

16.1 Otago Fish and Game AGM Council Minutes 30th November 2023

Minutes of the Otago Fish & Game Council Annual General Meeting 30th November 2023 Roxburgh Service Centre

1. Present

Colin Weatherall (Chair), Adrian McIntyre, Mike Barker, Rick Boyd, Vicky May, Blair Trevathan, Paulette Tamati-Elliffe (Ngāi Tahu appointee).

Present via video conferencing: John Highton

In attendance: Ian Hadland (CE), David Priest (Central Otago Operations Manager), Bruce Quirey (Communications Officer).

2. Apologies

Ray Grubb, Ian Cole

3. Presentation of Annual Report

The Chair spoke to the annual report, saying the financial position was better than anticipated.

He noted the Council was close to an agreement with Contact Energy for the Clutha Mata-Au Sportsfish and Habitat Trust. The new trust would meet to appoint its own chair. He expected the OF&GC CE would offer his support to the trust. Cr Weatherall acknowledged the enthusiasm and commitment of Cr May towards the formation of the trust. He expected a joint media announcement with Contact Energy before Christmas.

It had been a challenging year for all F&G councils in New Zealand, however, the performance of licence sales numbers in Otago Fish & Game region had made a high contribution to the NZC.

The Chair thanked the CE and team for their focus on core performance goals and the success they had achieved in the year to date, and he thanked councillors for their contribution. The Council was focussed on stakeholders, licence holders and future licence holders.

The Chair noted that, through no fault of this organisation, there had been a delay in the annual audit, meaning that financial report was only being tabled at the meeting today and councillors were seeing it for the first time. It was suggested that councillors receive the annual report in draft form to allow them further time for consideration of the financial report.

Moved (Cr May/Cr Barker)

That the 2023/23 Annual Report be received in draft.

Carried unanimously.

Otago Fish and Game Council Meeting & AGM 28th November 2024

4. Approve the minutes from the 2022 AGM

Moved (Cr Boyd/Cr Trevathan)

That the minutes of the Otago Fish & Game Council AGM held on 1st December 2022 be confirmed as a true and correct record.

