

# **Council Meeting Agenda**

**Taranaki Fish and Game Council** 

**15 February 2025** 

Saturday 15 February 2025 10:00am TET Multi Sports Centre Stratford

# AGENDA TARANAKI FISH AND GAME COUNCIL MEETING

## Saturday 15 February 2025 TET Multi Sports Centre, Stratford Commencing at 10:00am

1	Welcome	Welcome message / korero powhiri		1
2	Apologies			2
3	Conflict of Interest	Declaration of Conflicts of Interest		3-4
4	Minutes of Previous Meeting	a. 7 December 2024		5-13
5	Matters Arising	a. Action List Summary		
	Macters / Monig	b. Other Matters Arising		14-31
		c. North Taranaki Rod & Gun Club restricted reserve		32
6	NZ Council Business	a. NZ Council – Summary of NZC meeting - matters arising	Info	33-43
	NZ COUNCII BUSINCES	b. NZ Council Business – Budget Process	Info	
		c. Other NZ Council Business	Info	44-63
7	Public Forum	Open Session for Public		64
8	Regional Business – Governance	a. Chairman's Report on Taranaki Region	Info	65
	(CENTILI DESTITESS GOVERNMENCE	b. Reply to Minister of Hunting and Fishing	Info	
		c. Feedback on Governance Workshop	Info	
9	Inter-Regional Business	a. Chair's Forum Update	Info	66
	Inter-Regional Business	b. Shared Resources Update	Info	
10	Strategic Matters	a. Strategic Discussions	Discussion	67
TO	Strategic iviations	b. Risk Management Review	Info	
		b. Iwi Engagement	Info	68
11	Policy and Legislation	a. Wildlife Act Review	Info	69-70
7.7	Policy and Legislation	b. Resource Management Act Review	Info	05 70
		c. Fast-track Approvals Bill	Info	
		d. Arms Act Review	Feedback	71-81
		e. Draft Policy – Fatigue Policy	Feedback	82-84
40	11leb d Cofeby Domont	a. Health and Safety Report Nov/Dec 2024	Info	85-87
12	Health and Safety Report	a. Research	Info	88-103
13	Species Management		Decision	104-123
	0.34	a. Game Notice Recommendations.	Info	124
14	Habitat Advocacy & Management	a. Regional Planning advocacy	Info	124
	5	b. Resource Consent advocacy	Info	125
15	Participation	a. Access Management – incl. Access Campaign     b. Information to Clients	Info	123
,			Info	
	2 11 4	c. Licence Holder Engagement – incl. R3	Info	126
16	Public Awareness/Comms	a. Iwi Engagement b. Public Awareness	Info	120
<u> </u>			-	
		c. Communication	Info Info	
		d. Promotions	Info	127-128
17	Licence Sales	a. Licence Sales Update to 31 Dec 2024 – Fish c. Licence Management Systems Performance Nov/Dec	Info	129-131
			11110	127-131
-		d. Licence Price Optimisation Research	Info	
10	Onerational Summany Depart	a. Operational Report	Info	132-146
18	Operational Summary Report	a. Operational Report a. Profit & Loss – 1 Nov 24 to 31 Dec 24	Info	147-149
19	Financials	b. Balance Sheet – as at 31 Dec 24	Info	150-152
		c. Capital Expenditure	Info	3.50 1.52
	Correspondence	с. Сарікаї Ехрепините	Info	153
20	Correspondence		Info	154
21	Recognition Awards		Info	155-156
22	Conservation Board Liaison		IIIIO	157
23	General Business	Novt Monting, 20 March 2025 Stratford	Info	158
24	Next Meeting Confirmation	Next Meeting: 29 March 2025, Stratford	11110	1.70
25	Closure	korero kati		-
			_	
L				

## Agenda Item 1 Welcome

## **Summary**

Welcome to Councillors and public.

## Welcome Message - korero powhiri

Let us look after the water | Kia tiaki tatou i te wai

that flow from Mount Ruapehu and Mount | ka rere mai i Maunga Ruapehu me Taranaki | Taranaki Maunga

for the health of the fish and birds | Mo te oranga o nga ika me nga manu

and hunters and anglers | me nga kaiwhakangau me nga kaihao

Let us work together with unity to make good decisions kia mahi tatou me te kotahitanga ki te whakatau pai

## **Present and In Attendance**

## Summary

Record noted of all those who attend meeting in full or in part.

# Agenda Item 2 Apologies

## **Summary**

Confirm apologies notified to Chairman from those Councillors and public for non-attendance or lateness.

## **Decision Required**

## Recommendation/Action

Move motion accepting apologies from those that inform the Council of their non-attendance or lateness to meeting.

## Agenda Item 3 Conflict of Interest

#### Summary

Consider the Conflicts of Interest Register to ensure it clearly identifies any perceived or actual conflicts of interest of members in general.

Confirm that there are no additional conflicts of interest to declare -either in general or specific items in the current agenda.

Confirm how the Council will handle any new conflicts of interest identified – including speaking rights, voting rights, exclusion from meeting on specific items, or exclusion of receiving any specific material relating to that item identified.

## **Decision Required**

#### Recommendation/Action

Move motion accepting any additions/deletions to the Conflicts of Interest Register that are declared.

Councillor		onflict of Interest Identified	Date		
			Declared		
Chris Donald		Member of Inglewood Rod,	14 June		
		Hunting and Clay Target Club	2014		
Alan Flynn	0	None noted			
John	•	Member of Inglewood Rod,	17 August		
Nancarrow		Hunting and Clay Target Club	2024		
Romon	•	None noted			
Sargeson					
Gerard Karalus	•	None noted			
Rawenata					
Saunders	•	None noted			
Chris Mattock	•	None Noted			

Staff	Date		
•			Declared
Phil Teal	•	Manager of Wellington Fish & Game Council	19 October 20 <b>2</b> 4

# Agenda Item 4 Minutes of Meeting 7 December 2024

#### Summary

Consider the unconfirmed and draft Minutes of the Meeting of 7 December 2024 of the Taranaki Fish and Game Council.

Confirmation by two members of the Council present at that meeting that they are a true and correct record of that meeting.

Note any specific additions or alterations required for clarity or correctness.

## **Decision Required**

#### Recommendation/Action

Move motion accepting confirming that the Minutes of Meeting of 7 December 2024 are a true and correct reflection of the meeting (subject to any amendments noted).

that the Taranaki Fish and Game Council adopt the minutes of the Meeting held on 7 December 2024 be considered as a true and correct record of that meeting.

## TARANAKI FISH & GAME COUNCIL MEETING

MINUTES OF THE MEETING OF THE TARANAKI FISH & GAME COUNCIL, HELD AT AUTO LODGE, DEVON STREET EAST, NEW PLYMOUTH ON 7 DECEMBER 2024 COMMENCING AT 10:25AM

#### WELCOME

The Chairman, Chris Donald welcomed Councillors, staff and members of the public, Paul Blewman and Karl Gower to the meeting.

A Karakia was given by Councillor Paul Blewman.

#### PRESENT

Chairman Chris Donald, and Councillors Romon Sargeson, Gerard Karalus, Rawenata Saunders, Gerard Karalus (part) and Alan Flynn

#### **IN ATTENDANCE**

Staff: Phil Teal (Chief Executive), Jilli Steedman (Secretary), Allen Stancliff (Senior Field Officer), Jack Harland (Field Officer)

Licence Holders/Public: Paul Blewman and Karl Gower.

#### 2. APOLOGIES

Apologies were received from John Nancarrow and Chris Mattock. Councillor Karalus noted he would be leaving the meeting after lunch.

MOVED SARGESON / KARALUS THAT THE APOLOGIES RECEIVED, BE ACCEPTED CARRIED

## 3. CONFLICT OF INTEREST

There were no additions noted to the Conflicts of Interest register that had not already been declared at previous meetings.

## 4. MINUTES OF THE PREVIOUS MEETING 2 NOVEMBER 2024

MOVED KARALUS / SAUNDERS

THAT THE TARANAKI FISH AND GAME COUNCIL ADOPT THE MINUTES OF THE MEETING HELD 2 NOVEMBER 2024 AS A TRUE AND CORRECT RECORD CARRIED.

#### 5. MATTERS ARISING

The CE provided a brief overview of the action list.

Field Officer, Jack Harland, provided an update on the progress on preparing information for perch fishing opportunities in Taranaki and that it is nearing completion.

There was discussion on the status of removing Raupo from Hawkens Lagoon.

#### 6. NZ COUNCIL BUSINESS

- a. NZ Fish and Game Council appointee, Gerard Karalus gave a summary of the latest NZ Council meeting held in November. He noted:
  - That there are five new NZ Fish and Game councillors.

- He noted that there had been considerable media exposure of issues between Southland
   Fish and Game Council and Southland Federated Farmers.
- The he and Councillor Sargeson will attend the next NZ Council meeting.
- He noted the letter received, by all Councils, from the Minister for Hunting and Fishing, Hon Todd McClay.
- A move to zero based budgets was being pursued by NZ Council.
- The expected attendance of the Minister to the next NZC meeting.

MOVED KARALUS / SARGESON

THAT THE NZ FISH AND GAME COUNCIL APPOINTEE'S VERBAL REPORT BE RECEIVED CARRIED

#### 7. PUBLIC FORUM

The Chairman introduced Karl Gower and explained the make-up of Council. Karl noted that he had only recently taken up sports fishing with his children and has had a go at clay target shooting, since moving to Stratford.

## 8. REGIONAL BUSINESS – GOVERNANCE

## a. Chairmans Report

The Chairman provided a verbal overview report of key issues since the previous meeting.

Councillors discussed the joint meeting with Wellington Fish & Game to confirm alignment of the thinking and approach being taken, which could also include a governance training module. The Chairman proposed holding it in Palmerston North on 25<sup>th</sup> January, and asked Councillors to identify topics for discussion.

## MOVED DONALD / SARGESON THAT THE CHAIRMAN'S VERBAL REPORT BE RECEIVED CARRIED

- b. Reply to the Minister for Hunting and Fishing
  The CE spoke to the Minister's letter, and invited councillors to discuss concepts and key principles they wanted to cover in a reply addressing the questions asked.
- 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?

It was noted that replies to the Minister should reflect "us" – Taranaki and Wellington Fish and Game Councils because the two regions are already pursuing shared services that include financial support, communications, field work support and aligning regulations. It was noted the questions targeted Governance efficiencies not financial. Taranaki Councillors voiced their support for a central funding model – which could operate with a single NZ wide licence and distribution of funds being determined by budget requirements. The tension of grant receiving and levy paying regions would cease to be an issue, but does change the focus and determination of resource allocation to NZ Council.

2. What do you think about the Governance Review recommendation to merge regions, and on what basis would this be appropriate?

Councillors agreed with the original review recommendations for amalgamation of regions.

- 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?

Councillors agreed with reducing the number of Councillors to eight elected per regionnoting that Taranaki decided on 8 Councillors for the previous election (2021), however, did think that appointed or co-opted members should be additional to that number.

b. would a modest honorarium for councillors recognise and support your voluntary role?

Councillors did not support any payment for being an elected of council. It was agreed that payment to any outside representation be made by DoC & Government. They noted the value of having appointees with specialised skills i.e. governance. The chairman thought that NZC councillors could be paid 'a modest' honorarium) due to the extra work and commitments.

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?

Councillors noted that they are happy with the election of NZC appointee process.

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)?

Councillors would like to see a change to the eligibility to vote go from the necessity to tick a box when purchasing a licence to include all whole season licence holders (Family, Local Area and Loyal Seniors) (auto enrolling and opt out options). Paul Blewman suggested that there are criteria for "Fit and Proper Person" used by other agencies that might provide appropriate wording and direction in legislation — but there was no single definitive set of criteria used by public entities.

e. should the criteria under which the Minister currently has the power to remove elected members be reviewed?

Councillors noted their support of the status quo – that the power to remove elected members remains with the Minister.

The meeting adjourned at 12.30pm for lunch.
The meeting reconvened at 1:30pm
Councillor Karalus and Karl Gower left the meeting.

#### 9. INTER-REGIONAL BUSINESS

a. Chair's Forum Update

The Chairman noted he has had no interaction with other Chairman.

b. <u>Shared Resources Update</u>
The CE noted joint efforts in preparing the Performance Report and a Waimarino fish survey.

c. Progressing Formal Arrangement

It was agreed that topics for formalising Taranaki – Wellington regions' arrangements moving forward would be a potential purpose of a joint meeting, planned for 25 January 2025 to be centrally in Palmerston North, with Wellington Fish and Game Council. Councillors thought an invitation should be extended to the Minister.

MOVED SARGESON / SAUNDERS

THAT TARANAKI FISH & GAME COUNCIL RECEIVE THE REPORT PRESENTED BY THE CHAIRMAN CARRIED

## 10. STRATEGIC MATTERS

a. Risk Management Review

The CE updated Councillors on the risk management issues associated with:

- Avian influenza H5N1 Strain (HPAI High Pathogenic Avian Influenza) no change is risk
- Golden Clam samples found in accommodation lodge at Owhango, and Horizons Regional Council had been promoting a Check Clean and Dry approach to ameliorating the risk of small clams attaching to gear.

b. Iwi Engagement

It was noted that Te Kopuka has requested formal confirmation of Allen Stancliff as Fish and Game's representative.

Allen Stancliff has been confirmed as representative to Te Kopuka, however Allen noted that he would be unable to attend the next scheduled meeting to be held at Kakahi Marae on Friday 13<sup>th</sup> December. Adam Daniel of Auckland / Waikato Fish & Game will be attending as an alternate.

#### 11. POLICY AND LEGISLATION

a. Wildlife Act Review

There has been no update from the Minister of Conservation as to the priority or timetable but confirmation received that DoC are progressing with this review

b. Resource Management Act Review

The Resource Management (Freshwater and Other Matters) Amendment Act 2024 came into force on 25 October 2024. The Act amends the Resource Management Act 1991 (RMA) and several national direction instruments.

An Expert Advisory Group (EAG) has been established to prepare a blueprint to replace the RMA. The EAG will base this blueprint on principles agreed to by Cabinet and the Government's resource management reform objectives and aims to provide recommendations before Christmas 2024. Detailed policy work and legislative drafting will begin after Cabinet has agreed to key aspects of the new legislation in early 2025. The Government aims to introduce bills in Parliament in mid-2025 and pass these into law by mid-2026. The Select Committee process will be the main mechanism for public consultation.

c. Fast Track Approvals Bill

It was noted that the Select Committee hearing submissions on the Fast Track Approvals Bill had concluded their proceedings and were currently considering feedback for a report back to Parliament before any amendments are made to the detail of the First Reading of the Bill. On October 6, 2024, the New Zealand government announced the inclusion of 149 projects in the Fast Track Approvals Bill,

d. Arms Act Review

Government had considered the first two phases of firearms legislation review – with that focusing on the Firearms Safety Authority and operations of firearm training sites. The third phase of public consultation on the wider legislative reforms is planned for early 2025.

12. HEALTH AND SAFETY

The Chairman would like to see consideration of proactive approach to identify approaches to potential risks and that those options be recorded. This would be situations where an accident or near miss hasn't occurred, but a potential risk and mitigation identified.

MOVED FLYNN / SARGESON

THAT THE HEALTH AND SAFETY REPORT FOR SEPTEMBER AND OCTOBER 2024 BE RECEIVED CARRIED

## 13. SPECIES MANAGEMENT

a. Draft 2025/26 Game Season Gazette Notice

MOVED SARGESON / SAUNDERS

THAT TARANAKI FISH & GAME COUNCIL APPROVES THE RECOMMENDED 2025/26 TARANAKI REGION GAME GAZETTE NOTICE.
CARRIED

## 14. HABITAT ADVOCACY AND MANAGEMENT

a. Regional Planning advocacy

Taranaki Regional Council have made the decision to proceed with the consultation process for reviewing the Regional Plan with a view to notification in 2025:

- Freshwater outcomes and change drivers September to October 2023
   Identifying the timelines and where the pinch points might be.
- Setting targets June to August 2024
   Exploring potential targets for key areas linked to improving water quality.
- Limits November to December 2024
   Exploring potential rules for the proposed Land and Freshwater Plan to drive the change to achieve the targets set for freshwater.
- Feedback on Draft Plan February to April 2025
   Iwi, special interest groups and stakeholder engagement and feedback on the proposed Land and Freshwater Plan.
- Plans notification Mid-2025
   The proposed Land and Freshwater Plan will be publicly notified prior to a formal submissions and hearing process.

b. Resource Consent advocacy

Territorial Local Authorities within the Horizons region boundaries have been discussing consistency in management approaches and funding models for water management – potable water, stormwater, wastewater. This is concurrent to Government initiatives and approaches to municipal water management.

## 15. PARTICIPATION

- a. Access Management
  - Access Point descriptions and information updated for new season on website.
  - Updating access sign inventory.
  - Active management of access requirements to multiple sites undertaken.
  - Supporting NZ Council initiated campaign with an access focus.
  - Access Charter launched by Minister for Hunting and Fishing

This charter outlines the principles and commitments to ensure that recreational hunting and fishing on public conservation land and waters is recognised and safeguarded for current and future generations. It balances the rights and responsibilities of recreational users with the imperative to conserve New Zealand's natural heritage.

Principles:

- 1. Public right of access: The public has a right to access public conservation land and waters, including for recreational hunting and fishing. We will guarantee this access, and where there needs to be restrictions that limit access, we will clearly explain why. Recreational hunting and fishing access will be underpinned by a fair system that ensures equitable opportunities for all New Zealanders.
- Uniform standards and procedures: A common and consistent approach to access
  for hunting and fishing should occur across all regions. This will ensure fairness,
  transparency and predictability, facilitating compliance and fostering trust among
  users.
- Safety and responsibility: Safety must always come first. You must understand and follow all rules and regulations, including firearm and fishing rules, and general safety guidelines.
- Cultural respect: Public conservation land often holds cultural and historical significance for all New Zealanders. The charter respects and encourages you to honour the values and customs of local iwi and hapu.
- 5. Balancing recreation with conservation: We will allow hunting and fishing activities in areas that support or do not adversely affect conservation efforts.

## b. Information to Clients

- Assisted in early bird licence purchase e mail communications.
- The website has been substantially refreshed updated items.
- 2024/2025 Fish Season Magazine articles prepared and magazine distributed in August.
- Newsletter Early Summer produced and distributed.

## 16. PUBLIC AWARENESS / COMMUNICATIONS

#### a. Iwi Engagement

Allen Stancliff has been attending Te Kopuka meetings.

#### b. Public Awareness

Taranaki Fish & Game continues to support the New Zealand Council Re-Wilding campaign.

#### c. Communication

Press Releases on Children's Fishing Opportunities at Lake Rotomanu.

#### d. Promotions

Children's Fishing Day promotion event – Lake Rotomanu – preparation and attendance in October/early November.

Children's Fishing Day promotion event - Stratford - preparation November

Otago Promotion of Celebrating 150 years of Trout Fishing Licence

## 17. LICENCE SALES & LICENCE MANAGEMENT SYSTEM PERFORMANCE

a. Fish Licence sales update

It was noted that Fish Licence sales had increased in LEQs compared to previous year based on the NZ Council report.

## b. Game Licence sales update

N/A

## MOVED SARGESON / SAUNDERS

THAT THE REPORT ON LICENCE SALES FOR THE 2024/25 FISH SEASON TO 31 AUGUST 2024, BE RECEIVED CARRIED

## c. Licence Management System - July and August 2024

The CE provided a brief overview of the performance of the Licencing Management System noting that it was performing well with no issues of continuity of service.

#### MOVED SARGESON/SAUNDERS

THAT THE REPORTS FROM THE LICENCE OPERATIONAL GROUP FOR SEPTEMBER AND OCTOBER 2024, BE RECEIVED CARRIED

## c. Licence Price Optimisation Research

The CE noted that this project co-ordinated by NZ Council commenced in September 2024 using an external provider.

#### 18. OPERATIONAL SUMMARY

MOVED SARGESON / FLYNN

THAT THE BUDGET REPORT TO 31 OCTOBER 2024 AND PROGRESS REPORT TO 15 NOVEMBER 2024, BE RECEIVED CARRIED

## 19. FINANCIAL REPORTS

MOVED SARGESON / SAUNDERS
THAT THE FINANCIAL STATEMENTS TO 31 OCTOBER 2024, BE RECEIVED
CARRIED

#### 20. CORRESPONDENCE

MOVED SARGESON / FLYNN

THAT THE CORRESPONDENCE SCHEDULES TO 22 NOVEMBER 2024, BE RECEIVED. CARRIED

#### 21. RECOGNITION AWARDS

Long serving Hatchery volunteer, Gavin Sturgeon has decided to retire from his volunteer duties at the hatchery, councillors agreed he was deserving of a recognition award.

#### 22. CONSERVATION BOARD LIAISON

The CE noted that the Council consider formal (re) engagement with Taranaki / Whanganui Conservation Board – noting that under legislation this should occur.

#### 23. GENERAL BUSINESS

The chairman noted the need to update staff equipment. He also noted that National CE, Corinna Jordan, is still managing Hawkes Bay region.

## 24. CONFIRMATION OF NEXT MEETING DATE

The next meeting will be held on 15 February 2024 at 10:00 am at the TET Multi Sport Stadium in Stratford.

A joint meeting of Taranaki & Welling	gton Fish	and	Game	Councils	will	be	held	on	25 <sup>th</sup>	January
2025 in Palmerston North.										

25. <u>CLOSURE OF MEETING</u>
-------------------------------

There being no further business the Chairman declared the meeting closed at 3:15pm

APPROVED A	ASA	TRUE	AND	CORRECT	RECORD
------------	-----	------	-----	---------	--------

CHAIRMAN_	 	 	 	_
DATE				

## Agenda Item 5 Matters Arising from the Minutes

## **Summary**

#### a. Action List Summary

Consider the Action List from the Minutes of the Meeting of 10 December 2024 and consider the actions undertaken – including completed actions, partially completed actions, and actions pending.

#### b. Other Matters Arising

Consider any other items that are noted in the Minutes where further updates and clarification are sought – where they are not addressed in other agenda items for the meeting.

- 16 December 2024 Response to Minister for Hunting and Fishing letter dated 4 November 2024
- c. North Taranaki Rod & Gun Club

## For Information Only

## Recommendation/Action

Note any specific clarifications relating to follow-up actions undertaken that relate to items discussed at the previous meeting.

## **Phil Teal**

From:

Todd McClay (MIN) <T.McClay@ministers.govt.nz>

Sent:

Thursday, 19 December 2024 2:36 pm

To:

Phil Teal

Subject:

RE: TM02761 | Response from Taranaki Fish and Game Council for Feedback

Request from Minister for Hunting and Fishing 4 Nov 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Phil,

On behalf of Hon Todd McClay, thank you for your email of 16 December.

Your correspondence has been passed onto the Minister for his attention.

Kind regards,



## Lauren Gillot (She/Her)

Private Secretary (Executive Support) | Office of Hon Todd McClay

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

Phone: (04) 817 6810

Email: T.McClay@Ministers.govt.nz

Website: www.Beehive.govt.nz

Private Bag 18041, Parliament Buildings, Wellington 6160, New Zealand

From: Phil Teal <pteal@fishandgame.org.nz> Sent: Monday, 16 December 2024 11:11 PM

To: Todd McClay (MIN) <T.McClay@ministers.govt.nz>

Cc: Chris Donald < chrisdonald 518@gmail.com>

Subject: TM02761 | Response from Taranaki Fish and Game Council for Feedback Request from Minister for Hunting

and Fishing 4 Nov 2024

Your Ref: TM02437 / 24-B-0525

Hon Todd McClay

Minister for Hunting and Fishing

Parliament Buildings

Wellington 6160

## **Executive Summary - Taranaki Fish and Game Council**

Issue 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?

## **Outcome Sought:**

To address weaknesses in the devolved regional structure to achieve consistency in approach and efficiency in output of common core functions through shared resources achieving economies of scale.

The resource allocation and budgeting processes need to be based on needs/costs of managing the resource and opportunity for licence sales marketing efforts.

## **Actions Supported:**

Consider improved further scrutiny of improved co-ordination, effectiveness and efficiencies of the following functions:

- 1. Administration: Bi-monthly Financial Reporting, Annual Financial Reporting, Annual Performance Reporting, common Payroll system, common IT technology and software
- 2. Species Management: Monitoring, Research
- 3. Resource Advocacy: Case Management at Environment Court Level (or higher)
- 4. Communications and R3<sup>1</sup>/Marketing: Base Level of Communications and Marketing Actions Common to All Regions
- 5. **Licensing Management System and Revenue Distribution:** Collection and Re-Allocation of Revenue from Provider, Maintaining a Fair Resource Allocation to All Regions
- 6. Policy Development: Common Core Policy Development
- 7. Strategic Planning: Implementation of Strategic Planning

# Issue 2: What do you think about the Governance Review recommendation to merge regions, and on what basis would this be appropriate?

## **Outcome Sought:**

To have the ability to amalgamate Fish and Game regions if there is deemed to be a compelling argument to increase efficiency, effectiveness, and/or resilience.

Representation of licence holders is still viewed as a paramount consideration to ensure they are still connected to the organisation.

## **Actions Supported:**

Provide a legislative framework to enable the Minister to enable amalgamation of two (or more) regions on request by both regions in agreement.

 $<sup>^1</sup>$  R3 is an approach to licence holder interaction – Recruitment, Retention, Reactivation which has been a successful programme in the United States for engagement with hunting and fishing participants.

# Issue 3(a): would a reduced number of councillors on each council improve effectiveness and decision making?

## **Outcome Sought:**

Governors provide for diversity of expertise to set strategic direction and allocate resources.

## **Actions Supported:**

Maintain 8 (or up to 12) governors for each regional Fish and Game Council.

# Issue 3(b): would a modest honorarium for councillors recognise and support your voluntary role?

The principle of voluntary contribution to the governance of Fish and Game has been a longstanding tradition and part of the organisational culture.

## **Outcome Sought:**

That the concept of voluntary contribution by governors to the betterment of the Fish and Game governance and management of the resource be (re)confirmed for all governors.

## **Actions Supported:**

Retain voluntary contribution for all Fish and Game governors - no payment of honorarium.

Consideration for a modest honorarium for the NZ Council Chair only given the time resources and expertise required to undertake the role.

Issue 3(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?

#### **Outcome Sought**

NZ Council effectively co-ordinating common core functions with support from regional Fish and Game Councils.

NZ Council governors to be able to act with an organisational perspective —without the risk of being voted out of office within the three-year electoral cycle - if this the views conflict with regional perspective.

#### **Actions Supported:**

That NZ Council governors be elected for a three-year term in line with the Fish and Game electoral cycle.

Issue 3(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)?

## **Outcome Sought:**

That licence holders and the wider public respect the unique system of representation that Fish and Game has to manage the fish and game resource.

## **Actions Supported:**

Retain current legislation for a person to be eligible to stand for Election as a candidate in a Fish and Game Election.

Retain eligibility to vote in a Fish and Game election – but provide for easier and repeated information on the enrolment process. Potential for auto enrolment if you are eligible to vote, but most electoral rolls require voters to confirm interest in wanting to enrol/vote. Look at what best advice on how to maintain the electoral roll register – other than at point of sale.

Continue working with mana whenua and stakeholder groups to show that expertise that Fish and Game has is credible, relevant and respected.

Enable co-opted members to be able to participate fully in meetings included the right to vote — for co-opted members with specific expertise and/or iwi representatives.

Issue 3(e): should the criteria under which the Minister currently has the power to remove elected members be reviewed?

## **Outcome Sought:**

If an individual councillor is causing disruption to good governance practice and the smooth functioning of a Fish and Game Council, then there should be a mechanism for the Minister to intervene and remove that councillor.

## **Action Supported:**

The Minister currently has the power to remove an individual councillor and the current provisions in the Act are sufficient to achieve this.

In dealing with cases of alleged misconduct: the standards of integrity and conduct<sup>2</sup> for elected representatives on public entities provide clear guidance and expectations of conduct. If there are any issues that arise from individual councillors that do not follow this code of conduct, there should be internal Fish and Game policy and process for documenting behaviours, incidents, and disputes. This process would provide an output of documentation (of what is legally required) to support contention of misconduct. Only after this process would assistance be sought from the Minister to intervene.

<sup>&</sup>lt;sup>2</sup> A code of conduct issued by the State Services Commissioner under the State Sector Act 1988, section 57

## **Supporting Documentation and Explanation:**

Issue 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?

Progress has been slow or stalled in implementing Ministerial Review recommendations for achieving cost efficiencies, have been that region amalgamation and the development of corporate policies by the NZ Fish and Game Council have not been fully implemented or have stalled. While improvements in operational and governance resources are possible, the only progress that has been made has been in Wellington and Taranaki regions.

Internal tension exists around resource allocation, with regions competing for budgets amidst rising operational costs. Recent reviews of cost assessments and budgeting processes aim to recalibrate funding based on resource management needs and marketing opportunities for licence sales.

Efficiencies can be achieved by addressing:

- Duplication of core activities across regions
- Inconsistent implementation of standard procedures
- Policy development through templates
- A review of regional base funding and revenue distribution if shared services are restructured for efficiency.

#### **Outcomes Sought**

To address weaknesses in the devolved regional structure to achieve consistency in core functions in approach and output, efficiencies available through shared resources and economies of scale. This would result in a cohesive fit-for-purpose organisation and still encourage initiative and innovation.

The resource allocation and budgeting processes need to be based on needs/costs of managing the resource and opportunity for licence sales marketing efforts.

## **Actions Supported:**

Consider improved further investigation into ways of improved co-ordination, effectiveness and efficiencies of the following functions:

- 8. Administration: Bi-monthly Financial Reporting, Annual Financial Reporting, Annual Performance Reporting, common Payroll system, common IT technology and software
- 9. Species Management: Monitoring, Research
- 10. Resource Advocacy: Case Management at Environment Court Level (or higher)
- 11. Communications and R3<sup>3</sup>/Marketing: Base Level of Communications and Marketing Actions Common to All Regions
- 12. Licensing Management System and Revenue Distribution: Collection and Re-Allocation of Revenue from Provider, Maintaining a Fair Resource Allocation to All Regions
- 13. Policy Development: Common Core Policy Development
- 14. Strategic Planning: Implementation of Strategic Planning

<sup>&</sup>lt;sup>3</sup> R3 is an approach to licence holder interaction — Recruitment, Retention, Reactivation which has been a successful programme in the United States for engagement with hunting and fishing participants.

## **Explanation:**

The 2021 Ministerial Review on Fish and Game Governance highlighted duplication of effort and opportunities for efficiencies, recommending shared resources through regional amalgamation and corporate policy development by the NZ Fish and Game Council. However, little progress has been made in implementing these recommendations, with only the Wellington and Taranaki regions making advancements, despite additional advice on regional structure options.

#### The Benefits of the Current Federal System:

There are weaknesses inherent in each of the paradigms of organisational structure: a centralised structure favours consistency and conformity, whereas a devolved structure favours innovative approaches and nimble decision making to meet the needs of local stakeholders.

In considering the efficiencies and duplication within Fish and Game – there needs to be acknowledgement that the federal system has been extremely successful in delivering outputs to fulfilling Fish and Game's legislative and regulatory mandate and delivering outcomes for recreational hunters and anglers.

## **Reducing Duplication and Increasing Efficiency**

It's not about centralisation per se - it's about finding ways to collectively achieve the outputs on a consistent basis in more cost-effective way.

This may be a range of ways to look at achieving this outcome:

- 1. full centralisation of specific functions this doesn't fit in with the Fish and Game organisational culture
- 2. Operational Hubs based to service multiple regions e.g. lower North Island, upper North Island groupings for specific functional outputs.
- 3. Individual regions but on a more prescriptive and directive basis.

Adjustment to resourcing to reflect changes in output delivery - If there is shared or centralisation of functions then the budget and resource allocations need to reflect that. There cannot just be the creation of additional resources to achieve tasks without adjusting the regional resource allocation.

The following functions are worthy of further scrutiny in achieving cost efficiencies and/or effectiveness and consistency of outputs:

#### 1. Administration:

- a. **Annual Financial Reporting** Annual Financial reporting should be undertaken on a consistent basis to allow for a seamless consolidation of information to the licence holders and wider public of Fish and Game Inc's financial status.
- b. Annual Performance Reporting Outcome Reporting for Statement of Service Performance will required for the 2024/2025 Financial Year for all entities, and it would be useful to be able to present a consolidated report on Statement of Service Performance across the organisation.
- c. Bi-monthly Financial Reporting financial reporting to regional Fish and Game Council meetings should provide consistent in style and format, transparent information to governors.
- d. **Payroll system** standard modern approaches to using professional administration tools to ensure consistent outputs should be considered.

e. Procurement of Similar Technology and Software Services- Provision of appropriate software and technology that is commonly used by all regions should be co-ordinated by a national contract and managed by NZ Council on behalf of all regions (with appropriate policy guidelines and responsibilities defined).

## 2. Species Management:

- a. Monitoring –there would be considerable benefit in additional national co-ordination of data analysis being undertaken to ensure consistent approaches defined by SOPs are being undertaken. Providing an annual summary of all regional monitoring data in one NZ wide compendium would add to the scientific credibility of Fish and Game.
- b. Research NZ Council currently manages the National Research Project Budget on behalf of the organisation with regional input to confirm regional requirements for research.

#### 3. Resource Advocacy

a. Case Management at Environment Court Level (or higher) - Projects in Regional Planning that require higher level court action should be undertaken by a team consisting of project manager, legal advisor, planning advisor, and technical expertise relevant to a particular case. This could be co-ordinated by NZ Council.

## 4. Communications and R34/Marketing

a. Base Level of Communications and Marketing Actions Common to All Regions - A standard suite of core actions should be undertaken by all regions – which can be co-ordinated by NZ Council. Regional Councils should focus on actions that interface with local anglers and hunters.

#### 5. Licensing Management System -

## a) Collection and Re-Allocation of Revenue from Provider

The Conservation Act 1987 provides for each regional Fish and Game Council to issue licences for a fee<sup>5</sup> - with the current licensing system provider undertaking the sales function as a National Project co-ordinated by NZ Council. Inefficiencies exist in that there is reallocation of income by the provider based on sales attributed to a region — and then regions pay a levy to NZ Council to coordinate the funding of its activities and shortfalls in those regions where licence income does not cover budget.

Having one licence sales type - a New Zealand Licence - could help reducing tensions. For NZ Council to be a principal administrator of the revenue stream for the organisation and overseer of the funding pool (and responsible for distribution of funds) would require legislative change (to be able to issue a licence), and also clear policy that did not allow for a power imbalance of NZ Council to control funding to regional Fish and Game Council based on other criteria other than needs basis.

<sup>&</sup>lt;sup>4</sup> R3 is an approach to licence holder interaction – Recruitment, Retention, Reactivation which has been a successful programme in the United States for engagement with hunting and fishing participants.

<sup>&</sup>lt;sup>5</sup> Conservation Act 26Q (1) The functions of each Fish and Game Council shall be to... (f) to issue—

<sup>(</sup>i) licences to hunt or kill game, and game bird habitat stamps, in accordance with the Wildlife Act 1953 and any regulations made under it; and

<sup>(</sup>ii) licences to take sports fish, in accordance with this Part and any regulations made under this Act; .....

The Zero Based Budget approach currently being introduced by NZ Council could continue to define regional and NZ Council requirements - with some additional critique and scrutiny - essentially making all regions receivers of revenue funding from a common pool. This is based on the financial needs required to run a region effectively and efficiently – with core functions prioritised. This is a tension that needs to be dealt with as it causes significant disunity within the organisation – although this is not unique.

b) Maintaining a Fair Resource Allocation to All Regions - Revenue collection and (re)distribution is a result of the existing legislation that attributes licence issue (sales) to a particular region — even though it has been a NZ wide licence since the mid-1990s — and this is still retained in the legalisation defining who issues licence sales³ but this was only wholly relevant when licences a separate licence was required for each region. This has been used as a de facto method for resource allocation since - but the budget system actually determines the total budget costs for the organisation and the total licence sales forecast to set the licence fee recommendation to the Minister. The resource allocation shouldn't be simply based on the number of licence holders or activity level — as the marginal costs to run a region are not linear based on those parameters.

#### 6. Policy Development

a. Common Core Policy Development – Policy common to all regional entities should not have to be developed 12 times and there should be consistency in policy and its implementation. There should be a suite of policies developed that have generic templates that can be adopted by all regions - this should be a co-ordination function of NZ Council. Regional Fish and Game Councils can choose the priority order that they wish to adopt and review operational and governance policies.

#### 7. Strategic Planning

- a. **Implementation of Strategic Planning** there needs to be a tiered approach to developing and implementing strategic planning:
  - Organisational Strategic Outcomes providing an organisational-wide strategic perspective.
  - Regional Strategic Outcomes providing a link as to how a region acknowledges its contribution to the organisational strategic direction
  - Sports Fish and Game Bird Management Plan a ten-year long-term plan (required)
  - Three to Five Year Strategic Plan to provide direction in project planning and management
  - Annual Work Plan to implement projects that work towards achieving performance targets with an annual budget.

# Issue 2: What do you think about the Governance Review recommendation to merge regions, and on what basis would this be appropriate?

The intent of the Ministerial Review of Fish and Game Governance (2021) was to provide for:

- more efficient regional management structure by amalgamating functions and reducing duplication of effort.
- efficiencies in dealing with other statutory bodies (e.g., Regional Councils) and iwi groupings.

A subsequent Structure Review (Hunt et al., 2022) provided a more objective assessment to have regions of a similar critical mass of budget requirements.

## **Outcome Sought**

To have the ability to amalgamate Fish and Game regions if there is deemed to be a compelling argument to increase efficiency, effectiveness, and/or resilience.

Representation of licence holders is still viewed as a paramount consideration to ensure the are still connected to the organisation.

## **Actions Supported**

Provide a legislative framework to enable the Minister to enable amalgamation of two (or more) regions on request by both regions in agreement.

## **Explanation:**

## Shared Resources Arrangement - Wellington and Taranaki Fish and Game Regions

Taranaki Fish and Game Council are currently progressing a transitional shared resources arrangement with Wellington Fish and Game Council with a view to fully integrating operational and governance functions between the two regions so that core services and representation will be for a region of larger size — i.e. a formal amalgamation.

The two regions are currently operating as two separate business units but have shared operational services arrangements reflected in staff resourcing configurations.

This approach is our response to the recommendations listed in the Ministerial review into Fish and Game governance released in April 2021 to principally to rationalise governance within the organisation but also reduce duplication, provide consistency, and reiterate focus on providing service to licence holders.