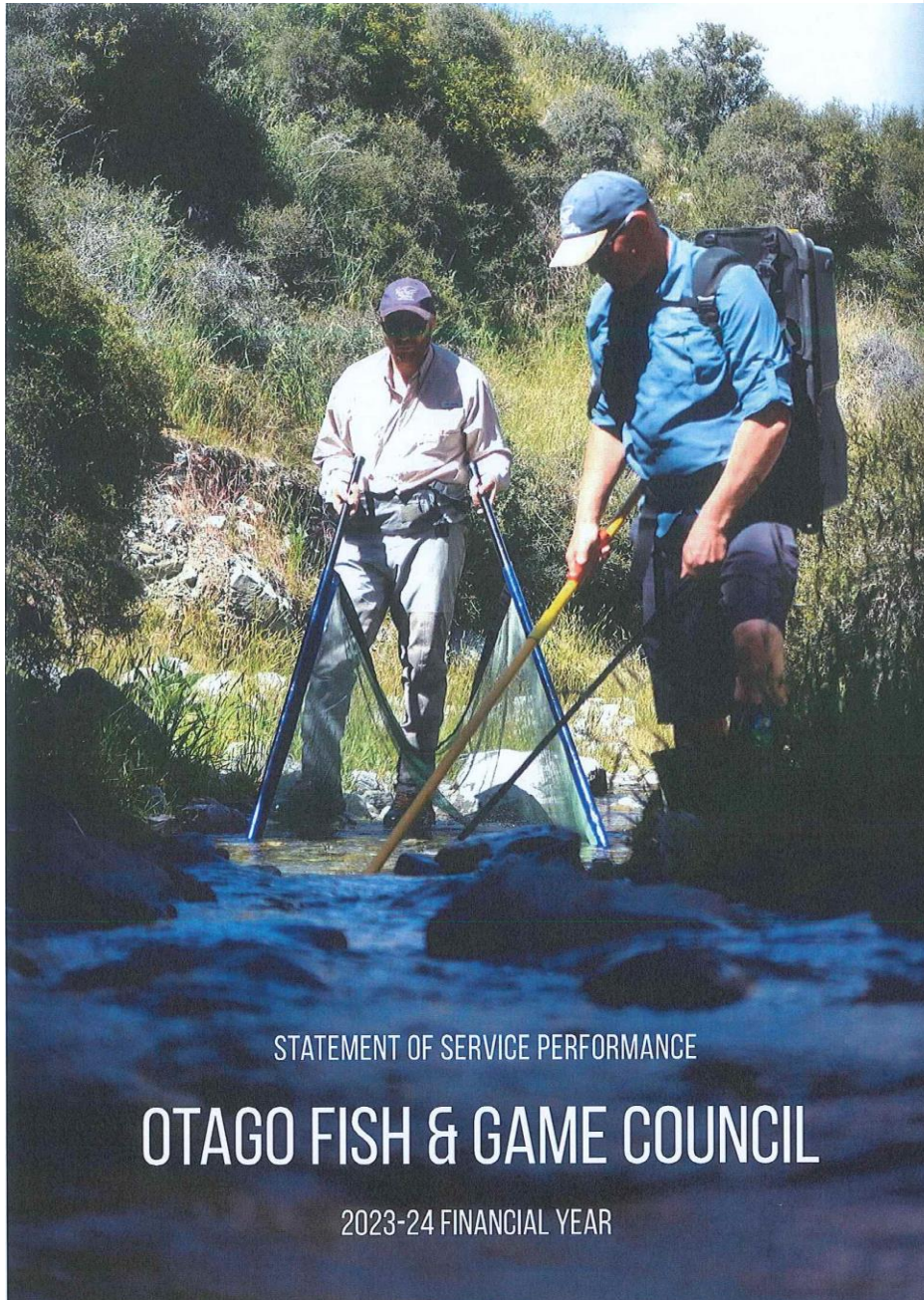
Carried unanimously

5. Questions from the floor

There were no members of the public in attendance.

The Chair thanked everyone for their involvement and declared the AGM closed.

16.2 Draft Annual Statement of Service Performance Report 2023-2024



Otago Fish and Game Council Meeting & AGM 28th November 2024

Chair's Report

It gives me great pleasure to report to you on the financial year to 31 August 2024.

This was the first year of a three year planning cycle and I am pleased with the progress being made. The Council readopted the 2023-2026 strategic priorities and further refined its proposed effort at the February planning meeting. I'm proud of the way the Council and staff have worked positively and practically this past year to ensure licence holders get the service they expect from us today, and in a position where we can also deliver on those expectations tomorrow.

While not initially a strategic objective, the rationalisation of the Council's assets with a future-focused approach has seen significant progress. Councillors and the Chief Executive have dedicated considerable effort, resulting in notable advancements in property matters throughout the year. The Council successfully sold an industrial section in Cromwell and acquired an office/workshop, previously leased, for its use. Additionally, it sold the Dunedin regional office and purchased a bare section near Mosgiel to establish a modest yet purpose-built regional office.

The financial position of Council remains healthy. Fish and game bird licence sales were steady even though the country was in a technical recession. The deficit was planned by Council to spend down reserves to fund specific projects. This is a good result under the circumstances.

Another key priority of Council was around Climate Change. The first step was to understand our own carbon footprint which was rigorously assessed. While our carbon use isn't excessive, I was proud of the Council for setting itself an ambitious target of a 50% reduction in its 2022 emissions by by 2030. Staff have made a good start on this and it will impact on future decisions of Council, particularly for our biggest emitter which is vehicles and travel.

Advocating for better ecological health in waterways, wetlands and habitat through RMA processes remains a major workload. Staff have attended stakeholder meetings, made submissions and appeared before hearings to give voice to licence holder concerns. A substantial effort has gone into submissions on the Land and Water Regional Plan and attending hearings for Otago Regional Policy Statement (RPS) The quality of the staff submissions has been excellent and really does reflect the values important to Otago licence holders.

Earlier this year, the Council adopted a Communications Strategy, which was informed by survey results from stakeholders and licence holders. A particularly encouraging outcome from the surveys was the slight increase in perceptions of value for money in licences—an area the Council has made a concerted effort to improve. Seeing progress in this regard, especially in the current economic climate, is highly satisfying.



Colin Weatherall QSM

Chairman,
Otago Fish & Game Council

The Council has also recently approved a comprehensive Communications Plan to implement the strategy, which includes allocating additional staff resources. This plan is expected to further enhance perceptions, not only among licence holders but also the broader public.

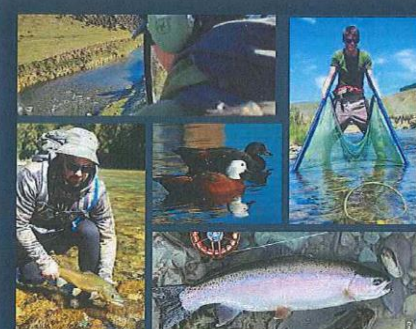
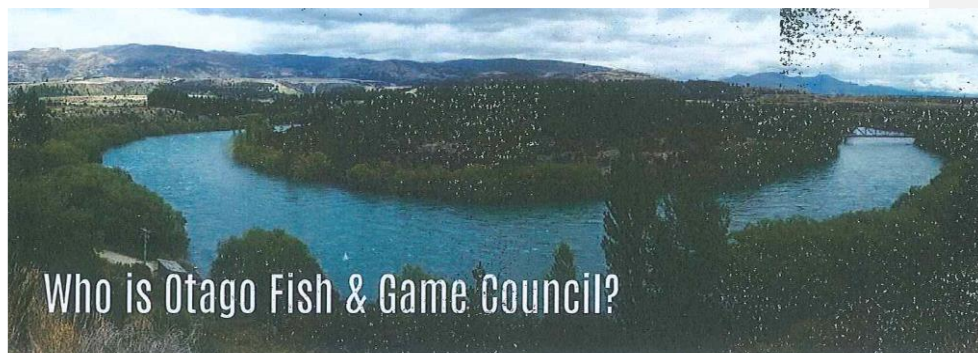
Strategic relationships are steadily growing, but few have been as productive as our partnership with Contact Energy. The newly established Mata Au/Clutha River Sportsfish and Habitat Trust, fully funded by Contact Energy, is a key outcome of this collaboration. Its primary role will be to evaluate the feasibility of a salmon hatchery on the Clutha River and to implement the provisions of Contact Energy's Sports Fish Management Plan. Several Fish & Game Councillors have been appointed to the Trust's board, and their extensive work programme will ultimately benefit the fishery, providing direct value to licence holders.

Stormwater management at the boundary of the former Wanaka Hatchery site remains a challenge for the Council, as urban stormwater continues to discharge into the headwaters of Bullock Creek. However, a recently renegotiated easement agreement with QLDC allows for the installation of a stormwater polishing wetland on Fish & Game land. While this will not reduce the volume of stormwater, it represents our best effort to mitigate its impact on Bullock Creek. We extend our gratitude to the Friends of Bullock Creek, who continue to champion this vital spawning stream, and have done outstanding work in removing weeds and planting the wetland springs area on our property.

It was unfortunate that Otago Council did not have enough candidates for an election in October with eight people standing for the nine seats available. Three long standing Councillors stepped down this year after having given a collective 49 years of service to Otago Council. We extend our best wishes to Ian Cole, Rick Boyd, and Ray Grubb for the future. We also look forward to working alongside new Councillors John Preedy and John Cruden as they take up the mantle of governance, and continue the great work here in Otago.