We consider that this joint and cooperative response will provide improve effectiveness of outcome services for licence holders by sharing internal staff experience and skills - and additionally lead to some (modest) administrative efficiencies. There has already been benefits of this approach in service delivery across several functional areas such as: communications with and engagement with licence holders, critique of species monitoring programmes, rationalising consistent governance and operational policies, and sharing of engagement styles with mana whenua.

#### **Recognising Unique Regional Capabilities**

One of the findings of the Ministerial review was to recognise the need to preserve the regional presence and local knowledge that makes Fish and Game effective. The regional structure provides an ability to respond to licence holder aspirations, as well as maintaining relationships at an appropriate level with regional planning entities — regional councils and district councils — and mana whenua groups.

## Amalgamations of Regions - Modest Cost Efficiency Gains

There could be some potential efficiencies in operations at the regional level simply by amalgamating into one business unit. However, the marginal cost efficiencies for administration are not hugely significant – and there is still a base level of service performance required – i.e. 'boots on the ground'.

There are at least two viable approaches to increase efficiencies, effectiveness, and resilience – each with their own strengths and weaknesses.

- 1. A formal amalgamation which formalises governance and operational connectivity into one business unit. It will also allow for diversity of skills and numbers of staff albeit across a larger area.
- 2. A shared resources arrangement between two (or more) business units with some benefits in operational effectiveness retained. The governance function which is undertaken on a voluntary basis and low cost could be retained to maintain a connection to local licence holders.

Consideration should be given to the regional structure adjustments recommended by Hunt et al. 2022 – which attempted to link regions so that their budget size and physical size of the regions was more uniform.

There are some potential risks for regions 'going it alone':

- a. There will be inevitable scrutiny of the base funding requirements of new entity—there is an intuitive perception that things will be able to be run at less cost even though these cost savings are modest. Other regions not amalgamating will not be subject to any additional scrutiny and will continue as 'business and usual'.
- b. An amalgamation will result in a single region there will be a loss of one vote at NZ Council and that region will have only one appointee on NZ Council. This risks potentially only one viewpoint representing a much larger region and parochial views on budgeting and resource allocation dominating decision making.
- c. It would be preferable that all regional amalgamations were considered at once to provide fair treatment and process unless there is a compelling reason for two regions to pursue amalgamation for specific reasons. Support the consideration of options based on the recommendations of the Hunt et al. (2022) report or some variation of those findings.

# Issue 3(a): would a reduced number of councillors on each council improve effectiveness and decision making?

The recommendations from the Ministerial Review of Fish and Game Governance (2021) focused on reducing the number of governors, ways to increase diversity, and ways to improve the skill set of governors.

There is still considerable support from licence holders to retain local, elected representatives as governors.

Taranaki Fish and Game Council currently retains up to 8 members.

## **Outcome Sought:**

Governors provide for diversity of expertise to set strategic direction

## **Actions Supported:**

Maintain between 8 to 12 governors for each regional Fish and Game Council.

## **Explanation:**

Fish and Game governors are unpaid. No additional costs so there is no compelling cost efficiencies from 9 to 12 members.

While advice varies most governance advice for modern not-for-profit boards suggest that they comprise not less than 8-9 members and not more than 11-14 members.

When a board is too large, it becomes difficult to manage as a cohesive group. Members of large boards often feel their influence and participation are limited, leading to disengagement.

Small boards can suffer from power imbalances, with one or two members potentially dominating due to their specialised knowledge, and time availability. Members may also be overloaded with tasks. The excessive workload can lead to burnout, causing members to disconnect from the board and the organisation.

# Issue 3(b): would a modest honorarium for councillors recognise and support your voluntary role?

The principle of voluntary contribution to the governance of Fish and Game has been a longstanding tradition and organisational culture.

It has been suggested that offering an honorarium may assist in attracting candidates with better skill sets, and increase diversity. However, cost and perceptions to the licence holder becomes a factor and it would be removing the volunteer imperative.

#### **Outcome Sought:**

That the concept of voluntary contribution by governors to the betterment of the Fish and Game governance and management of the resource be (re)confirmed for all governors.

#### **Actions Supported:**

Retain voluntary contribution for all Fish and Game governors – no payment of honorarium.

Consideration for a modest honorarium for the NZ Council Chair only given the time resources and expertise required to undertake the role.

#### **Explanation:**

Governors are expected to act in a full governance mode (strategy and policy focused, forward-looking and allocating resources to enable the achievement of strategy) but at times move into a volunteer mode to deliver on services.

The following assessment criteria were considered by Taranaki Fish and Game Council that may assist in determining to pay an honorarium to members or not:

- Number of yearly meetings six
- Can we afford to pay governors? NO
- Is the complexity of the organisation such that we need semi-professional governors? NO
- Would payments fit the organisational values? NO

- Will the membership accept governors being paid? Likely NO
- Can we attract and retain the right skill mix for the board without offering fees? YES
- Would it improve the quality and professionalism of the governors? NO
- Would it improve the diversity of people being interested in governors? MAYBE
- Would you likely get better results and outcomes if board members were paid? (e.g. Community Boards, Conservation Boards). NO
- Do you need to supplement the current set of skills of governors with a co-opted member?
  E.g. mana whenua engagement, accounting expertise. POSSIBLY
- How will the internal and external politics play out if some and not all governors are remunerated in some way? IT WOULD BE ALL OR NONE – so NONE
- Are we competing for appropriately skilled directors (particularly independent directors)? NO

Some not-for-profit organisations consider giving the chair a stipend recognising the additional time required.

The Taranaki Fish and Game Council concluded was opposed to any honorarium being paid to members of regional Fish and Game Councils or the NZ Fish and Game Council.

The only consideration for an honorarium that could potentially be justified is for the Chair of NZ Council – based primarily on the time resource component – that might otherwise limit the role to a semi-retired or retired person.

Issue 3(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?

The responsibilities of NZ Council and regional Fish and Game Councils is clear in legislation but regional expectations and level of co-operation is variable.

In recent years, the efforts to develop organisational strategy and involve regional expertise in nationally co-ordinated function outputs has improved relationships between NZ Council and most regional Fish and Game Councils.

The requirements of a regionally appointed NZ Council appointee is to take an organisation-wide perspective to issues. Occasionally the regional Fish and Game Council that appointee the NZ Councillor has an expectation that the appointee is more like a representative to advocate best outcomes for regional interests. This creates tension and instability in that the appointee can be removed at any stage by the regional Fish and Game Council if they are not satisfied with outcomes achieved.

#### **Outcome Sought**

NZ Council effectively co-ordinating common core functions with support from regional Fish and Game Councils.

NZ Council governors to be able to act with an organisational perspective—without the risk of being voted out of office within the three-year electoral cycle - if this the views conflict with regional perspective.

## **Actions Supported:**

That NZ Council governors be elected for a three-year term in line with the Fish and Game electoral cycle.

## **Explanation:**

#### NZ Fish and Game Council Function:

There are several observations that regional Fish & Game councils can make about the functioning of New Zealand Fish & Game Council:

- Represent Fish & Game and licence holders interests at central government level not determine policy in isolation from regions and licence holders.
- Open communication and consultation with regions not control. Currently communication and trust with the New Zealand Fish & Game Council Chief Executive is poor, with a 'siege mentality', New Zealand Fish & Game Council are duplicating regional work in some areas, and regional experience and expertise is not sought or valued.
- Coordination not making the controlling decisions but <u>facilitating</u> regions to represent at regional level key relationships sit with local government regional councils, iwi, and licence holders and this is where things are implemented
- Have a clear strategic plans and objectives. For example, there is no formalised communications strategy. This has likely led to conflicting messages – one week "the rivers are ruined" contrasted by the following week "buy a licence – the fishing is great".

NZ Council can be frustrated by the failure of all regional Fish and Game Councils to readily adopt policy or implement procedures that it has recommended for the betterment of the organisation.

Tensions can develop when there is a perception of control, setting priorities, or conflicting outcomes being sought. The development and implementation of common strategic outcomes and development of clear policy should help reduce the grey areas of operational outputs (when is this regional responsibility or national responsibility?). There needs to be recognition by all entities that they share common goals, threats and opportunities.

## NZ Council Appointee - Stability of Tenure

There are examples of tension between NZ Council appointees and regional Fish and Game Councils that have appointed them. This is generated by the perception that the NZ Council appointee – elected by the region – should represent the views of the regional Fish and Game Council and promote best outcomes for that particular region. The role of the appointee to NZ Council is to provide an organisation-wide perspective – which at times varies from the regional perspective.

The way in which the appointee is elected means that that position is reviewable at any given ordinary regional Fish and Game Council meeting. In effect, the regional Fish and Game Council has the perception that if the appointee can be replaced if they do not promote their views.

Taranaki Fish and Game Council considered options available to maintain stability for the NZ Council for the whole three-year term – and concluded electing an appointee for the full three-year term was appropriate.

The NZ Councillor must be in a position as regional appointee to provide an appropriate information flow in a timely manner to maintain transparency and regional support of actions.

# Issue 3(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)?

Fish and Game needs to retain its relevance to licence holders and other stakeholders to retain its social licence.

First and foremost, it is critical to maintain the confidence of licence holders in the system of electing governors to set strategic direction is still relevant and fit for purpose, the electoral system used to confirm governors for representation, and the quality of the governors elected.

## **Outcome Sought:**

That licence holders and the wider public respect the unique system of representation that Fish and Game has to manage the fish and game resource.

## **Actions Supported:**

Retain current legislation for a person to be eligible to stand for Election as a candidate in a Fish and Game Election.

Retain current eligibility criteria to vote in a Fish and Game election. Taranaki Fish and Game Council seeks auto enrolment on the electoral roll at licence point of sale (i.e. this confirms you are eligible to vote).

Continue working with mana whenua and stakeholder groups to show that expertise that Fish and Game has is credible, relevant and respected.

Enable co-opted members to be able to participate fully in meetings included the right to vote – for co-opted members with specific expertise and/or iwi representatives.

## **Explanation:**

The Fish and Game system is based on the premise that it is a user-pay user-say system that has democratically elected governors providing strategic direction to the management of Fish and Game resources in New Zealand.

Taranaki Fish and Game Council governors maintain connection to hunters and anglers through communications, attendance at hunting and fishing club meetings, and direct interaction with individual hunters and anglers.

They are well-respected by the hunters and anglers and there are normally more candidates than councillor positions — so this provides those on the electoral roll an element of choice.

Eligibility to Stand in Election: The Conservation Act s26U (2) defines the eligibility criteria for membership on a Fish and Game Council is to hold a current Fish and Game licence – and s26U (4) further defines eligibility as not being a person who is a bankrupt or has been convicted of an offence involving sports fish or game or protected wildlife (being an offence under this Act or any other Act).

There could be an added criteria of a 'fit and proper person' but this would need to be in-line with other elected offices in New Zealand. In most cases — a single disruptive person as a governor should not cause the Council to become dysfunctional per se. A 'fit and proper person' meets criteria relating to character, competence, law-abiding, and reputation. This would have to align with eligibility for other elected officials in New Zealand for public entities.

**Eligibility to vote:** Every NZ Resident who holds an adult whole season licence that entitles that person to hunt game or fish for sports fish in a particular region in the season immediately preceding the next election, or in the *period of 3 months before the close of the roll for any election* 

This was relevant prior to the licence being a nationwide licence (i.e. regional inter-availability of licence to be able to fish and/or hunt in any region).

Electoral Roll – Eligibility to vote: Conservation Act 1987 s26Y (1) and (2)<sup>6</sup> defines how to confirm your registration on the electoral roll for Fish and Game elections.

Many hunters and anglers will not understand the significance of enrolling on the electoral roll at licence purchase – as elections only occur once every three years and there is no supporting information as to what the hunter or angler is signing up to – to be on the roll.

Taranaki Fish and Game Council considered that an automatic enrolment and 'opt-out' option of registering on the electoral roll for Fish and Game elections is preferred than the current 'opt-in' option – i.e. the licence holder should be automatically enrolled on the electoral roll for a region unless they specifically do not want to vote.

Other options were discussed on changing the composition and interactions of Fish and Game Boards:

- (1) **Diversity** how to promote a diversity of candidates that are principally interested in hunting and fishing and want to contribute to its strategic governance and management
- (2) How improve or **retain appropriate skill sets** of governors and how to develop skills of those governors who already are passionate about their pursuit.
- (3) Inclusion of co-opted members the ability already exists in the Conservation Act 1987 26V (1) and (2)<sup>7</sup> to co-opt members. Co-opted members should be able to vote at the discretion of Council.

<sup>&</sup>lt;sup>6</sup> Conservation Act 26Y Eligibility to vote

<sup>(1)</sup> Every New Zealand resident who holds an adult whole season licence that entitles that person to hunt game or fish for sports fish in a particular region in the season immediately preceding the next election, or in the, of members of the Fish and Game Council for that region shall be entitled to vote at that election.

<sup>(2)</sup> A person may choose to participate in any such election either at the time when he or she purchases a licence to hunt or fish or at any subsequent time before, but not later than 1 month before, the next election is held.

<sup>&</sup>lt;sup>7</sup> Conservation Act 26V Co-opted members

<sup>(1)</sup> Any Fish and Game Council may co-opt for such term as it thinks fit any suitable person or persons to be a member or members of the Council.

<sup>(2)</sup> A co-opted member of a Council shall be entitled to attend and speak at any meeting of that Council, but shall not be entitled to vote on any question.

- (4) How to reflect engagement with mana whenua given the multiple iwi groupings in the region. Advice would be welcomed on how best to consult with a structure and process which is respectively and enduring.
- (5) How best to maintain relationships with other stakeholders including landholders, industry advocates, and various agencies.

Taranaki Fish and Game have undertaken considerable work (with limited resources) to establish collaborations and engage with stakeholders. It would be welcomed to receive additional advice on how we can further develop these interactions to retain relevance, be solutions focused, and contribution to shared outcomes.

## What does the organisation want to become in order to maintain its relevancy and statutory mandate:

## 1. Customer Service Led Organisation

- Fish & Game should be more licence holder focused with licence sales portrayed not as a tax, but rather an opportunity and experience.
- Marketing customer focus and meeting licence holder needs, not dictating to them.
- Providing opportunity and experience for licence holders and potential recruits to the pursuits.

## 2. Credible Resource Manager:

- Need to maintain level of scientific credibility as leaders of water management and species management knowledge.
- Engaging in collaborations with mana whenua and other stakeholders including landowners

#### 3. Recreational Management Focus:

- Managing and maintaining public access.
- Managing world class fishing opportunities for range of experiences: wilderness experience, easily accessible to urban population.
- Managing and enhancing exceptional water fowling and upland gamebird harvest opportunities
- Increased focus on health and well-being though outdoor recreation.

# Issue 3(e): should the criteria under which the Minister currently has the power to remove elected members be reviewed?

Current legislation allows for the Minister to remove individual Fish and Game Council members or entire Councils for non-performance or dysfunction. Grounds for individual removal include bankruptcy, inability to perform duties, neglect, misconduct, or convictions related to sports fish, game, or protected wildlife offenses. Recent examples of disruptive behaviour, often covered by the media, include aggressive conduct, swearing, inappropriate remarks, leaking confidential documents, and negative media comments. If a Council seeks removal, they must present evidence of misconduct to the Minister, who will assess the severity and impact on governance.

## **Outcome Sought**

If an individual councillor is causing disruption to good governance practice and the smooth functioning of a Fish and Game Council, then there should be a mechanism for the Minister to intervene and remove that councillor.

## **Action Supported**

The Minister currently has the power to remove an individual councillor and the current provisions in the Act are sufficient to achieve this.

In dealing with cases of alleged misconduct: the standards of integrity and conduct<sup>8</sup> for elected representatives on public entities provide clear guidance and expectations of conduct. If there are any issues that arise from individual councillors that do not follow this code of conduct, there should be internal Fish and Game policy and process for documenting behaviours, incidents, and disputes. This process would provide an output of documentation (of what is legally required) to support contention of misconduct. Only after this process would assistance be sought from the Minister to intervene.

## **Explanation**

There are currently sufficient powers for the Minister to intervene and remove an elected Fish and Game councillor.

In circumstances where a councillor is being intentionally disruptive and does not follow good governance practices including collective responsibility of decisions then this should follow a formal disputes process (akin to an employment dispute) where appropriate evidential documentation is provided to support alleged misconduct.

The good governance practice of undertaking regular annual performance reviews of governors - and collective governance performance - should help to identify code of conduct issues and sources of potential conflict.

<sup>&</sup>lt;sup>8</sup> A code of conduct issued by the State Services Commissioner under the State Sector Act 1988, section 57

## TARANAKI FISH AND GAME COUNCIL

The Chairman
Taranaki Fish and Game Council

## North Taranaki Rod & Gun Club - Restricted Reserve

The North Taranaki Rod & Gun Club was incorporated under the "Incorporated Societies Act 1908" on 28<sup>th</sup> June 1948. After a long history, the Club has been in recess since 2007 and a majority of members are now either deceased or too old to hunt and fish.

Clause 28 of the Deed of Incorporation provides that in the event of the winding-up of the Club, such balance in hand after the discharge of all liabilities shall be handed to the Taranaki Acclimatisation Society or to such body as may be handling Acclimatisation affairs in the District (i.e. Taranaki Fish & Game). As the Club was essentially an angling club in its latter years, several of the last remaining members informally agreed that the use of these funds should be restricted to "the development of fishing opportunity within the former Taranaki Acclimatisation Society area, with a particular focus on Lake Mangamahoe".

In that regard, the Club funded materials for both casting platforms at Lake Mangamahoe (1994/95 and 2019/20) with materials and digger hire for the newest platform costing some \$5,000. There has been agreement from Manawa Energy and NPDC that a third casting platform can be constructed at Lake Mangamahoe, but agreement has yet to be reached with NPDC about its preferred location at "the roundabout".

At the wind-up of the Rod & Gun Club accounts there were available funds of \$26,857.68, which was deposited into the Taranaki Fish & Game account on 24<sup>th</sup> January 2025. It is recommended that they be held as a restricted reserve, with interest accruing back to the principal.

## RECOMMENDATION

 That funds of \$26,857.68 from the North Taranaki Rod & Gun Club be held in a Restricted Reserve and used for the development of fishing opportunity within the former Taranaki Acclimatisation Society area, with a particular focus on Lake Mangamahoe.

Allen Stancliff Senior Field Officer 27<sup>th</sup> January 2025

## Agenda Item 6 NZ Fish and Game Council Business

## **Summary**

NZ Council Appointee to cover key issues from NZ Council Meeting and business conducted.

- a. NZ Council Meeting 13 and 14 December 2024
  - Any matters arising from this or previous meeting(s)
- b. Changes in Approach to Budget Process
  - Implementation of a Zero-Based Budget (ZBB)
- c. HPAI Response by NZ Fish and Game Council
- d. Other NZ Council Business

## **FEEDBACK REQUIRED**

#### Recommendation/Action

Council to move motion to receive the report from the Taranaki Council appointee to NZ Council on NZ Fish and Game Council business for the previous period – including meetings and key issues/actions.



17 January 2025

## NZC CEO Update to Regional Managers

Summary of Fish & Game National Council Meeting #171 (13 & 14 December 2024)

Tēnā koutou.

Below, you'll find a comprehensive summary of the topics and decisions from our latest NZC meeting.

#### **Executive Overview:**

It was the first meeting of the New Zealand Council following the 2024 elections, and it was lovely meet some new faces and say hi to some returning faces. Barrie Barnes was re-elected as the national council Chair and the meeting kicked off with governance expert Graeme Nakhies taking everyone through the expectations and the functions of NZC.

The Council approved the annual meeting and budget schedule accepting changes proposed by North Canterbury Fish & Game and Otago Fish & Game Councils. Key items of discussion were the Health and Safety Report, NZ Fish & Game Council Draft Performance Report, RMA fund updates and application on RM Reform Phase 3 and National Direction, research into (1) Licence holder perceptions and (2) economic assessment of New Zealand's trout fisheries, the staff development application fund, Sports Fish and Gamebird Management Plan policies and guidance, and High Pathogenicity Avian Influenza.

#### New Zealand Fish & Game Risk Register

The Risk Register was presented to the Council. Risks around organisational culture and cohesion, wellbeing, and resilience remain high despite the establishment and implementation of a significant body of work over the last 2 years to address these risks. Other risks on the register that remain high are New Zealand Council Staff stress and wellbeing, support for the financial management of NZC along with support to the GBHT and Fish & Game Regions, New Zealand Environmental Management Legislation reform, Conservation Law Reform, licence holder recruitment, reactivation, and retention, and biosecurity.

Two further Items had developed since the risk register paper was published at meeting 170. These were the provision of financial support for New Zealand Council - a consultant has been brought in to help assist with the financial work. Plus there have been some developments around the risk of High Pathogenicity Avian Influenza (HPA). More discussion of this issue occurred later in the meeting.

New Zealand Council STATUTORY MANAGERS OF FRESHWATER SPORTS FISH, GAME BIRDS & THEIR HABITATS

Level 1, Unit 2, 166 Featherston St, Wellington 6011 | PO Box 25-055, Wellington 6146, New Zealand
Phone 04 499 4767 | Email nzcouncil@fishandgame.org.nz | fishandgame.org.nz



#### Health and Safety Report

The Health and Safety Report is intended to provide an update to NZC on Health and Safety across the organisation as well as in relation to the NZC team. An important requirement of NZC is to exercise due diligence to ensure that the entire organisation complies with health and safety obligations. This includes understanding the risks of the workplace and ensuring the organisation has the polices, processes, and resources in place to avoid, and minimise risks.

In supporting the organisations H&S requirements, the NZC CEO has established a H&S committee which is facilitated by Adrienne Murray. The committee consists of the following team and meets every 2<sup>nd</sup> Monday (11am online):

- Adrienne Murray (NZC);
- Steve McKnight (CSI);
- Davey Jones (Hawkes Bay);
- Karen Crook (Nelson);
- Danielle Lelievre (Ak/Wgtn); and
- Samantha May (NZC)

The H&S committee considers and advises on:

- Any incidences, near misses, or future potential H&S matters reported by the regions or by NZC;
- The committee provides advice on any changes to policies, processes, or ongoing training, that
  may be required to ensure the organisation continues to meet H&S legislative requirements and
  provides a safe and supportive organisational working environment;
- Reviews current national and regional policies and identify policy/ process gaps or/and amendments;
- Provides a list of policies or /and processes that they recommend are put in place and a priority list with timeframes for implementation;

It is important to remind everyone that all incidents or near misses need to be recorded and we seek that they are communicated up to New Zealand Council. Even where a near miss does not result in an injury it is important that it is recorded. NZC is working to create an environment and organisational culture of transparency and where the whole organisation can learn from a region's/ NZS experiences. A good reporting framework also allows F&G to identify trends across the country and put in place preemptive processes to ensure risk are adequately avoided/ mitigated.

The New Zealand Fish & Game Council is reviewing Health and Safety across Fish & Game and proposing policies in order to ensure Fish and Game is meeting its obligations as a good employer along with Health and Safety legislative requirements. This work is also intended to increase efficiencies across Fish & Game by avoiding duplication of effort and utilising experts.



The New Zealand Fish & Game Council approved for regional Fish & Game Council consultation and feedback, a proposed fatigue management policy. The policy was released for regional consultation 28 May 2024. At this stage only CSI and Hawkes Bay have provided feedback.

NZC sought additional amendments to the draft policy to consider Fatigue Management in relation to governance, along with highlighting significant concerns in relation to potential fatigue associated with driving for long distances.

Regions are invited to consider and provide feedback on the Fatigue Management Policy. Feedback is due by the 20th March 2025.

It is noted that for those regions which are implementing Maritime Functions, they are required to have an operative Fatigue Management Policy in place now in order to meet Maritime legislative requirements.

[draft Fatigue Management Policy attached]

Once the New Zealand Fish & Game Councils considers regional feedback, and if NZC adopts the policy, it will become binding on Fish & Game regions under section 26C(1)(a) and s26Q(1)(e)(v) of the Conservation Act 1987.

s26C Functions of New Zealand Fish and Game Council

- (1) The functions of the New Zealand Fish and Game Council shall be -
- (a) to develop, in consultation with Fish and Game Councils, national policies for the carrying out of its functions for sports fish and game, and the effective implementation of relevant general policies established under the Wildlife Act 1953 and this Act:

s26Q Functions of Fish and Game Councils

- (1) The functions of each Fish and Game Council shall be to manage, maintain, and enhance the sports fish and game resource in the recreational interests of anglers and hunters, and, in particular, -
  - (e) in relation to planning
    - (v) to implement national policy determined by the New Zealand Fish and Game Council

It is noted that NZC can audit regions against National Policy under s26C(1)(j) of the Conservation Act 1987.

26CFunctions of New Zealand Fish and Game Council

- (1) The functions of the New Zealand Fish and Game Council shall be—
  - (a) to develop, in consultation with Fish and Game Councils, national policies for the carrying out of its functions for sports fish and game, and the effective implementation of relevant general policies established under the <u>Wildlife Act</u> 1953 and this Act:...
  - (i) to audit the activities of Fish and Game Councils

New Zooland Council STATUTORY MANAGERS OF FRESHWATER SPORTS FISH, GAME BIRDS & THEIR HABITATS

Level 1, Unit 2, 166 Featherston St, Wellington 6011 | PO Box 25-055, Wellington 6146, New Zealand
Phone 04 499 4767 | Email nzcouncil@fishandgame.org.nz | flahandgame.org.nz



Page 30 of the NZC board pack included a table summarising the status of policies and procedures across all regions (updated 25/11/2024). The NZC CEO stated that the inclusion of this work was not authorised and the table was materially incorrect. It was to be struck from the board pack, and as such has been deleted from the publicly available material. This work is ongoing and will be included once it is finalised and has been confirmed by the regions.

Regional Fish & Game Councils are kindly asked to share their H&S update papers with NZC staff, so that the team can consider these reports in their update to NZC on H&S matters across the organisation. This is also to enable the timely consideration of any incidences, accidents, or near misses by the H&S committee.

#### RMA/Legal Fund Update & Applications:

There is a huge amount of work that we have in front of us as a result of the change of Government. The coalition are looking at wholesale reform to the RMA, plus reviews of the Biosecurity Act, Conservation Act, Arms legislation, and freshwater framework. The NZC Chair's view is that this is a very significant aspect of the work Fish & Game engages in on behalf of hunters and anglers, and that our current budget is insufficient for this work.

#### RMA/Legal Fund paper [attached]

An application was put to NZC from the NZC CEO seeking funding to engage in the Governments National Direction and RM Reform phase 3 work. The application for \$98,000 was granted to cover the RMA phase 3 reform, replacement NPS-FM, and to support development of an agricultural consenting framework. The spend is for legal, ecological, and agricultural expertise as well as Kahu Environmental Planning. The particular experts that are proposed to be bought on have been selected because of the relationships they have both across central government a wider group of stakeholders, which will be beneficial to Fish & Game in securing positive outcomes for hunters and anglers. The application to engage on the Governments National Direction and RM Reform Phase 3 had been supported in principal by the Regional Managers/ CE's at their in person meeting on the 14 and 15 November 2024.

NZC discussed the practice notes that have been developed, and raised concerns that these may be outdated given the potential changes to the NPS-FWM. The Practice Notes are exception pieces of policy work, representing the latest scientific thinking, case law, and robust planning principals. This works forms Fish & Games policy position, and provides a suite of documents that Regional Councils, and stakeholders can access and engage with. Irrespective of changes to RMA and NPS FW, the Practice notes are a valuable resource which is helpful in framing up Fish & Games planning and more general Government submissions. The Practice Notes are a living document, which will be reviewed and updated as required.

#### Wai Good Policy

NZC also discussed reforms that might lead to charging for the use of public conservation land. The understanding of the NZC CEO is that the Government is looking to charge international tourists for access but would only seek to charge New Zealanders for the use of facilities. Hunters and Anglers have strongly opposed charging New Zealanders for access.



#### Licence Holder Survey 2024:

The Council was excited to hear about the results of a recent survey conducted by Dr Humphrey Walker on the priorities, value, and performance of Fish & Game New Zealand as perceived by licence holders.

This survey will assist NZC track progress year on year in our Statement of Service Performance priorities, and builds on the survey by Primary Purpose in 2023. The survey should not be used in an of itself, to inform budget and operational work plans. It should be considered alongside other information we have, including work on R<sup>3</sup>, and other research and insights.

The survey highlighted that the top priorities for licence holders are access (working to ensure access to waterways), ecological monitoring (monitoring the ecology of rivers, lakes and wetlands), fish population monitoring (monitoring fish populations and spawning sites) and advocacy (participating in legal process for healthy freshwater habitats). Interesting findings were that younger licence holders (under 45) and female respondents prioritised environmental concerns more, while older (65+) male respondents prioritised access.

Overall 60.6% of respondents rate Fish & Game's performance as good, while only 7.1% rated it poorly.

#### NZIER Economic Contribution of Freshwater Angling Report:

The other piece of research which generated quite a buzz at New Zealand Council was a report into the economic contribution of recreational angling and an assessment of the wellbeing impacts conducted by NZIER.

The report estimates that domestic and international Fish & Game licence holders spend a total of \$113 - \$139 million per year across their angling trips. This results in a total (direct and indirect) output of between \$96-118 million, \$66 - \$81 million of value added (GDP) and supports between 952 - 1,168 jobs around the country.

The report also found evidence that freshwater angling enhances physical and mental health outcomes and is part of a group of physical recreational activities in which anglers participate such as hiking, kayaking and swimming.

The Council considers this to be an excellent piece of work with powerful conclusions. And they asked how we can maximise the outreach on this piece of work. Part of the contract with NZIER includes an outreach component and we believe that this report merits its own launch and advocacy.

#### **Budget and Meeting Schedule**

The budget and meeting schedule was approved with amendments supporting the feedback from both the North Canterbury and Otago Fish & Game Councils.

[updated meeting and budget schedule uploaded to Managers Sharepoint folder]



#### Staff Development Fund

Two applications for the staff development fund were received, one for Jayde Cooper to attend a two-day hands-on course on otolith preparation and techniques and a second for Adam Daniel to study aquatic invasive species prevention in the USA.

The cost for the two development opportunities was in excess of the \$10,000 budget that has been allocated for staff development. NZC passed two resolutions in relation to this matter:

- 1. The CEO has the delegated authority to award staff development grants, with regard to the views of regional managers, and so long as the cost is within the budget envelope;
- 2. In this instance, the two projects were to be funded with the outstanding funds coming from the research budget.

Congratulations to Jayde Cooper and Dr Adam Daniels.

#### Sports Fish and Gamebird Management Plan Policies and Guidance

The Fish & Game team has done a considerable amount of work preparing a range of documents to support the development of regional Fish & Game Sportfish and Gamebird management plans. The documents have been socialised with regional staff and governance on a number of occasions. The paper to NZ Council was to confirm the adoption of three policies and the Mana Whenua engagement guideline.

A discussion was held on the merits of having these documents as policies rather than guidelines. The NZC CEO explained that the Ministerial review recommended that NZ Council write guidance on this matter, but that the Minister for Hunting and Fishing was clear that his expectations was that the material be adopted as NZC policy, especially given that NZC would be required to advise the Minister on any subsequent Regional Sportsfish and Gamebird Management Plans.

A few further errors were identified in the documents during the debate. NZC adopted the SFGMP consultation policy, key elements and guide as amended by NZC as policies and the Mana Whenua Engagement as guidance.

[documents uploaded to Managers Sharepoint folder]

#### Ranger & Maritime Compliance Reports:

There are still two significant unresolved issues stemming from the lack of consistent policy across the organisation. In particular, NZC is lacking a consistent trip reporting procedure and their remains gaps in the health and safety suite of policies and national processes. There are at least five separate staff intentions policies in place currently just within the regions participating in the NZC maritime program. To be prepared for the next audit and to monitor compliance with the 2023 Maritime NZ audit NZC needs to develop a policy database to track the polices regions have or have not adopted or make that policy mandatory. In addition, it may be prudent to develop a fast-track method for creating new policy in conjunction with regions to better respond to future needs.

New Zealand Council STATUTORY MANAGERS OF FRESHWATER SPORTS FISH, BAME BIRDS & THEIR HABITATS

Level 1, Unit 2, 166 Featherston St, Wellington 6011 | PO Box 25-055, Wellington 6146, New Zealand
Phone 04 499 4767 | Email nzcouncil@fishandgame.org.nz | fishandgame.org.nz



Following this discussion, NZC is going to write back to regional offices asking them to go back and review their health and safety policies and look at their enforcement systems. A H&S Committee has been established to provide greater co ordination across Fish & Game and to collate and disseminate the learnings from regions across Fish & Game. The discussed further above under the Health and Safety topic. NZC staff will present an overarching H&S policy to NZC at its Feb meeting.

#### License Working Party and Sales Update

Despite Fish Licence 2023-24 sales reporting to be 1.8% behind 2022-23 complete season results, 99.2% of the annual sales target was met. The variance nationally was \$83,145 ex GST.

#### Communications Update:

NZC received an update on communications and public awareness work. Advocacy, social licence and brand are key focus areas and the NZC communications Report Dec 2024, has been developed to highlight progress and achievements in these areas. NZC work in communications and advocacy and the organisations ReWild campaign has been designed to support the organisations R³ programmes as well as enhancing the organisations social licence. The Re Wild campaign has been successful in achieving reach and positive brand perception since its launch in November 2023 and 2024, with 6 million impressions across all channels. Ages between 35 and 54 are the most engaged, though reach is across demographics (age, gender, ethnicity). Feedback and analytics of content performance on a range of channels and campaigns is monitored and reported.

#### High Pathogenicity Avian Influenza (HPAI)

The NZC CEO presented a late paper to the New Zealand Council on HPAI. This is a fast-moving situation so the NZC CEO was keen to get the latest information in front of Councilors, and Regions.

HPAI is a highly contagious viral disease that affects both domestic and wild birds. This virus has been circulating globally for many years as several strains. The highly pathogenic H5N1 strain, which can be transmitted to humans and other animals, emerged in 2021 in the northern hemisphere and began to spread globally. New Zealand has not yet recorded a case of the H5N1 strain, but it is expected that it will eventually spread here naturally through migrating birds. Against this backdrop, a recent H7N6 outbreak (also a high pathogenic variety but H7 strains do not have the same capacity to jump species) in an egg farm in Otago was discovered. This outbreak has given MPI, DOC and ourselves an opportunity to test our systems for responding to an HPAI outbreak.

The New Zealand Council discussed various policy approaches in relation to the current H7N6 strain. The most important message at this stage in the response is to stay vigilant for sick or dead birds. If you see three or more sick or dead birds, you are to report them to the Biosecurity Hotline on 0800 80 99 66. Other policies include the cessation of bird banding in Canterbury and Otago (which we understand do not have active banding programs scheduled anyway), although it is okay to continue with bird banding operations in the rest of the country so long as appropriate PPE gear is worn.



Permits for culling wild birds are not to be issued in response to concerns around HPAI. MPI advises that disturbing or culling wild birds is not an effective approach in relation to HPAI as it risks spreading the virus further.

Finally, if H5N1 is discovered in New Zealand and the country moves to Phase 3 on the risk framework, Fish & Game may need to consider ceasing routine operations involving the handling of wild birds until advised further. Note that in Phase 3 where contact with wild birds is necessary and undertaken in conjunction with MPI, PPE level 3 protocols must be adhered to by all Fish & Game staff and volunteers.

NZC supported the following recommendations and requested that regional councils also uphold these positions:

- (i) That Personal Protective Equipment (PPE) level 1 protocols are adhered to for any activities where birds are being handled;
- (ii) That any bird banding operations in Otago and CSI are to cease (as requested by MPI) until further notice, but banding operations outside of Otago and CSI may continue, if PPE level 1 protocols are implemented.
- (iii) That if H5N1 is discovered in New Zealand and the country moves to Phase 3 on the risk framework, Fish & Game will stop routine operations involving the handling of wild birds until advised further. Note that in Phase 3 where contact with wild birds is necessary and undertaken in conjunction with MPI, DOC or Te Whatu Ora, PPE level 3 protocols must be adhered to by all Fish & Game staff and volunteers. (iv) That permits for disturbing or culling wild birds are not to be issued as a mechanism to address concerns around HPAI transmission from wild birds to farmed birds or more generally as a response to HPAI concerns.

NZC adopted the HPAI Communications Plan.

[NZC HPAI paper, including recommendations, PPE levels and requirements, and NZC adopted communications plan attached].

Note that the HPAI situation in New Zealand has the potential to change quickly, which may require agility in relation to the NZC recommendations.

#### **POLICIES**

Please note that once the New Zealand Fish & Game Councils consults with the regions and gives proper and due regard to their feedback, that if NZC adopts the policy it will become binding on Fish & Game regions under section 26C(1)(a) and s26Q(1)(e)(v) of the Conservation Act 1987. It is also noted that NZC can audit regions against National Policy under s26C(1)(j) of the Conservation Act 1987.

This section has been included as it has come to the notice of the Council that there may be some confusion as to the legislative status of NZC policy and its implications on regions



#### **Approved Policies:**

Sportsfish and Gamebird Management Plan policies and guidance

#### **HPAI** recommendations

NZC supported the following recommendations and requested that regional councils also uphold these positions:

- (i) That Personal Protective Equipment (PPE) level 1 protocols are adhered to for any activities where birds are being handled [HPAI NZC paper]
- (ii) That any bird banding operations in Otago and CSI are to cease (as requested by MPI) until further notice, but banding operations outside of Otago and CSI may continue, if PPE level 1 protocols are implemented.
- (iii) That if H5N1 is discovered in New Zealand and the country moves to Phase 3 on the risk framework, Fish & Game will stop routine operations involving the handling of wild birds until advised further. Note that in Phase 3 where contact with wild birds is necessary and undertaken in conjunction with MPI, DOC or Te Whatu Ora, PPE level 3 protocols must be adhered to by all Fish & Game staff and volunteers. (iv) That permits for disturbing or culling wild birds are not to be issued as a mechanism to address concerns around HPAI transmission from wild birds to farmed birds or more generally as a response to HPAI concerns.
- (iv) Adopt the Fish & Game New Zealand HPAI Communications Plan [HPAI NZC Paper]
- (v) Note that the HPAI situation in New Zealand has the potential to change quickly, which may require agility in relation to the NZC recommendations.

#### **Draft Policies for Regional Consultation:**

#### Fatigue Management Policy

Deadline for Feedback is 20 March 2025

#### Conclusion

I hope you enjoyed this summary of the NZ Council meeting. I look forward to working with this Council for the term and together with the wider organisation, shaping the future of Fish & Game, and ensuring that fishing and hunting remain part of the fabric of New Zealand and our culture.

As usual, I welcome any questions or clarifications regarding the matters in the letter or any other matters of relevance.