I would like to thank our chief executive and staff, Rangers, councillors, our New Zealand Council appointee Mike Barker, and our co-opted Ngai Tahu member Paulette Tamati-Elliffe for their hard work and support over the year. We look forward to a positive 2025.

Colin Weatherall, Chair



Who are we?

Otago Fish & Game Council is an independent crown entity with nine staff, nine governors and 12 volunteer rangers. The current Chair is Colin Weatherall QSM.

Why do we exist?

Otago Fish & Game Council is the statutory manager of sports fish and game bird resources within Otago Region. It holds functions and responsibilities set out in the Conservation Act 1987. The organisation's functions include managing, maintaining and enhancing the sports fish and game resources of Otago in the long-term recreational interests of anglers and hunters; representing the interests and aspirations of anglers and hunters in the statutory planning process; and advocating the interests of the Council, including its interests in the habitats of sports fish and game birds.

Links:

- ☐ [Conservation Act 1987](#)
- ☐ [Otago Region homepage on F&GNZ website](#)

What we aim to do

Conservation and Sustainability:

Conserve and manage Otago's freshwater fisheries and game bird populations. Work to ensure that these resources are sustainable and healthy for future generations to enjoy.

Recreational Opportunities:

Provide recreational opportunities for anglers and hunters. Manage and maintain access to public fishing and hunting areas in Otago, ensuring that these activities can be enjoyed by all New Zealanders and visitors.

Advocacy:

Advocate for the interests of recreational anglers and hunters. We represent the concerns and preferences of licence holders in regulatory and policy decisions related to fisheries and game bird management, and the habitat which supports them.

Research and Education:

Conduct research and monitoring of fish and game populations and habitats, which helps inform management decisions. Engage in educational efforts to promote responsible and sustainable angling and hunting practices.

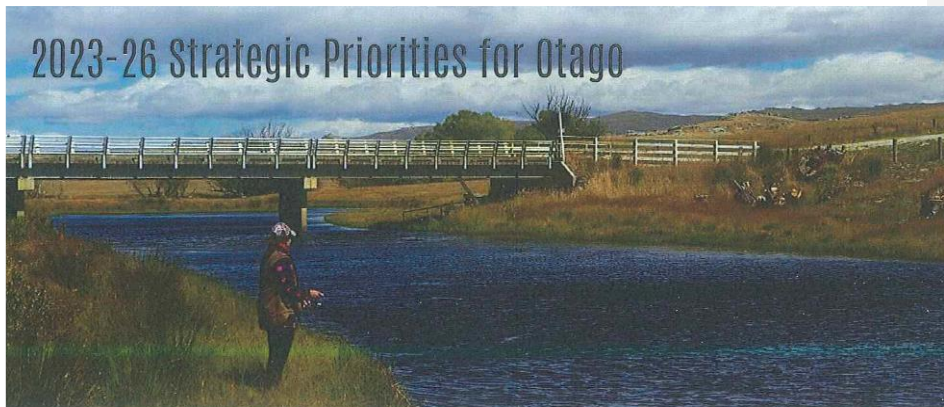
Regulation and Licensing:

Issue fishing and hunting licences and collect revenue to fund management and its operations. We communicate with licence holders regularly and enforce regulations to ensure that recreational activities are conducted in a sustainable and lawful manner.

Environmental Stewardship:

In addition to a focus on fish and game species, we work on broader environmental issues related to freshwater ecosystems, including wetlands, as their health is essential for the well-being of all species.

2023-26 Strategic Priorities for Otago



The Otago Fish and Game Council developed a three-year set of strategic priorities at its February 2023 meeting. The Council has made a judgement in selecting this set of priorities as its key objectives to report against in this Statement of Service performance.

The 2023/24 annual operational workplan was generated to work towards those outcomes.

GOAL:

To manage, maintain and enhance Otago sports fish and game birds and their habitats in the best long-term interests of present and future generations of anglers and hunters



Strategic Relationships and Advocacy Enhanced

- ☐ Improve public and stakeholder perceptions of F&G.
- ☐ Form alliances with like-minded bodies.
- ☐ Build partnerships with landowners for habitat protection and species management.
- ☐ Enhance public understanding of the value of trout, salmon, and game birds.

Links:

- ☐ [Otago Operational Workplan 2023-2024](#)
- ☐ [Otago Strategic Priorities 2023-2026](#)



Species & Habitat Maintained and Improved

- ☐ Understand climate change impacts on critical habitats and species.
- ☐ Establish long-term monitoring programmes for sensitive sports fish and game birds.
- ☐ Ensure RMA/NBEA planning documents protect and restore habitats.



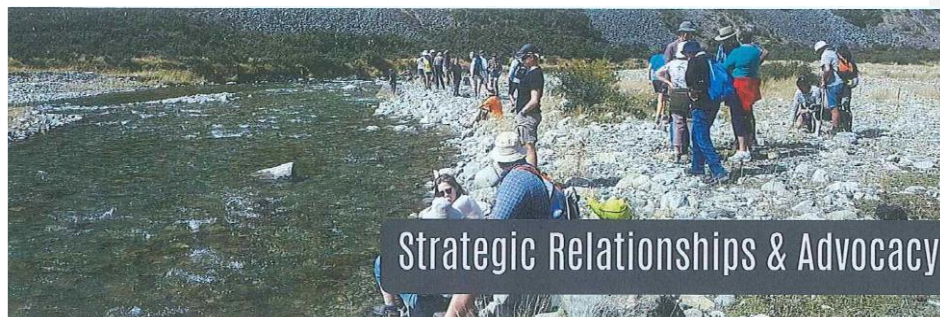
Recruitment and Retention of Licence Holders Improved

- ☐ Increase knowledge of Otago F&G's role, improving value perceptions.
- ☐ Reduce barriers to participation (cost, regulation complexity, access).
- ☐ Provide 'evidence of service' through regular communication.



Tangata/Mana Whenua Engaged

- ☐ Share aspirations with Iwi for freshwater and wetland protection.
- ☐ Form enduring and meaningful partnerships with tangata/manua whenua.
- ☐ Meet treaty responsibilities (Conservation Act Sec. 4).



Strategic Relationships & Advocacy

Communications Strategy Developed

Maintaining a positive public perception and stakeholder relationships is critical to retaining social licence and underpins much of our communications and engagement activities.

Limited resourcing means Otago F&G must focus communications and engagement efforts where it will be most effective. As such, Otago F & G contracted *Latitude Strategy and Communication Consultants* to help develop a high level communications strategy.

The strategy identifies priorities to help Otago F&G achieve its goals. The priorities were based on the outcome of a number of surveys of licence holders and also last year's stakeholder survey.

The key priorities that were agreed to address in the coming years were:

1. Increase licence holder numbers and perceptions of value.
2. Strengthen relationship with mana whenua (step towards partnership).
3. Build constructive relationships with landowners through the Otago Catchment Community.
4. Increase positive awareness across the general public, including potential licence holders.
5. Broaden the base of connection with Otago University academics/science community.

Towards the end of the financial year an 18 month Implementation Plan was also developed and funded to meet the objectives of the strategy.

Links:

- ☐ [Otago Fish & Game Council Facebook Page](#)
- ☐ [Communications Strategy](#)
- ☐ [Habitat Enhancement Fund Update](#)

Public Awareness

Generating print and mainstream online media content is one of the primary vehicles for communicating with the general public. Social media, mainly Facebook, has provided a useful two-way channel to communicate with both licence holders and members of the public. This is a growing medium.