Nāku iti noa, nā

Corina Jordan

**Chief Executive Officer** 

New Zealand Fish and Game Council

HPAI Update and Recommendations
New Zealand Fish and Game Council Meeting 171 - 13 & 14 December 2024

Pr	Prepared by: Ros Connelly and Maggie Tait			
Kā	brero ta	aunaki - Summary of considerations		
Pι	ırpose			
1.	To outline the general context and risks associated with the high pathogenicity avian influenza virus, provide a situation report on the H7N6 avian influenza detection at an egg farm in rural Otago and recommend immediate actions and policy decisions in relation to HPAI.			
Fil	nancia	l considerations		
	⊠ Nil	☐ Budgetary provision ☐ Unbudgeted		
	sk □ Lov gā taun	/ ☑ Medium ☐ High ☐ Extreme  aki - Staff Recommendations		
Th	at NZC	);		
2.	Receive the information,			
•		the following recommendations and request that regional councils also d these positions:		
	(i)	That Personal Protective Equipment (PPE) level 1 protocols are adhered to for any activities where birds are being handled (see Appendix 2)		
	(ii)	That any bird banding operations in Otago and CSI are to cease (as requested by MPI) until further notice, but banding operations outside of Otago and CSI may continue, if PPE level 1 protocols are implemented.		
	(iii)	That if H5N1 is discovered in New Zealand and the country moves to Phase 3 on the risk framework, Fish & Game will stop routine operations involving the handling of wild birds until advised further. Note that in Phase 3 where contact with wild birds is necessary and undertaken in conjunction with MPI,		

- DOC or Te Whatu Ora, PPE level 3 protocols must be adhered to by all Fish & Game staff and volunteers.
- (iv) That permits for disturbing or culling wild birds are not to be issued as a mechanism to address concerns around HPAI transmission from wild birds to farmed birds or more generally as a response to HPAI concerns.
- 4. Adopt the Fish & Game New Zealand HPAI Communications Plan as set out in Appendix 3.
- 5. Note that the HPAI situation in New Zealand has the potential to change quickly, which may require agility in relation to the NZC recommendations.

#### Executive Summary - Whakarapopoto

- 6. High pathogenicity avian influenza (HPAI) or bird flu, is a viral disease of birds and is spreading globally, causing widespread losses of poultry and wild birds, and spillover infections in mammals. The H5N1 2.3.4.4b strain, which is particularly devastating, has spread throughout the world but has not yet been discovered in Oceania. MPI is the lead agency for bird flu response in New Zealand.
- 7. On 2 December 2024, MPI confirmed detection of H7N6, a subtype of avian influenza HPAI (High Pathogenic Avian Influenza) at a rural Otago commercial egg farm, representing the first detection of HPAI in New Zealand poultry.
- 8. Key points and Recommendations
  - This is not the H5N1 strain that is causing global concern,
  - The H7N6 strain appears to have mutated from low pathogenic strains already present in NZ,
  - MPI has implemented biosecurity controls at the affected Otago farm,
  - There are no reports of illness in wild birds to date, but people need to be vigilant for signs of sickness or mortality and report three or more sick or dead birds to Biosecurity NZ Hotline 0800 80 99 66 and NZC,
  - Fish & Game are encouraging heightened biosecurity protocols for all staff, hunters and members of the community who are dealing with wild birds.
  - Food safety is not a concern regarding the consumption of wild game birds, provided usual food safety protocols are followed.
  - NZC are advising regions to follow PPE level 1 protocols for any activities where birds are being handled. In the event of an H5N1 outbreak, the organisation will move to PPE level 3 and routine operations where wild birds are handled are to cease pending further information.
  - MPI has advised that any planned banding operations for Otago and CSI should cease until further notice due to the outbreak of H7N6. Banding operations outside of Otago and CSI may continue, if PPE level 1 protocols can be implemented. Ongoing testing of birds for virus monitoring is recommended.
  - MPI and DOC have advised that Fish and Game should not issue permits for culling wild birds as a mechanism to address concerns around HPAI transmission from wild birds to farmed birds,
  - MPI and DOC may request Fish & Game support for testing of wild birds for LPAI or HPAI,
  - In relation to Fish & Game's botulism response, the advice from MPI is that regions can continue responding to botulism outbreaks until Phase 3, provided Phase 1 PPE is used. If this advice changes prior to Phase 3, we will let you know,
  - The NZC CEO is the primary point of contact for MPI and DOC over the Christmas New Year period. She will alert Regional Managers, the Chair of the NZC and Regional Chairs if an HPAI outbreak occurs over this period,
  - The NZC team is continuing to monitor worldwide responses and the latest scientific thinking in the design of our recommendations. The

situation is dynamic and as such recommendations and advice will continue to evolve.

#### 9. Immediate actions being taken:

- A Fish & Game cross-organisational regional team was established to work together to draft an HPAI action plan,
- The NZC CEO has established regular meetings with senior leaders across MPI and DOC to ensure timely flow of information and a professional and coordinated response across the organisations to HPAI,
- MPI and DOC have been reviewing the Fish & Game Draft HPAI Action Plan,
- NZC staff have a direct relationship with MPI comms team and are working collaboratively to work up the communications and engagement strategy and key messages. This includes targeted comms resulting from the H7N6 outbreak at the Otago poultry farm (Appendix 1),
- Regional Managers have been kept updated and consulted through Regional Managers meetings, in-person managers meeting on 14 – 15 November date and regular communications,
- NZ Council was updated at their August meeting,
- Regional staff have been kept updated through the staff newsletter and an all of staff webinar was held on 10 December; this will be followed by a Councillor's webinar on Thursday 19 December.

#### Background - Takenga mai

- 10. Avian influenza virus strains are described as **low pathogenicity** (**LPAI**) causing no or minimal illness or **high pathogenicity** (**HPAI**) causing severe illness. Influenza viruses are further divided into subtypes based on two proteins on the surface of the virus: the H protein and the N protein. There are 18 different H subtypes and 11 different N subtypes (H1 through H18 and N1 through N11, respectively).
- 11. Genetic analysis of low pathogenicity H5 and H7 viruses suggests that these viruses have circulated for decades amongst birds within New Zealand, with no evidence of recent introductions.
- 12. Influenza viruses evolve rapidly, which means that their genetic code changes over time. This means that a reasonably benign influenza type can mutate into a more concerning type very quickly. In avian species, infections with the H5 and H7 subtypes are of greatest concern because of their potential to evolve into the highly pathogenic form of the virus that can devastate poultry populations and occasionally be transmitted to humans. Why the H5 and H7 subtypes are more prone to evolve into highly pathogenic forms than other subtypes remains poorly understood.
- 13. In 2020, a new H5N1 strain of high pathogenicity avian influenza known as H5N1 2.3.4.4b emerged in the northern hemisphere. It established and has subsequently spread to the United Kingdom, Europe, the United States, and other regions. It has caused large outbreaks in commercially farmed poultry, with devastating consequences.

- 14.In 2023, it was detected in the southern hemisphere. Since then, it has spread through South America to the sub-Antarctic islands and the Antarctic peninsula. It is important to note that to date Oceania remains free of the currently circulating strain of Highly Pathogenic Avian Influenza (HPAI H5N1 2.3.4.4b).
- 15. The typical evolutionary pattern for the avian flu virus is that wild birds are host to the low pathogenicity form of the virus where it is likely to be asymptomatic. Wild birds then come in contact with farmed birds and transmit the virus to them. In the farming environment, the virus mutates into the high pathogenic variety. The high pathogenic variety is then passed back to the wild bird population and then to humans or other mammals including cows. There are cases where humans have caught the H5N1 2.3.4.4b virus from non-bird species and in rare cases humans have passed it to other humans.
- 16. At the beginning of December 2024, a highly pathogenic strain of avian influenza was detected on a commercial rural Otago egg farm. Tests from the Mainland Poultry managed farm have identified a high pathogenic H7N6 subtype of avian influenza. The H7N6 virus is troubling as it has the potential to cause widespread loss to the poultry industry, however this is a different strain to the H5N1 2.3.4.4b strain that is causing international alarm.
- 17. It is believed that the current H7N6 outbreak in Otago is an example of highly pathogenic avian influenza (HPAI) viruses evolving directly from low-pathogenic (LPAI) virus precursors following introduction into domestic poultry, known as a "spillover event".
- 18. In birds, avian influenza viruses are shed in the faeces and respiratory secretions. They can also be spread through direct contact with secretions from infected birds, especially through faeces or through contaminated feed and water. Because of the resistant nature of avian influenza viruses, including their ability to survive for long periods when temperatures are low, they can also be carried on farm equipment and spread easily from farm to farm.
- 19.MPI has established an HPAI risk framework with different phases to help guide the H5N1 response. Each level has different recommendations for PPE (attached as Appendix 2).
  - Phase one: now, focus on being prepared alert but not alarmed.
     Working with poultry industry and wider primary industries sector;
  - Phase two: HPAI is closer to NZ (Ross Sea area of Antarctica/Australia)
     broader awareness raising;
  - Phase three: HPAI is here response-type approach to communication;
  - Phase four: HPAI is established in the wild bird population.

#### Discussion - Korerorero

#### Concerns for Fish & Game

20. The concerns for Fish & Game are primarily focused on (i) the health of our wild bird populations (and any staff, hunters or members of the community coming into contact with wild birds), (ii) the social licence to ensure sustainable populations of waterfowl and game birds continue to be treated as treasured and respected taonga and (iii) the financial and organisational consequences for Fish & Game should cancellation of a hunting season become necessary.

#### Health Aspects

- 21. The globally circulating strain of avian influenza H5N1 2.3.4.4b can cause mass mortalities in many species of wild birds as well as other non-avian wildlife species and may represent a population level threat to some wildlife hosts, impacting biodiversity. Other strains of HPAI are less likely to cause disease in wild birds and mammals. Low pathogenicity strains are unlikely to cause disease in wild birds or other wildlife species but need to be monitored due to the potential of H5 and H7 subtypes to mutate into HPAI forms when introduced to poultry.
- 22. The most obvious sign of HPAI is several sick or dead birds. Sick birds may appear dopey; display lethargy/reluctance to move, droopy head, panting and nasal secretions, lack of co-ordination, blindness and trembling. The symptoms are similar to botulism, a bacterial disease present in New Zealand.
- 23. The key message at this stage of the avian flu response is to report sick or dying birds to Biosecurity New Zealand's Exotic Pest and Disease hotline 0800 80 99 66. The specific instructions are to:
  - If a significant number of birds (three or more) are observed in a group sick or dying, report it to the hotline 0800 80 99 66,
  - Record a GPS reading or other precise location information,
  - Take photographs and/or videos of sick and dead birds,
  - Identify the species and estimate the numbers affected.
  - Note how many sick or freshly dead are present as well as total number present.
  - Follow Biosecurity New Zealand instructions for handling of sick or dead birds,
  - Also inform NZC of the finding as soon as practicable and enter into a national Fish & Game database.
- 24. Although the H5N1 2.3.4.4b virus is not yet present in New Zealand, there are sensible precautions that staff and hunters must take:
  - Maintain a heightened awareness of disease risk when working with wildlife,
  - Always maintain good biosecurity and hygiene practices to prevent disease spread and protect yourself,
  - Scrub and disinfect all your equipment, boots & clothing between sites,
  - Clean your hands and equipment between handling each bird e.g. alcohol wipe.
  - Employ good personal hygiene, this includes not hunting when you are sick or are immunocompromised,

- Regional Fish & Game staff are requested to follow MPI PPE Level 1 protocols for any activity where birds are being handled. However, the alert levels and PPE requirements will change depending on the virus risk so Fish & Game staff and hunters will need to be agile in our response,
- See Appendix 3 for the Fish & Game HPAI Engagement and Communications Strategy.
- 25. It is recommended that dogs not be allowed to retrieve or come in contact with birds that appear sick or have been found dead. Hunters should also not feed their dogs raw meat from harvested birds nor allow them to come in contact with discarded carcasses or entrails. All dogs should be up to date with their vaccinations and do not bring them hunting if they are sick or injured.
- 26. Banding operations that concentrate birds or expose birds to common capture or holding equipment have the potential to increase the transmission of HPAI among wild birds.
- 27. Because of the heightened global risk of HPAI, Fish & Game staff in Otago and CSI have been requested to cease all banding operations for population monitoring. Banding operations outside of Otago and CSI may continue, if PPE level 1 protocols can be implemented. Ongoing testing of birds for virus monitoring is recommended.
- 28. There is no evidence that people can be infected with HPAI by eating thoroughly cooked poultry (including duck), eggs, or foods that contain them. The internal temperature of a cooked bird should reach at least 73°C for 2-3 minutes. Eggs should be cooked until the white is completely firm and the yolk begins to thicken. Usual food safety protocols including keeping raw meat separate from other foods, ensuring equipment and surfaces are clean and correctly chilling, freezing and defrosting of food is to be followed.
- 29.It is not improbable that the first sign of H5N1 2.3.4.4b in New Zealand will be discovered amongst wild birds by members of the public. It is therefore critical that everyone working with birds is alert to the signs of HPAI and protocols for reporting.

#### **Botulism**

- 30. In relation to Fish & Game's botulism response, the advice from MPI is that, while we are in HPAI risk level Phase 1, we can continue our standard operations regarding collection of birds, so long as Phase 1 PPE is used. If this advice changes prior to Phase 3, we will let you know.
- 31. If the country moves to alert level 3, all routine Fish & Game activities where wild birds are handled, including botulism response operations, are to cease until advised.
- 32. The current recommended Botulism protocol is :
  - Inform Regional Council or District Council (as appropriate);
  - Inform MPI (hotline for bird deaths 0800 80 99 66);
  - MPI to inform on whether or not birds should be tested for HPAI
  - Record event, location, number of bird deaths, and response;

- Update F&G national database so we can keep a record of outbreaks and changes over time;
- Use PPE gear if handling birds (gloves, eye protection, closed footwear and either change and disinfect at the end of fieldwork or between sites – Alert Level 1):

#### Social Licence Aspects

- 33. Anseriformes (ducks, swans, geese) and Charadriiformes (gulls, terns and shorebirds) are considered the main natural reservoirs for all avian influenza viruses. However, it is also worth noting that the influenza virus has been confirmed in other wild bird species including rails, petrels, cormorants, penguins, hawks, eagles, owls, sparrows, magpies and blackbirds. Internationally, over 5000 species of birds have been identified as LPAI carriers. Studies on species other than Anseriformes and Charadriiformes are limited.
- 34. Because of the connection between *Anseriformes* and avian influenza, and because the monitoring of avian influenza has predominantly occurred in ducks (so there is better data in relation to the prevalence of the virus in ducks than other avian species) there is a tendency for some to point the finger at ducks as the cause of the HPAI situation.
- 35. This is an unhelpful response and not based in the scientific learnings. Furthermore, any attempts to cull large numbers of birds could be counterproductive and likely illegal.
- 36.MPI has advised farmers and hunters against actively culling or dispersing wild birds because it can increase the spread of HPAI. Disturbing groups of wild birds might cause them to scatter and spread the disease further. Other birds will quickly move into the vacated space and may bring the virus with them. Because of this advice Fish & Game are requesting that offices do not issue any permits to disturb or cull game birds around poultry operations as a mechanism to reduce HPAI risk to farmed birds or as a more general response to HPAI, unless advised by MPI.
- 37. Any reports of disturbing or culling birds without a permit should be investigated following the usual processes.

#### Organisational Impacts for Fish & Game

- 38. Should the avian influenza risk in New Zealand worsen, it is possible that one or more game bird hunting seasons may have to be cancelled. This would cause a significant financial loss for Fish & Game and it could have long running consequences for game bird hunting in New Zealand.
- 39. The issue around the financial risk for Fish & Game has already been raised in conversation with Government and New Zealand Fish & Game will develop a strategy on how to maintain hunting capital in New Zealand should we experience the loss of a season.

#### Actions Taken So Far

- 40. Because of the global threat of the H5N1 virus, Fish & Game have already been working with MPI and DOC at the highest levels to develop a joined-up approach to wild bird populations should the disease arrive. The current outbreak of H7N6 has allowed us to test this approach and identify areas for improvements. We are also working with external experts to provide independent advice and help Fish & Game develop our policy direction.
- 41. The key recommendations we are proposing are on 1) safe handling of wild birds and the usage of PPE, 2) the current position on the banding of birds, 3) issuance of permits to disturb or cull wild birds as a response to HPAI, and 4) the cessation of routine Fish & Game operations where wild birds are being handled if we move to Phase 3, until advised differently. The current paper proposes recommendations based on the evidence to date. Our advice may chance as more information comes to light or the risk of the virus changes.
- 42. New Zealand Fish & Game has also sought to inform regional offices and councillors on this emerging situation. As well as regular email updates we propose to hold webinars with technical experts over the next few weeks. We have already held a webinar for staff and a webinar for regional councillors will be held next week. This will be an opportunity for you to ask questions and discuss other operational policies you consider would be of value.

#### Considerations for decision-making - Whai whakaaro ki ngā whakataunga

#### Financial Implications

43. Current response actions can be accommodated within existing budgets.

#### Legislative Implications

44. Operating within existing MPI framework. No additional requirements currently.

#### Section 4 Treaty Responsibilities

- 45. Maintain communication with iwi partners regarding potential impacts
- 46. Consider implications for customary harvest

#### **Policy Implications**

- 47. Review of handling procedures for wild birds
- 48. Update to staff safety protocols
- 49. Update permits to disturb or cull policies

#### Risks and mitigations

50.H5N1 2.3.4.4b incursion in New Zealand resulting in large-scale bird deaths Mitigation: Vigilance in reporting sick or dead birds and heightened biosecurity practices to limit disease spread

- 51. Staff and hunter safety when handling birds. Mitigation: Enhanced PPE and protocols for staff. Communication to hunters on appropriate safety measures;
- 52. Impact on monitoring programs. Mitigation: Alternative surveillance methods/estimates
- 53. Bird culling or bird disturbance from uninformed members of the public Mitigation: Clear messaging and alignment between messaging from Fish & Game, MPI and DOC
- 54. Closure of one or more hunting seasons with resultant financial and hunting capital loss Mitigation: discussions with Government on how to limit loss, development of strategy to guide actions

#### Consultation

- 55. Ongoing communication with MPI
- 56. Regional council engagement
- 57. Staff briefings scheduled

#### Next actions - Ngā mahinga e whai ake nei

- 58. Implement staff and councillor briefing program (Priority: High, Timeframe: This week)
- 59. Establish enhanced monitoring protocols (Priority: Medium, Timeframe: Two weeks)
- 60. Review and update response measures as situation develops (Priority: Ongoing)

## Understanding avian influenza in wild birds



Low pathogenic avian influenza has been present in wild bird populations in New Zealand for over 20 years and many species of wild birds may have strains of the virus.

Internationally, over 5,000 species of wild birds have low pathogenic avian influenza (LPAI).

LPA1 causes few or no signs of illness in wild birds but when it infects chickens, it can mutate into highly pathogenic avian influenza (HPA1) which causes severe illness and deaths.

It's believed this is what caused the current case of HPAI (strain H7N6) at an Otago free-range egg farm. The hens, foraging outside their shed, are likely to have encountered wild birds with LPAI which has mutated into HPAI.

It appears that the Otago event is a rare one-off situation and there is no evidence to suggest that the risk of spread of LPAI from wild birds to poultry has changed.

## Should wild birds be culled to protect commercial poultry?

MPI and the Department of Conservation advise against culling wild birds in relation to avian influenza because it will not prevent transmission and may worsen outbreaks.

Cotting would potentially increase bird movements and cause stress to any native or threatened birds in the trabitat. More birds would move into vacated habitats and on-farm risk will not be reduced.

#### **LPAI** in New Zealand

Biosecurity New Zealand has been carrying out avian influenza surreillance in wild birds for more than 20 years. The H7N6 strain detected at the Otago farm is known to be closely related to LPAI strains present in wild birds in New Zealand. The 1PAI in wild birds does not appear to be causing deaths or severe filmss in the birds carrying it.

#### Spillover to poultry

When LPAI is introduced to of ickens, it can qualate into a high pathogenicity strain (HPAI). This is something that happens over time, not immediately.

The mutation to HPAI happens by chance after the chicken is exposed to the low pathogenicity form of the virus. It does not happen with every exposure to the virus.

There is no evidence that the strain at the Otago egg farm, H7N6, can spread from chickens back into wild birds.

The recent detection of bird fluiss poultry in Otago is the first case of HPAI in New Zealand. It is not the H5N1 strain causing global concern.







#### Are wild birds a risk to poultry farms?

There is no evidence to suggest there has been any recent change in the circulating LPAI viruses in wild birds in New Zealand or that the risk of spread of LPAI from wild birds to positry has changed.

However, changes in animal husbandry with more free-range birds does create the potential for increasing exposure of poultry to LPAI visuous carried by wild birds.

Good on-farm biosecurity and minimising the contact between wild birds and poultry is the recommanded approach to protecting poultry from bird flu.



Te Kümmatanga e Antaaroa New Zesland Government

Sweeter 20

### APPENDIX 2 – Use of Personal Protective Equipment during HPAI

Activity level 1 - Contact with apparently healthy birds (no disease/mortality) and associated

- •Activity level 2 Contact with birds/ sick/dead possibly due to HPAI and associated fomites.
  •Activity level 3 Contact with birds/mammals sick/dead and associated fomites in places known to have HPAI

PPE Level 1	Previous level, plus: BAU blosecurity. Gloves (nitrile or latex) and eye protection should be worn. Footwear (closed and waterproof) and clothes should be changed and, at the end of fieldwork, cleaned and disinfected (eg using SteriGene) before re-using.
PPE Level 2	Previous level, plus: Enhanced levels of biosecurity, facial mask (PFF2, N95 or KN95), protective eyewear, and protective clothing (preferably Tyvek/plastic overalls or waders).
PPE Level 3	Previous level, plus: Two layers of gloves (nitrile or latex) and full-body waterproof clothing (disposable Tyvek overall). Hair should be covered by the overall's hood. There should be no gap between gloves and sleeves (use tape if necessary). Fitted face mask

#### APPENDIX 3 - Fish & Game New Zealand HPAI communications plan

#### Context

New Zealand has confirmed its first case of highly pathogenic avian influenza (HPAI) with the detection of H7N6 at an Otago commercial egg farm in December 2024. While this is not the H5N1 strain causing global concern, it represents a significant shift in New Zealand's avian influenza status and requires immediate communication response.

It still demands careful handling to inform and prepare stakeholders without inciting unnecessary alarm.

Fish & Game has a duty to provide clear, factual guidance on safety protocols and reporting processes.

Additionally, there is ongoing risk of H5N1 HPAI arriving in New Zealand through wild birds. Fish & Game needs to communicate effectively with staff, licence holders, and stakeholders about both the current H7N6 situation and preparedness for potential H5N1 incursion.

Fish & Game should be reinforcing the need for vigilance and readiness. Communication must balance transparency and responsibility, ensuring obligations are met while maintaining public confidence and avoiding hysteria.

Fish & Game has already been sharing our constructive messages around avian influenza in our stakeholder newsletter and shared MPI's campaign on social media, and we will continue with the heartbeat continual messaging.

See an example <u>here</u> in our recent November newsletter and <u>here</u> from May. It was also highlighted in our July, August and November staff newsletters.

It is important that Fish & Game are part of a whole of New Zealand response to this issue. It is potentially significant for people's health and the economy. Our reputational risk of breaking ranks is serious, but also likely unhelpful. Simple clear messages are what's needed and complexity won't be understood.

Fish & Game manages game bird hunting across New Zealand and has direct communication channels with approximately 40,000 licence holders who need clear guidance on safety protocols and reporting procedures.

Communications objectives

- **Inform and reassure** licence holders about the current H7N6 situation and its implications for hunting
- Educate hunters about biosecurity protocols and safety measures when handling game birds
- Establish reporting protocols to ensure hunters know how to report unusual bird deaths
- Build preparedness for potential future HPAI incursions including H5N1

- Maintain confidence in game bird hunting while ensuring safety measures are understood and followed

#### Strategic approach

Communications will take a three-phase approach:

- 1. Immediate Response (December 2024)
  - Address current H7N6 situation
  - Provide clear guidance for staff
  - Establish reporting protocols
  - Have message control avoid causing panic
- 2. Enhanced Preparedness (January-March 2025)
  - Continue to build awareness of HPAI risks and symptoms
  - Educate about biosecurity measures
  - Coordinate with MPI and other agencies
  - prepare communications for H5N1 strain incursion
- 3. Seasonal Readiness (April-May 2025)
  - Pre-season hunter education
  - Distribution of safety guidelines
  - Integration with game bird season communications

#### 4. Distribution channels

- Direct email to licence holders
- Fish & Game website
- Social media
- Both Barrels newsletter
- Reel Life magazine
- Hunting & fishing retailers
- Club networks
- Staff newsletter and emails from CE

#### 5. Key messages

#### **Current Situation (H7N6)**

- First detection of HPAI in NZ but not the H5N1 strain of global concern
- There is no current evidence of spread to wild birds
- Normal hunting activities can continue with appropriate precautions
- Fish & Game is working closely with Biosecurity NZ on surveillance

#### Safety Protocols

- Don't harvest or handle birds that appear sick or are found dead
- Use appropriate PPE when handling game birds
- Practice good hygiene including hand washing
- Clean and disinfect equipment between hunting sites

#### Reporting Requirements

- Report 3+ sick or dead birds in a group to 0800 80 99 66
- Do not handle or move dead birds
- Note location and species if possible

#### **Food Safety**

- Game birds remain safe to eat when properly handled and cooked
- Internal temperature should reach at least 73°C for 2-3 minutes
- Keep raw meat separate from other foods
- Use clean equipment and surfaces

#### **Bird Culling**

- Hunters and farmers are advised to not actively cull or disperse wild birds, because this can increase the spread of HPAI.
- A low pathogenic strain of avian influenza exists in wild bird populations in New Zealand and has done for over 20 years. Many species of wild birds may have strains of the virus.
- Many species of wild birds may have low pathogenic strains of the virus and there is no evidence to suggest that the risk of spread of LPAI from wild birds to poultry has changed.
- Culling wild birds because they may have avian influenza is not justified and we strongly advise against it.
- Culling of wild birds can only be done with a permit. It's important that any
  decision to cull wild birds is based on robust science and evidence.
- Culling wild birds is likely to increase bird movements, as well as causing stress to any native or threatened birds in the area (which could also be present in wetland areas). More birds will move into vacated wetlands and on-farm risk will not be reduced.
- Good on-farm biosecurity and minimising the contact between wild birds and poultry is the recommended approach to protecting poultry from bird flu.

#### LPAI in New Zealand (MPI messages)

 Biosecurity New Zealand has been carrying out surveillance in wild birds for more than 20 years. The H7N6 strain detected in Otago is known to be closely related to LPAI strains present in wild birds in New Zealand. There are no reports or evidence of disease in wild birds from the low pathogenic strain of H7N6.

#### Spillover to poultry

- When low pathogenicity avian influenza (LPAI) is introduced to chickens, it can mutate into a high pathogenicity strain (HPAI). This is something that happens over time, not immediately.
- The strain detected in Otago is not the H5N1 strain causing global concern.
   There is no evidence this strain of high pathogenicity avian influenza, H7N6, can spread from chickens back into wild birds.

- The recent detection of bird flu in poultry in Otago is the first case of HPAI in New Zealand. We believe it may have happened after free-range laying hens foraging outside were exposed to the low pathogenicity virus, which then mutated in the hens to become HPAI. The mutation happens by chance after the chicken is exposed to the low pathogenicity form of the virus, it does not happen with every exposure to the virus.
- There is no evidence to suggest any recent change in the circulating LPAI viruses in wild birds in New Zealand or that the risk of spread of LPAI from wild birds to poultry has changed.
- However, changes in husbandry with more free-range birds does create the potential for increasing exposure of poultry to LPAI viruses carried by wild birds.
- This ongoing risk of infection of poultry with LPAI viruses circulating in wild birds should be addressed with increased biosecurity.

#### Are wild birds a risk to poultry farms?

- There is no evidence to suggest any recent change in the circulating LPAI viruses in wild birds in New Zealand or that the risk of spread of LPAI from wild birds to poultry has changed.
- However, changes in husbandry with more free-range birds does create the potential for increasing exposure of poultry to LPAI viruses carried by wild birds.
- This ongoing risk of infection of poultry with LPAI viruses circulating in wild birds should be addressed with increased biosecurity.
- The Department of Conservation has advised there is no evidence from overseas that this strain of high-pathogenicity H7N6 can spread from chickens back into wild birds.
- For farms in the vicinity of the infected farm, the greatest risk of HPAI infection is from the infected farm. It is not clear if an H7N6 LPAI virus is circulating in wild birds in the vicinity of the infected farm.

#### Other MPI messages:

## How to protect yourself and prevent possible spread

- Although avian influenza viruses rarely infect people, it is important to minimise
  your risk by avoiding sick or dying birds and practicing good hygiene if handling
  wild birds both to protect yourself and to prevent spreading the virus.
- If you are tramping, camping, hunting, walking dogs near bird colonies, or anywhere you might be exposed to wild birds or marine mammals, keep your distance and maintain good hand hygiene.
- Wash your hands with soap and running water or use alcohol hand rubs as frequently, thoroughly, and often as possible. This is especially important before and after contact with animals and their environments.

 Do not touch, handle or collect any dead or dying birds. Leave these alone to prevent disease spread and protect human health. Ensure children and dogs don't touch them either.

#### Advice for hunters:

New Zealand Food Safety's advice on food safety for hunters applies but in particular:

- don't harvest or handle wild birds (or their feathers) if they are obviously sick or found dead
- wash and dry your hands after handling or dressing wild birds
- don't eat, drink or put anything in your mouth while handling or cleaning harvested birds
- wash knives and other utensils, and scrub chopping boards between preparation of raw and cooked foods
- keep raw meat and poultry covered and away from ready-to-eat food, fruit, and vegetables
- cook birds well an internal temperature of 75°C for at least 30 seconds, 70°C for 3 minutes or 65°C for 15 minutes is needed to kill bacteria and viruses
- scrub and disinfect all boots and equipment between hunting sites
- after each hunting trip, wash, or hose down any clothes that have been in direct contact with birds.

## National Gamebird Monitoring Policy and SOPs

#### Proposed Process and timeframes:

- 2023 Regional teams empowered to work together to create SOP's workshop on this at the 2023 Staff Conference;
- Information has been collated and a number of SOPs are drafted, but this work has paused I think mainly due to resourcing constraints;
- NZC CE has now brought on external experts to advise on Policy and SOP's and help review and finalise this work;
- NZC CE is keen to stand up a small F&G technical team to review this work and provide input prior to the policy being finalised for wider circulation to the regions;
- Draft Policy and SOPs to Regional Managers after technical input, for their feedback (20
   March 2025)
- Draft Policy and SOPs to NZC following consultation with Regions and incorporating feedback (12 April 2025);
- NZC to consider draft Policy and SOPs and then if approved send to Regional Fish & Game Councils for consultation;
- Regional Council consultation (April/ May);
- Finale NZC decision (17, 18 June 2025).

#### Programme deliverables:

- Species included in the programme: Mallards, Black Swan, Australasian Shoveler, Paradise Shelduck, Pukeko;
- Introduction to gamebird management in NZ, why monitor (populations, health, harvest), and how to use the data;
- Summary of current F&G monitoring approaches;
- Recommended monitoring approach for each species and how to set up the monitoring programme;
- Templates;
- Recommended Statistical analyses and how to;
- National database.

NZC adopted the recommendations in the HPAI NZC paper (circulated to Managers on the 12 December 2024) and requested that regional councils also uphold these positions:

- (i) That Personal Protective Equipment (PPE) level 1 protocols are adhered to for any activities where birds are being handled [HPAI NZC paper]
- (ii) That any bird banding operations in Otago and CSI are to cease (as requested by MPI) until further notice, but banding operations outside of Otago and CSI may continue, if PPE level 1 protocols are implemented (NB we understand that CSI and Otago are not banding anyway).
- (iii) That if H5N1 is discovered in New Zealand and the country moves to Phase 3 on the risk framework, Fish & Game will stop routine operations involving the handling of wild birds until advised further. Note that in Phase 3 where contact with wild birds is necessary and undertaken in conjunction with MPI, DOC or Te Whatu Ora, PPE level 3 protocols must be adhered to by all Fish & Game staff and volunteers.
- (iv) That permits for culling wild birds are not to be issued as a mechanism to address concerns around HPAI transmission from wild birds to farmed birds or more generally as a response to HPAI concerns.
- (v) Adopt the Fish & Game New Zealand HPAI Communications Plan [HPAI NZC Paper]
- (vi) Note that the HPAI situation in New Zealand has the potential to change quickly, which may require agility in relation to the NZC recommendations.

## **Biography of Hon James Meager**



Member for Rangitata, National Party

Date first elected: 14 October 2023

Member of the following Parliaments: 54th

Rangitata - National Party - 14/10/2023

Current Roles 24/01/2025

Hunting and Fishing - Minister

South Island - Minister

Transport Associate - Minister

Youth - Minister

Justice Select Committee – Chairperson 07/12/2023 to present

James Meager is the National MP for Rangitata, Minister for Hunting and Fishing, Minister for the South Island, Minister for Youth and Associate Minister of Transport. James, 37, was born and raised Timaru with family from both Mid and South Canterbury.

After gaining a Bachelor of Laws and a Bachelor of Arts from the University of Otago, James held a number of roles at Otago University, including as a student coordinator and a strategic projects manager for its Māori health workforce development programme. He went on to work for National MP Chris Bishop, as a press secretary for then-Deputy Prime Minister Paula Bennett and as an advisor to opposition leaders Bill English and Simon Bridges. James then spent three years with Simpson Grierson in Wellington and Christchurch, including as a senior solicitor in the public law litigation team.

Outside of work, James enjoys spending time with his two dogs Alexios (Alex) and Barnabas (Barney), and playing cricket for the Parliamentary Cricket XI aka The Blackbenchers, which he co-captains.

"I'm proud to have the opportunity to stand up for my home and to fight for the issues that matter most to our people. As a local boy, I will work tirelessly to deliver for Mid and South Canterbury as part of a Christopher Luxon-led Coalition Government. My priority is on growing Mid and South Canterbury to ensure it has a sustainable future where individuals and families want to work, live and play. I will proudly represent the people of Rangitata in Parliament, and work tirelessly to support my constituents in our fantastic electorate."

## Agenda Item 7 Public Forum

#### Summary

Invite public for an opportunity to speak to any issues – this may be up to 5 minutes allotted per speaker but is at the Chairman's discretion to allow more time

#### No Decision Required

#### Recommendation/Action

Note any issues brought to the attention of Council during the Public Forum.

## Agenda Item 8 Regional Business - Governance

#### Summary

a. Chairman's Report for Previous Period

Chairman to provide an overview report of key issues since the previous meeting.

This will focus on issues relevant to governance functions but provide an overview of key operational outcomes where appropriate.

b. Response to Letter from Minister of Hunting and Fishing 4 November 2024

Chairman to provide an overview of feedback of any communications back from Minister.

c. Feedback on Governance Training Workshop

Brief discussion on the level of training received and potential additional training opportunities.

#### For Information Only

Recommendation/Action

Council to move to receive the report presented by the Chairman for the previous period since the last meeting of Council.

## Agenda Item 9 Inter-Regional Business - Governance

#### **Summary**

a. Regional Chairs' Forum Update
Brief report from the Chairman of any interactions of the Fish and Game Regional Chairs' Group.

b. Shared Resources Update Update on the shared resources arrangement between Wellington and Taranaki Fish and Game Councils.

#### For Information Only

#### Recommendation/Action

Council to move to receive the report presented by the Chairman for the previous period since the last meeting of Council.

### Agenda Item 10 Strategic Matters

#### Summary

#### a. Strategic Discussion

Consideration of Strategic Direction in terms of responding to strategic planning – both formal and informal processes – that will assist in defining strategic priorities for 2025/2026 and additional resources required for project delivery.

Key elements will include implementation of organisational strategic priorities and outcomes.

Refer to Supporting Documentation papers appended to agenda.

#### **Active discussion on strategic priorities**

#### Recommendation/Action

Provide for defining strategic priorities and how these could be implemented over a five year period - and what elements are required for resourcing in the next Financial Year

#### b. Risk Management Review

Update risk management issues associated with:

Avian influenza H5N1 Strain (HPAI – High Pathogenic Avian Influenza) – no change is risk level

#### c. Iwi Engagement

- Taranaki Maunga receives personhood status.
- Developing a strategic approach to engaging with Mana Whenua and how to incorporate a co-operative process in decision-making.
- Undertake a detailed register of interest in Mana Whenua groupings and contacts (initiated).
- Develop an education programme to upskill staff and governors on tikanga and processes for engagement.

#### For Information Only

#### Recommendation/Action

No action is required.

# Taranaki maunga becomes legal person, Govt acknowledges 'immeasurable harm' inflicted on iwi

NZ Herald·30 Jan, 2025 07:50 PM

Almost a decade of <u>settlement negotiations</u> between the Crown and Taranaki formally concluded today when Parliament voted unanimously to pass a law that formally grants legal personhood to Taranaki maunga (mountain).

The redress bill also acknowledged the <u>historical grievances</u> inflicted on Taranaki's eight iwi by the Crown.

Parliament voted in favour of the Taranaki Maunga Collective Redress Bill this evening, marking the 100th settlement between the Crown and Māori and the end of nine years of negotiations.

Hundreds of descendants of Taranaki's eight iwi gathered at Parliament, many filling the public gallery, to witness their maunga gain legal personhood and the country's Treaty Negotiations Minister Paul Goldsmith formally acknowledge the "immeasurable harm" of the past.

"Today is a historic day for nga iwi o Taranaki," Goldsmith said in the House.

Goldsmith said since the signing of the Treaty in 1840, the Crown's actions had caused the iwi of Taranaki significant grievance. After European settlers established themselves in the area in the early 1840s, the Crown began purchasing land in the Taranaki region.

Māori grew concerned when the Crown began acquiring land from individuals or groups, often without the consent or knowledge of key leaders or the wider community, Goldsmith said. Māori land at the time was typically communally "owned" by multiple if not 100s of people.

In 1860 the Crown used military forces to complete its purchase of land at Waitara, leading to wars between the Crown and Māori, he said. A few years later, the Crown unfairly punished Māori by confiscating 1.2 million acres of Taranaki land, including the mountain.

"The Crown's breaches of the Treaty mean that immense and compounding harm have been inflicted upon the whānau, hapū and iwi of Taranaki, causing immeasurable harm over many decades."

Taranaki lead negotiator Jamie Tuuta, who watched proceedings from the public gallery, said today was an important day for the iwi "as the recognition of our maunga as a legal person, as tūpuna, and as an indivisible and living being is passed into law".

The national park will be renamed Te Papa-Kura-o-Taranaki and the highest peak will have its name changed to Taranaki Maunga.