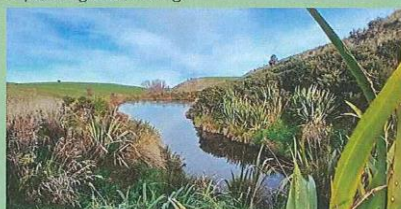
| MEDIA BY THE NUMBERS | 2024 | 2023 |
|--------------------------|-------|-------|
| Media releases generated | 65 | 63 |
| Print media appearances | 121 | 106 |
| Facebook page followers | 4,363 | 3,751 |
| Facebook posts | 160 | 177 |

Habitat Enhancement Fund

Another key project which fosters relationships with landowners and catchment groups is the Council's grant scheme for habitat improvement and protection.

A total of \$7,500 was contributed to three Wanaka basin projects for planting and fencing spawning streams. Two additional grants, totaling \$3,000, were approved for private landowners and will be paid upon completion of wetland projects.

A review of grant-funded projects from 2018 to 2020 showed improvements at all sites but highlighted the need for more follow-up with landowners and support for planting and fencing.



Staff returned to John Marks wetland near Heriot which was granted \$2,000 towards development in 2019.



Species management

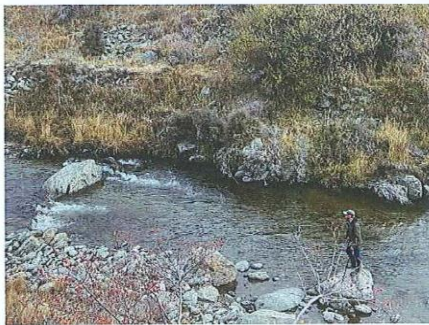
Spawning Model Development

A model of salmonid spawning habitat in the Otago Region has been created using the extensive Otago Fish & Game spawning database as well as NIWA's freshwater fish database and DOC's Freshwater Ecosystems of New Zealand geo-database.

The model was created by determining combinations of habitat variables that currently support spawning and then extrapolating out to previously un-surveyed areas. It was tested with an extensive summer programme where staff made visual assessments of spawning suitability and electric fished for juveniles at almost 100 sites around Otago.

The model has been set at a threshold that correctly identifies 90% of previously identified spawning sections, within approximately 25% of river reaches in the region.

The model will be utilised in future to better target spawning surveys and to support policy and planning work such as the upcoming Otago Land and Water Plan and the next Sports Fish and Game Management Plan.

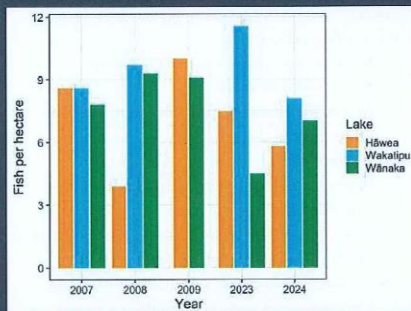


Staff undertaking ground truthing of the spawning model in Fraser Stream.

Acoustic Monitoring at Southern Lakes

Establishing a fit-for-purpose, long term monitoring system for sports fish in Southern Lakes took a further step forward this year with F&G staff repeating the previously NIWA run project. The acoustic surveying using high definition sonar to detect fish in lakes Wānaka, Hāwea, and Wakatipu was conducted over six days in early February 2024. The survey followed the methods established by NIWA in 2007, 2008, 2009, and 2023.

Total fish counts and densities were relatively consistent with previous surveys, with Hāwea and Wakatipu showing a decrease from last year's count, and Wānaka showing an increase. Fish were observed at similar depths, predominantly concentrated near the lake bottom.



The acoustic monitoring is set to be repeated in February 2025, to assess the extent of annual fluctuations, after which the long-term plan for future surveys will be established.

Links:

- ☐ [2024 Report on Acoustic Monitoring of Southern Lakes](#)
- ☐ [Spawning Model Development Report 2024](#)

Habitat Management

RMA Policy and Planning

The Council's primary aim was to improve the outcomes from our statutory involvement in Resource Management Act (RMA) planning and consenting matters. Meaningful measurement of the impact of this sort of RMA advocacy is problematic. Firstly the policy or plan changes happen over several financial years and, secondly, it is difficult to measure how our advocacy influenced the final outcome, especially when neither plan has been finalised yet. Given the complexity of the process and the lack of a suitable metric, it is appropriate to simply just record our effort and cost.

Making submissions and attending RMA hearings has been a large body of work this last year, which was exacerbated by the simultaneous development of an Otago Regional Policy Statement and a Land and Water Regional Plan. Notably, staff presented a substantial case for protecting the habitat of trout and salmon, addressing species interaction, protecting wetlands and protecting ecosystems generally at multiple Regional Policy Statement hearings. This stretched the organisation's staff resources, and external planning and legal assistance was required to improve the prospects of a good outcome for the species and habitat.



Wetlands, like the Council's Takitakitoa Wetland, are widely recognised for their positive role in climate change management and carbon emission reduction, although accurately measuring their contribution remains challenging.

Resource Consents

The RMA consent application workload continues to diminish as Otago Regional Council (ORC) plan changes take effect. This has been especially noticeable around water allocation consents as these are now managed with standard conditions (to protect flows) and fixed terms by ORC staff meaning little F&G input is required.

| RMA CONSENTS | 2024 | 2023 | 2022 |
|---|------|------|------|
| Total received | 13 | 30 | 31 |
| Affected Party approval given (with conditions) | 11 | 20 | 21 |
| Submissions made | 6 | 4 | 3 |
| Hearings attended | 3 | 0 | 3 |

Climate Change

This year marked progress in understanding climate change impacts on resources managed by the Council. The response had two parts: measuring Otago F&G Council's carbon footprint and initiating the assessment of climate change effects on species and habitats under our care and advocacy.



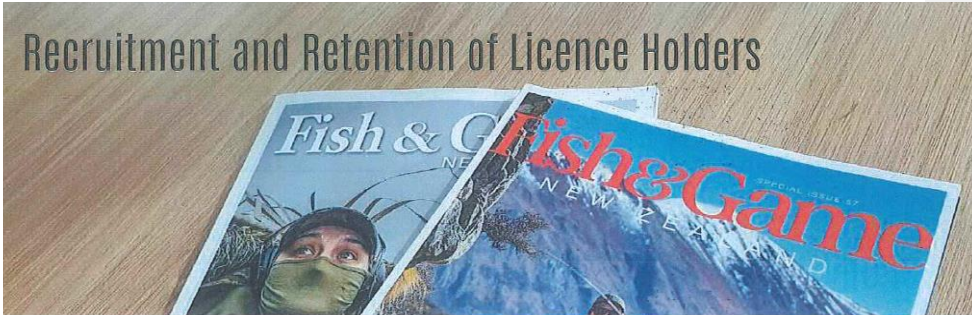
Council has agreed to a 50% reduction of its 2022/23 emissions of 100.8 tonnes/annum, by 2030

A literature review on potential climate change impacts was completed this year. The next step is to analyse the findings and report on implications for species abundance, diversity, range, and their habitats.

Links:

- ☐ [Climate Change Report 2023/24](#)

Recruitment and Retention of Licence Holders



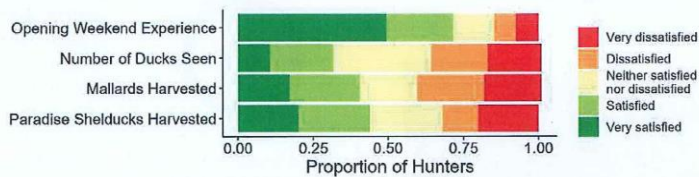
Satisfaction Survey of Gamebird Hunters

Satisfaction is a key component in retaining anglers and hunters. A 2024 opening weekend survey showed that about 70% of hunters were satisfied or very satisfied with their experience, despite the low waterfowl harvest rates, which exceeded expectations.