The Department of Conservation will continue its operational management of Te Papa-Kura-o-Taranaki as a national park, with the public retaining freedom of access.

Goldsmith will deliver a formal apology to Taranaki iwi in the future.

## Agenda Item 11 Policy and Legislation

#### Summary

#### a. Wildlife Act Review

There has been no update as to the priority or timetable but confirmation received that DOC are actively progressing this review.

#### b. Resource Management Act Review

A second RMA amendment bill was be introduced to Parliament in December and is due to become law in mid-2025.

The Government is taking a phased approach to overhauling the resource management system. The Resource Management (Consenting and Other System Changes) Amendment Bill (the Bill) was introduced to Parliament on 9 December 2024 and forms part of what the Government describes as *Phase 2* of that workstream. This phase encompasses targeted changes to the existing system and precedes *Phase 3*, which will see an entirely new Resource Management Act.

Submissions on the Bill are being accepted until 10 February 2025 and the Bill is expected to come into force mid-2025.

The Bill progresses key Government priorities and the amendments relate to five "themes" described as:

- 1. infrastructure and energy;
- 2. housing growth;
- 3. farming and the primary sector;
- 4. natural hazards and emergencies; and
- 5. system improvements.

#### Discharges

The Bill amends the scope of discharge rules under section 70 of the Resource Management Act (RMA), in response to recent Court findings and in alignment with the Resource Management (Freshwater and Other Matters) Amendment Act 2024.

Section 70 limits the circumstances in which regional councils can permit discharges, which currently includes where there are significant adverse effects on aquatic life in the receiving waterbody. The Bill enables regional councils to permit such discharges if those adverse effects already exist and there are standards that contribute to a reduction in adverse effects over a specified time period.

#### c. Fast Track Approvals Act

• Fast Track Approvals Act is now active legislation.

#### d. Arms Act Review

The Government announced in February 2024 that firearms legislation will be reviewed. This includes rewriting the Arms Act 1983, transferring responsibility for that act to the Ministry of Justice, and transferring the Firearms Safety Authority to another department such as the Department of Internal Affairs. Associate Justice Minister Nicole McKee said the Arms Act had been in place for over 40 years, and would be rewritten by 2026.

Government are reforming firearms law and regulation to provide for greater protection of public safety and simplify regulatory requirements to improve compliance.

From 13 January to 28 February, they are inviting public submissions to help guide the rewrite of the Arms Act 1983.

#### e. Organisational Policies

Continuing to liaise with NZ Council and regions regarding defining best practice policy for operational and governance applications.

#### **Draft HR Policy – Managing Fatigue in the Work Place**

Outlines causes and risks of fatigue, and responsibilities to implement suitable control measures to reduce the risks of fatigue.

Further discussion on long-term fatigue or burnout will be required.

Wellington Fish and Game Council has already provided feedback.

Feedback

Recommendation/Action
No Action Required

## **Firearms Legislation Reform**

Government are reforming firearms law and regulation to provide for greater protection of public safety and simplify regulatory requirements to improve compliance.

From 13 January to 28 February, they are inviting public submissions to help guide the rewrite of the Arms Act 1983.

## **Objectives**

The firearms reform programme will deliver a firearms system that:

- imposes controls that protect individuals and the public from firearms related harm
- supports the safe possession and use of firearms and other weapons for legitimate purposes, such as sports, hunting, collecting, and pest control.

## Why they are doing this

Since the Act was passed 40 years ago, it has been changed many times, including in response to events in New Zealand's history where there were many deaths involving firearms. One example of this was on 15 March 2019, where a terrorist attacked worshippers at two Christchurch mosques.

Changes to the Act were often made quickly. This meant that a thorough review of all the rules in the Act was often not possible at the time. This has resulted in today's firearms rules being complicated to understand for a range of firearms users, making it hard for some users to know what to do to comply.

To address this, the Government made a commitment in the Coalition Agreement between the National Party and the ACT Party to reform the firearms system in this Parliamentary term. They committed to making changes to several parts of the firearms system.

This has been broken up into four overlapping phases of work. Phase 1 is now complete, and the other phases are in different stages of development.

## Phase 1: Effective enforcement (improvements to Firearms Prohibition Orders)

This was part of a first 100-days coalition commitment to give Police additional power to search gang members for firearms. This will help prevent high-risk people from legally accessing or using firearms or associating with people who have firearms. The additional powers were enabled through amendments to the Firearms Prohibition Orders system. The Firearms Prohibition Orders Legislation Amendment Act 2024 was passed in September 2024 and the law will come into effect in March 2025.

## Phase 2: Regulating shooting clubs and shooting ranges

This addresses concerns about Part 6 of the Arms Act relating to the controls placed on shooting clubs and shooting ranges in 2020. The bill is currently before Parliament.

## Phase 3: Institutional arrangements for effective and efficient regulation

This involves a review of the Firearms Registry to determine if it is effectively improving public safety. Phase 3 also involves the transfer of the Firearms Safety Authority, regulator of the Arms Act, to another department.

## Phase 4: A systematic rewrite to modernise the Arms Act 1983

This will involve rewriting the Arms Act to ensure it provides for greater protection of public safety, reflects best practice, and is fit for purpose.

#### Public consultation on the Arms Act rewrite

From 13 January to 28 February, we are inviting public submissions to assist us with the Arms Act rewrite. They want to hear your thoughts on what works, what doesn't, and what needs to change.

#### **Discussion document**

The Ministry of Justice have developed a discussion document.

The document divides the Act into seven key themes and seeks your views on key areas within each theme.

Public are welcome to provide feedback on aspects of the firearms system not covered in the document or suggest broader improvements to the firearms system.

## Making your submission

You can make your submission through:

- <u>Citizen Space, (external link)</u> (external link), the Ministry of Justice online consultation hub
- emailing us at <u>firearms@justice.govt.nz</u>
- posting it to

Firearms Policy
Ministry of Justice – National Office
DX SX10088
Wellington

# **Arms Act rewrite**

Public consultation fact sheet

# We want to hear your thoughts on what works, what doesn't, and what needs to change.

We are rewriting the Arms Act 1983 to provide for greater protection of public safety and to simplify regulatory requirements to improve compliance. The rewrite is a key part of the commitment made by the Government in the Coalition Agreement between the National Party and the Act Party to reform New Zealand's firearms system.

## The Arms Act is due for review

The Act, passed over 40 years ago, has undergone multiple amendments, including following events in New Zealand's history where there were many deaths involving firearms. One tragic example of this was on 15 March 2019, where a terrorist attacked worshippers at two Christchurch mosques.

Many changes to the Act were made quickly. This meant that a thorough review of all rules in the Act was often not possible at the time. This has resulted in today's firearms rules being complicated for many firearms users to understand, making it hard for some users to know what to do to comply.

## Your views matter

From 13 January to 28 February 2025, the Government is consulting with the public on the Arms Act rewrite. We want to hear your thoughts on what works, what doesn't, and what needs to change.

During this time, you can make a submission on the Act. Your submission will help the Government identify where the Act is and isn't working.

## Consultation documents

We have developed the Arms Act rewrite discussion document to assist with your submission. You can download it from the Firearms reform webpage. It breaks the Act down into seven key themes and includes a glossary to explain technical terms.

We have also developed a summary version of the discussion document that is shorter and less technical. It is available in English, Arabic, Bengali, Somali, and Urdu languages. Accessible formats will also be provided.

We encourage you to read the discussion document or the summary version before making your submission.

## How to submit your feedback

You can send your submission by email, post or through the Ministry of Justice's online consultation hub. Further details are available on the Firearms reform webpage.

## More opportunities to be heard

This consultation is just the beginning. Public submissions will inform draft policy proposals presented to the Associate Minister of Justice. These proposals will shape the bill, which will be drafted and introduced to Parliament. Once the bill is introduced, you will have another opportunity to provide feedback through the select committee process. The bill is expected to be introduced in late 2025.

For more information and to make a submission visit www.justice.govt.nz/firearms



# **Arms Act rewrite**

Summary version of the discussion document

Ministry of Justice

January 2025



Te Kāwanatanga o Aotearoa New Zealand Government

## Introduction

The Government has committed to improving New Zealand's firearms rules to provide greater protection of public safety and make the rules easier to understand. To achieve this, the Government will rewrite the Arms Act 1983 and update the supporting Arms Regulations 1992, which together make up New Zealand's rules on firearms to keep people safe.

Since the Act was passed 40 years ago, it has been changed many times, including in response to events in New Zealand's history where there were many deaths involving firearms. One tragic example of this was on 15 March 2019, when a terrorist attacked worshippers at two Christchurch mosques. The terrorist killed 51 people and wounded 40 more using a range of firearms, including semi-automatic firearms with large capacity magazines. The Government acknowledges the tragic events that have led to changes to the Act.

Changes to the Act were often made quickly. This meant that a thorough review of all rules in the Act was often not possible at the time. This has resulted in today's firearms rules being complicated to understand for a range of firearms users, making it hard for some users to know what to do to comply.

To address this, the Government has committed to rewriting the Act so that new rules can be established. The new rules will aim to provide for greater protection of public safety, keep firearms out of the wrong hands, make it easier for users to understand, and support compliance.

Most firearms users are law-abiding and responsible. They use their firearms safely in legal activities that provide benefits to our communities and protect our environment, such as pest control or hunting to provide food for their families.

However, we also acknowledge that all members of the public need to have confidence in how firearms are controlled. The safety of our communities needs to be at the heart of an effective firearms system.

## Out of scope areas

Some areas of the firearms system are out of scope for this consultation. This is because they sit outside of the Act or have been or are being considered through other work in the firearms reform programme.

The areas that are not in scope include:

- changes to legislation other than the Arms Act, such as the Crimes Act 1961
- the transfer of the Firearms Safety Authority to a different government department
- the Firearms Registry
- exemptions from holding firearms licences, endorsements, and permits to possess for members of some government agencies to fulfil their duties, such as military operations by the New Zealand Defence Force.

If you want to know more about how we are working through these areas of the firearms reform programme, please visit the Firearms reform webpage: <a href="www.justice.govt.nz/firearms">www.justice.govt.nz/firearms</a>.

## We want to hear your views

We are seeking submissions from all communities in New Zealand to assist us with the rewrite of the Act. We want to hear your views on what works, what doesn't, and what needs to change in the Act.

You are invited to submit your views about the Act during the public consultation period of 13 January to 28 February 2025.

## How to make a submission

There are several ways you can make a submission.

- Make your submission online through the Ministry of Justice consultation hub.
- Email your submission to <u>firearms@justice.govt.nz</u>.
- Post your submission to Firearms Policy, Ministry of Justice National Office, DX SX10088, Wellington.

Please send us your submission by midnight 28 February 2025.

## Official information and privacy

Find out more about how we use your personal information on our privacy page: <a href="https://www.justice.govt.nz/justice-sector-policy/key-initiatives/firearms-reform/privacy">www.justice.govt.nz/justice-sector-policy/key-initiatives/firearms-reform/privacy</a>.

## How your submission will be used

Your submissions will help the Government understand how the Act is and isn't working. Submissions received through this consultation will help us develop proposed changes to the Act for the Government to consider.

Following this, the Government will rewrite the Act and introduce it to Parliament as a bill. We expect this will take place in the second half of 2025.

Once the Government has made decisions about what it wants to change in the Act, the Ministry – Te Tāhū o te Ture will publish a summary of submissions on the Ministry of Justice website. The summary will not include any information that could identify individuals.

## **Discussion document**

To assist you with your submission, we have written a discussion document that outlines the Act and how the current rules work.

The document divides the Act into seven key themes and includes a glossary to explain technical terms. The Glossary of Firearms Terms for the Arms Act rewrite consultation can also be downloaded as a separate document from the Firearms Reform webpage.

You are not required to complete all themes or questions. You are welcome to offer feedback on topics not addressed in the seven themes.

You can download the discussion document on the Firearms reform webpage: <a href="https://www.justice.govt.nz/firearms">www.justice.govt.nz/firearms</a>.

An overview of the themes document and questions to guide your submission are provided below.

# Theme 1: Purpose of regulating firearms access, possession, and use

This section seeks your views on the purpose section and the general principles of the Act.

The purpose of the Act will establish how public safety is supported while providing for the legitimate use of firearms.

This section helps people understand and apply the legislation. It also guides how the legislation is interpreted and how regulators, such as the Firearms Safety Authority (FSA), exercise their powers.

## Questions

- What do you consider the main principles and purposes of the Act should be?
- Are there any additional considerations that should be included?

## Theme 2: Products controlled by the Act

This section seeks your views on how the Act:

- defines what is and isn't a firearm
- categorises firearms and associated products, such as magazines and ammunition
- controls products, who can use them, and how they can be used
- · enables firearms amnesty and buy-back regimes.

Controls help to ensure that firearms are not misused. Misusing firearms can lead to serious injury or the loss of human life.

#### Questions

- In your view does the Act define a 'firearm' well?
- In your view, is the focus on regulating firearms (and associated products) based on the risk profile of each product an appropriate approach to the maintenance of public safety?
- Do you have any other comments on a risk-based approach?
- What product definitions outlined in Appendix 5 of the discussion document do you think need to be reviewed and what changes would you recommend?
- Should there be options to support people to surrender, dispose or modify firearm products that the licence holder can no longer legally use? If so, what should these be?

## Theme 3: Responsible possession and use

This section seeks your views on the Act's rules on:

- possession and use of firearms
- the firearms licencing regime, which provides rules for who can access, possess, and use firearms, and under what conditions.

Rules on responsible possession and use help ensure the safe use of firearms products and provide clarity about what behaviours are not safe or are illegal.

## Questions

- What are your views on the length of time a firearms licence is issued for?
- · Do you have any other comments on firearms licences?
- What are your views on the fit and proper person test?
- What are your views on the minimum age?
- Do you have any other comments on the fit and proper test?
- What are your views on people with a standard firearms licence being able to manufacture products for their own use, including the use of 3D printing?
- Do you think specific requirements are needed for the manufacture of ammunition and firearm parts?
- Do you think the Act provides appropriate controls on manufacturing of firearms and related products?
- What role should the FSA play in ensuring licence holders follow the rules relating to firearms possession?
- What are your views on licence compliance?
- What are your views on the FSA checking of security and storage?
- · What are your views on the role of health practitioners in the licencing process?
- What are your views on rules relating to unlicenced use?
- · What are your views on the regulation of airguns?
- What are your views on the processes for visitor's licences?
- What are your views on endorsements relating to pistols, prohibited firearms and restricted weapons?
- What are your views on the requirements for approved ammunition sellers?
- What are your views on the permit to possess system, and how it interacts with endorsements?
- In your view, are there any areas that would benefit from having more guidance/education?

## Theme 4: Supplying, importing, and buying products

This section seeks your views on the Act's rules on:

- dealer's licences
- import permits.

Firearm, parts, and ammunition supply, purchase and import rules enable firearms to be accessed for legal purposes, while providing a barrier for those who want to use them illegally.

## Questions

- What are your views on standard licence holders' ability to sell privately?
- What are your views on the types of activities that require a person to hold a dealer's licence?
- Do you have views on any other matters relating to dealers?
- What are your views on the fit and proper tests applied to ascertain the suitability of dealer licence applicants?
- Do you have any other views on the rules for licensing dealers?
- What are your views on the dealer licence endorsement and permits system?
- What are your views on licensing requirements for employees?
- What are your views on the rule that only dealers are able to manufacture and supply some firearm items?
- Do you have any other comments on dealers and controls on manufacturing?
- Do you consider the rise of 3D printing requires specific rules to control it? If so, what should these be?
- What are your views on the current rules for a permit to import?

## Theme 5: Compliance, offences, and penalties

This section seeks your views on offences and penalties in the Act and their effectiveness in encouraging compliance.

We need a clear and consistent system that helps firearms users follow the law and provides appropriate consequences for when they don't, to keep all communities safe.

## Questions

- If you are a licence holder, what has been your experience with understanding your legal obligations in the Act?
- Do you think current offences and penalties are contributing to public safety? If yes, how?
- What are your views on the current offences and penalty levels in the Act? Are they too high? Too low?
- Do you think there are other ways we could encourage compliance?
- Do you have any other views on the offences and penalties regime in the Act?

## Theme 6: Cost recovery

This section seeks your views on how the Government sets fees.

The Government provides a variety of services to the public in controlling the possession of firearms. The Act allows the cost of some of these services to be recovered from users.

## Questions

- What are your views on how fees are set or processed?
- · Do you think any changes are required?

# Theme 7: Agencies that control the possession and use of firearms

This section seeks your views on:

- the role of the Firearms Safety Authority (FSA) and its interaction with wider Police functions
- the roles and responsibilities of groups that provide advice on the firearms regulatory system, such as the Minister's Arms Advisory Group, Firearms Community Advisory Forum, and Arms Engagement Group.

It is important that the right agencies and groups hold appropriate roles and responsibilities within the firearms regulatory system to keep firearms users and the public safe.

## Questions

- What are your views on the role of the Minister's Arms Advisory Group?
- What are your views on the FSA's roles and responsibilities? Are there any changes that you would recommend?
- What education and guidance should the FSA provide to help people understand risks associated with possession and use of firearms products and best practices?
- What are your views on the role of the Firearms Community Advisory Forum and the Arms Engagement Group?
- Do you think the FSA has been successful in reaching members of the firearms community with its education and compliance work?
- Which roles and responsibilities do you think should be retained by the Police within its law enforcement role?
- Are there roles and responsibilities which should be shared between the FSA and Police?

## Other matters

This section provides an opportunity for you to share your views on areas of the firearms system that have not been covered in the discussion document, or broader suggestions about how to improve the firearms regulatory system.

## Questions

- Are there any matters related to the firearms regulatory system that have not been covered in this document that are not out of scope that you have views on?
- Do you have any other views not covered in this document on how the Act protects public safety?

Ministry of Justice Te Tăhū o te Ture

justice.govt.nz

National Office
Justice Centre | 19 Aitken St
DX SX10088 | Wellington | New Zealand



Te Kāwanatanga o Aotearoa New Zealand Government



## **POLICY**

Section	Operational
Contact/Owner	NZC HR
Last Review	New Policy
Next Review	April 2026
Approval	NZC .
Effective Date	19 April 2026

#### 1. PURPOSE

The purpose of these guidelines is to ensure that Fish and Game NZ employees and manager minimize the risk to themselves and others by:

- Understanding fatigue and how it affects workers
- Understanding the roles and responsibilities of workers and managers
- Identifying hazards that contribute to fatigue
- Assessing fatigue risks
- Working with employees to manage factors that contribute to fatigue improving work quality and performance

## 2, FATIGUE AND THE HSWA 2015

Under the Health and Safety at Work Act, fatigue is a workplace risk that must be managed like any other risk. This means that the business must eliminate the risk of fatigue as far as reasonably practicable.

If it can't be eliminated, it must be minimized as far as reasonably practicable, by implementing suitable control measures in consultation with employees.

## 3. APPLICATION

This policy applies to all employees at our workplace, including councillors and contractors, and to anyone who comes into our workplace

## 4. OUR EXPECTATIONS OF YOU

## Management responsibilities:

- Ensure employees have sufficient breaks between periods of work to rest and recover
- Provide training for employees to foster a common understanding of fatigue management
- Develop a culture of shared responsibility for fatigue management

#### VALUES

## TRUST

We are trusted as consistent and capable providers

## INCLUSION

We recognise and respect diverse perspectives and cultural interests

#### CONNECTION

We are deeply connected with anglers, hunters, regulators and the public

## SERVICE

We are enthusiastic, professional, kind and accountable

## **Employee Responsibilities**

Employees have a duty under the Act to take reasonable care of their own safety and health and that their acts or omissions ddon't adversely affect the health or safety of others.

To reduce the risk of being involved in a work accident caused by fatigue you should:

- Understand your sleep, rest and recovery needs and obtain adequate sleep and rest away from work.
- Seek medical advice if you are concerned about a health condition that affects your sleep or causes fatigue.
- · Look out for signs of fatigue in yourself and the people you work with
- In consultation with your manager, take steps to manage fatigue e.g. taking a short break or nap(before driving home after a long period of field work), drinking water, stretching
- Talk to your manager if you foresee or experience being impaired by fatigue likely to create a health and safety risk e.g. because of a health condition, excessive work demands or personal circumstances

## 5. WHAT IS FATIGUE

A state of mental and/or physical exhaustion that reduces a person's ability to perform work safely and effectively. It can occur because of prolonged or intense physical or mental activity, sleep loss and/or disruption of the internal body clock. Signs of fatigue include:

- Tiredness even after sleep
- Reduced hand-eye coordination or slow reflexes
- . Short term memory problems and an inability to concentrate
- Blurred vision or impaired visual perception
- A need for extended sleep during days off work
- Increased irritability
- Falling asleep at work
- Excessive head nodding or yawning
- Near misses

#### 6. WHAT CAUSES FATIGUE?:

- Long continuous periods of work
- Inadequate rest breaks
- Not enough time to recover between work periods
- Very strenuous jobs and long commuting times.
- Disruption of circadian rhythms
- Environmental stresses (noise, vibration)
- Stress from external and internal factors

## 7. FATIGUE MANAGEMENT PLAN

Teams can mitigate the risks of fatigue by developing a practical fatigue management plan that matches the demands of their roles.

First steps are to identify the particular causes of fatigue and finding solutions; for example:

- Where long distance driving is required to undertake ranging or check wetlands, plan for rest periods. Where possible take a second person to share driving and provide extra support
- During the work day take adequate breaks, where possible every 2 hours.
- Plan to reduce the need to work for extended periods without adequate rest.
- Eliminate or reduce the need to work long shifts for more than 3 consecutive days
- Be aware of the fatiguing effects of drift diving and other physical work and find solutions to reduce the risk of accidents following such work. This could include staying overnight, or spreading work over extra days.
- Making sure that there is at least 10 hours between the end of one workday and the start of the
- Ensuring that employees work no more than 10 hours in a day, without a fatigue management plan to manage rest periods
- Ensuring that there is no more than 7 consecutive days of work
- If working shift work such as late or night work, be aware of signs of fatigue and take steps to prevent or manage this.

- When feeling signs of fatigue especially when driving, operating a boat or machinery, or carrying out CLE work, stop and have a rest break and if necessary, cease work.
- Where necessary to prevent fatigue ensure adequate food and drink intake. Stop and rest. Take a micro nap if required and remember to walk around after waking from sleeping.
- Managers will take steps to ensure that staff are not unduly stressed from workload or situations
  which are affecting ability to rest and sleep, including personal factors.
- Managers will take steps to ensure staff are taking adequate time off such as annual leave or time in lieu, to ensure adequate rest physically and mentally.

#### 8. BREACHES

These policies reflect "the way we do things around here."

Depending on the seriousness of the breach, if you are found to have breached these policies we will:

- talk with you to make sure you know the terms of the policy you have breached, including what appropriate support we can offer.
- make sure you know the required behaviour expected from now on; and/or,
- take disciplinary action if necessary.

See our code of conduct and the 'Serious misconduct' clause of your employment agreement for more information about what behaviour is expected and what action may be taken for breaches.

#### DOCUMENT MANAGEMENT CONTROL

Prepared by:	Jane Hutchings	
Owned by	NZC HR	
Authorised by	Council	
Date Issued (fo	or Consultation) 11/11/2024	
Next Review: I	November 2026	

## Agenda Item 12 Health and Safety Report

## Summary

Consider the Health and Safety Report November 2024 and December 2024.

Regular discussions on Health and Safety topics are undertaken at weekly staff meeting.

No accidents or notable incidents are reported that are required to be brought to the attention of Council.

Review of Health and Safety Policy being co-ordinated by NZ Council.

## For Information Only

## Recommendation/Action

Council to move to receive staff report on Health and Safety for November 2024 and December 2024

## **HEALTH AND SAFETY REPORT**

## **Wellington Fish and Game Council**

As part of the commitment to Health and Safety and providing a safe workplace the Wellington Fish & Game Council requires at each meeting describing:

- 1. Implementation and adherence with the Health and Safety manual/policy.
- 2. Risk Management (identification and treatment) new issues or hazards that have arisen and addressed, emergency procedures, dealing with on-site contractors and members of public,
- 3. Risk Management On-going issues or hazards
- 4. Training, and awareness raising programme information sharing and training of staff and volunteers,
- 5. Audits, reviews, and meetings making sure the planning is implemented
- 6. H&S incidents near misses or injuries sustained, plus updates on past events,
- 7. Follow up from Council Meeting Subjects raised under H&S agenda item for staff and ranger meetings
- 8. Recommendations

## Bi-Monthly Update - November and December 2024

<ol> <li>Implementation and adherence with the Health and Safety manual/policy.</li> </ol>		
	Status	
Development of Health and Safety Manual/Policy	Manual developed and in use.	

2. Risk Management - New Issues o	r Hazards
	Status
COVID19 Coronavirus Transmission	All restrictions recommended by
	Government were lifted on 15 August
	2023.

3. Risk Management - On going Issues	Status
Drift Dive/Electric Fishing/Spawning Survey Field Intention Sheets developed for each site	Entry/exit points to be identified – completed
Safe vehicle use	All personnel reminded of safe use practices compliant with road code.  Vehicle Use Policy confirmed.
Safe vehicle	All personnel undertake vehicle check on monthly basis.

	First Aid kits for vehicles checked — update as required.
Fire Extinguishers for Office and Vehicles checked	Regular maintenance schedule. Inventory maintained.

4. Training, and awareness programme	
4. If allilling, and a war stress per b	Status
- Literates for field staff	Valid for field and technical staff.
First aid certificates for field staff	F 5==

5. Audits, reviews, and meetings	Status		
Health & Safety Staff Meeting – November 2024	Weekly meetings with feedback sought and required actions noted.		
Health & Safety Staff Meeting – December 2024	Weekly meetings with feedback sought and required actions noted.		
Reviewed Vehicle Inspection Forms for December 2024	Regular checks for updates encouraged. Any work on vehicle is also encouraged to be completed and up to safe		
Review Health & Safety Manual for Council information	requirements.  NZ Council reviewing best practice policy to refine Health and Safety Policy		
Review first aid kits to ensure practical items included in kits	Reviewed and options considered to make up bespoke first aid kits.		

6. H&S incidents - Near misses or injuries	
6. H&S incidents - Near misses of injuries	Status
	Consider proactive actions as arise in
No accidents reported	cidents reported Consider proactive actions as arise in response to near misses.

7. Follow Up from Council Meeting	
7. Follow op from country	Status
No follow up required	Consider list as required and updated

Receive Health and Safety Summary Report for November 2024 and December 

## Agenda Item 13 Species Management

## Summary

## a. Research Update

A brief report on research undertaken on:

- 1. Trout Native Fish interactions
- 2. Potential effects of Climate Change on Trout Distribution and other Native Fish Distribution. published

For Information Only

Recommendation/Action

No action required

## b. Game Notice Recommendations

Staff have analysed the monitoring data, and provide guidance on game season regulations for 2025 Game Season.

#### Decision

## Recommendation/Action

Confirm draft recommendations to the Minister of Hunting and Fishing for Game Season 2025 – subject to trend counts for paradise shelduck and black swan in January 2025.

Confirm draft recommendations for 2025 Game Season.



# The implications of climate change for New Zealand's freshwater fish

A.D. Canning@ab, C. Zammitc, and R.G. Deathd

<sup>a</sup>Centre for Tropical Water and Aquatic Ecosystem Research (TropWATER), James Cook University, 1 James Cook Drive, Townsville 4814, Australia; <sup>b</sup>Wellington Fish and Game Council, Palmerston North, New Zealand; <sup>c</sup>National Institute of Water and Atmospheric Research (NIWA), Christchurch, New Zealand; <sup>d</sup>River Research, Pohangina RD14, Ashhurst 4884, New Zealand

Corresponding author: A.D. Canning (email: adam.canning@jcu.edu.au)

## **Abstract**

Climate change is poised to reshape ecological communities globally by driving species into new environments and altering interactions between species. Conservation efforts should not only address current pressures but also plan for future pressures, such as sensitive species moving into degraded environments or arising problematic trophic interactions. This study sought to assess how climate change may affect the end-of-century distributions of New Zealand's native and nonnative freshwater fish, including consequences for the overlap between trout (a nonnative sports fish) and native species vulnerable to trout predation. Random forest modelling was used to predict end-of-century distributions for New Zealand's freshwater fish based on six hydrologically downscaled global climate models across four representative concentration pathways. Severe climate change impacts could drive nine native fish species to extinction or near-extinction and cause substantial declines in another eight native species. Seven nonnatives are also predicted to decline substantially, including a 30%–40% reduction in the extent of trout. To avert these potential extinctions, it is crucial to mitigate climate change severity and improve land use impacting freshwater ecosystems.

Key words: predation, trophic impacts, global warming, rainbow trout, brown trout, galaxiid,

## 1.0 Introduction

Although we know that climate change will wreak severe devastation on the world's biodiversity, we are still uncertain about which particular species will be most affected or how these pressures will interact with other ongoing anthropogenic stresses (Brooker et al. 2007; Death 2024). As global climate patterns shift, species are expected to undergo substantial changes in their geographical distributions, with native species often migrating to more suitable habitats in response to changing environmental conditions (Hellman et al. 2008; Mainka and Howard 2010; Pyšek et al. 2020). Such shifts in distribution can lead to ecological imbalances, including disruptions in food webs, nutrient cycling, and ecosystem services, all of which are critical to maintaining biodiversity and ecological resilience (Harvey et al. 2020; Turner et al. 2020; McDermott 2022). For example, climate-induced rewiring has been observed in north-temperate lake ecosystems that contain the cold-water lake trout (Salvelinus namaycush) (Guzzo et al. 2017; Bartley et al. 2019). While lake trout traditionally forage between shallow nearshore and deep offshore habitats, telemetry and diet data indicate that climate changeinduced warming of nearshore waters is forcing them into deeper, cooler areas. This shift is disrupting carbon flows through the lake ecosystems and affecting lake trout growth,

condition, and population density. Similar behavioural and dietary shifts have also been observed in other co-occurring species, such as the planktivorous cisco (Coregonus artedi) and piscivorous walleye (Sander vitreus), indicating a broader pattern of food web rewiring in response to climate change (Guzzo et al. 2017; Bartley et al. 2019). If the habitat occupied under future distributions is degraded, then fish populations may also reduce and become more vulnerable to disturbances. For example, reduced rainfall in Australia's Murray-Darling basin could dry upstream refuge habitats and drive some species downstream to more polluted areas with less instream habitat (Balcombe et al. 2011; Pratchett et al. 2011). Predictive modelling could enhance fish conservation by enabling proactive planning to mitigate existing stressors in future habitats and implement measures to restrict unwanted migrations (Schweiger et al. 2008; Angert et al. 2013).

Climate change imposes complex, multifaceted pressures on riverine ecosystems, reshaping fish distribution patterns and altering key ecological dynamics (Olden et al. 2010; Woodward et al. 2010; Comte et al. 2013). A primary driver of these changes is the shift in thermal regimes, which directly affects the spawning, growth, and survival rates of fish species adapted to specific temperature ranges (Woodward et al. 2010). Rising water temperatures not only push species

beyond their optimal thermal limits but also reduce oxygen solubility, increasing the risk of hypoxic conditions detrimental to many aerobic organisms (Rabalais et al. 2010). Altered precipitation patterns and intensified hydrological cycles result in modified river flows-ranging from severe droughts to extreme flood events-that can disrupt the availability of suitable habitats and challenge the life-strategies of various fish species (Olden et al. 2010; Comte et al. 2013). Alterations in the timing of seasonal flows can misalign critical life events, such as migration and reproduction, with environmental cues, potentially compromising reproductive success (Aldous et al. 2011; Milner et al. 2013). As fish populations adapt to these pressures, many species may shift their ranges toward cooler waters or higher elevations, resulting in a reorganization of community structures and a reshaping of historical distributions (Brooker et al. 2007; Schweiger et al. 2008; Pecl et al. 2017). While some species may experience reduced distributions, others may experience increased distributions, ultimately resulting in new assemblage compositions and altered patterns of interspecific interactions.

In the context of New Zealand's freshwater ecosystems, climate projections suggest that rising temperatures and intensified westerly winds could lead to the continued earlier emergence of mean winter flows, particularly in the South Island, whereas streamflow in the North Island is projected to decline (Collins 2021; Queen et al. 2023). Temperature increases are anticipated to extend further south, accelerating the melting of alpine glaciers. Across the country, the frequency and intensity of floods are also projected to increase (Collins 2020; Serrao-Neumann et al. 2024).

Temperature and hydrological changes will impact New Zealand's freshwater fish and pose challenges for managing future species assemblages and their interactions. For example, Boddy and McIntosh (2017) predict that alpine galaxias (Galaxias paucispondylus) populations will fragment as they move into habitats currently occupied by trout, which may retreat from warming waters. Conversely, invasive species like brown bullhead catfish (Ameiurus nebulosus) and koi carp (Cyprinus carpio) are expected to expand their range, worsening sedimentation and algal growth in lowland rivers (Wu et al. 2013; Leathwick et al. 2016; Collier et al. 2017). Additionally, native fish like the warm-tolerant shortfin eel (Anguilla australis) may spread to new areas, preying on both native and introduced fish, further complicating ecosystem management (Sagar et al. 2005; Jellyman 2016; Stewart et al. 2024).

New Zealand's National Policy Statement for Freshwater Management (NPS-FM 2020) requires regional authorities to set pollution and water abstraction limits considering anticipated climate change impacts. However, limited understanding of climate change's effects on freshwater fauna may hinder authorities' ability to manage future impacts. Conservation managers also face the challenge of protecting both native species and introduced sports fish like trout, which are valued for recreation and funding freshwater advocacy but can harm native species. Identifying where these impacts are most severe in the future could enable more targeted conservation efforts without widespread trout eradication. To guide freshwater fish management decisions in New Zealand, this study aims to address the following questions:

- 1. How might the severity of climate change (indicated by the Intergovernmental Panel on Climate Change (IPCC) representative concentration pathways (RCPs) affect the potential end-of-century distributions of New Zealand's freshwater fishes?
- 2. For the predicted end-of-century distributions, how might climate change severity affect the overlap extent between introduced trout and native fish highly vulnerable to trout predation?

## 2.0 Methods

## 2.1 Fish data

Fish detection data were sourced from the New Zealand Freshwater Fish Database (NZFFD) (Richardson 1989), which is a national database compiling detection and nondetection data from freshwater fish surveys collected from a wide range of studies. To ensure a sufficient site selection for the models to learn habitat while reducing the influence of temporal changes in fish communities, only fish species that were present in at least 300 surveys (regardless of survey method used) since 1986 (the starting year of the climate baseline) were included, constituting 35 native and 10 nonnative species (Table 1). Juvenile migratory galaxiids, known as "whitebait", were excluded to focus on predicting adult distributions as the migratory pathway covered by whitebait does not necessarily indicate suitable habitat. To account for potential temporal autocorrelation, observations made at the same site over time were aggregated into a single observation. A site is considered a single reach (typically  $\sim$ 700 m long), as mapped by the New Zealand's river environment classification system (Snelder et al. 2010). For each site, if at least one presence was recorded over the observation period, the site was considered as having a presence, ensuring each site was only represented once in the dataset, thereby minimizing temporal dependencies. Given that survey effort is not consistent across all database records, the dataset can only inform presence and nondetection, rather than true absence.

#### 2.2 Environmental data

Two sets of environmental variables were compiled from multiple spatial datasets covering New Zealand's riverine network (Snelder et al. 2010), the first set (Table S1) was assumed to remain unchanged under future climate predictions, while the second set (Table S2) varied according to the climate scenario and climate model used. The first set contained 29 predictors (Table S1), containing a range of modelled and measured habitat and land use characteristics from the Freshwater Environments New Zealand geodatabase (Leathwick et al. 2010). Since water quality has varied both spatially and temporally during the fish data period, we focused on variables that are assumed to have changed little over this period, for example, geological or long-term hydrological variables. This reduces the likelihood of mismatch between species presence and environmental variables and improves model transferability (Werkowska et al. 2017).

**Table 1.** The scientific names and common names, native or introduced status, along with the number of New Zealand Freshwater Fish Database (Richardson 1989) observations (Obs.) of freshwater fish species modelled across New Zealand under different climate scenarios. NZTCS is the New Zealand Threat Classification System.

Status	Scientific name	Common name	NZTCS status	Vuln.	Int.	Obs.
Native	Aldrichetta forsteri	Yelloweye mullet	Lease concern	Minor		546
	Anguilla australis	Shortfin eel	Near threatened	Minor		11 809
	Anguilla dieffenbachii	Longfin eel	Endangered	Minor		18508
	Cheimarrichthys fosteri	Torrentfish	Vulnerable	Minor		2988
	Galaxias anomalus	Central Otago roundhead galaxias	Critically endangered		1	594
	Galaxias argenteus	Giant kokopu	Vulnerable	Moderate	1	1913
	Galaxias brevipinnis	Koaro	Least concern	Moderate	1	4473
	Galaxias cobitinis	Lowland longjaw galaxias	Critically endangered		1	971
	Galaxias depressiceps	Flathead galaxias	Vulnerable		1	
	Galaxias divergens	Dwarf galaxias	Endangered	Moderate	1	992
	Galaxias eldoni				1	614
	Galaxias fasciatus	Banded kokopu	Least concern	Minor	1	5740
	Galaxias gollumoides	Gollum galaxias	Critically endangered	Moderate	1	674
	Galaxias macronasus	Bignose galaxias	Critically endangered		1	654
	Galaxias maculatus	Inanga	Least concern	Minor		6594
	Galaxias paucispondylus	Alpine galaxias	Least concern	Moderate	1	1147
	Galaxias postvectis	Shortjaw kokopu	Endangered	Moderate	1	1055
	Galaxias prognathus	Upland longjaw galaxias	Critically endangered		1	383
	Galaxias pullus	Dusky galaxias	Critically endangered		1	407
	Galaxias species D	Clutha flathead galaxias	Nationally critical	High	1	842
	Galaxias vulgaris	Canterbury galaxias	Least concern	Moderate	1	3080
	Geotria australis	Lamprey	Data deficient	Minor		1004
	Gobiomorphus basalis	Crans bully	Least concern	Minor		1716
	Gobiomorphus breviceps	Upland bully	Least concern	Moderate		8356
	Gobiomorphus cotidianus	Common bully	Least concern	Minor		9672
	Gobiomorphus gobioides	Giant bully	Least concern	Minor	1	1131
	Gobiomorphus hubbsi	Bluegill bully	Vulnerable	Moderate	1	1347
	Gobiomorphus huttoni	Redfin bully	Near threatened	Minor	1	5969
	Mugil cephalus	Grey mullet	Least concern	Minor		339
	Neochanna apoda	Brown mudfish	Endangered	High	1	1105
	Neochanna burrowsius	Canterbury mudfish	Critically endangered		1	1546
	Neochanna diversus	Black mudfish	Endangered	High	1	880
	Neochanna heleios	Northland mudfish	Critically endangered	-	1	1379
	Retropinna retropinna	Common smelt	Least concern	Minor		2500
	Rhombosolea retiaria	Black flounder	Data deficient	Minor	1	419
ntroduced	Ameiurus nebulosus	Catfish				651
	Carassius auratus	Goldfish				1330
	Cyprinus carpio	Koi carp				563
-	Gambusia affinis	Gambusia				2399
	Oncorhynchus mykiss	Rainbow trout				3339
	Oncorhynchus tshawytscha	Chinook salmon				436
	Perca fluviatilis	Perch				1041
	Salmo trutta	Brown trout				13 60
	Salvelinus fontinalis	Brook trout				328
	Scardinius erythrophthalmus	Rudd				741

Note: Vulnerability (Vuln.) to trout predation from Coughlan (2022) provided for native fish, along with an indication of intolerance (Int.) to anthropogenic stressors from Joy and Death (2004a) and the NZTCS conservation status (Dunn et al. 2018).

The second set of environmental variables contained 26 predictors (Table S2), composed of reach scale temperature and hydrological indicators calculated from climate-hydrology models by Collins (2020). Collins (2020), coupled a

TopNet hydrological model with six general circulation models (GCMs) to predict daily flows and catchment air temperature for both baseline or hindcast (1986–2005) and end-of-century (2080–2099) periods using four climate RCPs at

47759 approximately equidistant reaches across the New Zealand River Environment Classification geospatial network (Snelder et al. 2010). Variables described in Table S1 were extracted from river reaches that corresponded to the same river reaches where climatic predictions were made. While the environmental variables in Table S1 were assumed to remain unchanged, their inclusion in modelling is necessary as water quality, physical habitat, and barriers to migration (such as dams), are often influential in determining the distribution of New Zealand's freshwater fish (Joy and Death 2004b; Leathwick et al. 2005; Canning 2018). For example, a large dam could prevent the movement of diadromous fish upstream (represented with the USDam variable), regardless of the hydrological and climatic suitability of the upstream environment. Pairwise Pearson correlations were used to assess collinearity between all variables across all distinct fish observation sites modelled and for each of the six climate models assessed, ensuring no variables were highly correlated (r > 0.9; Data S1), which can improve model transferability. The inclusion of spatially relevant covariates, such as altitude, distance from the coast, slope, temperature, precipitation, and vegetation cover, also help to account for potential spatial autocorrelation in our data (Joy et al. 2019).

#### 2.2.1 Global climate models

The six GCMs used as part of the Coupled Model Intercomparison Project Phase 5 and included BCC-CSM1.1, CESM1-CAM5, GFDL-CM3, GISS-E2-R, HadGEM2-ES, and NorESM1-M (Collins 2020). The four future RCP scenarios used were a mitigation pathway (RCP2.6), two stabilization pathways (RCP4.5 and RCP6.0), and a high-end pathway (RCP8.5). Each RCP represents a different scenario of greenhouse gas emissions and concentrations, aerosols, and land use, extending to the year 2100. They are named based on their projected radiative forcing values for the year 2100, relative to pre-industrial levels ( $\pm$ 2.6,  $\pm$ 4.5,  $\pm$ 6.0, and  $\pm$ 8.5 W·m<sup>2</sup>, respectively). Radiative forcing is a measure of the change in the balance of solar energy (measured in W·m<sup>2</sup>) entering and leaving Earth's atmosphere due to factors like greenhouse gases or solar activity. Positive radiative forcing indicates an increase in net incoming energy, leading to a warming effect, while negative forcing implies a net loss of energy, resulting in cooling. These four RCP scenarios can be indicatively described as follows (Rogelj et al. 2012; IPCC 2014):

RCP2.6. This pathway is sometimes referred to as a "peak-and-decline" scenario. It represents a very stringent scenario where greenhouse gas emissions peak between 2010 and 2020, with emissions declining substantially thereafter. The goal of this pathway is to keep global warming likely below 2 °C above pre-industrial temperatures.

RCP4.5. This is a stabilization scenario where total radiative forcing is stabilized shortly after 2100, without overshooting the RCP4.5 level. It implies more modest reductions in emissions than RCP2.6 and is often considered an intermediate scenario. Under RCP4.5, the use of a mix of energy sources and technologies, including significant use of renewables, nuclear power, and fossil fuels with carbon capture and storage, is envisioned.

RCP6.0. This is another stabilization scenario where total radiative forcing is stabilized shortly after 2100, without overshooting the RCP6.0 level. It represents a scenario with no explicit climate target but where emissions peak around midcentury and decline thereafter.

RCP8.5. Often considered a "business as usual" scenario, it assumes continued high emissions leading to high greenhouse gas concentration levels. Under this scenario, there is no implementation of climate change policies, leading to high radiative forcing by the end of the century. This pathway is often used as a high-end scenario for risk assessment.

For each of the six GCMs and four RCP scenarios, all the temperature and hydrological variables in Table S2 were calculated for the hindcast and end-of-century periods using Collins (2020).

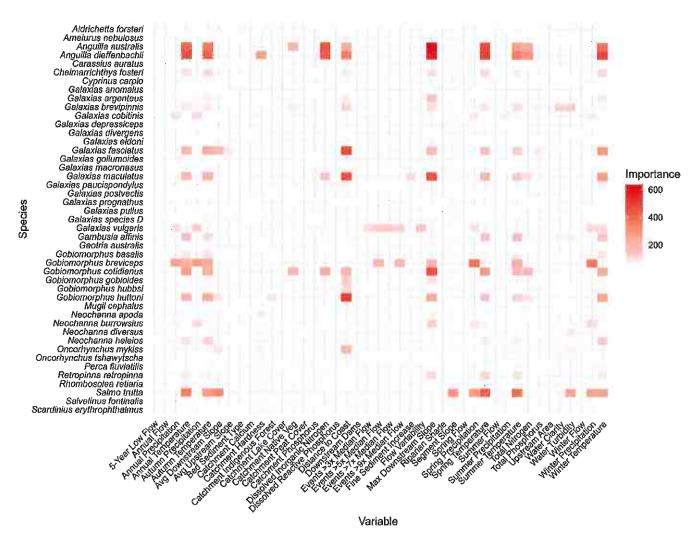
## 2.3 Data analysis

## 2.3.1 Predicting species distributions with climate change

Random forests is a machine learning method that uses a collection of classification and regression trees, whereby each tree is fitted to a bootstrapped sample (with replacement) and then validated on the out-of-bag sample. Random forest predictions are the average of the predictions of each tree. Classification and regression trees, and consequently random forests, work by partitioning observations at splits of predictors that minimize the sum of squares error. They have a high level of flexibility and can handle nonlinear relationships and complex interactions (Cutler et al. 2007).

For each fish species and each of the six climate models, random forests modelling was used to yield the probability of detection for all fish species using the potential predictor variables in Table S1 and the hydrological variables in Table S2 based on the hindcast climate scenarios, Each model was made using the "randomForest" function (trees = 500) from the randomForest package in R (Liaw and Wiener 2002; R Core Team 2024). The rfUtilities, psych, and pROC packages (Robin et al. 2011) were used to assess the performance (interrater reliability) of each model by calculating the average Cohen's Kappa coefficient and area under the receiver operating curves (AUC-ROC) using K-fold cross-validation (N = 5). The globally important variables were also identified using the "importance" function, which measures the decrease in Gini index from splitting on each variable, averaged over all trees. The thresholds for converting predicted probability to presence or background were determined using the occurrence, threshold function in the rfUtilities package to identify the thresholds that maximized the Kappa statistic (Evans and Murphy 2019). All species occurrence models were then used to predict the end-of-century distributions for each of the four RCP scenarios as determined by each of the six GCMs. Given the substantial increases in prediction uncertainty when extrapolating species distribution models to novel environments beyond the training data range, multivariate environmental similarity surfaces (MESS) analysis (Elith et al. 2010) was used to identify all river segments that contained environmental conditions outside the range of the training

Fig. 1. The mean variable importance for random forest models predicting the distributions of New Zealand's freshwater fish. Variable importance for random forest models was calculated within the *importance* function in the randomForest R package (Liaw and Wiener 2002), with higher values indicating greater influence as determined by the contribution to reduction in Gini coefficient. Six individual random forest models were created for each species using climate data from six global climate models; the mean variable importance values shown are the mean importance value across the six random forest models for each species.



data, This was conducted using the MESS function in the mod-EVA R package (Barbosa et al. 2016), involving the comparison of all hindcast training predictors for each climate model with each of the corresponding end-of-century climate scenario predictors. Negative values indicate areas where environmental conditions differ from the training data.

## 2.3.2 Overlap between trout and vulnerable native fish

Coughlan et al. (2024) developed a risk assessment matrix to systematically score and rank the vulnerability of New Zealand's native fish to the impacts of trout predation. Factors in the risk assessment matrix included the overlap of physical habitat where co-occurrence at reach level occurs, diel activity patterns, diet similarities, fecundity and egg

size, the age of reproductive maturity, larval dispersal ability, threatened species ranking, and adult body size. The vulnerability status from Coughlan (2022) is included in Table 1. For each of the climate scenario and climate-model combinations, the proportion of the end-of-century distributions predicted for each of the native fish species considered highly vulnerable to trout predation that overlaps with at least one trout species was estimated (Coughlan 2022).

#### 3.0 Results

## 3.1 Predicting species distributions with climate change

All random forest models of present species distribution (using hindcast climatic conditions) showed very good or excellent performance as indicated by AUC-ROC values greater

Can. J. Fish. Aquat. Sci. 00: 1-15 (2025) | dx.doi.org/10.1139/cjfas-2024-0127

than 0.8 and Cohen's Kappa values of at least 0.6 (Data S2). Variable importance, as indicated by the decrease in Gini index from splitting on each variable, is in Data S3. Overall, the most important variables for most species were the distance inland (river length) from the coast and the mean annual temperature (Fig. 1; Data S3). MESS analysis revealed that across climate scenarios and models, less than 0.28% of the end-of-century modelled river network was environmentally dissimilar to the hindcast training data.

Of the 35 native species modelled, four species (11%) are predicted to show a greater than 30% increased extent with an RCP8.5 scenario relative to hindcast extent in at least one climate model, native species predicted to have the greatest net increase in extent with increased radiative forcing compared to the hindcast scenario are Mugil cephalus, Neochanna diversus, Gobiomorphus gobioides, and Retropinna retropinna. Of the 10 nonnative fish modelled, four are predicted to have a large (>30%) net increase, with Onchorhynchus tshawytscha and Cyprinus carpio having the largest increases (Figs. 2 and 3). Among the native species modelled, 17 (49%) are projected to experience the greatest relative decline in extent with increased radiative forcing compared to the hindcast scenario. These species include Galaxias depressiceps, Neochanna apoda, Galaxias species D, Galaxias gollumoides, Galaxias pullus, and Galaxias eldoni. Additionally, seven nonnative species, including Salvelinus fontinalis and Salmo trutta, are also predicted to undergo significant reductions. Brown trout (Salmo trutta) are predicted to face reductions in current extent by between, on average, and between 12% and 43%, depending on the severity of climate change (Figs. 2 and 4). Rainbow trout (Onchorhynchus mykiss) are predicted to face reductions in current extent by between, on average, and between 17% and 24%, depending on the severity of climate change. As climate change severity increases, both brown and rainbow trout distribution reductions primarily occur southward and inland in the North Island, with minimal changes observed in the South Island (Fig. 3).

#### 3.2 Overlap between trout and native fish

The native fishes considered highly vulnerable to trout predation by the Coughlan (2022) risk assessment, along with their change in extent and potential overlap with at least one trout species shown in Fig. 5. Despite increases in extent predicted for Neochanna diversus, Neochanna burrowsius, Galaxias prognathus, and Galaxias macronasus under more severe climate scenarios, expansion was consistently predicted in areas without trout overlap. Neochanna apoda and Galaxias pullus show varied results, with some models predicting both increases and decreases in extent, including scenarios with complete trout overlap. Galaxias eldoni and Galaxias depressiceps show potential decreases in extent with increased climate change severity, with high overlap with trout in all scenarios (Fig. 5).

## 4.0 Discussion

## 4.1 Species distribution models

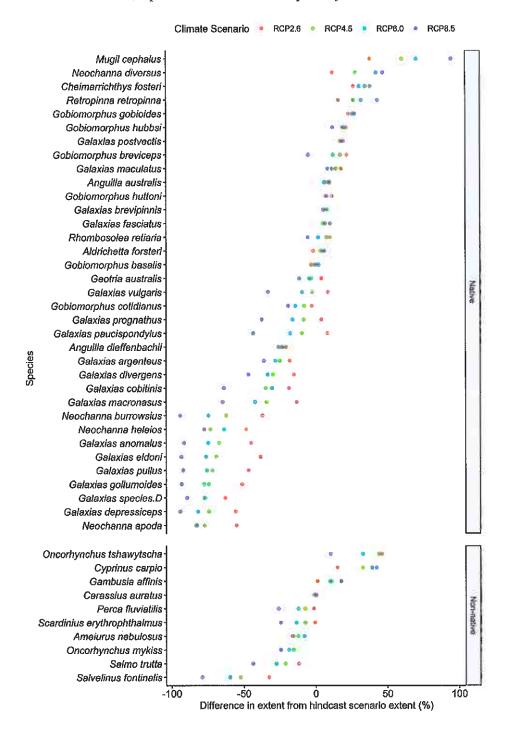
The present study used random forest models (Cutler et al. 2007) to predict how the distribution of New Zealand's fresh-

water fish might alter with climate change. The choice of modelling algorithm can significantly impact model transferability when extrapolating to novel conditions, such as those under climate change scenarios. While a model may perform well in predicting test data from the baseline conditions, it may not perform well in predicting unobserved conditions (García-Callejas and Araújo 2016; Morán-Ordóñez et al. 2017; Yates et al. 2018). For example, Charney et al. (2021) compared the transferability of 11 model algorithms when predicting the distribution of 108 tree species across the United States of America, and observed random forests to perform well within the range of training data and moderately when extrapolating to novel areas. Heikkinen et al. (2012) compared 10 model algorithms applied to bird, butterfly, and plant species in Finland. They showed that random forests were among the best performing models when assessing using Kappa, but showed intermediate performance (relative to the best and worst performing models) when assessing using the Area Under the Receiver Operating Curve (AUC)—though the difference in AUC performance from the best performing models was small (~0.03 reduction) (Heikkinen et al. 2012). There is also no universally accepted model algorithm that performs well in all instances when predicting both within and outside of the trained environmental space (Heikkinen et al. 2012; Norberg et al. 2019; Charney et al. 2021).

Relying on a single model algorithm is risky and potentially misleading, and decision-makers should compare predictions between different methodologies that use different source datasets, modelling algorithms, background data selection, cross-validation methods, and be mindful of the potential reasons for the differences. Random forests, as with all tree-based methods, tend be conservative when extrapolating to novel environmental as they use predicted values from the closest observed tree split within the training range. In contrast, regression-based methods, such as generalized linear models, continue extrapolating the regression with the same slope derived from the training data, which may lead to extreme and unrealistic predictions (Elith and Graham 2009). Predicting beyond training data is challenging for any model, though Bayesian methods with priors informing species tolerance from experimental studies may be a promising avenue to improve the reliability of model transferability (Norberg et al. 2019; Schleuning et al. 2020; Bosch-Belmar et al. 2021). At present, there is limited published experimental data on the tolerance of New Zealand's fish to differences in temperature and hydrological regimes, and further research on fish tolerance should be prioritized to the species identified here as most at-risk (Richardson et al. 1994). Despite inevitable model difficulty predicting to entirely novel environments, the MESS analysis identified very few locations where environmental conditions are dissimilar to the range covered by the training dataset, likely owing to New Zealand's diverse climate and geology.

In addition to model methodology, future habitat and population changes may also affect the reliability future distribution predictions. Previous analysis has shown that nutrient enrichment, followed by downstream barriers (i.e., dams) and loss of riparian vegetation, but not the presence of introduced fish, currently accounts for the largest broad-scale de-

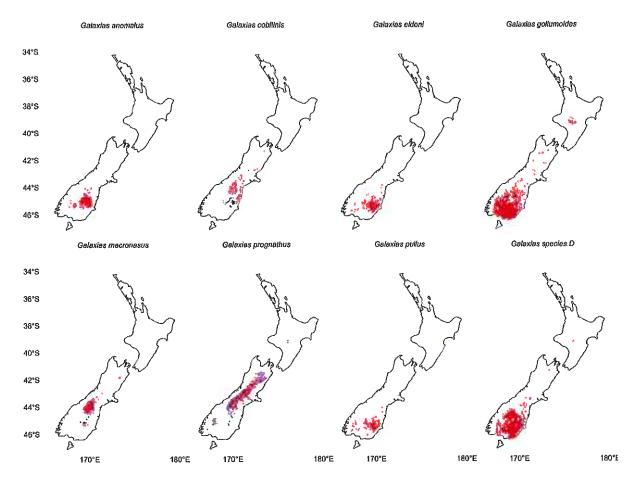
**Fig. 2.** The extent of the modelled hydrological network (%) across New Zealand predicted to be occupied by a given freshwater fish for four end-of-century climatic scenarios relative to the extent in the hindcast climate scenario (measured as percentage difference). Residuals within the climate scenarios are derived independently using six different global climate models. Groups compare native and nonnative fish. RCP, representative concentration pathway.



viation in freshwater fish distributions from that predicted to occur in reference conditions (Canning 2018), consistent with other research on the decline of New Zealand's freshwater fish (McDowall 2010; Dunn et al. 2018; Joy et al. 2019). Given that previous analysis also shows that frequent distur-

bances, owing to the short flood-prone nature of New Zealand rivers and streams, often limit the influence of biological interactions affecting species presence (Jowett and Richardson 1989; Death and Winterbourn 1995; Winterbourn 1997), this analysis did not use joint species distribution models (JSDMs).

Fig. 3. The predicted change in the extent of New Zealand's modelled hydrological network occupied by species currently classified by the IUCN as critically endangered (Dunn et al. 2018). Predictions are based solely on the Beijing Climate Center (BCC) climate modelling, contrasting a contemporary climate with a severe end-of-century scenario (RCP8.5). Red areas represent locations where the species are predicted to occur under the contemporary climate but not under the RCP8.5 scenario. Grey areas represent locations where the species are predicted to occur under the RCP8.5 scenario but not under the contemporary climate. Blue areas indicate locations where the species are predicted to occur under both climate scenarios. Classifications were plotted in order of occurrence in both places first, followed by future occurrence only, followed by hindcast only, as a result the hindcast only may mask appearance of other categories and visually emphasize loss.

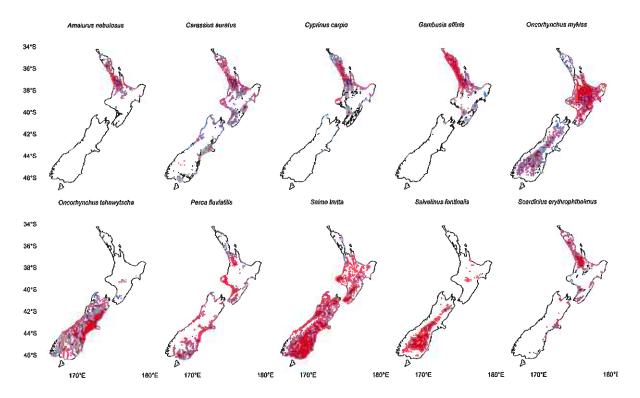


However, JSDMs may be a valuable exploration where population estimates are desired in environmentally stable locations or where environmental decline increases competition for resources (Woodward et al. 2016; Jellyman and McIntosh 2020). Although the National Policy Statement for Freshwater Management (NPS-FM; Ministry for Environment, 2020) requires regional management authorities to either maintain or improve the health of freshwater ecosystems, if that direction changes or is not enforced and future declines in freshwater health occur, then predictions made here are likely to underestimate declines in end-of-century distribution. Without any land use change, increased climatic variability could increase erosion and the sedimentation of freshwater habitats (Neverman et al. 2023). Extended periods of low rainfall or drought with fewer floods could reduce connectivity between riverine pools, disrupt migratory and spawning cues, increase water temperature in stagnant pools, and increase the likelihood of hypoxic events as algae and nutrients are

flushed less frequently (Woodward et al. 2010; van Vliet et al. 2023). Therefore, predictions presented may over-estimate future distributions or indicate distributions occupied by small and vulnerable populations unless efforts are taken to reduce nutrient enrichment and sedimentation and improve habitat quality.

As the models were trained using a dataset that collates surveys from many different studies using different methods, sampling intensity and study focus, the models only predict the probability of the product of occurrence and detection, which is not indicative of population density. It was also not possible to account for detection inadequacies or the true absence of species from any given site, instead models were trained by compared detected presence against background values where species may or may not be present. As a result, predictions may underestimate the true extent of species, particularly in locations where deep waters, instream structures, or turbidity make commonly used survey

Fig. 4. The predicted change in the extent of New Zealand's modelled hydrological network occupied by 10 introduced fish species is shown. Predictions are based solely on BCC climate modelling, contrasting a contemporary climate with a severe end-of-century scenario (RCP8.5). Red areas represent locations where the species are predicted to occur under the contemporary climate but not under the RCP8.5 scenario. Grey areas represent locations where the species are predicted to occur under the RCP8.5 scenario but not under the contemporary climate. Blue areas indicate locations where the species are predicted to occur under both climate scenarios. Classifications were plotted in order of occurrence in both places first, followed by future occurrence only, followed by hindcast only, as a result the hindcast only may mask appearance of other categories and visually emphasise loss.

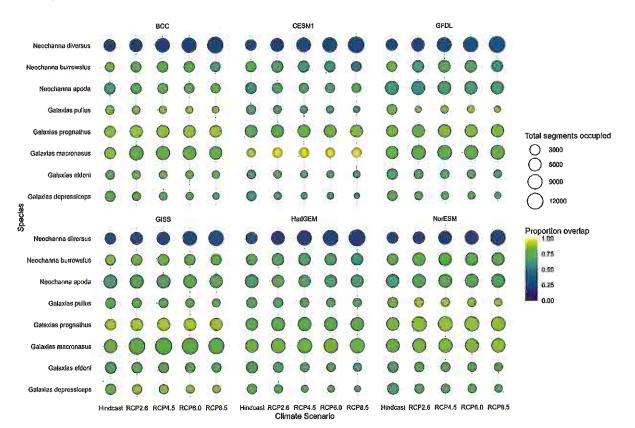


methods, such as electric fishing and spotlighting, difficult or where most surveys were collected focusing on a single species (not distinguished in the NZFFD). Nonetheless, the NZ Freshwater Fish Database remains the most comprehensive fish observation database across New Zealand. Although standardized and routine freshwater fish monitoring has historically been poor, a relatively recent directive to conduct standardized fish monitoring was given to all regional authorities from central government via the NPS-FM (Ministry for Environment, 2020). The directive requires councils to develop and implement a freshwater fish monitoring across wadeable rivers and stream, with sampling to occur at least annually between December and April (inclusive) following the protocols outlined in Joy et al. (2013), which builds on protocols by David et al. (2010). If successfully implemented, future analyses could explore modelling presence-absence, and relative abundance, as well as quantitative appraisals of spatiotemporal dynamics of fish assemblages and species interactions via JSDMs (Pollock et al. 2014; Tikhonov et al. 2017). Routine quantitative assessments of fish assemblages would improve impact assessments of changes in water quality, habitat, and species interactions, enabling managers to respond more effectively to detected declines.

#### 4.2 Changes in species range

Nine native species are predicted to have end-of-century distributions reduced to less than 1% of the modelled network with a business-as-usual approach to climate change (RCP8.5 scenario). These species are all nonmigratory galaxiids or mudfish with very localized contemporary distributions and are critically endangered (Joy and Death 2013; Keegan et al. 2022). The substantial reductions in extent predicted to occur with a business-as-usual management of climate change may result in the extinction or near-extinction of these species. If populations are reduced to low levels in these localized areas, they become vulnerable to Allee effects, where reduced population fitness can lead to extinction (Berec et al. 2007; Walter et al. 2017). Small populations face heightened risks from demographic stochasticity, environmental stochasticity, and genetic factors. Random fluctuations in birth and death rates (demographic stochasticity) can cause significant declines in small populations, while unpredictable environmental events like floods and droughts (environmental stochasticity) disproportionately impact them (Bernhardt et al. 2020; Garant 2020). Genetic factors, such as inbreeding and reduced genetic diversity, further reduce their resilience to disturbances (Walter et al. 2017; Fenderson

Fig. 5. The proportion (colour) of the modelled river network across New Zealand where at least one species of trout is predicted to overlap with a given fish species considered highly vulnerable to trout predation (Coughlan 2022). Circle size is proportional to number of river reaches (segments) predicted to be occupied for a given native species, climate scenario, and global climate model. Within the climate scenarios, "Hindcast" approximates a contemporary climate, while RCP2.6–8.5 indicate potential end-of-century scenarios with values indicating the global radiative forcing (W·m<sup>-2</sup>).



et al. 2020; Hohenlohe et al. 2021). These combined pressures likely contributed to the extinction of the New Zealand grayling (Prototroctes oxyrhynchus). Deforestation, sedimentation, and pollution degraded their freshwater habitats, turning once optimal rivers into unfavourable ones, which, combined with overfishing, predation by introduced species, and the spread of Saprolegnia parasitica, led to their decline (Lee and Perry 2019). To prevent further extinctions of New Zealand's freshwater fishes, efforts must focus on restoring and creating habitats, and mitigating threats near predicted distributions (Morris et al. 2006; Hodgson et al. 2011; Synes et al. 2020).

Included in the native species predicted to increase with increased radiative forcing are three of New Zealand's five migratory galaxiid species known as "whitebait"—highly valued for their recreational and commercial fisheries (Rowe et al. 1992; Yungnickel et al. 2020). Furthermore, the black mudfish, which is currently considered At Risk—declining under the NZ Threat Classification System, is anticipated to have a substantially greater habitable distribution, particularly across the lowland Waikato River and the lowland Manawatu River. Despite potentially greater habitable distributions, the lack of connectivity between habitats and the

extensive loss of wetlands will likely constrain the potential habitat distribution from being realized (Davidson 2014; Dymond et al. 2021). In addition, to the increased extent of these native species, pest species including goldfish, carp, and mosquitofish will likely benefit from increased temperatures and changed flow regimes if biosecurity efforts are ineffective. Interestingly, some species with seemingly similar functional traits, such as short-fin and long-fin eels, and short-jaw kōkopu and giant kōkopu, are projected to increase and decrease, respectively. We are currently exploring what might be driving these differing responses in a companion publication (Death et al. in prep.).

## 4.3 Altered interspecific interactions

As climate change is predicted to substantially alter the composition of freshwater fish assemblages nationally, the food web interspecific interactions will also change. While existing predation pressures may reduce in some instances, new predation pressures may arise in other instances, as both native and nonnative predators move into new areas, e.g., if the introduced mosquitofish become established in the lower North Island, particularly in places like the Wairapapa Moana

Wetlands complex. If that spread is realized, then both native fish and introduced sports fish in those locations will be at risk of having their fins and eyes nipped by mosquitofish, potentially reducing their populations and causing trophic events, similar to those observed in Northland's Kai Iwi Lakes (Ling 2004; Rowe et al. 2018). The movement of native species into nonnative ranges can pose significant conservation challenges, as their impacts can mirror that of introduced species (Staudt et al. 2013; Van Zuiden et al. 2016; Guiden et al. 2019). For example, eels are predicted to move slightly into higher altitude river reaches, which would then increase predation pressures on smaller fish in those locations.

For nonmigratory species like the black mudfish, range shifts may require facilitated translocations to overcome geographical barriers and restore suitable habitats at new locations. Managing species movement, whether through assisted migration or natural range shifts, poses multiple challenges (Thomas 2011; Berger-Tal et al. 2020; Butt et al. 2021). While there are precedents for successful translocations to preserve endangered species, such as the South Island Takahē, the eastern barred bandicoot, and the Tasmanian devil, the ecological risks and unintended consequences of such interventions are well-documented, leading to significant hesitation in their application for climate adaptation (Miskelly and Powlesland 2013; Thalmann et al. 2016; Groenewegen et al. 2017). Socio-political challenges stem from high financial costs and societal concerns about species introductions, creating political risks for policymakers. Additionally, there is a potential values conflict when protecting native species that migrate into new areas due to climate change. While these species are native to their original habitats, they may be perceived and managed like introduced species in their new ranges, leading to ecological and ethical dilemmas (Coz and Young 2020; Glikman et al. 2022). This complicates traditional conservation paradigms focused on protecting native biodiversity and managing invasive species. Conservation managers will need detailed research into the ecological requirements of both the species at the destination and the species being relocated, including the timing around relocations to match climatic suitability, socio-political views, and the potential alteration of destination food webs (Miskelly and Powlesland 2013; Thaimann et al. 2016; Groenewegen et al. 2017). Even where detailed research has been completed, there is often considerable uncertainty in predicting suitable future habitats and potential ecological interactions, which hinders implementation (Pollock et al. 2014; Briscoe et al. 2019). Despite these barriers, advances in mechanistic and JSDMs, alongside adaptive management frameworks, offer pathways to mitigate uncertainties and balance ecological knowledge, societal engagement, and political will (Wyborn et al. 2021).

## 4.4 Native fish and valued sports fish

In New Zealand's unique context, introduced trout fisheries are a highly valued sports fishery that receive a high level of protection under conservation law, requiring populations to be maintained and enhanced. This can create

tension between conservation priorities, particularly in locations where trout have been implicated in the decline of native species via predation, competition, and behavioural mechanisms (McIntosh et al. 2010; Jellyman et al. 2018). Conversely, New Zealand's trout fishery generates substantial funding for conservation via licence sales, which have allowed the relevant statutory conservation agencies (Fish and Game councils) to become New Zealand's most active advocates for freshwater environments. The advocacy lobbies for strong environmental policies that benefit both introduced trout and native fisheries, and the licence-based funding model has afforded greater independence from government influence compared with the tax-funded Department of Conservation. For example, Fish and Game were responsible for securing 12 of the current 15 Water Conservation Orders, which are the highest level of protection a waterbody can be afforded in New Zealand. However, licence income has also funded the restoration of over 200 wetlands (Canning et al. 2021), far exceeding efforts made any other agency in New Zealand, and providing considerable habitat for native fauna (Garrett-Walker et al. 2020; Stewart et al. 2022). A balanced approach to managing both introduced trout and native fisheries likely involves prioritizing native fish protection in areas where they are particularly vulnerable to trout pressures.

Using the risk-assessment framework by Coughlan (2022), which identifies native fish most at risk from the pressures of trout, the potential end-of-century overlap between trout and highly vulnerable fish species was assessed. Overall, this overlap is predicted to reduce substantially with increasing climate change severity. It is estimated that the overlap with a radiative forcing of 8.5 W·m<sup>-2</sup> (business-as-usual scenario) will be approximately half that of the "peak and decline" scenario where radiative forcing is limited to 2.6 W·m $^{-2}$  (Fig. 5). This is attributed to a reduction in trout distribution, consistent with global observations of trout reduction (Kovach et al. 2016; Muhlfeld et al. 2019), as well as a reduction in the distribution of native fish that are highly vulnerable to trout predation. Of the latter, a business-as-usual scenario is predicted to reduce the distributions of 7 of the 10 highly vulnerable taxa almost entirely, potentially resulting in their extinction or near-extinction. This does not account for further declines in habitat quality or increased predation. At locations where trout may overlap with highly vulnerable native fish, conservation managers should consider mitigating inventions, such as reducing trout population pressures and increasing habitat for spawning and refugia.

While trout is predicted to reduce, Chinook salmon is predicted to have a considerable increase in extent. Chinook salmon hatch in cool, clean freshwater habitats with gravel substrates, where juveniles feed on small invertebrates before migrating to the ocean at 1–2 years old; once matured they returning to freshwaters to spawn and do not eat at this stage. As they typically spawn in waters below 10 °C, warming of lowland South Island rivers where they currently spawn could push Chinook to migrate further upstream to cooler waters in lower order streams with longer cumulative length (Beer and Steel 2018; Fuhrman et al. 2018).

## 4.5 Intervention-forward adaptive management

An intervention-forward adaptive management approach is warranted for species facing extinction, significant range reductions, or high vulnerability to predation pressures. Intervention-forward adaptive management is an approach whereby, in the face of uncertainty, multiple interventions are planned and implemented early, followed by cyclical monitoring, evaluation, and adjustment as needed (Dickie et al. 2023). This iterative process allows managers to test hypotheses and adjust their approaches based on the outcomes observed, thereby improving the effectiveness of conservation efforts over time (Allen et al. 2011; Keith et al. 2011; Williams 2011). This involves long-term quantitative monitoring of affected native fish, trout, and their habitats in key overlap areas to assess intervention effectiveness. Intervention-forward adaptive management uses a precautionary approach and would be preferable over realized adaptive management, which relies on patterns of decline to establish first, which may take time to establish with confidence, particularly where natural variability is high and where monitoring capacity is limited.

In addition to local-scale mitigation efforts, reducing cumulative impacts from the broader catchment, and reducing climate change severity via a reduction in fossil fuel use, are also necessary. Showcasing the potential of reducing broader catchment stressors, Vaughan and Gotelli (2019) demonstrated that improving water quality effectively mitigated the adverse effects of significant temperature increases on aquatic macroinvertebrates in England and Wales between 1991 and 2011. Land use change, such as increasing vegetation cover, altering vegetation type, reducing impervious surfaces, and restoring wetlands, can also be used in key locations to mitigate climate-driven alterations in the severity of flooding and drought, as well as improve water quality and freshwater habitat availability. For example, Canning et al. (2022) examined the impact of creating 44 lagoons and sediment traps in a highly coordinated way across Australia's Tully-Murray catchment, which receives approximately 4 m of rainfall annually. Not only was widespread flooding across the catchment substantially reduced, but the lagoons provided habitat for at least 36 native freshwater fish, and landholder profitability increased. Thus, demonstrating the potential benefits of coordinated land use change and wetland restoration that could be observed more widespread in other catchments. Further research into catchment-based mitigation strategies at priority locations, considering both land management practices and land use, would be highly beneficial in informing more effective catchment management.

This study projected the potential end-of-century impacts of climate change on New Zealand's native fish. While predation pressures from trout are anticipated to reduce substantially with increasing climate change severity, the potential distributions for many of New Zealand's native fish are also anticipated to reduce. If aquatic habitats remain in their current condition and an RCP 8.5 climate scenario is observed, then climate change is predicted to result in approximately 10 native fish species being reduced to extinction or near-extinction. A further 18 species were predicted to have sig-

nificant reductions in extent, including the valued trout fisheries being reduced by approximately 30%–40%. These grim outcomes are likely only if a business-as-usual approach to climate change persists. Mitigating climate change severity and improving land use impacts on freshwater environments could prevent anticipated extinctions or near-extinctions.

## Acknowledgements

The authors thank Phil Teal from Wellington Fish and Game Council for supporting this study, and two anonymous reviewers for their constructive feedback.

## **Article information**

History dates

Received: 28 April 2024 Accepted: 7 November 2024

Accepted manuscript online: 4 December 2024

## Copyright

© 2025 Authors Canning and Death; and National Institute of Water and Atmospheric Research. This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

## Data availability

Species climate prediction data can be accessed from a figshare repository at 10.6084/m9.figshare.27634824.

## **Author information**

## **Author ORCIDs**

A.D. Canning https://orcid.org/0000-0001-8813-2240

## **Author contributions**

Conceptualization: ADC, RGD

Data curation: ADC Formal analysis: ADC, CZ

Funding acquisition: ADC Investigation: ADC, RGD

Methodology: ADC, CZ, RGD Project administration: ADC

Resources: CZ Validation: ADC Visualization: ADC

Writing – original draft: ADC

Writing - review & editing: ADC, CZ, RGD

## Competing interests

The authors declare there are no competing interests.

## **Funding information**

This research was partially supported by the Wellington Fish and Game Council.

Can. J. Fish. Aquat. Sci. 00: 1-15 (2025) | dx.doi.org/10.1139/cjfas-2024-0127

## Supplementary material

Supplementary data are available with the article at https://doi.org/10.1139/cjfas-2024-0127.