This supports the argument that hunter satisfaction isn't solely tied to ducks harvested, with other social factors playing a role. Survey comments also mentioned positive interactions with rangers, a general decline in duck numbers, and the absence of an opening weekend licence.



Hunters reported positive interactions with rangers. Compliance rates of hunters were very high at 96.2%.



Compliance contacts

An important opportunity for direct contact with licence holders is through compliance activity. Staff and volunteers engaged face-to-face with 1,086 (9.23%) season-long fish licence holders and 106 (2.75%) game bird licence holders in the field, providing key chances to share information

Connecting with licence holders

Since a 2021 survey revealed low awareness of the Council's activities and declining perceptions of licence value, improving knowledge among licence holders has been a priority. Recent surveys show improvement, and the Council hopes this will boost retention rates. Increased direct communication has been key to this progress.

Survey results identified emailed content as the preferred form of direct communication, making the weekly river reports especially popular. Sent to 17,489 (13,940 last year) recipients, these reports—featuring river conditions and fishing tips—have an impressive 45% open rate. Along with monthly ezines, this provides a consistent platform to highlight the organisation's activities.

The Fish & Game magazine remains the primary vehicle for distribution of information to licence holders. 11,258 fishing and 3920 game licence holders were posted the F&G magazine, which contained four pages of dedicated Otago material.

Links:

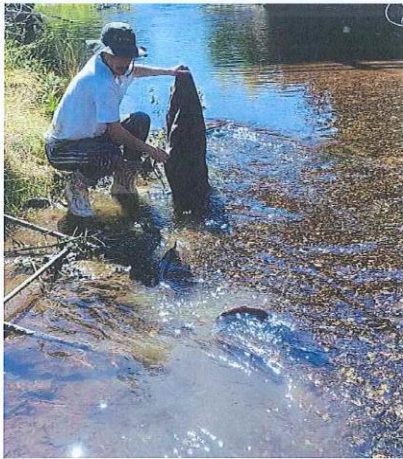
- ☐ [Otago Fish & Game Council Facebook Page](#)
- ☐ [Fish & Game Magazine](#)
- ☐ [Compliance Summary Report](#)
- ☐ [Game Bird Hunter Harvest report](#)

Mana Whenua Engagement & Output Expenditure

Working with Mana Whenua

Few opportunities arose to directly engage with Mana Whenua on critical issues but there was positive interaction:

- Regular meetings held with Aukaha to discuss RMA planning matters.
- Opened lines of communication with local papatipu runanga for further consultation on the Otago Gamebird Gazette notices.
- Consulted with Mana Whenua on the Bendigo Wildlife Management Reserve.
- Assisted iwi with the recovery of tuna (eels) from the Phoenix Dam which was being drained for safety reasons.



A staff member of Te Nukuroa o Matamata releases tuna (eels) which were recovered from Phoenix Dam with the assistance F&G staff and equipment.

Links:

- ☐ [2023/24 Otago F&G Council Financial Report](#)
- ☐ [Otago F&G Council Agendas and Minutes](#)

Output expenditure changes

The allocation of overhead costs against outputs is presented below. The major changes from the previous years were:

- Less hours spent in species management due to a shift in focus onto angler and hunter participation.
- Increase in effort to engage with the public on Fish & Game matters.
- Increase in staff hours for licensing due to the Designated Waters Implementation.
- Shifting demands in planning and reporting increased staff hours and overhead costs.

| Output | 2024 | 2023 |
|-----------------------------------|--------------------|--------------------|
| Species Management | \$279,075 | \$306,270 |
| Habitat Protection and Management | \$359,059 | \$412,597 |
| Angler and Hunter Participation | \$224,315 | \$162,568 |
| Public Interface | \$197,968 | \$159,368 |
| Compliance | \$109,479 | \$125,342 |
| Licencing | \$143,065 | \$111,632 |
| Council | \$79,024 | \$66,149 |
| Planning and Reporting | \$141,464 | \$104,498 |
| Total | \$1,533,450 | \$1,448,425 |