#### References

- Aldous, A., Fitzsimons, J., Richter, B., and Bach, L. 2011. Droughts, floods and freshwater ecosystems: evaluating climate change impacts and developing adaptation strategies. Mar. Freshwater Res. 62(3): 223– 231. doi:10.1071/MF09285.
- Allen, C.R., Fontaine, J.J., Pope, K.L., and Garmestani, A.S. 2011. Adaptive management for a turbulent future. J. Environ. Manage. 92(5): 1339–1345. doi:10.1016/j.jenvman.2010.11.019. PMID: 21168260.
- Angert, A.L., LaDeau, S.L., and Ostfeld, R.S. 2013. Climate change and species interactions: ways forward. Ann. N.Y. Acad. Sci. 1297(1): 1–7. doi:10.1111/nyas.12286. PMID: 25098378.
- Balcombe, S.R., Sheldon, F., Capon, S.J., Bond, N.R., Hadwen, W.L., Marsh, N., and Bernays, S.J. 2011. Climate-change threats to native fish in degraded rivers and floodplains of the Murray-Darling Basin. Mar. Freshwater Res. 62(9): 1099-1114, doi:10.1071/MF11059.
- Barbosa, A.M., Brown, J., Jiménez-Valverde, A., and Real, R. 2016. mod-EvA: model evaluation and analysis.
- Bartley, T.J., McCann, K.S., Bieg, C., Cazelles, K., Granados, M., Guzzo, M.M., et al. 2019. Food web rewiring in a changing world. Nat. Ecol. Evol. 3(3): 345–354. doi:10.1038/s41559-018-0772-3. PMID: 30742106.
- Beer, W.N., and Steel, E.A. 2018. Impacts and implications of temperature variability on Chinook salmon egg development and emergence phenology. Trans. Am. Fish. Soc. 147(1): 3–15. doi:10.1002/tafs.10025.
- Berec, L., Angulo, E., and Courchamp, F. 2007. Multiple Allee effects and population management. Trends Ecol. Evol. 22(4): 185–191. doi:10. 1016/j.tree.2006.12.002. PMID: 17175060.
- Berger-Tal, O., Blumstein, D.T., and Swaisgood, R.R. 2020. Conservation translocations: a review of common difficulties and promising directions. Anim. Conserv. 23(2): 121–131. doi:10.1111/acv.12534.
- Bernhardt, J.R., O'Connor, M.I., Sunday, J.M., and Gonzalez, A. 2020. Life in fluctuating environments. Philos. Trans. R. Soc. B: Biol. Sci. 375(1814): 20190454. doi:10.1098/rstb.2019.0454.
- Boddy, N.C., and McIntosh, A.R. 2017. Temperature, invaders and patchy habitat interact to limit the distribution of a vulnerable freshwater fish. Austral. Ecol. 42(4): 456–467. doi:10.1111/aec.12463.
- Bosch-Belmar, M., Giommi, C., Milisenda, G., Abbruzzo, A., and Sarà, G. 2021. Integrating functional traits into correlative species distribution models to investigate the vulnerability of marine human activities to climate change. Sci. Total Environ. 799: 149351. doi:10.1016/j.scitotenv.2021.149351. PMID: 34371417.
- Briscoe, N.J., Elith, J., Salguero-Gómez, R., Lahoz-Monfort, J.J., Camac, J.S., Giljohann, K.M., et al. 2019. Forecasting species range dynamics with process-explicit models: matching methods to applications. Ecol. Lett. 22(11): 1940–1956. doi:10.1111/ele.13348. PMID: 31359571.
- Brooker, R.W., Travis, J.M.J., Clark, E.J., and Dytham, C. 2007. Modelling species' range shifts in a changing climate: the impacts of biotic interactions, dispersal distance and the rate of climate change. J. Theor. Biol. 245(1): 59–65. doi:10.1016/j.jtbi.2006.09.033. PMID: 17087974.
- Butt, N., Chauvenet, A.L.M., Adams, V.M., Beger, M., Gallagher, R.V., Shanahan, D.F., et al. 2021. Importance of species translocations under rapid climate change. Conserv. Biol. 35(3): 775–783. doi:10.1111/ cobi.13643. PMID: 33047846.
- Canning, A., Smart, J., Dyke, J., Curwen, G., Hasan, S., and Waltham, N. 2022. Sugarcane profitability, freshwater biodiversity, and ecosystem services are all enhanced by constructed wetlands. Submitted to Environmental Management.
- Canning, A.D. 2018. Predicting New Zealand riverine fish reference assemblages. PeerJ, 6: e4890. doi:10.7717/peerJ.4890. PMID: 29868285.
- Canning, A.D., Jarvis, D., Costanza, R., Hasan, S., Smart, J., Finisdore, J., et al. 2021. Financial incentives for large-scale wetland restoration: beyond markets to common asset trusts. One Earth, 4(7): 937–950. doi:10.1016/j.oneear.2021.06.006.
- Charney, N.D., Record, S., Gerstner, B.E., Merow, C., Zarnetske, P.L., and Enquist, B.J. 2021. A test of species distribution model transferability across environmental and geographic space for 108 Western North

- American tree species [Original Research], Front. Ecol. Evol. 9. doi:10. 3389/fevo.2021.689295.
- Collier, K.J., Leathwick, J.R., and Rowe, D.K. 2017. Assessing vulnerability of New Zealand lakes to loss of conservation value from invasive fish impacts. Aquat. Conserv.: Mar. Freshwater Ecosyst. 27(2): 534–546. doi:10.1002/aqc.2705.
- Collins, D.B.G. 2020, New Zealand river hydrology under late 21st century climate change. Water, 12(8): 12. doi:10.3390/W12082175.
- Collins, D.B.G. 2021. Hydrological sentinels and the relative emergence of climate change signals in New Zealand river flows. Hydrol. Sci. J. 66(15): 2146–2154. doi:10.1080/02626667.2021.1987439.
- Comte, L., Buisson, L., Daufresne, M., and Grenouillet, G. 2013. Climate-induced changes in the distribution of freshwater fish: observed and predicted trends. Freshwater Biol. 58(4): 625-639. doi:10.1111/fwb.
- Coughlan, A. 2022. Risk assessment and mitigations of the potential impacts of trout predation on New Zealand's indigenous fish species. Massey University, Manawatū, New Zealand.
- Coz, D.M., and Young, J.C. 2020. Conflicts over wildlife conservation: learning from the reintroduction of beavers in Scotland. People Nat. 2(2): 406–419. doi:10.1002/pan3.10076.
- Cutler, D.R., Edwards, T.C., Jr, Beard, K.H., Cutler, A., Hess, K.T., Gibson, J., and Lawler, J.J. 2007. Random forests for classification in ecology. Ecology, 88(11): 2783–2792. doi:10.1890/07-0539.1PMID: 18051647.
- David, B.O., Hamer, M.P., Collier, K.J., Lake, M.D., Surrey, G.M., McArthur, K., et al. 2010. A standardised sampling protocol for robust assessment of reach-scale fish community diversity in wadeable New Zealand streams. N.Z. J. Mar. Freshwater Res. 44(3): 177-187. doi:10.1080/00288330.2010.498090.
- Davidson, N.C. 2014. How much wetland has the world lost? Long-term and recent trends in global wetland area. Mar. Freshwater Res. 65(10): 934–941. doi:10.1071/MF14173.
- Death, R.G. 2024. Chapter 2 the resilience of riverine ecological communities. *In Resilience* and riverine landscapes. *Edited by M. Thoms and I. Fuller. Elsevier. pp. 23–39.*
- Death, R.G., and Winterbourn, M.J. 1995. Diversity patterns in stream benthic invertebrate communities: the influence of habitat stability. Ecology, 76(5): 1446–1460. doi:10.2307/1938147.
- Dickie, M., Ford, A.T., Steenweg, R., and Serrouya, R. 2023. Intervention-forward adaptive management in the face of extinction. Trends Ecol. Evol. 38(6): 505–506. doi:10.1016/j.tree.2023.01.016. PMID: 36806454.
- Dunn, N., Allibone, R., Closs, G., Crow, S., David, B., Griffiths, M., et al. 2018. Conservation status of New Zealand freshwater fish, 2017. N.Z. J. Mar. Freshwater Res. 44: 15-15. doi:10.1080/00288330.2010.514346.
- Dymond, J.R., Sabetizade, M., Newsome, P.F., Harmsworth, G.R., and Ausseil, A.-G. 2021. Revised extent of wetlands in New Zealand. N. Z. J. Ecol. 45(2): 1–8. Available from https://www.jstor.org/stable/4862188 2/accessed 16 September 2024/.
- Elith, J., and Graham, C.H. 2009. Do they? How do they? Why do they differ? On finding reasons for differing performances of species distribution models. Ecography, 32(1): 66–77. doi:10.1111/j.1600-0587. 2008.05505.x.
- Elith, J., Kearney, M., and Phillips, S. 2010. The art of modelling range-shifting species. Methods Ecol. Evol. 1(4): 330–342. doi:10.1111/j. 2041-210X.2010.00036.x.
- Evans, J.S., and Murphy, M.A. 2019. Package 'rfUtilities'.
- Fenderson, L.E., Kovach, A.I., and Llamas, B. 2020. Spatiotemporal land-scape genetics: investigating ecology and evolution through space and time. Mol. Ecol. 29(2): 218–246. doi:10.1111/mec.15315. PMID: 31758601.
- Fuhrman, A.E., Larsen, D.A., Steel, E.A., Young, G., and Beckman, B.R. 2018. Chinook salmon emergence phenotypes: describing the relationships between temperature, emergence timing and condition factor in a reaction norm framework. Ecol. Freshwater Fish, 27(1): 350–362. doi:10.1111/eff.12351.
- Garant, D. 2020. Natural and human-induced environmental changes and their effects on adaptive potential of wild animal populations. Evol. Appl. 13(6): 1117-1127. doi:10.1111/eva.12928. PMID: 32684950.
- García-Callejas, D., and Araújo, M.B. 2016. The effects of model and data complexity on predictions from species distributions models. Ecol. Modell. 326: 4–12. doi:10.1016/j.ecolmodel.2015.06.002.
- Garrett-Walker, J., Collier, K.J., Daniel, A., Hicks, B.J., and Klee, D. 2020. Design features of constructed floodplain ponds influence waterbird

- and fish communities in northern New Zealand, Freshwater Biol. 65: 1–15, doi:10.1111/fwb.13602.
- Glikman, J.A., Frank, B., Sandström, C., Meysohn, S., Bogardus, M., Madden, F., and Zimmermann, A. 2022. The Human dimensions and the public engagement spectrum of conservation translocation. In Conservation translocations. Edited by M.J. Gaywood, J.G. Ewen, P.M. Hollingsworth and A. Moehrenschlager. Cambridge University Press, Cambridge. pp. 303–330.
- Groenewegen, R., Harley, D., Hill, R., and Coulson, G. 2017. Assisted colonisation trial of the eastern barred bandicoot (*Perameles gunnii*) to a fox-free island. Wildl. Res. 44(7): 484–496. doi:10.1071/WR16198.
- Guiden, P.W., Bartel, S.L., Byer, N.W., Shipley, A.A., and Orrock, J.L. 2019. Predator-prey interactions in the anthropocene: reconciling multiple aspects of novelty. Trends Ecol. Evol. 34(7): 616–627. doi:10.1016/j. tree.2019.02.017.
- Guzzo, M.M., Blanchfield, P.J., and Rennie, M.D. 2017. Behavioral responses to annual temperature variation alter the dominant energy pathway, growth, and condition of a cold-water predator. Proc. Natl. Acad. Sci. USA, 114(37): 9912–9917. doi:10.1073/pnas.1702584114.
- Harvey, J.A., Heinen, R., Gols, R., and Thakur, M.P. 2020. Climate changemediated temperature extremes and insects: from outbreaks to breakdowns. Global Change Biol. 26(12): 6685–6701. doi:10.1111/gcb. 15377.
- Heikkinen, R.K., Marmion, M., and Luoto, M. 2012. Does the interpolation accuracy of species distribution models come at the expense of transferability? Ecography, 35(3): 276-288. doi:10.1111/j.1600-0587.
- Hellman, J., Byers, J., Bierwagen, B., and Dukes, J. 2008. Five potential consequences of climate change for invasive species. Conserv. Biol. 22(3): 534-543. doi:10.1111/j.1523-1739.2008.00951.x.
- Hodgson, J.A., Thomas, C.D., Cinderby, S., Cambridge, H., Evans, P., and Hill, J.K. 2011. Habitat re-creation strategies for promoting adaptation of species to climate change. Conserv. Lett. 4(4): 289-297. doi:10.1111/j.1755-263X.2011.00177.x.
- Hohenlohe, P.A., Funk, W.C., and Rajora, O.P. 2021. Population genomics for wildlife conservation and management. Mol. Ecol. 30(1): 62–82. doi:10.1111/mec.15720.
- IPCC. 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva, Switzerland.
- Jellyman, D. 2016. Management and fisheries of Australasian eels (Anguilla australis, Anguilla dieffenbachii, Anguilla reinhardtii). In Biology and ecology of anguillid eels. pp. 274–290.
- Jellyman, P.G., and McIntosh, A.R. 2020. Disturbance-mediated consumer assemblages determine fish community structure and moderate topdown influences through bottom-up constraints. J. Anim. Ecol. 89(5): 1175–1189. doi:10.1111/1365-2656.13168.
- Jellyman, P.G., McHugh, P.A., Simon, K.S., Thompson, R.M., and McIntosh, A.R. 2018. The effects of brown trout on the trophic webs of New Zealand streams. In Brown trout: biology, ecology and management. Edited by J. Lobon-Cervia and N. Sanz. John Wiley & Sons Ltd, United Kingdom.
- Jowett, I.G., and Richardson, J. 1989. Effects of a severe flood on instream habitat and trout populations in seven New Zealand rivers. N.Z. J. Mar. Freshwater Res. 23(1): 11-17. doi:10.1080/00288330.1989.9516335.
- Joy, M., David, B., and Lake, M. 2013. New Zealand Freshwater Fish Sampling Protocols (Part 1): Wadeable rivers and streams. Massey University, Palmerston North, New Zealand.
- Joy, M., Foote, K., McNie, P., and Piria, M. 2019. Decline in New Zealand's freshwater fish fauna: effect of land use. Mar. Freshwater Res. 70(1): 114-124. doi:10.1071/MF18028.
- Joy, M.K., and Death, R.G. 2004a. Application of the Index of Biotic Integrity methodology to New Zealand freshwater fish communities. Environ. Manage. 34(3): 415–428. doi:10.1007/s00267-004-0083-0.
- Joy, M.K., and Death, R.G. 2004b. Predictive modelling and spatial mapping of freshwater fish and decapod assemblages using GIS and neural networks. Freshwater Biol. 49(8): 1036-1052. doi:doi:10.1111/j. 1365-2427.2004.01248.x.
- Joy, M.K., and Death, R.G. 2013. Freshwater biodiversity. In Ecosystem services in New Zealand: conditions and trends . pp. 448–459.
- Keegan, L.J., White, R.S.A., and Macinnis-Ng, C. 2022. Current knowledge and potential impacts of climate change on New Zealand's biological

- heritage. N. Z. J. Ecol. 46(1): 1–24. Available from https://www.jstor.org/stable/48652113 [accessed October 2024].
- Keith, D.A., Martin, T.G., McDonald-Madden, E., and Walters, C. 2011. Uncertainty and adaptive management for biodiversity conservation. Biol. Conserv. 144(4): 1175–1178. doi:10.1016/j.biocon.2010.11.022.
- Kovach, R.P., Muhlfeld, C.C., Al-Chokhachy, R., Dunham, J.B., Letcher, B.H., and Kershner, J.L. 2016. Impacts of climatic variation on trout: a global synthesis and path forward. Rev. Fish Biol. Fish. 26(2): 135–151. doi:10.1007/s11160-015-9414-x.
- Leathwick, J.R., Collier, K.J., Hicks, B.J., Ling, N., Stichbury, G., and de Winton, M. 2016. Predictions of establishment risk highlight biosurveillance priorities for invasive fish in New Zealand lakes. Freshwater Biol. 61(9): 1522–1535. doi:10.1111/fwb.12792.
- Leathwick, J.R., Rowe, D., Richardson, J., Elith, J., and Hastie, T. 2005. Using multivariate adaptive regression splines to predict the distributions of New Zealand's freshwater diadromous fish. Freshwater Biol. 50(12): 2034–2052. doi:10.1111/j.1365-2427.2005.01448.x.
- Leathwick, J.R., West, D., Gerbeaux, P., Kelly, D., Robertson, H., Brown, D., et al. 2010. Freshwater Ecosystems of New Zealand (FENZ) Geodatabase. Department of Conservation, Wellington.
- Lee, F., and Perry, G.L.W. 2019. Assessing the role of off-take and sourcesink dynamics in the extinction of the amphidromous New Zealand grayling (Prototroctes oxyrhynchus). Freshwater Biol. 64(10): 1747–1754. doi:10.1111/fwb.13366.
- Liaw, A., and Wiener, M. 2002. Classification and regression by random-Forest. R News, 2(3): 18–22.
- Ling, N. 2004. Gambusia in New Zealand: really bad or just misunderstood? N.Z. J. Mar. Freshwater Res. 38(3): 473-480, doi:10.1080/ 00288330.2004.9517254.
- Mainka, S.A., and Howard, G.W. 2010. Climate change and invasive species: double jeopardy. Integr. Zool. 5(2): 102-111. doi:10.1111/j. 1749-4877.2010.00193.x.
- McDermott, A. 2022. Climate change hastens disease spread across the globe, Proc. Natl. Acad. Sci. USA, 119(7): e2200481119–e2200481119. doi:10.1073/pnas.2200481119.
- McDowall, R.M. 2010. New Zealand freshwater fishes: an historical and ecological biogeography. Springer.
- McIntosh, A.R., McHugh, P.A., Dunn, N.R., Goodman, J.M., Howard, S.W., Jellyman, P.G., et al. 2010. The impact of trout on galaxiid fishes in New Zealand. N. Z. J. Ecol. 34(1): 195.
- Milner, A.M., Robertson, A.L., McDermott, M.J., Klaar, M.J., and Brown, L.E. 2013. Major flood disturbance alters river ecosystem evolution. Nat. Clim. Change, 3(2): 137–141. doi:10.1038/nclimate1665.
- Ministry for Environment, 2020, National Policy Statement for Freshwater Management 2020, New Zealand Government, Wellington, New Zealand.
- Miskelly, C.M., and Powlesland, R.G. 2013. Conservation translocations of New Zealand birds, 1863–2012. Notornis, 60(1): 3–28.
- Morán-Ordófiez, A., Lahoz-Monfort, J.J., Elith, J., and Wintle, B.A. 2017. Evaluating 318 continental-scale species distribution models over a 60-year prediction horizon: what factors influence the reliability of predictions? Global Ecol. Biogeogr. 26(3): 371–384. doi:10.1111/geb. 12545.
- Morris, R.K.A., Alonso, I., Jefferson, R.G., and Kirby, K.J. 2006. The creation of compensatory habitat—Can it secure sustainable development? J. Nat. Conserv. 14(2): 106–116. doi:10.1016/j.jnc.2006.01.003.
- Muhlfeld, C.C., Dauwalter, D.C., D'Angelo, V.S., Ferguson, A., Giersch, J.J., Impson, D. et al., 2019. Global status of trout and char: conservation challenges in the twenty-first century. In Trout and char of the world. pp. 717–760.
- Neverman, A.J., Donovan, M., Smith, H.G., Ausseil, A.-G., and Zammit, C. 2023. Climate change impacts on erosion and suspended sediment loads in New Zealand. Geomorphology, 427: 108607–108607. doi:10. 1016/j.geomorph.2023.108607.
- Norberg, A., Abrego, N., Blanchet, F.G., Adler, F.R., Anderson, B.J., Anttila, J., et al. 2019. A comprehensive evaluation of predictive performance of 33 species distribution models at species and community levels. Ecol. Monogr. 89(3): e01370. doi:10.1002/ecm.1370.
- Olden, J.D., Kennard, M.J., Leprieur, F., Tedesco, P.A., Winemiller, K.O., and García-Berthou, E. 2010. Conservation biogeography of freshwater fishes: recent progress and future challenges. Divers. Distrib. 16(3): 496–513. doi:10.1111/j.1472-4642.2010.00655.x.

- Pecl, G.T., Araújo, M.B., Bell, J.D., Blanchard, J., Bonebrake, T.C., Chen, I.C., et al. 2017. Biodiversity redistribution under climate change: impacts on ecosystems and human well-being. Science, 355(6332): eaai9214–eaai9214. doi:10.1126/science.aai9214.
- Pollock, L.J., Tingley, R., Morris, W.K., Golding, N., O'Hara, R.B., Parris, K.M., et al. 2014. Understanding co-occurrence by modelling species simultaneously with a Joint species Distribution Model (JSDM). Methods Ecol. Evol. 5(5): 397–406. doi:10.1111/2041-210X. 12180
- Pratchett, M.S., Bay, L.K., Gehrke, P.C., Koehn, J.D., Osborne, K., Pressey, R.L., et al. 2011. Contribution of climate change to degradation and loss of critical fish habitats in Australian marine and freshwater environments. Mar. Freshwater Res. 62(9): 1062–1081. doi:10.1071/MF10303.
- Pyšek, P., Hulme, P.E., Simberloff, D., Bacher, S., Blackburn, T.M., Carlton, J.T., et al. 2020. Scientists' warning on invasive alien species. Biol. Rev. 95(6): 1511–1534. doi:10.1111/brv.12627.
- Queen, L.E., Dean, S., Stone, D., Henderson, R., and Renwick, J. 2023. Spatiotemporal trends in near-natural New Zealand river flow. J. Hydrometeorol. 24(2): 241–255. doi:10.1175/JHM-D-22-0037.1.
- R Core Team, 2024. R: a language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria.
- Rabalais, N.N., Díaz, R.J., Levin, L.A., Turner, R.E., Gilbert, D., and Zhang, J. 2010. Dynamics and distribution of natural and human-caused hypoxia. Biogeosciences, 7(2): 585–619. doi:10.5194/bg-7-585-2010.
- Richardson, J. 1989. The all-new freshwater fish database. Freshwater Catch, 41: 20-21.
- Richardson, J., Boubée, J.A.T., and West, D.W. 1994. Thermal tolerance and preference of some native New Zealand freshwater fish. N.Z. J. Mar. Freshwater Res. 28(4): 399–407. doi:10.1080/00288330,1994. 9516630.
- Robin, X., Turck, N., Hainard, A., Tiberti, N., Lisacek, F., Sanchez, J.-C., and Müller, M. 2011. pROC: an open-source package for R and S+ to analyze and compare ROC curves. BMC Bioinformatics, 12(1): 77. doi:10.1186/1471-2105-12-77.
- Rogelj, J., Meinshausen, M., and Knutti, R. 2012. Global warming under old and new scenarios using IPCC climate sensitivity range estimates. Nat. Clim. Change, 2(4): 248–253. doi:10.1038/nclimate1385.
- Rowe, D.K., Closs, G., and West, D.W. 2018. Restoration of native fish in New Zealand lakes and reservoirs. In Lake restoration handbook: a New Zealand perspective. Edited by D.P. Hamilton, K.J. Collier, J.M. Quinn and C. Howard-Williams. Springer International Publishing, Cham. pp. 333–365.
- Rowe, D.K., Saxton, B.A., and Stancliff, A.G. 1992. Species composition of whitebait (galaxiidae) fisheries in 12 bay of plenty rivers, New Zealand: evidence for river mouth selection by juvenile galaxias brevipinnis (günther). N.Z. J. Mar. Freshwater Res. 26(2): 219-228. doi:10.1080/00288330.1992.9516517.
- Sagar, P.M., Graynoth, E., and Glova, G.J. 2005. Prey selection and dietary overlap of shortfinned (Anguilla australis) and longfinned (A. dieffenbachii) eels during summer in the Horokiwi Stream, New Zealand. N.Z. J. Mar. Freshwater Res. 39(4): 931–939. doi:10.1080/00288330.2005. 9517363.
- Schleuning, M., Neuschulz, E.L., Albrecht, J., Bender, I.M.A., Bowler, D.E., Dehling, D.M., et al. 2020. Trait-based assessments of climate-change impacts on interacting species. Trends Ecol. Evol. 35(4): 319–328. doi:10.1016/j.tree.2019.12.010.
- Schweiger, O., Settele, J., Kudrna, O., Klotz, S., and Kühn, I. 2008. Climate change can cause spatial mismatch of trophically interacting species. Ecology, 89(12): 3472–3479. doi:10.1890/07-1748.1.
- Serrao-Neumann, S., White, I., Dean, S.M., Paulik, R., Sleight, B., Stori, F.T., et al. 2024. The need to reconfigure consistency and variability to best manage changing flood risks in Aotearoa-New Zealand. J. R. Soc. N. Z. 54(4): 473-490. doi:10.1080/03036758.2023.2211777.
- Snelder, T., Biggs, B., and Weatherhead, M. 2010. New Zealand river environment classification user guide. Ministry for the Environment.
- Staudt, A., Leidner, A.K., Howard, J., Brauman, K.A., Dukes, J.S., Hansen, L.J., et al. 2013. The added complications of climate change: understanding and managing biodiversity and ecosystems. Front. Ecol. Environ.
- Stewart, C., Garrick, E., McDougall, M., and Moss, Z. 2022. Waterfowl hunting wetlands as habitat for two New Zealand eel species. N.Z. J. Zool. 49(1): 67–77. doi:10.1080/03014223.2021.1885454.

- Stewart, C., Harper, B., Couper, J., Bury, S.J., and Sabadel, A. 2024. Can non-native perch (*Perca fluviatilis*) support native eel populations in a wetland complex? Ecol. Freshwater Fish, 33(2): e12749. doi:10.1111/ eff.12749.
- Synes, N.W., Ponchon, A., Palmer, S.C.F., Osborne, P.E., Bocedi, G., Travis, J.M.J., and Watts, K. 2020. Prioritising conservation actions for biodiversity: lessening the impact from habitat fragmentation and climate change. Biol. Conserv. 252: 108819–108819. doi:10.1016/j.biocon.2020.108819.
- Thalmann, S., Peck, S., Wise, P., Potts, J.M., Clarke, J., and Richley, J. 2016. Translocation of a top-order carnivore: tracking the initial survival, spatial movement, home-range establishment and habitat use of Tasmanian devils on Maria Island. Aust. Mammal. 38(1): 68–79. doi:10.1071/AM15009.
- Thomas, C.D. 2011. Translocation of species, climate change, and the end of trying to recreate past ecological communities. Trends Ecol. Evol. 26(5): 216–221, doi:10.1016/j.tree.2011.02.006.
- Tikhonov, G., Abrego, N., Dunson, D., and Ovaskainen, O. 2017. Using joint species distribution models for evaluating how species-to-species associations depend on the environmental context. Methods Ecol. Evol. 8(4): 443–452. doi:10.1111/2041-210X.12723.
- Turner, M.G., Calder, W.J., Cumming, G.S., Hughes, T.P., Jentsch, A., LaDeau, S.L., et al. 2020. Climate change, ecosystems and abrupt change: science priorities. Philos. Trans. R. Soc. B: Biol. Sci. 375(1794): 20190105–20190105. doi:10.1098/rstb.2019.0105.
- van Vliet, M.T.H., Thorslund, J., Strokal, M., Hofstra, N., Flörke, M., Ehalt Macedo, H., et al. 2023. Global river water quality under climate change and hydroclimatic extremes. Nat. Rev. Earth Environ. 4(10): 687–702. doi:10.1038/s43017-023-00472-3.
- Van Zuiden, T.M., Chen, M.M., Stefanoff, S., Lopez, L., and Sharma, S. 2016. Projected impacts of climate change on three freshwater fishes and potential novel competitive interactions. Divers. Distrib. 22(5): 603–614. doi:10.1111/ddi.12422.
- Vaughan, I.P., and Gotelli, N.J. 2019. Water quality improvements offset the climatic debt for stream macroinvertebrates over twenty years. Nat. Commun. 10(1): 1956–1956. doi:10.1038/ s41467-019-09736-3.
- Walter, J.A., Grayson, K.L., and Johnson, D.M. 2017. Variation in Allee effects: evidence, unknowns, and directions forward. Popul. Ecol. 59(2): 99–107. doi:10.1007/s10144-017-0576-3.
- Werkowska, W., Márquez, A.L., Real, R., and Acevedo, P. 2017. A practical overview of transferability in species distribution modeling. Environ. Rev. 25(1): 127–133. doi:10.1139/er-2016-0045.
- Williams, B.K. 2011. Adaptive management of natural resources—framework and issues. J. Environ. Manage. 92(5): 1346–1353. doi:10.1016/j.jenvman.2010.10.041.
- Winterbourn, M. 1997. New Zealand mountain stream communities: stable yet disturbed? In Evolutionary ecology of freshwater animals; concepts and case studies. Edited by S. Bruno and S. Lively. Springer. pp. 31–54.
- Woodward, G., Bonada, N., Brown, L.E., Death, R.G., Durance, I., Gray, C., et al. 2016. The effects of climatic fluctuations and extreme events on running water ecosystems. Philos. Trans. R. Soc. B: Biol. Sci. 371(1694): 20150274–20150274. doi:10.1098/rstb.2015.0274.
- Woodward, G., Perkins, D.M., and Brown, L.E. 2010. Climate change and freshwater ecosystems: impacts across multiple levels of organization. Philos. Trans. R. Soc. B: Biol. Sci. 365(1549): 2093–2106. doi:10.1098/rstb.2010.0055.
- Wu, N., Górski, K., and Daniel, A.J. 2013. Abundance of larval native and nonnative fishes in floodplain habitats of the lower Waikato River, New Zealand. Inland Waters, 3(3): 359–368. doi:10.5268/IW-3.
- Wyborn, C., Louder, E., Harfoot, M., and Hill, S. 2021. Engaging with the science and politics of biodiversity futures; a literature review. Environ. Conserv. 48(1): 8–15. doi:10.1017/S037689292000048X.
- Yates, K.L., Bouchet, P.J., Caley, M.J., Mengersen, K., Randin, C.F., Parnell, S., et al. 2018. Outstanding challenges in the transferability of ecological models. Trends Ecol. Evol. 33(10): 790–802. doi:10.1016/j.tree. 2018.08.001.
- Yungnickel, M.R., Hickford, M.J.H., and Schiel, D.R. 2020. Spatio-temporal variation in species composition of New Zealand's whitebait fishery. N.Z. J. Mar. Freshwater Res. 54(4): 679–694. doi:10.1080/00288330. 2020.1745854.

## TARANAKI FISH AND GAME COUNCIL

The Chairman

Taranaki Fish and Game Council

## 2025/26 GAME SEASON GAZETTE NOTICE

Following presentation of the draft 2025/26 Game Season Gazette Notice report to Council at its meeting on 7<sup>th</sup> December 2024, trend counts for paradise shelduck and black swan were carried out in January 2025.

## Paradise shelduck

Counts for paradise shelduck remain relatively stable at the low end of abundance in Waimarino and Whanganui (Areas A & B) with 2,899 paradise counted at 18 sites in the Waimarinho and 1,587 counted at 10 sites in Whanganui (Figure 1). No change to the current season conditions of a 10-bird daily bag limit for an 8-week season is recommended for those areas.

However the count of 14,135 paradise at 46 sites in Area C is at an historically high level, similar to 2020 and 2021 (Figure 1). Most of the birds are located at moult sites on the Taranaki ringplain within the area bounded by Hawera, Eltham, Stratford, Inglewood and Waitara, with large moult gatherings on the Opunake, Eltham, Stratford and Inglewood town oxidation ponds, Wiremu Station, Barrett Lagoon, Umutekai and Lake Cowley.

As the Taranaki ringplain consists almost entirely of productive dairy farms, with chicory crops and pasture, there is significant potential for damage to occur. So far this season, 21 permits to disturb paradise shelduck have been issued in this area and currently there are several landholders adjacent to moult sites that are very unhappy with the damage that is occurring.

By contrast, the total harvest of paradise shelduck in the region has been declining over time (Figure 2). Some of the decline is likely due to the reduction in the Waimarino and Whanganui populations, including in the Patea – Waverley area. However, the current ringplain count and the harvest information together indicate that this area could sustain an increase in harvest.

Promotion of the 2025 three-weekend (7-day) summer hunting season may help. However, it is also recommended that the opening weekend bag limit for paradise shelduck in Area C be increased from 10 birds to 15 for the 2025 game season to promote an increase in harvest from the Taranaki ringplain population.

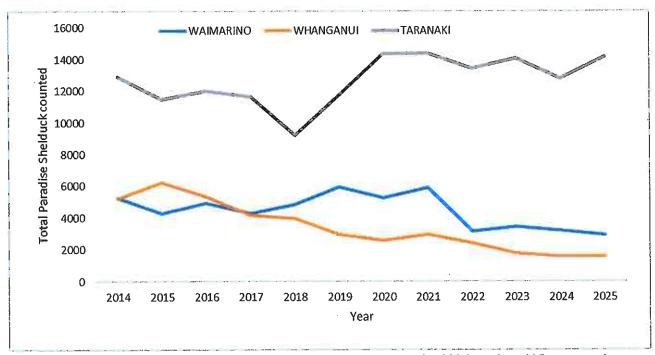


Figure 1. Total January trend count of paradise shelduck in the Waimarino, Whanganui and Taranaki areas, 2014 to 2025.

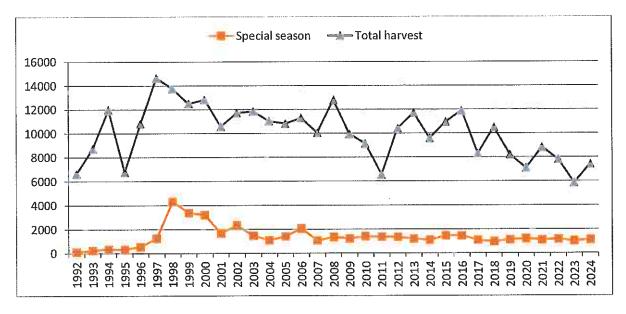


Figure 2. Estimated special season harvest and total annual harvest of paradise shelduck across the Taranaki region, 1992 to 2024.

## Black Swan

January trend counts of black swan remain stable in the Taranaki region, with 27 swan counted at nine sites in the Waimarino, 384 swan at nine Whanganui sites and 542 swan at 31 sites on the Taranaki ringplain.

While count data from Nelson / Marlborough is not yet available, swan counts in the Wellington region totalled 6952 birds, down 18% from 8517 swan counted in 2024 (Figure 3).

Given, this information, it is recommended that there is no change to the Taranaki season conditions, of a 2-bird daily bag limit for an 8-week season.

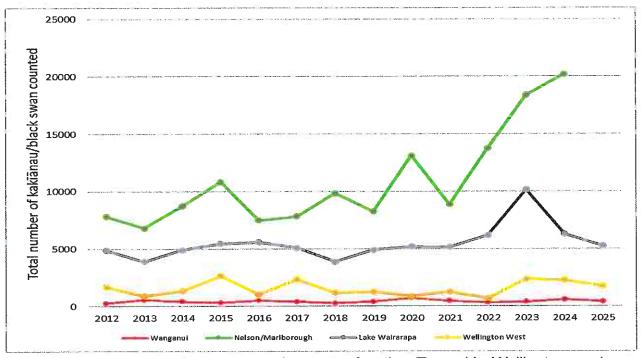


Figure 3. January black swan trend counts for the Taranaki, Wellington and Nelson/Marlborough regions 2010 to 2025.

## RECOMMENDATION

 That the daily bag limit for paradise shelduck be amended to 15 birds in Area C for opening weekend only.

Allen Stancliff Senior Field Officer 28<sup>th</sup> January 2025

### TARANAKI FISH AND GAME REGION1

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

Species	Season Duration	Daily Bag Limit	Hunting area
	(dates inclusive)		
Grey/mallard duck	3 May to 29 June 2025	10	All areas
NZ shoveler duck	3 May to 29 June 2025	2	All areas
Paradise shelduck	3 May to 4 May 2025	15	Area C
	3 May to 4 May 2025	10	Area A&B
	5 May to 29 June 2025	10	All areas
	21 and 22 Feb 2026	10	Area C
	28 Feb and 1 March 2026	10	Area C
	7 to 9 March 2026	10	Area C
Black swan	3 May to 29 June 2025	2	All areas
Pūkeko	3 May to 31 August 2025	5	Area A&B
	3 May to 31 August 2025	10	Area C
California quail	3 May to 31 August 2025	5	All areas
Cock pheasant	3 May to 31 August 2025	2	All areas
Bobwhite (Virginian) quail	3 May to 31 August 2025	5	All areas
Red legged partridge	3 May to 31 August 2025	2	All areas
Pheasant, both sexes	3 May to 31 August 2025	No limit	Upland game properties with special conditions in clause 6 for this Region.

### 2 Definition of Areas

- 2.1 Area A: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Tawhata; then by Tawhata Road to the boundary; then by the generally eastern boundary of the region to Waiaruhe Road.
- **2.2** Area B: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Makakaho Junction down the eastern bank of the Waitotara River to the sea; then by the sea coast and generally eastern boundary of the region to Waiaruhe Road.

<sup>&</sup>lt;sup>1</sup>Reference to Description: Gazette, No. 83, of 27 May 1990, at page 1861

**2.3** Area C: The balance of the region contained by the westerly boundaries of Area A and B and the sea coast between the Mokau River and Waitotara River mouths.

### 3 Shooting Hours

6.30am to 6.15pm.

### 4 Decoy Limit

No limit.

### 5 Special Conditions

5.1 Special Paradise Shelduck Season

Area C only: For the Special Paradise Shelduck Season on 21 February, 22 February, 28 February, 1 March, 7 March, 8 March and 9 March 2026, the hours of hunting are extended 6.30am to 8.00pm. In addition, all hunters, including land occupiers, must, within a month of the end of the season, provide the Taranaki Fish and Game Council with particulars of: the dates and locations where they hunted paradise shelduck; the hours hunted each day; the number of birds taken each day; and the number of birds not retrieved.

- 5.2 No person shall hunt, as specified, within 100m of any urban sewage oxidation pond.
- 5.3 No person may wilfully leave on the hunting ground any game bird(s) shot or parts of any game birds shot.
- 5.4 No person may shoot game from a boat on the Whanganui River downstream of Kemps Pole (Kauarapaoa Stream confluence).
- 5.5 Any licensed game bird hunter who has a Department of Conservation permit to take or kill wildlife for the purpose of hawking may hunt with an Australasian Harrier (*Circus approximans*) to take gamebirds. This is subject to the season length and bag limit for each gamebird species in clause 1 of this notice for this region and subject to any conditions imposed by the Director-General of Conservation under such a permit.

### 6 Upland Game Properties with Special Conditions

- 6.1 This clause applies to the following specified property only:
  Paetawa station. 366a Kauarapaoa Road Whanganui being lots1-2 DP 29356.
  Waipukurau SD. 1307.9440ha administered by Hienni investment Ltd.
- 6.2 Where hunting takes place in any specified property defined in this notice, no person shall have in that person's possession outside that specified property any game taken from that specified property, unless affixed to the game is a label with the name of the specified property where that game was taken or killed written legibly on it, and the additional words on the label, "for personal consumption, not for sale or profit" written legibly on it.
- **6.3** A person must not clip the wings of a bird released on any specified property after the bird is 8 weeks old.
- **6.4** A person must not clip the beak of any bird released on any specified property at any time.
- 6.5 A person must not hunt a pheasant before it is 18 weeks old.
- **6.6** A person must not hunt waterfowl on a specified property on the same day that a pheasant hunt takes place on that property.

- 6.7 The unlimited daily bag limit for the specified property shall only apply when at least 400 pheasants have been released on to that specified property within 5 months of the opening day of the season, otherwise the daily bag limit shall be 2 cock pheasants.
- **6.8** A property owner listed in subclause (1) or a lessee of that property owner must keep a register of:
- (a) the names and addresses of hunters and all other persons who take game from that property;
- (b) the number and type of birds taken by those persons;
- (c) the description of that person's role in the hunting and killing of game birds on that day.

### TARANAKI FISH AND GAME COUNCIL

The Chairman
Taranaki Fish and Game Council

### 2025 GAMEBIRD TREND COUNT REPORT

This report presents the January 2025 trend count information for paradise shelduck and black swan. The Council made recommendations on the draft 2025/26 Game Gazette Notice at its meeting on 7<sup>th</sup> December 2024. As the final deadline for provision of regulation details to the NZ Fish & Game Council has passed (29<sup>th</sup> January 2025), this report is for the Council's information only.

### **PARADISE SHELDUCK**

### WAIMARINO (AREA A)

Count information for paradise shelduck was obtained from 17 Waimarino moult sites in early January 2025, compared with 14 in the previous year (Appendix 1, Table 1). The three additional sites for this year's count included a continuation of counts at the Makakahi Lodge site, which was missed in 2024, and the inclusion of two new sites, Mangawherawhera, and Waiharuru. 53 and 151 shelduck were recorded at each site respectively, and therefore both sites will be surveyed again next year.

The count estimation of 51 Shelduck at the Harris site was provided by the landowner and considered to be accurate. The count at Lake Otamaraha was obtained from the Wellington F&G aerial flight, due to Raupō obstructing views of the lake from the ground. The 2025 count of 2,745 paradise shelduck confirms that the Waimarino population remains at the "low end" of its historical range of abundance, with a 13.65% decrease on the 2024 count of 3,179 birds. The average number of Paradise shelduck per moult site in 2025 was 161 birds, which is lower than the 2024 average of 227 birds, but consistent when it is considered that less birds were counted this year over more survey locations, in comparison with 2024.

### WHANGANUI (AREA B)

Paradise shelduck were counted at 10 Whanganui coastal and hill country moult sites in January 2025. These are the same 10 sites that have been counted from 2022 onwards, including Lakes Oturi, Waiau and Maumahaki located in Area C just north of the Waitotara River (Appendix 1, Table 2). Counts at the Lake Westmere location are known to be challenging due to the dense riparian vegetation surrounding the lake, but there is confidence in the reported count number of 204 being reasonably accurate.

The overall count of 1,736 birds was slightly higher than in 2024 (1,566), with a 9.79% increase. Although there was an overall increase for the year, at a site-specific level, only four sites showed an increase in bird numbers when compared to 2024 site count data. There was a particularly notable increase in numbers at Lake Kaitoke, where counts increased to 717, compared with Kaitoke's 2023 count of 290, and 2024 count of 325.

The overall count of 1,736 birds maintains the trend that the Whanganui paradise population remains situated around the "low end" of its historical range of abundance.

### WAITOTARA RIVER CATCHMENT (AREA B&C)

Counts in the Waitotara Catchment were undertaken at 5 of the 7 sites in January 2025. Four birds were recorded at Bush Pond, alongside 7 at the pond of the true right bank of Makakaho Road. The pond on the true left bank of Makakaho Road was not counted this year due to access issues, but there may well be a small population of shelduck there, as 141 birds were counted here in 2022, and 122 in 2023.

### TARANAKI PROVINCE (AREA C)

Counts of paradise shelduck were undertaken at 46 sites in January 2025 compared with 39 in 2024 (Appendix 1, Table 4). This included sites in the Taranaki eastern hill country, ringplain and coastal areas as far north as Mohakatino and as far south as Manutahi.

The total count of 14,135 birds was right up there with the record highs of 2020, 2021 and 2023 (Appendix 1, Table 4) and well above the long-term average (2008 – 2025) of 12,040 birds.

Sites on the ringplain bounded by Hawera, Eltham, Stratford, Inglewood and Waitara held the bulk of the moulting population, with sites in the eastern hill country holding only moderate numbers. Highest numbers were almost exclusively in dairying country where the impacts of moult aggregations can be significant.

Counts at the Waingongoro Road site (Appendix 1, Table 4) remained low owing to dispersal of birds with a gas gun. A similar situation occurred at an upper Egmont Road moult site where the dairy farmer had had enough of the birds and obtained a permit and a gas gun in December 2024. However, this was more than offset by increases at other sites, particularly at the Opunake, Eltham, Stratford and Inglewood town oxidation ponds. A farmer adjacent to the Opunake oxidation ponds is very unhappy with numbers of paradise shelduck (and Canada geese) coming onto his property, even with the use of a gas gun. The Manager at nearby Wiremu Station has also complained about the number of paradise grazing pasture, during what has been a particularly dry period. Chicory crops are also being targeted by post-moult birds, with one farmer at Tikorangi having up to 300 paradise causing damage.

Overall, the population remains at the high end of abundance and given the number of permits issued to farmers to disturb paradise shelduck causing damage to pasture and crops in Area C (21 so far in 2024/25), a summer hunting season to disperse birds after the moult remains a necessity.

Given the high numbers of paradise shelduck at moult sites on the Taranaki ringplain, it is also recommended that the opening weekend bag limit be increased from 10 birds to 15 in Area C, with the usual 10-bird limit for the rest of season.

### **BLACK SWAN**

### WANGANUI - WAVERLEY COASTAL STRIP

A total of 386 Black Swan were counted during a ground survey of 10 dune lakes in the Whanganui to Waverley coastal strip in January 2025 (Appendix 2, Table 5). This was less than the count in 2023 (563 birds) yet still above the long-term (32-year) average of 344 birds.

A notable increase in Swan was found on Lake Herengawe, with 61 birds recorded this year, in comparison with 0 for 2024. This is because Lake Herengawe was once popular with watercraft users that would push any resident swan away from the lake, but a recent introduction of the invasive aquatic weed hornwort has now reduced watercraft use, in turn enabling birds to re-settle, and take advantage of this new food source. By contract the swan count at Lake Marahau declined from 102 in 2024 to only 1 in 2025, for unknown reasons.

### WAIMARINO - WANGANUI HILL COUNTRY

A total of 27 black swan were counted at 12 sites visited in the Waimarino, which was less than the total of 45 counted in 2024. This is mostly due to the absence of swan at Sues Pond, with none recorded for 2025, contrasting with the 17 found there in 2024. As swan populations are mobile and of a much smaller total number than other gamebird species, this change is not considered significant. The total count of 27 birds for 2025 sits just below the long term (17-year) average of 33 birds (Appendix 2, Table 6).

### TARANAKI RINGPLAIN

A total of 542 black swan were counted at 38 sites visited in the Taranaki ringplain area during January 2025 (Appendix 2, Table 7). This was the highest count so far and well above the long-term average (2007 – 2025) of 383 swan.

### **CENTRAL NEW ZEALAND**

Black swan are relatively mobile and it is thought that a single population extends over central New Zealand, if not further afield. The January 2025 count from Lake Wairarapa (5,226 birds) decreased further from its high in 2023, back to average levels (Figure 1). Counts in Wellington west (1,726 swan) also decreased from 2024 (2,258 swan) but remain at slightly elevated levels. The Nelson/Marlborough count increased back to the 2023 high, with Farewell Spit (9,850) and the Wairau Lagoons (6,100) accounting for the majority of swan. Overall counts remain well above average when compared with the full record of monitoring (Figure 2; 1977 – 2025).

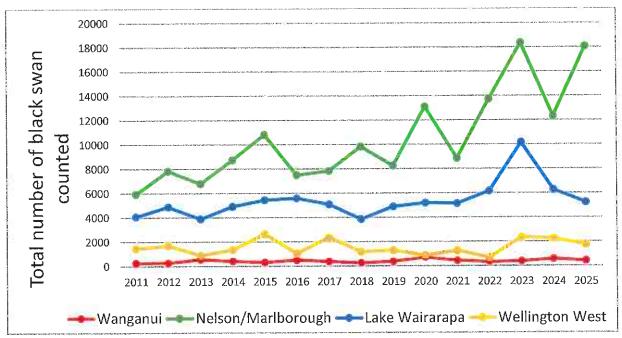


FIGURE 1. Central NZ trend counts for black swan, 2011 - 2025.

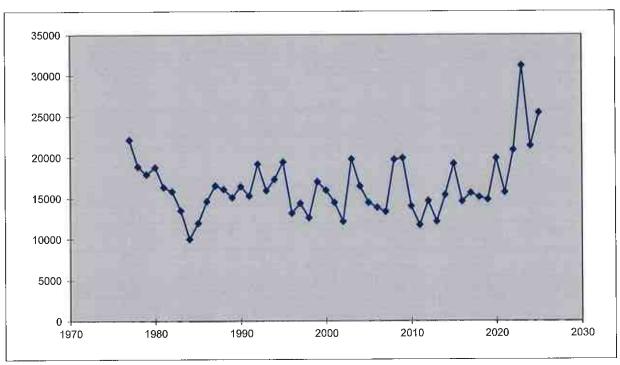


FIGURE 2. Central NZ trend counts for black swan, 1977 - 2025.

### **RECOMMENDATION:**

THAT THE 2025 GAMEBIRD TREND COUNT REPORT BE RECEIVED.

Jack Harland Allen Stancliff 30 January 2025

### TARANAKI FISH AND GAME REGION1

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

Species	Season Duration	Daily Bag Limit	Hunting area
	(dates inclusive)		
Grey/mallard duck	3 May to 29 June 2025	10	All areas
NZ shoveler duck	3 May to 29 June 2025	2	All areas
Paradise shelduck	3 May to 4 May 2025	15	Area C
	3 May to 4 May 2025	10	Area A&B
	5 May to 29 June 2025	10	All areas
	21 and 22 Feb 2026	10	Area C
	28 Feb and 1 March 2026	10	Area C
	7 to 9 March 2026	10	Area C
Black swan	3 May to 29 June 2025	2	All areas
Pükeko	3 May to 31 August 2025	5	Area A&B
	3 May to 31 August 2025	10	Area C
California quail	3 May to 31 August 2025	5	All areas
Cock pheasant	3 May to 31 August 2025	2	All areas
Bobwhite (Virginian) quail	3 May to 31 August 2025	5	All areas
Red legged partridge	3 May to 31 August 2025	2	All areas
Pheasant, both sexes	3 May to 31 August 2025	No limit	Upland game properties with special conditions in clause 6 for this Region.

### 2 Definition of Areas

- **2.1** Area A: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Tawhata; then by Tawhata Road to the boundary; then by the generally eastern boundary of the region to Waiaruhe Road.
- 2.2 Area B: That area within the following boundary commencing at Waiaruhe Road; then by that road, Owhakura Road, Whangaehu Valley Road and Fields Track to Kakatahi; then by straight lines to Pipiriki and Makakaho Junction down the eastern bank of the Waitotara River to the sea; then by the sea coast and generally eastern boundary of the region to Waiaruhe Road.

<sup>&</sup>lt;sup>1</sup>Reference to Description: Gazette, No. 83, of 27 May 1990, at page 1861

**2.3** Area C: The balance of the region contained by the westerly boundaries of Area A and B and the sea coast between the Mokau River and Waitotara River mouths.

### 3 Shooting Hours

6.30am to 6.15pm.

### 4 Decoy Limit

No limit.

### 5 Special Conditions

5.1 Special Paradise Shelduck Season

Area C only: For the Special Paradise Shelduck Season on 21 February, 22 February, 28 February, 1 March, 7 March, 8 March and 9 March 2026, the hours of hunting are extended 6.30am to 8.00pm. In addition, all hunters, including land occupiers, must, within a month of the end of the season, provide the Taranaki Fish and Game Council with particulars of: the dates and locations where they hunted paradise shelduck; the hours hunted each day; the number of birds taken each day; and the number of birds not retrieved.

- 5.2 No person shall hunt, as specified, within 100m of any urban sewage oxidation pond.
- 5.3 No person may wilfully leave on the hunting ground any game bird(s) shot or parts of any game birds shot.
- **5.4** No person may shoot game from a boat on the Whanganui River downstream of Kemps Pole (Kauarapaoa Stream confluence).
- 5.5 Any licensed game bird hunter who has a Department of Conservation permit to take or kill wildlife for the purpose of hawking may hunt with an Australasian Harrier (*Circus approximans*) to take gamebirds. This is subject to the season length and bag limit for each gamebird species in clause 1 of this notice for this region and subject to any conditions imposed by the Director-General of Conservation under such a permit.

### 6 Upland Game Properties with Special Conditions

- **6.1** This clause applies to the following specified property only: Paetawa station. 366a Kauarapaoa Road Whanganui being lots1-2 DP 29356. Waipukurau SD. 1307.9440ha administered by Hienni investment Ltd.
- 6.2 Where hunting takes place in any specified property defined in this notice, no person shall have in that person's possession outside that specified property any game taken from that specified property, unless affixed to the game is a label with the name of the specified property where that game was taken or killed written legibly on it, and the additional words on the label, "for personal consumption, not for sale or profit" written legibly on it.
- 6.3 A person must not clip the wings of a bird released on any specified property after the bird is 8 weeks old.
- **6.4** A person must not clip the beak of any bird released on any specified property at any time.
- 6.5 A person must not hunt a pheasant before it is 18 weeks old.
- **6.6** A person must not hunt waterfowl on a specified property on the same day that a pheasant hunt takes place on that property.
- 6.7 The unlimited daily bag limit for the specified property shall only apply when at least 400 pheasants have been released on to that specified property within 5 months of the opening day of the season, otherwise the daily bag limit shall be 2 cock pheasants.
- **6.8** A property owner listed in subclause (1) or a lessee of that property owner must keep a register of:

- (a) the names and addresses of hunters and all other persons who take game from that property;
- (b) the number and type of birds taken by those persons;
- (c) the description of that person's role in the hunting and killing of game birds on that day.

APPENDIX 1. PARADISE SHELDUCK

1	2)	,
4	Area L	
	hanganui (	)
	on s	
	counts	
	se shelduck trend	
	Paradi	-
1	TABIJE 2.	

IAB	ABLE 2. Paradise shelduck trend counts in whangahul (Area B)	rara	dise	sheld	CK	renc	COM	TIS II	I W 11	allga		TICA	(0							į,								- 1	L			Ì	
Site	1991	992 15	193 19	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003	5 19	96 198	77 199	8 199.	9 200	0 2001	2002	2003	2004	2005	2006	2007	2008	2009 2	2010 2	2011 2	2012 2	2013 20	2014 20	2015 20	2016 2017	17 2018	8 2019	9 2020	2021	2022	2023	2024	2025
L Marahau	500	8	822 53	536 433	3 782	2 1600	0 1205	3 1105	1105 1284		610 1740	886	910	731	616	1115	884	313	287	241 3	399 2	299 2	254 32	328 186	6 192	2 552	237	493	330	299	341	288	203
L Waikato			_		-				310	- 1	0		315	436	1351	490	625	574 9	982 (	673 7	749 7	721 5	562 72	721 771	1 490	0 358	391	515	420	45	132	135	170
Maewa	550 9	905 49	494 11	1144 1149	9 850	0 1700	0 1200	794	1377	7 1250	630	1115	605	870	1177	420	523	371 (	919	489 4	473 3	397 2.	227 2	28 71	1 9	0	16	0					
L Waipu	300	8	874 64	647 835	5 692	2 710	964	215	742	250	09	128	370	175	173	394	575	326	287	251 4	438 5	531 10	1070 24	2430 1255	55 1200	086 00	)   920	470	670	631	338	325	234
L. Rotokanwan		-				-					300	0	330	134	334	222	420	178	654 (	1 589	127* 5	576 4	432 15	151 147	130	0 300	24	19	4	9	50	43	7
L. Kohata							-72							46	4		10	4	23	13	0	0	7 0	0 4		_	L			ı			
L. Kaitoke			-		-	-								238	575	275	330	424	763	710 1	1024 1	1101	943 96	962 1140	40 650	0 153	3 720	562	730	483	290	325	717
Arranmore						-																						52	149	160	203	220	160
L. Westmere			+												204		420	129	342	268 5	586 2	257 5	535 54	547 594	515	5 402	522	428	545	337	328	190	204
L. Pauri			li li														20	000	27	35	20	0	0	0	0	0	0	0	F4				1
L. Grassmere									-								0	12	0	17	∞	23	7	4	-		4						
Lake Oturi+				111									445	250	185	530	485	380	376	321 3	370 2	289 2	240 2	212 93	3 137	7 293	3 71	14	31	39	12	10	26
Lake Waiau+				-							L			210	56	196	210	195	130	74	110	93 1	1 001	170 17	172 31	8	2	3	28	30	0	0	0
L Maumahaki														45	120	09		70	65	82	170 2	245	60 1	10 41	1 33	3 39	20	35	40	20	06	30	15
TOTAL			<b>1</b>	-					4725	4725 3945 3860 3818 3458 3810	3860	3818	3458	3810	5655	5190	5709	3581 4	4552 5	5032 5	5712 5	5614 52	5209 62	6230 53	5349 4137	37 3945	5 2923	3 2591	2948	2418	1784	1566	1,736
	-	1	1			-				1	-																						

+Sites in Area C \* disturbed site

Daradise sheldnok frend counts in the unner Waitotara catchment (Area C) TABLE 3.

TABLE 3. Paradise s	Paradise shelduck trend counts in the upper waitotara calcument (Area C)	rs in t	ue upp	er wa	TOLA	ra carc	nmenn (	Area	5								-			
Site Name	1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025	1 2002	2003 20	04 200	5 2000	5 2007 2	008 2009	2010	011 20	012 20	3 201	4 2015 2	016 20	17 2018	2019 20	20 20	21 202	2 2023	2024	2025
TLB Makakaho Rd	635 220 150 640 310 979 797 1029	0 310	979	797 102	077 6	0 730		508 4	131 5	508 431 525 106	9				-	1 (	) 141	1 122		
"Kidney pond"	260 470 6	60 370	08												Д	D D	Dry Dry 0	22		0
"Bush pond"	90 20 1	0 0									-				43	430 285	5 0	19		4
Ponds at top of Makakaho Rd	0 9															0	9 2	12		
TRB Makakaho Rd	0 83 425 360 420 214 420 409	0 420	214 4	20 40	9 389	389 269		294	68 27	27 27			-		(1)	31 100	30 31	-		-
Makakahi Road Lower										1 //							26	12		0
TOTAL	635 659 1065 1070 1100 1273 1217 1438 1159 999	0 1100	1273 12	17 143	8 115	666 6		802 4	661	802 499 552 133	8				4	62 39	94 20	462 394 200 194		11

- no count in 2008 & 2009

Paradise shelduck trend counts in the Taranaki province (Area C). TABLE 4 (Continued).

2022 2023 2024 2025					21 9	1300 753 1200 1600		320 2 0	100 195 330 155	50 0 0 0	137 289 437 340	500 780 770 1000		480 950 770 1000	510 580 1000 950		112 103 116 311	210 212 246 253	226 350 152 400	115 95 79 235	0 0* 200 207	0 0 11	350 350 55 320	11 0 0	66 118 145	18 3 0	14 0 1	36 20 0 20	
2021					50	1400		0	170	0	360	009	dry	200	260		78	217	300	17	366	31	91						
2020	0		0		49	1769		20	130	82	365	770	340	220	586		149	79	009	73	290								
2019	11	0	0		0	1470		75	45	0	295	635	175	573	340	0	87	260		43									
2018	×	0	0	0	7	1180		dry	180	2	100	470	46	217	180	0	49	158											
2017	0	9				1400		120	204	40	150	400	354	297	103	0	20												
2016	0	5	0			1240		2	220	0	180	385	300	270	31	0	16												
2015		3	0	20	1	1100		47	265	0	128	440	220	160	30	93				L		NE I							
2014	0	5	0	25	0	1050		62	206	0	*9	320	434	252	62					-									-
2013	0	7	0	09	14	1000		135	360	0	83	350	275	135	36		1												-
2012	0	10	0	0		1123		300	145	0	23	344	175	П			0						_						+
2011		B	0	0		950		47	130	0	00	279		4			0					i							+
9 2010		1	7	- 17	0	1020		170	200	0	7	220		S						-							_		+
3 2009	7	5	0	30	19	900		450	25	0	7	135		Ŋ								_							1
2008	m	7	0	30	2	617	0	430	45	7	145		5	0						-							-		+
5 2007	-	∞	16	30	18	564	7	472	59	0				0					-			L							+
5 2006	0	'n	7	40	6	1450	7	415	0 450	30				0									-						+
4 200	0	7	26			300	70	300	100	30			2.2	0						-			-				-	-	+
3 200	0	0	0			375	40			9								-		L							-		+
2 200	25	0	165				_		-	0		-								-					L_		-		1
1 200	0	1.8					-			0		_				·				-		-	-			_	-		+
00 200	12	0						ļ	-	0		-	-									H						-	4
99 200	ļ	0										_								-		-			F	-			
38 195		0									1 - 4					F		H	-			-						-	+
97 199		_									-	-			-					-									+
96 19				<u> </u>							+			-				-		+				-					-
95 19					-					-						b				-	-				-		-		+
94 19												-	$\vdash$				-			F	+							+	
1993   1994   1995   1996   1997   1998   1999   2000   2001   2002   2003   2004   2005																				1									
1						10			l	T	pı	s/a		spu															
POND LOCATION	Beach Road Omata (2)	Perth Road (2)	Upland Rd (2)	Waiwiri Road	Kaipi Road	Stratford oxidation ponds	Sangster Rd Rotokare (3)	Parihaka Station	Kina Road	Nowells Lakes (2)	Winstones Manutahi Road	Opunake oxidation ponds	Rugby Road	Inglewood Oxidation ponds	Eltham Oxidation Ponds	- Jimmy Stewart Wetland	e Mangamahoe	NPDC Waiongana	Durham Road upper	Manaia oxidation pond	Kaponga oxidation pond	Patea oxidation pond	Komene Lagoon	Waipu Lagoons	Bell Block Oxy ponds	Opunake Lake	100 Wills Road	Richmond Road 2	

APPENDIX 2. BLACK SWAN
TARE F. Slack swan trend counts in the Wanganui - Waverley coastal strip.

N TABL

Roke         13         4         6         9 <th>Site 2007 2008 2009 2010 2011 2012 2</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>2023</th> <th>2024</th> <th>2025</th>	Site 2007 2008 2009 2010 2011 2012 2	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
13   12   14   3   5   1   4   8   0   0   0   0   1   1   2   5   9   1   1   1   1   2   5   9   1   1   1   1   2   5   9   1   1   1   1   2   5   9   1   1   1   1   2   5   9   1   1   1   1   2   5   9   1   1   1   1   2   5   9   1   1   1   2   5   9   9   1   1   1   1   1   1   1   1	Browns	4		2	0		8	4	3	0	0	5	m	4	1	0	0	0	0	
nne Oxyy Pond         2         2         0         <	Roke	13		14	3		1	4	80	0	0							16	15	11
ni Oxy Ponds (2)         1         0	Ohakune Oxy Pond	2		0	0	0	0	0	2	5	0	0	0	1	1	2	5	6	I	0
aut (3)         19         12         0         2         4         6         6         1         9         6         9         8         13         16         8         5         6           nuit         6         5         0         3         1         0         6         8         8         6         7         14         12         5         1         3         6           indextrack         1         6         7         1         9         8         6         7         14         12         5         1         9         8         6         7         14         15         1         9         8         1	Raetihi Oxy Ponds (2)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nuit         6         5         1         0         6         8         8         6         7         14         12         5         1         3           ii         6         5         0         0         0         0         0         3         5         1         9         8         5         1         9           ichds Track         1         0         0         0         0         0         0         1         9         8         5         2         0         6           ichds Track         1         0         1         0<	Morikau (3)	19				2	4	9	9	ш	6	9	6	∞	13	16	8	5	9	4
Lit         6         6         6         6         6         6         7         9         8         5         5         9         8         5         2         0         6           iclds Track         8         6         7         1         0         0         0         0         0         1         9         8         5         2         0         6           iclds Track         1         1         0         0         0         0         0         0         0         0         6         0	Mokanui	9		0		3	Ĭ	0	9	8	8	9	7	14	12	3		3		
Formation   Form	Taonui	9		0	0		0	0	0	0	0	0	m	2						
ields Track         1         0         1         0         0         0         0         0         0         1         0         0         1         0         0         1         0 <th< td=""><td>Harris</td><td>8</td><td></td><td>1</td><td></td><td></td><td>0</td><td>0</td><td>9</td><td>5</td><td>5</td><td>3</td><td>Ţ</td><td>6</td><td>8</td><td>5</td><td>2</td><td>0</td><td>9</td><td>0</td></th<>	Harris	8		1			0	0	9	5	5	3	Ţ	6	8	5	2	0	9	0
1 Estate         2         0         4         0         1         0         3         3         1         0         0         4         0         0           Otamaraha         10         1         3         5         2         12         7         0         1         0         6         0         4         0         4         0         4         0         4         0         4         0         4         0         4         0         4         0	Old Fields Track		T	0	I	0	0	0	0	0	0	1	0		1	F				
Otamaraha         10         1         3         5         2         12         7         0         1         6         7 <th< td=""><td>Kaahu Estate</td><td></td><td>2</td><td>0</td><td>0</td><td></td><td>0</td><td>0</td><td>I</td><td>0</td><td>0</td><td>3</td><td>33</td><td>1</td><td>0</td><td>0</td><td></td><td></td><td>1</td><td></td></th<>	Kaahu Estate		2	0	0		0	0	I	0	0	3	33	1	0	0			1	
aruru         awherawhera         2         1         1         0         4         3         4         2         1         7           nal Park Oxy Pnd         Rahi         4         0	Lake Otamaraha		10	1	3		2	12	7	0	ş-mr(	0	9	0	4	0	0	4	T	0
awherawhera         awherawhera         2         1         1         0         4         3         4         2         1         7         17           nal Park Oxy Pnd         nal Park Oxy Pnd         4         0	Waiharuru																			9
nal Park Oxy Pnd         Park Indicated         Park	Mangawherawhera																		1	5
4     0     0     0     0     0     0     0     0	Sues			1					2	1	1	0	4	9	4	2	1	5	17	0
	National Park Oxy Pnd								4	0	0	0	0	0	0	0	0	0	0	0
	Makakahi								1									2		

00 07 07 07	07 64	12 21	52	67 79	26
-------------	-------	-------	----	-------	----

TABLE 7. BI	lack	SWa	n tre	pua	cour	ıts ii	n nc	orth 8	Black swan trend counts in north and south	outh	Tar	Taranaki	i.			Å					Ш		-	ŀ			-			
POND LOCATION 1	1994	1995 1	996 15	1 166	998 15	399 26	300 24	001 20	1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006	3 200	4 2005	2006	2007	2008	2009 2	2010 2	2011 2	2012 2	2013 2(	2014 20	2015 20	2016 2017	17 20	2018 2019	~	207	7	٠,	2024	2024 2025
Lake Cowley (Waitara)	53	29	32 5	52	16 2	24 3	35	17 10	104 60	92	86	28	29	34	84	83	69	133	. 19	77	74 11	112 115	5 85	5 92	-	138		114	100	185
Lake Ngangana	m	1	1	9	9	. 9	7	9	5 4	6	9	5	3	4	5	0	2	1	0	0	-	7 0	4		5		-	0	7	4
Lake Mangamahoe	16	6	11 1	12	14 1	15 2	24	6	5 20	12	16	61	32	48	19	17	30	27	75	31 9	93 4	44 38	8 52	2 34	4 44	1 28	37	37	59	37
Umutekai Rd	0	0	0	4	m	5	0	5	0 0	10	0	3	0	0	3	1	0	5	0	0	0	2 0	0	4	1	m	pared	~	0	0
Winstones Manutahi Rd							1						0	1	7	7	S	2		1	2	5 4	0 +	) 4		4	7	0	7	7
Barrett Lagoon	0	4	2	1	4	-	4	60	1 7		7	2	3	7	8		2	7	10	7	7 0	4 7		7 0	2	22	25	119	31	17
Alfred Road	10	12		16	13	15 1	17	18 2	22 14	1 20	30	32	39	42	24	28	40	56	42	20 7	47 3	38 72	- 1	30 14	4 14	5	S	10	0	0
Waipu Lagoons	0	5	0	8	4	0	4	0	0 9	0	0	4	3	4	1		3	9	3	2		3 2		0 4	4	9	S	5	9	0
Bell Block Oxy Ponds	0		15 1	15	0	10	2	0	0 1	0	0	0	0	0	0	0	0	0	0	0	2	1 0	0 4	4 0	0	=	0	10	4	0
Tariki Road	0		0	1	0	0	4	9	0 0	5	0	0	0	0	0	3	0	0	2	2	0	0	2	7 2	0	0				8
LandCorp Wiremu	-	1	-	5		0	9	m	1 0		3	2	2	5	7	9	0	0	0	1	0	0 1		4 0	0	0	0	0		0
Arawhata Road		-	0	0	0	0	0	2	0 0	0	0	0	0	0	0	2	0	0	0			_	0	0	0	0				
Beach Road Omata	0	0	0	0	0	0	0		0 0	0	0	0		0	0	0	0	0	0	0	0	0	0	0 0	0		4			
Richmond Rd					-			-	0 9	9	0	9	6	0	5	4	4	2	4	4		4	2	1	7	7	3	-		-
Perth Road				0	0	0	0	3	0 0	0	0		0	0	0	0	0	0	0	0	0	0	0	0 0						1
Upland Road									7	10	0		2	0	3	0	0	0	0	7	0	0		0	0					
Komene Lagoon										11	0	0	27	dry	<b>—</b>	Н	dry	0		15 6	dry d	dry 3	3 di	dry dry	y dry	y 7	3	00	33	0
Inglewood Oxy Ponds		t	-								9	'n	4	0	0	0	3	9	3	0	3	7	2	5 3	1	7	01	4	0	_
Egmont Road																									1	∞	5	0		
Clarke Rd		T	$\vdash$										1	S	0	Ŋ.		0			-		0	2 0	0	= 11		_1		
Stratford oxidation												0	m	2	2	3	7	7	11	17	13	18	17   1	13 4	1 20	0 27	7 37	43	58	89
ponds Opunake Lake	ł				0	0	0	0			0		0					0	11	2	14	0	2	5 5	5 2	0	4	7	6	3
Punehu					24	7	∞	-	7	3	10	∞	perel	9	9	44	4	ν	9	9	9	1 /	17	2 2	2 25	5 22	0 2	7	20	3
Opunake oxy ponds								-							∞	1	9	1	4	5	9	3	5	2 1	3	5		-	0	0
Hawera oxidation ponds					140 1	118 1	111	83 4	47 57	7 39	25	37	42	51	81	73	84	132	130	120 1	135 1	151 1(	101	6 08	92 108	8 145	5 94	89	102	79
Nowell's Lakes (2)		28			0	0		4	36 25	5 47	38	14	19	28	20	12	18	29	16	29	29	18 2	24 4	41 2	22 18	33	3 44	42	32	89
Lake Taumaha		0								1	∞	0	9	1	1		4	0		0	2	7	5	2	16 4			-		∞
Lake Kaikoura (Ball Rd)					_						5	0	5	2	0		6		Ţ		0	0	7	12 1	8	7 29	9 13	10		2
Spence Road				$\vdash$							7		2											-						
Patea oxidation pond			1			N	-	-					2								6	2	7	×	2	3		Search .		0
Thupuku Lagoon	18				5					_	3	0	0	0	0						11		0	0	0		-			0
Lake Maumahaki (2)											0	7	5		5	0	2	0	0	3	0	2	3	0	-	7	-	-	0 (	7
Manaia oxidation pond	-							1		H						i i				٦				1	5	12	-	13		m
Tokaora quarry pond										H	ď													-	5 6	0	7	-	0	7

### Agenda Item 14 Habitat Advocacy and Management

### Summary

### a. Regional Planning advocacy

Horizons Regional Council are continuing with the Oranga Wai consultation — the next generation of Regional Plan changes to reflect NPS FM 2020 — focusing on water quantity and water quality parameters. The timetable to complete the Plan Change revision for public notification has been officially put back to September 2027 (originally December 2024 deadline).

Horizons Regional Council are continuing with their Plan Change 2 of the Regional Plan (One Plan) to introduce an additional tool – Nitrogen Loss Risk Scorecard - to deal with nitrogen leaching from intensive farm use. Awaiting decision from Environment Court. Feedback was sought from the Environment Court as to whether the participants saw value in pursuing the legal arguments given pending changes to RM legislation.

Taranaki Regional Council have made the decision to proceed with the consultation process for reviewing the Regional Plan with a view to notification in 2025:

- Feedback on Draft Plan February to April 2025
   Iwi, special interest groups and stakeholder engagement and feedback on the proposed Land and Freshwater Plan.
- Plans notification Mid-2025
   The proposed Land and Freshwater Plan will be publicly notified prior to a formal submissions and hearing process.

### Resource Consent advocacy

TLAs within the Horizons region boundaries have been discussing consistency in management approaches and funding models. This is concurrent to Government initiatives and approaches to municipal water management.

### c. Habitat Enhancement Projects

Nothing to report on habitat enhancement projects. Advice provided to support applications to Game Bird Habitat Trust – staff to act as referee where appropriate.

### For Information Only

Recommendation/Action

No action required.

### Agenda Item 15 Participation

### **Summary**

### a. Access Management

- Access Point descriptions and information updated for new season on website.
- Updating access sign inventory.
- Supporting NZ Council initiated campaign with an access focus.
- Access Charter launched by Minister of Hunting and Fishing

### b. Information to Clients

- Assisted in pre-Christmas licence purchase e mail communications.
- 2024/2025 Fish Season Magazine articles prepared and magazine distributed in August.
- Newsletter Early Summer produced and distributed.

### c. Licence Holder Engagement

No specific activity this period

### For Information Only

Recommendation/Action

No action required.

### Agenda Item 16 Public Awareness/Communications

### **Summary**

a. Iwi Engagement

Meetings attended

b. Public Awareness

Club sponsored fishing days supported.

c. Communication

Publicity on Children's Fishing Opportunities at Stratford

d. Promotions

Children's Fishing Day promotion event – Stratford

Otago Promotion of Celebrating 150 years of Trout Fishing Licence

### For Information Only

Recommendation/Action

No action required.

### Agenda Item 17 Licence Sales & Licence Management System Performance

### Summary

- a. Fish Licence Sales Update until 31 December 2024
  - Licence Sales Report for 2024/2025 Fishing Season YTD
     Confirmation of licence sales indicating YTD comparison with previous year.
    - LEQ sales up to previous year 15% (825 c.f. 715)
    - Total Number of Sales of licences up on previous year 27% (1523 c.f. 1199)
    - **▶** Nationally licence sales value LEQ is down 1.1% (55,551c.f. 56,178).

### For Information Only

### Recommendation/Action

Council move to receive Licence Sales Report for 2024/2025 Fishing Season YTD (31 December 2024)

### b. Licence Management System - November and December 2024

The Licencing Operational Group overview the performance of the Licencing Management system outlining:

- No issues with continuity of service
- A list of bugs and fixes required under agreed contract.
- Completing requirements of development phase of contract

Each regional Fish and Game Council is a signatory to the agreement for ESL to provide services to manage electronic licence sales (Public on Line and Agent on Line) and data capture. This contract is valid until 31 August 2025 — with a right of renewal for two years. Consideration to scoping and developing an RFP for the next iteration of the Licence Management System and associated support software — which may include: CRM function (customer relationship management software), digital licence, Fish and Game App.

### For Information Only

### Recommendation/Action

Council move to receive the update report from the Licencing Operational Group for contract management of provider of services to manage the licensing platform and database management.

### c. Licence Price Optimisation Research

This project is being undertaken by an external provider

### For Information Only

National Fish Licence Sales YTD to 5 January	tales YTD to 5 J	anuany								ı	h	l			ì	ì	i		ì	i	١		
	- Constitution		100000		1						1	_			40000	2000000		1	-		2024540	2007.77	ACREAGED.
	Chamel	FVIT	FWA FWHA		FSCA	FLAA #	EWIS E	HLBA FS	PSBA I	DA FONA	NA FW3	DIAME O	101	EDIO	FWC	PWWG	FDMC	STOR	WLE	WUNITE	DESTRUCTION OF	Sh LEG	SEE NAC
Taranaki	Public Online	90	168	46	8	12	0	-	24					CI	225	o	0	0	0	o	752		
	Agency Online	33	182	ഹ	51	ę	٥	o	4	17	-	0	4	0	49 64	0	0 (	ę ;	8 4	0 (	4 5	ř	
2023-2024	Total	8	320	ξ.	<u>م</u>	37	٥.	<u>.                                    </u>	<u>ب</u>					8 1	274	0 1	0 6	5 0	<u></u>	0 0	1188	135	
	Public Online	75	232	67	4 r	<u>ක ද</u>	00	0 0	<u>6</u> ⊦					N C	238	- a	N 0	טינ	o 1-	<b>3</b> 0	381		
2024-2025	Agency Cilline Total	104	371	7	8.6	28 2	0	10	- 5g			123		0.61	390	·	2 0	ω	. 1~	0	1523	825	15.34¢
Wellington	Public Online	190	673	67	149	106	0	m						4	468	~	0	0	203	42	2437		
	Agency Online	138	596	9	138	72	o	7	1	38	8 115	9	42	٥	106	0	o	37	09	0	1369		
2023-2024	Total	328	1269	73	287	178	0	Ŋ						4	574	-	0	37	88	42	3800	2344.51	
	Public Online	206	661	4	169	123	0	7						7	455	-	0	0	203	23	2394		
	Agency Online	114	497	တ	153	66	0	2						0	146	0	0	28	52	-	1410		
2024-2025	Total	320	1158	20	322	222	0	4						7	601	~	٥	26	258	24	3804	2261.34	N T
NATIONAL TOTAL	Direct	6772	9364	1741	1915	1665	0								6409	49	8	3619	4792	729	51314	26993.25	
	AOL.	8135	12046	555	3549	1849	0	7.	590	1627 10	1006 1833	33	3 265	57	1081	œ	4	6480	5824	222	45261	29185.52	
2023-2024	Total		21410	2296	5464	3514	0								7490	57	104	10099	10616	951	96575	56178.77	
	Direct		10226	1885	2136	1994	0								8002	8	63	3767	5030	842	57436	29549.19	
	AOL	6957	10288	525	3592	1928	0								905	7	5	5106	4473	290	39511	26002.08	
2024-2025	Total		20514	2410	5728	3922	0								8907	75	4	8873	9503	1132	96947	55551,25	
	0	0	0	o	٥	0	0							ğ	0	0	0	0	0	a	٥	-627.5212	-1.1%

### Monthly Performance Report – Licence Management System November 2024

### **EXECUTIVE SUMMARY**

### A. Licence System Performance

- 1. Total number of licences sold in the period: 16,278
- 2. System Availability: 100% uptime vrs KPI 99.9%

### **B.** Licence System Maintenance

- 1. Bug Fixes and Improvements. 4 x system improvements (Bug fixes/Enhancements) were successfully released on 27<sup>th</sup> of November.
- 2. Booking System Improvements. Several improvements were made to the booking system including the release of new days available timed from midday rather than midnight.
- 3. Removing Duplication: No auto de-duplication updates were run in November.
- **4. Updating Customer Contacts:** Received updated customer contact details from Hothouse with these changes applied to the licence holder details.

### C. System Development

- 1. Booking Systems: A further improvement to the display of the current days to include the "Consecutive days" plus 1 day is to be released on 17<sup>th</sup> of December.
- 2. Agency Search: Improving the ability for an Agent to accurately recover the details of a licence holder will be available from the 17<sup>th</sup> of December.

### **D. Business Services**

- 1. Call Centre Activity: A total of 514 telephone and email support requests were received during the month. 342 of these calls were received as general enquiries from the public.
- 2. Response times: All support requests responded to within SLA. 24 voicemail messages (unanswered calls) were received. Calls received within business hours were responded to within 1 hour. Calls over weekend or after hours responded to following business day.
- 3. Invoicing Agents: Agent invoices reconciled and dispatched on or before November 10th and within SLA. 3<sup>rd</sup> Party Accountant reviewed and confirmed compliance.
- 4. Licence Delivery Process: Sent Hothouse monthly client contact list.
- 5. Licence Refunds and Cancellation: 12 POL refunds were processed within the month. 48 Cancellations and 13 reissue requests were processed within the month.
- 6. Variable Charges: One invoice raised for recovery of ABCorp charges.

### E. Contract Performance

- 1. System Upgrade: MVP completed
- 2. System Development: No further development, but several improvements were made as described above.
- 3. Business Services Function: Compliant with KPIs
- 4. Scoping Additional Functionality:

Developing proposals to enhance the current licence system with deployment of these planned for 2025.



Report Date: 17 December 2024

- a. CRM -- Presented a proposed integrated solution to enhance the Licence System with the addition of leading edge HubSpot CRM technology together with enablement services. The proposed approach will ensure effective execution of Fish & Games R3 strategy at the regional and national level.
- b. Digital Licence Presented solution to support digital Licences leveraging the digital wallet technology provided by Samsung, Google and Apple. While independent of the CRM, the digital licence will integrate with the Licence System and CRM to deliver enhanced customer experiences at reduced cost.
- c. Formal proposals are to be presented prior to the Christmas break.

### Monthly Performance Report – Licence Management System December 2024

### **EXECUTIVE SUMMARY**

### A. Licence System Performance

- 1. Total number of licences sold in the period: 21,800
- 2. System Availability: 100% uptime vrs KPI 99.9%

### **B. Licence System Maintenance**

- 1. Bug Fixes and Improvements. 5 x system improvements (Bug fixes/Enhancements) were successfully released on 17<sup>th</sup> of December
- 2. Booking System Improvements. 3 of the system improvements related to the Booking system, including adding consecutive days plus 1 and resolving the possibility of gaming reservations by changing date and time of the applicants Web Browser.
- 3. Removing Duplication: An auto de-duplication was run in December.
- **4. Updating Customer Contacts:** Received updated customer contact details from Hothouse with these changes applied to the licence holder details.

### C. System Development

- Booking Systems: A further improvement to the display of the current days to include the "Consecutive days" plus 1 day was released on 17<sup>th</sup> of December.
- 2. Agency Search: Improving the ability for an Agent to accurately recover the details of a licence holder was included in the 17<sup>th</sup> of December release.

### D. Business Services

- 1. Call Centre Activity: A total of 399 telephone and email support requests were received during the month. 264 of these calls were received as general enquiries from the public.
- 2. Response times: All support requests responded to within SLA. 4 voicemail messages (unanswered calls) were received. Calls received within business hours were responded to within 1 hour. Calls over weekend or after hours responded to following business day.
- 3. Invoicing Agents: Agent invoices reconciled and dispatched on or before December 10th and within SLA. 3<sup>rd</sup> Party Accountant reviewed and confirmed compliance.
- 4. Licence Delivery Process: Sent Hothouse monthly client contact list.
- 5. Licence Refunds and Cancellation: 16 x POL refunds were processed within the month. 54 x Cancellations and 2 x reissue requests were processed within the month.
- **6. Variable Charges:** Two invoices raised, one for recovery of ABCorp charges and the other for NZ Post fees.

### E. Contract Performance

- 1. System Upgrade: MVP completed
- System Development: No further development, but several improvements were made as described above.
- 3. Business Services Function: Compliant with KPIs
- 4. Scoping Additional Functionality:

Presented two proposals to incorporate CRM and Digital Licences into the Licence System using Concentrate/HubSpot (Concentrate) and a digital wallet solution. A further proposal to improve and automate existing manually created financial management reports is under preparation.

Report for Game

Report Date: 13 January 2025

Agenda Item 18	Operational Summary	
Summary		
Summary of activities und	dertaken in November and December 2024	
Nothing material required	d to be highlighted	
For Information Only		

Recommendation/Action

Council receive staff report on Operational progress to 31 December 2024

Taranaki Fish & Game Council Budget Report to 31 December 2024 And

, 2025	
Progress to 26 January 20	
s to 26	
Progress	
Project F	

		or cestigationalation	7	Sales Control of the last	NAME AND POST OF PERSONS ASSESSED.
OUTPUT	Budget	YTD external costs	Comments on significant variations	Budget	YTD hours
	external	(31/12/24)		Hours	
Population Monitoring	15,500	1,387		520	257.25
Harvest Assessment				09	4.25
Hatchery	10,000	898'9		09	7,25
Liberations	6,000	61/19		150	777
Season Regulations				20	B
Gamebird Dispersal	2,000	2,180		120	39.5
RMA				200	24.5
Habitat Management & Enhancement	20,000			400	13.5
Assessing & Monitoring				100	16
Hunter / Angler Access	200			100	5.5
Satisfaction Survey				40	1.25
Magazine / Newsletter / Ezine	9,500	1,931		200	22.25
Hunter / Angler support	1,000				
Ctubs				10	5.5
Statutory Liaison				30	2.5
Iwi Liaison	1,000			09	25
Information to Clients				100	25.5
General Advocacy	200	1,512		100	57.5
Hunting & Angling Promotions	3,300			140	125
Ranger Management	1,500	343		112	26.75
Compliance	1,500			170	24
Licencing & Commission	9,870	3,229		20	1
Council Meetings & Administration	9,500	5,567		280	83.45
Management, Strategic & Policy	100	1,091		80	11.5
Business Planning				40	4.5
OSH & Other Reporting	7,576	31		89	30
National Liaison	100			160	8.5
Total Expenditure	99,146	30,858		3697	997.95

Project Income	Budget	YTD Income	Comments on significant variations
Fish Population Assessment	200	3,239	
Harvest Assessment - Summer Season	200		
Liberations	3,238	249	
Gamebird Dispersal	750	495	
Taranaki Hunting & Habitat Scheme	15,000		
Compliance	1,000		
Total Income	20,688	3,983	
		Trop ou	
Net Expenditure	78,458	56,875	

Overheads	Budget	γτο	Comments on significant variations
1910 Salaries & Management Contract	317,037	100,859	
1920 Staff Expenses	3,550	2,701	
1940 Office Premises	22,200	7,503	
1950 Office Equipment	2,000	1,657	
1960 Communications / Consumables	5,250	4,168	
1970 General	3,050	2,020	
1980 General Equipment	5,000	1,405	
1990 Vehicles	15,850	10,840	
Total Overheads	373,937	131,154	

Other Income & Expenses	Budget	QTY.
Interest	9,032	
Wellington Fish & Game Admin	4,000	6,468
Donations & Other Income		
Total Other Income & Expenses	13,032	6,468
Nett Project, Overhead and Other	Budget	ΥΤD
	439,363	151,561

VES
ESER
N R
ENTS
VEM
5

NEGODII VIIIONIII	Date Paid

## SPECIES MANAGEMENT

[2	2024/2025 Annual Plan – Planned Result	Progress to date
الم الم	ata to inform and enable populations across the	effective management decisions to maximise opportunities and satisfaction while ensuring the egion.
T-		Electric fishing survey of 22 sites in the Manganui River catchment carried out over four days (11/16/17/18/) in December 2024.
. 2	Undertake a resource inventory of the Manganui River catchment to determine current status of the trout fishery and identify threats and opportunities (yr 1 of 2)	Data being collated for resource inventory report.
κi	. Monitor and report information on the status of the region's trout fisheries sufficient to measure overall angler success (through a diary scheme), set effective regulations and inform management directions.	Diaries sent to 24 anglers for the start of the 2024/25 season.  Fishery monitoring report prepared for Council's 19 October 2024 meeting.  Electric fishing survey of Kapuni Stream carried out for Ballance Agrinutrients (24/10/2024).  Electric fishing survey of sites in the Wahianoa and Tokiahuru Stream catchments in Karioi Forest carried out for Ernslaw-One (3-6 December 2024) in conjunction with Wellington F&G staff.
4	. Implement an effective grey and mallard duck banding programme in the Whanganui area to obtain an estimate of the population size and level of hunting harvest which will guide future monitoring requirements and regulation setting (yr 6).	Waimarino/Whanganui duck banding report prepared for Council's 19 October 2024 meeting. Initial preparations made for February 2025 banding in Whanganui.
и)	5. Monitor and report information on the status of the region's mallard and grey duck, paradise shelduck, shoveler, swan and pukeko populations sufficient to assess harvest, identify and manage any population impacts, set effective regulations and inform management directions. As part of this, review count methods for paradise shelduck, including the effectiveness, efficiency and cost of returning to aerial counts for some parts of the region.	2024 draft census report for Shoveler duck received 30/09/2024. January 2025 trend counts for paradise shelduck and black swan carried out at 78 sites in the Game Management Areas A, B & C and a report prepared for Council's 15 <sup>th</sup> February 2025 meeting.
9	<b>6.</b> Review game bird monitoring programme for the region taking into account banding results and including regulation setting requirements.	

9. Provide advice and support practical and effective predator control opportunities that assist game bird populations.  Objective: Supplement trout fishing opportunities with appropriate stocking that is v community support.  10. Undertake an annual trout stocking programme which concentrates on creating and maintaining valued lake fisheries.	cond and which  Draft 2025 Game Gazette Notice report prepared for Council's 19 October  stainability and  2024 meeting, with an updated report presented to Council's 19 October  Council recommending an increase in the 2025 opening weekend daily bag  limit for paradise shelduck in Area C. A trend count report was also prepared  for Council's 15th February 2025 meeting.  Estocking that is valued, cost effective in terms of the return to the angler and which retains  ates on creating  500 2-year rainbows (and one larger fish) from Eastern F&G's Ngongotaha  hatchery were released into Lake Rotomanu (29/10/2024) for a family trout  fishing day. 101 rainbow and 160 brown trout from the Hawera hatchery were  released into the Hangatahua (Stony) River on 4/11/2024, with a further 101  brown trout and 67 rainbow trout released there on 25/11/2024,  A total of 251 brown trout were released into Lake Mangamahoe (50) and Te  Henui Stream (201) on 28/11/2024, 372 well grown rainbow trout were  released into the scout den pool in the Patea River in Stratford's King Edward  Park on 13/12/2024 for a kids' fishing promotion. A total of 115 brown trout  park on 13/12/2024 for a kids' fishing promotion. A total of 115 brown trout  park on 13/12/2024 for a kids' fishing promotion. A total of 115 brown trout  park on 13/12/2024 for a kids' fishing promotion. A total of 115 brown trout  park on 13/12/2024 for a kids' fishing promotion.
<ul> <li>11. Undertake release of up to 200 17-month brown and rainbow trout into the lower Patea River and assess angler returns to gauge the potential for a long-term programme (yr 6)</li> <li>12. Operate Hawera hatchery in an effective, cost efficient and sustainable manner utilising volunteer support to meet the identified stocking objectives.</li> </ul>	9/01/2025 – the last of the 2023 year-class. 200 Hawera hatchery rainbows released on 22/10/2024 and 150 Hawera hatchery brown trout and 2 rainbow trout released on 25/11/2024. A report on the releases was prepared and sent to Manawa Energy on 12/12/2024.  A hatchery and trout releases report was prepared for Council's 19 <sup>th</sup> October 2024 meeting. Hatchery volunteer Gavin Sturgeon has retired from the hatchery roster owning to ill health.

Objective: Provide effective compliance to protect resource sustainability (including revenue base) and user experience to maintain licence holder satisfaction.	revenue base) and user experience to maintain licence holder satisfaction.
13. Review and renew ranger warrants and maintain a skilled honorary ranger team of at least 12 rangers consistent with requirements and objectives of the Compliance Policy and Strategy and also R3 principles.	Ranger training day held at Mangorei Hall on 21/09/2024 attended by five Rangers and two staff. Honorary ranger application received (12/09/2024) from an experienced angler based in Ohakune. New Field Officer, Jack Harland, has completed on-line CERT modules, had further training with CERT principal trainer Brad Dannefaerd and received his warrant in December 2024.
14. Undertake safe and effective compliance coverage across the Taranaki Region, including a target of 100 licence checks of anglers and also of hunters.	Compliance annual report prepared for Council's 19 October 2024 meeting. Fish season ranging conducted by staff and honorary rangers.
15. Process detected offences in a fair and timely way consistent with national prosecution guidelines.	

Objective: Proactively manage problem aggregations of gamebirds in the interests	
of both hunters and property owners and managers.	
16. Manage problem aggregations of gamebirds through implementation of a	Annual disturbance report prepared for Council's 19 October 2024 meeting.
special Paradise shelduck season in Area C and proactively responding to and	11 permits to disturb gamebirds issued to date: 8 for pukeko (6 rural, 2 urban)
assisting landholders.	and 3 for paradise shelduck / mallard duck. 36 permits to disturb issued to
	date: 12 for Pukeko (6 rural, 6 urban), 2 for mallard duck only, 10 for paradise
	shelduck only, and 12 for mallard and shelduck.

# HABITAT PROTECTION AND MANAGEMENT

Objective	Planned Result
Objective: Protect / improve habitat for sports fish & game as a fundamental and effective means to sustain the fish & game resource in the interests of licence holders and with biodiversity benefits for the wider community.	ective means to sustain the fish & game resource in the interests of licence
<ol> <li>Provide valued advice and support to licence holders, landowners and the wider community regarding the importance of and how to protect and enhance habitat and also undertake predator control/ management to benefit both fish &amp; game and wider indigenous biodiversity resources.</li> </ol>	

5.	2. Promote, encourage and support landowners to create, enhance and protect	Site vi
	wetlands by providing sound technical advice and assistance to make successful	wetlar
	applications to the GBHT and Hunting & Habitat Funds.	fundin

Proactively take opportunities to make effective representation in statutory and
other community processes to best achieve sports fish and game bird habitat
protection and enhancement.

Site visit made to view completed earthworks at Andy Whitehead's Kinatai wetland development at Oaonui (14/11/2024), which has been allocated funding from the GBHT and H&H funds.

Approval was given to Horizons RC (Marius Alers; 11/09/2024) to remove fallen trees in the Mangateitei Stream and Mangawhero River at Ohakune.

A Fonterra Kapuni stakeholders meeting was attended (18/09/2024). Fonterra is proposing to split the suite of resource consent applications currently lodged with Taranaki Regional Council into two "bundles" – Water related & effluent irrigation/air discharge.

An update was received from Taranaki By-Products (10/10/2024) regarding re-consenting of water takes and discharges from their Okaiawa rendering plant (Inaha Stream). Taranaki F&G submitted on these consents on 14/10/2020.

STDC (Harrison/Grierson) contacted Taranaki F&G (21/10/2024) regarding reconsenting options for the discharge from the Waverley town oxidation ponds. F&G's preferred option is for limited notification to allow input into consent conditions. The consents were subsequently limited-notified and a F&G submission was lodged on 19/12/2024.

NPDC (Greg Larkin; BTW) contacted F&G regarding perch in the Pukekura Park bowl lake, which will be partially drained this summer to allow the erection of permanent seating. NPDC also contacted F&G re: re-consenting of coastal structures (25/12/2024).

Todd Nicholson (Whenuku Quarries) got in touch (11/10/2024 & 11/11/2024) regarding quarry and Waingongoro riparian management plans.

Comments were provided to Manawa Energy on the Patea HEPS Upstream Fish Passage Report 2024 on 20/12/2024.

EFishing permit provided to WSP (Melanya King) for fish salvage in small Whanganui River tributary prior to road culvert replacement (14/01/2025).

 Investigate the establishment of an environmental award to acknowledge and highlight outstanding contributions to the protection of sports fish or gamebird habitat

The SFO attended the TRC Environmental Awards presentations on 20/11/2024.

5. Seek effective environmental outcomes as part of the reconsenting of the Mangorei and Motukawa hydro schemes.	Awaiting processing by TRC.
6. Promote and explore opportunities to improve water quality in Lake Rotomanu.	
Objective: Work collaboratively and proactively with landowners, other groups ar achieved by this approach.	other groups and iwi recognising the synergistic benefits and wider outcomes that can be
7. Engage proactively and collaboratively with iwi & community groups to identify and protect/ enhance shared resource values including contributing to water related matters through the Taranaki Maunga Settlement process.	Staff attended the annual 1-day Wild for Taranaki (WfT) biodiversity forum (23/10/2024) and a Wai Connection Inanga/fish passage 2-day seminar on 12/13 November 2024. The WfT online AGM was attended — the two new Trustees on the Board are Andrew Castle & Amanda Clinton-Gohdes.  Attended Biosecurity Taranaki zoom meeting (25/09/2024. A Biosecurity Taranaki meeting was attended on 29/11/2024.
8. Represent Fish & Game and provide valued input to the Te Awa Tupua process.	An online Te Kōpuka meeting was attended (19/09/2024) and a face-to-face meeting at Ohakune (27/09/2024). SFO Allen Stancliff re-confirmed as F&G Nominee at Council's 19 <sup>th</sup> October 2024 meeting. A Te Kōpuka online zoom meeting was attended on 26/11/2024. Auckland/Waikato Fisheries Manager Adam Daniel attended a face-to-face meeting at Kakahi Marae on 13/12/2024 as the F&G Alternate member.
9. Explore options with other parties to remove a weir in the Waingongoro River at Eltham.	
10. Investigate whether there is sufficient landowner support for an application to the Whanganui River Enhancement Trust (WRET) for funding assistance to continue the Horizons / F&G joint Orautoha Stream / Manganuioteao Riparian Project to protect water quality in this catchment and the many values it supports.	
Objective: Development of an effective Natural Resources Plan that protects frest consent processes and free up resources for other management responses.	rt protects freshwater and wetland habitats and which will also minimise Council costs in sponses.

1			
	Reviewed TRC Policy & Planning agendas for results of latest consultation.		
	11. Engage in and actively advocate for provisions which protect and/or enhance	sports fish & game bird habitat in the Taranaki Natural Resources Plan	development process.

### PARTICIPATION

2024/2025 Annual Plan – Planned Result	n – Planned Result	Progress to date
Objective: Add value t	Objective: Add value to licence holders by increasing their opportunity, success and satisfaction and so retain them in the sport.	atisfaction and so retain them in the sport.
1. Maintain and impro "how to" and "whe and up to date.	Maintain and improve the Taranaki pages on the new Fish & Game website so "how to" and "where to go" information is readily available, easily understood and up to date.	
2. Work with National an Introduction to	Work with National Office to populate new website with information including an 'Introduction to duck hunting in the Taranaki Region'.	
3. Continue posting or to regularly inform	Continue posting on the Council's facebook page in line with any National Policy to regularly inform licence holders using this forum.	5 facebook posts have been published (18/10, 23/10, 25/10, 31/10, 06/11), these posts collectively reached 5.4k people. 83 new followers. Four new posts (27/11, 03/12, 12/12, 19/12), 306 page followers.
Objective: Encourage	Objective: Encourage past and prospective hunters and anglers into the sport throu	nto the sport through initiatives which make it easy to 'have a go' and/or provide support.
4. Develop and utilise date.	Develop and utilise licence holder email list to keep hunters and anglers up to date.	List of child and junior licence holders was used to publicise the Lake Rotomanu family trout fishing day (via Hothouse 11/10/2024).
5. Complete monthly contributions to the Lowdown" angling	Complete monthly contributions to Reel Life and Both Barrels Ezines and weekly contributions to the Wellington Fish & Game Region's "Lower North Island Lowdown" angling email consistent with national R3 recommendations.	A Taranaki contribution to the Reel Life ezine was made in September and on 17th October 2024, and on 19/11, 18/12, and 20/1/2025. Weekly contributions to the "Lower NI Lowdown" email were made from 25/09/2024.
6. Provide a quality 2- Magazine.	Provide a quality 2-page regional supplement in each edition of Fish & Game Magazine.	A 3-page regional supplement was prepared for the 2025 game special issue of F&G Magazine.

Wellington Fish & Game and sent to regional licence holders and hunting landowners. Hunting newsletter also distributed to all rural box holders in the region.  8. Proactively provide timely and useful information to licence holders when requested.  9. Replace/erect 2 -3 new signs which provide anglers with helpful on-site information re access and regulations consistent with identified priorities.  10. Provide organised fishing opportunities in Lake Rotomanu and the Patea River in Stratford consistent with R3 objectives and branding and in association with	Information provided to licence holders on request. Staff attended the Inglewood Rod, Hunting & Clay Target Club's opening week fish season weigh-in (6/10/2024) and their "Big 4" weigh-in (28/10/2024).  Four angling signs cleaned and one replaced (1/10/2024)  A successful family trout fishing day was held at Lake Rotomanu on 3/11/2024 in conjunction with the Inglewood Rod, Hunting & Clay Target Club, Hynds in conjunction with the Inglewood Rod, Hunting & Clay Target Club, Hynds in conjunction with the Inglewood Rod, Hunting & Clay Target Club, Hynds
volunteer groups for kids and families.  11. When fish are available, release 2-year rainbow trout into Sattler's Dam to provide opportunities for kids and families.  12. Review, negotiate, publicise and issue access permits to publicly available hunting areas and actively seek and develop new opportunities.  13. Identify and explore mentoring schemes to support new hunters.  14. Develop web based introductory package for anglers highlighting access opportunities and methods to get started.	Pipe Systems and Taranaki Hunting & Fishing. A grant application for the Stratford kids trout fishing day was submitted to the Taranaki Electricity Trust (25/10/2024) in conjunction with the Stratford Fishing Club and was successful in obtaining a \$1,000 grant towards costs. A successful Stratford kids' trout fishing day was held on 14/12/2024, attended by 85 children.  Liaised with DOC Turangi to confirm fish pick-up on 19/02/2025.  Pamphlet highlighting fishing methods and location information for targeting Perch throughout the Taranaki Region drafted.

15. Proactively take opportunities to make effective representation in statutory and other community processes to maintain or enhance hunting or angling access and opportunity.	
16. Assess satisfaction and success of Taranaki Region anglers using catch rates from a voluntary diary scheme and online satisfaction survey.	Angler diaries distributed to 24 anglers.
17. Locate and publicise quality trout, perch and game bird recipes that enable anglers and hunters to make good use of these species.	
18. Assess satisfaction of Taranaki Region hunters using an online satisfaction survey.	Interim results of a 2024 national opening weekend hunter satisfaction survey presented to Council's 19th October 2024 meeting.
19. Implement actions to influence hunter behaviour as identified in hunter behaviour strategy to maximise enjoyment and participation and also public support for gamebird hunting.	
20. Provision of ready and valued support and assistance to licence agents such that they are kept up to date, resourced and operate as effective agents	

## IWI & PUBLIC INTERACTION

2024/2025 Annual Plan – Planned Result	Progress to date
Objective: Work proactively and collaboratively with iwi at all levels consistent with Treaty of Waitangi obligations and responsibilities regarding the protection	Treaty of Waitangi obligations and responsibilities regarding the protection
and use of natural resources.	
1. Proactively engage, work and collectively share with iwi and hapu within the region on matters affecting wetland and freshwater resources or their use.	Spent a day (5/11/2024) with Taranaki Iwi Taiao staff electric fishing two coastal streams. Attended WfT Biodiversity forum and Wai Connection 2-day
	seminar. Staff attended Fonterra Kaitiaki Group meeting to discuss habitat and fish
	passage enhancement in the Tawhiti Stream catchment (1/11/2024).
Objective: Strong relationships and involvement with DOC and local and regional councils to effectively represent the interests of hunters and anglers in formal	uncils to effectively represent the interests of hunters and anglers in formal
decision-making process.	

Maintain a positive and constructive profile in the media which encourages prospective participants and fosters support and understanding among the participants and fosters support and understanding among the (20/09/2024) and in the Ruapehu Bulletin "Summertime Edition" (11/11/2024).  An advert promoting the Lake Rotomanu family trout fishing day was placed in the Taranaki Daily News (26/10/2024) which also ran an article publicising the event. Information was also provided to two radio stations for their community notices.  Advertising and an article was also organised in the Stratford Press for the Stratford kids trout fishing day (12/11/2024). Stratford DC also agreed to support the day with advertising through their channels, including their
electronic notice boards. An article promoting the Stratford kids' trout fishing day was also provided to the South Taranaki Star.
Implement raviced modis etratems and including incorporating any National Policy

# COUNCIL ADMINISTRATION

2024/2025 Annual Plan – Planned Result	Progress to date
Objective: Sound and effective governance which facilitates a co-operative and supportive relationship between Council, staff and licence holders that enables effective management of resources in the best interests of the licence holder and the fish & game resource.	oortive relationship between Council, staff and licence holders that enables a fish & game resource.
<ol> <li>Not less than six meetings of Council are held, and meetings are conducted consistent with provisions of the Standing Orders.</li> </ol>	A Council meeting was held in Stratford on 19 <sup>th</sup> October 2024 and the first meeting of the new Council was held in New Plymouth on 2/11/2024. The Council's AGM and Ordinary meeting was held in New Plymouth on 7/12/2024.
2. Council undertakes governance training provided nationally, preferably in conjunction with Wellington Fish & Game Council.	Taranaki Councillors attended a joint governance training session with Wellington F&G Councillors on 25/01/2025 in Palmerston North.
3. Identification and implementation of options and strategies to increase the diversity of Council and iwi involvement.	
4. The 5-Year Strategic Plan is reviewed and agreed by Council by March 2025.	5-year strategic plan updated and received at Council's 19 <sup>th</sup> October 2024 meeting.
5. Formulation and adoption of an Annual Operational Plan and Budget for 2025/26 consistent with the 5-Year Strategic Plan.	
<ol> <li>Presentation by Council of its audited annual report for 2023/24 not later than 31 December 2024</li> </ol>	2024/25 Annual Report and Audit completed and presented to Council's 7 <sup>th</sup> December 2024 meeting.
Objective: Operate consistent with National Policy and make valued contributions to the management of the resource and Fish & Game nationally in the interests of all licence holders.	the management of the resource and Fish & Game nationally in the interests
7. Effective regional policies are developed, adopted and reviewed as required and are consistent with any National Policy requirements.	
8. Progress reporting of licence sales, work progress and financial position is timely and accurate and supports sound financial and operational management and oversight.	Presented to each Council meeting

use eisewhere.	Addition to the state of the st
9. Effective administration such that the Council is within annual budget ( $\pm$ 5%), operates consistent with best practice and at least 90% of its annual plan is completed.	
10. Staff management requirements including performance reviews completed and new KPIs and objectives for staff defined, and regular staff meetings.	Job interviews conducted for new Field officer, with Jack Harland beginning work for the Council on 23/09/2024. Weekly staff meetings held each Monday morning.
11. Implement any outcomes and directions from Fish $\&$ Game Ministerial Review and /or National Council reviews.	
12. Progress amalgamation discussions with the Wellington Fish & Game Council and implement agreed measures which don't require legislative change.	
13. Effective communication and liaison with NZ Fish & Game Council and other Fish & Game regions including valued input and comment on Fish & Game issues and attendance at Fish & Game Managers meetings.	Staff participated in the following national groups:  RMA Group; zoom meetings to discuss SFGMP's (14/10/2024) and Access (29/10/2024), with information provided on current RMA advocacy in the region and where angler and hunter access has been lost, and gained;  CLE Group: zoom meeting attended on 8/10/2024 to review opening weekend fish season ranging effort;
14. Contribute to National Office by providing valued advice, assistance and feedback on national issues and processes as requested.	
15. Refine financial administration, reporting and analysis working with NZF&G Council and staff.	
Objective: Demonstrate a commitment to Health & Safety and ensuring the welfare of staff and others through effective policy, systems, resourcing and oversight.	staff and others through effective policy, systems, resourcing and oversight

	auring January Jielawork in the Waimarino) Whattigurury Waitangurury W
--	--

**Recommendation**That the Budget Report to 31 December 2024 and Project Progress Report to 26 January 2025 be received.

# Agenda Item 19 Financial Reports - Income Statement and Financial Transactions

#### Summary

Confirmation and clarification of financial reports -

Income Statement and from 1 September up to end December 2024 (2024/2025 Financial Year to date).

a. Income Statement to 31 December 2024

Nothing to highlight

b. Balance Sheet as at 6 January 2025 BNZ Statement of Accounts as at 6 January 2025

Nothing to highlight

c. Capital Expenditure Considerations

Selling of Ford Ranger – replacement already in operation

#### For Information Only

#### Recommendation/Action

Council move to receive Financial Statements for Year-to-Date for the 2024/2025 Financial Year – Income Statement up to end December 2024 and Balance Sheet as at 6 January 2025.

# **Profit and Loss For Council**

## Taranaki Fish and Game Council For the 4 months ended 31 December 2024

	SEPT-DEC 2024	YTD BUDGET	2025 OVERALL BUDGET	VARIAN	CE	VARIANCE	≟%
levenue							
Licence Income							
Fish Licence Income	104,540	81,600	130,769	22,940	1	28%	1
Game Licence Income	112	-	103,471	112	1	_	-
Less Commission and Fees	(3,229)	(3,123)	(9,370)	(106)	4	-3%	•
Total Licence Income	101,423	78,477	224,870	22,946		29%	
Grants	52,274	104,549	209,098	(52,275)	4	-50%	•
Interest Received	_	3,010	9,032	(3,010)	4	-100%	•
Other Income	10,450	1,584	24,688	8,866	个	560%	•
Gross Profit	164,147	187,620	467,688	(23,473)		-13%	
perating Expenses							_
SPECIES MANAGEMENT							_
Population Monitoring	1,387	2,000	15,500	(613)	Ψ.	-31%	•
Hatchery Operations	6,868	3,333	10,000	3,535	1	106%	•
Releases	6,719	6,000	6,000	719	1	12%	
Control	2,180	666	2,000	1,514	1	227%	
Total SPECIES MANAGEMENT	17,154	11,999	33,500	5,155		43%	
HABITAT PROTECTION / MANAGEMENT							
Assisted Habitat	-	6,666	20,000	(6,666)	4	-100%	1
Total HABITAT PROTECTION / MANAGEMENT	_	6,666	20,000	(6,666)		-100%	_
PARTICIPATION	<del></del>						
Access	-	-	200	_	-	_	
Newsletters Magazine Web pages	1,931	4,083	9,500	(2,152)	Ψ.	-53%	1
Training	_	332	1,000	(332)	<b>J</b>	-100%	ı
Total PARTICIPATION	1,931	4,415	10,700	(2,484)		-56%	1
PUBLIC INTERFACE							_
Liaison		333	1,000	(333)	4	-100%	1
Advocacy	1,512	1,816	3,800	(304)	4	-17%	J
Total PUBLIC INTERFACE	1,512	2,149	4,800	(637)		-30%	1
COMPLIANCE							_
Ranging		250	500	(250)	ተ	-100%	)
	343	500	1,000	(157)	$\Phi$	-31%	)

	SEPT-DEC 2024	YTD BUDGET	2025 OVERALL BUDGET	VARIAN	CE	VARIANCE	: % —
Compliance		750	1,500	(750)	Ψ.	-100%	1
Total COMPLIANCE	343	1,500	3,000	(1,157)		-77%	A-1000
LICENCING							
Licence Agents	•	250	500	(250)	$\mathbf{\downarrow}$	-100%	1
Total LICENCING	*	250	500	(250)		-100%	
COUNCIL							_
Council Meeting Expenses	5,567	3,166	9,500	2,401	1	76%	1
Total COUNCIL	5,567	3,166	9,500	2,401		76%	
PLANNING & REPORTING							
Management / Strategic Planning	1,091	33	100	1,058	<b>↑</b>	3,206%	1
Reporting Audit	31	166	7,576	(1.35)	Ψ.	-81%	1
National Liaison	-	33	100	(33)	4	-100%	1
Total PLANNING & REPORTING	1,122	232	7,776	890		384%	
OVERHEADS							
Salaries	100,859	105,679	317,037	(4,820)	4	-5%	1
Staff Expenses	2,701	1,182	3,550	1,519	1	129%	1
Office Premises	7,503	7,400	22,200	103	<b>↑</b>	1%	1
Office Equipment	1,657	666	2,000	991	个	149%	1
Communications / Consumables	4,168	1,750	5,250	2,418	1	138%	1
General	2,020	1,018	. 3,050	1,002	<b>↑</b>	98%	1
General Equipment	1,405	1,665	5,000	(260)	4	-16%	•
Vehicles	10,840	5,284	15,850	5,556	1	105%	4
Total OVERHEADS	131,154	124,644	373,937	6,510		5%	
Depreciation	**	4,246	12,739	(4,246)	4	-100%	1
Total Operating Expenses	158,782	159,267	476,452	(485)		0%	
ew Surplus/(Deficit)	5,365	28,353	(8,764)	(22,988)		-81%	

# **Balance Sheet**

# Taranaki Fish and Game Council As at 6 January 2025

	6 JAN 2025
Assets	
Bank	
BNZ Current Account	131,437.80
BNZ Term 3031	413,520.64
MRP	1,694.77
Total Bank	546,653.21
Current Assets	35,511.71
Accounts Receivable	
Prepayments and Accrued Income	2,574.41 38,086.12
Total Current Assets	36,000.12
Fixed Assets	
Accum Dep Vehicles	(68,262.08)
Accum Dep Buildings	(16,451.00)
Accum Dep Office Equipment	(21,745.03)
Accum Dep Plant & Equipment	(18,895.31)
Buildings	16,451.00
Office Equipment	25,022.63
Plant & Equipment	26,474.26
Vehicles	167,479.32
Total Fixed Assets	110,073.79
Total Assets	694,813.12
Liabilities	
Current Liabilities	
Accounts Payable	15,764.22
Accruals and Prepaid Licences	378.00
BNZ Credit Card - Allen	1,236.19
BNZ Credit Card - J Morison	2.00
Designated Waters Licence	44.74
Duck Stamp Levy Clearing	8.70
Employee Entitlements	43,263.59
GST	10,519.20
Income in advance	9,963.00
PAYE Clearing	(19,234.78
Rounding	0.03
Sea Run Salmon Endorsement	20.77
Total Current Liabilities	61,965.68
Total Liabilities	61,965.68
Net Assets	632,847.44

Accumulated Funds	141,427.68
Asset Replacement Funding	21,578.00
Back Country Fisheries Reserve	20,139.79
Current Year Earnings	33,598.05
Fisheries Project	7,386.30
Hunting & Habitat Scheme	321,960.74
Manganuioteao River Riparian Project	4,649.29
Net Surplus/(Deficit)	82,107.59
Total Equity	632,847.44



THE SECRETARY
TARANAKI FISH & GAME COUNCIL
PO BOX 4152
WHANGANUI 4541

Bank of New Zealand Wanganui Store 124 Victoria Avenue Wanganui

Telephone Facsimile WWW 0800 800 468 06 345 5439 www.bnz.co.nz

# Statement of Accounts as at 06 January 2025

#### Your Accounts at a Glance



	Account	Account Number	Maturity Date	Balance		
)	Non Profit Org A/C	02-0792-0332133-000				131,437.80
)	MRP	02-0792-0332133-001		1,694.77		

#### Your Other Accounts at a Glance



Account	Account Number	Maturity Date	Balance
Term Deposit	36332133-03031	02 Feb 2025	413,520.64

Our investment statements and current disclosure statement may be obtained free of charge from any Bank of New Zealand store, or viewed at www.bnz.co.nz.

### Agenda Item 20 Correspondence

#### **Summary**

Correspondence:

No items directly addressed to Council not already addressed in agenda.

#### For Information Only

#### Recommendation/Action

Council move to receive the correspondence to 31 December 2024

**Inwards Correspondence** 

Date	Meeting	From	Staff Councillor	Subject
27.11.24	Feb-25	Taranaki By Products	Allen	Consent Meeting
29.11.24	Feb-25	Mpi	Allen Jack	Freshwater Clams response
1.12.24 2.12.24	Feb-25 Feb-25	Hugh Dixon-Paver Manawa Energy Francis Douglas Mem. College	Allen Allen	Patea HEPS Upstream Fish Passage Report 2024 FDMC Work Shadowing Student
14.1.25	Feb-25	Melanya King WSP	Allen	Site specific permit required for Electric Fishing
14.1.25	Feb-25	Darlene Ladbrook TRC	Allen	Submission summary
21.1.25	Feb-25	Rotokare Scenic Reserve Trust	Allen Jack	Rotokare Bush Telegraph - Dec 24
22.1.25	Feb-25	Courtney Bond - Horizons	Allen	Jobs for Nature Governance Group

**Outwards Correspondence** 

Date	Meeting	То	Staff Councillor	Subject
Date	Meening	10	Councillo	
27.11.24	Feb-25	Taranaki Regional Council	Allen	Notice of Submission – Taranaki Bi-Products
		-		FDMC Work Shadowing Student – 27-29
29.11.24	Feb-25	Francis Douglas Mem. College	Allen	November 2024
20.12.24	Feb-25	Hugh Dixon-Paver Manawa Energy	Allen	Patea HEPS Upstream Fish Passage Report 2024
29.12.24	Feb-25	Hamish Carnahan	Jack	Lower North Island Low Down
				Freshwater Fish Survey / Relocation – Mangaiti
14.1.25	Feb-25	Melanya King WSP	Allen	Stream in the Whanganui River catchment
22.1.25	Feb-25	Colin Dudley STDC	Allen	Beach Road, Hawera - Geese

## Agenda Item 21 Recognition Awards

#### Summary

Consideration of recognising volunteer or exceptional service.

Presentation of awards to those on the list and attending meeting.

#### For Information Only

Recommendation/Action

No action required

# Agenda Item 22 Conservation Board Liaison

#### **Summary**

Consider formal (re) engagement with Conservation Board.

Noted under legislation that this should occur.

#### For Information Only

#### Recommendation/Action

No action required. CE to request meeting timetables and agendas.

# Taranaki/Whanganui Conservation Board

#### Introduction

The Taranaki Whanganui Conservation Board has 9 members appointed by the Minister of Conservation. The Board is currently carrying 1 vacancy.

#### Meetings

The Conservation Board meets up to six times a year at various locations. A public forum session, where members of the public can talk to the Board on conservation issues, is held at each meeting.

Next meeting: TBC

The full agenda for meetings is generally available from the Board Support Officer one week before the meeting date.

## Agenda Item 23 General Business

#### **Summary**

Items of General Business should be alerted to the Chairman at beginning of the meeting.

The Chairman may undertake a brief round table open discussion of members regarding items not covered in the meeting agenda.

#### For Information Only

#### Recommendation/Action

No action required.

## Agenda Item 24 Confirmation of Next Meeting Date

#### Summary

Confirmation of the next meeting will be held on 29 March 2025 in Stratford

## Agenda Item 25 Closure of Meeting

## Closing - korero kati

Thanks for your wisdom in making decisions today

Good health to you all

Nga mihi mo to whakaaro nui ki te whakatau i tenei ra

Kia ora koutou katoa