



AGENDA

AUCKLAND/WAIKATO FISH AND GAME COUNCIL

14th February 2026

AUCKLAND/WAIKATO FISH & GAME

**A Meeting of Council will be held at the Waikato Deer Stalkers Hall, Wairere Drive,
Hamilton, on Saturday 14th February 2026 commencing at 11:00 a.m.**

AGENDA

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* Denotes attachments

** For decision.

**N.Juby,
Chairman**

29/01/2026

AUCKLAND/WAIKATO FISH & GAME



Minutes of a Meeting of Council
held at 156 Brymer Road on the Saturday the 29th November
2025 commencing at 11.30am

PRESENT:

Chairman: N. Juby
Councillor’s present in person: S. Smith, M. Barker, E. Williamson, O. Kent, P. Dell, A. Sapich,
 D. Cocks, G. Annan.
Staff: D. Klee, D. Lelievre, B. Jarvis-Child
Members of the Public: Sean McGrath, Shane McGrath, Bruce Inwards, Eric Best,
 Mick Innes, Colin Sherrard.

1. APOLOGIES:

G. Dickey, T. Clarke, A. Brown, P. Hardy (DOC representative), A. Daniel.
 It was moved;

that apologies be accepted.

Annan/Cocks– CARRIED

2. POSSIBLE CONFLICTS OF INTEREST ARISING FROM MEETING AGENDA:

Nil.

3. MINUTES OF PREVIOUS MEETINGS OF THE 27th SEPTEMBER 2025:

It was moved;

that the minutes of the previous meeting of the 27th September 2025 be accepted as true and correct record.

Annan/Dell– CARRIED

4. MATTERS ARISING FROM PREVIOUS MINUTES:

Council expressed disappointment that the mapping initiative being led by regional staff across the country, and led by Beau, has not been supported. The feedback received by Councillors has been overwhelmingly positive and anglers are commenting how much easier it is making for them to access the resource and understand the regulations. Councillor Dell asked what our current contractual obligations were to the existing external provider. The CE explained that he had requested but not received any information regarding the existing contract.

5. TRI-ANNUAL GAME BIRD REGULATION REVIEW

The Chair outlined the process by which Council sets game regulations, including the species monitoring, hunter surveys and seeking direct feedback from licence holders through the remits. He noted that there were sometimes tensions between providing maximum hunter opportunity through liberalising regulations and maximising game populations, and it was the Council's job to weigh up the potential trade-offs in making their determination.

Six members of the public attended the meeting and four indicated they wished to address the Council regarding the game regulations. The Chair invited each person to address the Council and provide their perspective.

Eric Best addressed the council and spoke to his written submission, advocating for an increase in season length and lifting the ban on pond feeding.

Mick Innes, representative of the Northern Whangamarino Wetland Management Association, addressed the meeting, highlighting concerns around the wetlands' degradation. Season Length was cited as the primary issue when it comes to regulations as in many years there isn't enough water in May.

Bruce Inwards spoke to his submission, the key issues related to the short season length, creating a lack of opportunity and inability to foster recruitment into the sport. He wished to see the season lengthened to increase opportunity for hunters.

Sean McGrath addressed the council, suggesting there was no issue with duck populations but rather that the current season was too early before the wetlands in the region received sufficient rainfall. He sought an increase in season length or a shift in the season to alter in June.

The Chair thanked submitters for taking the time to engage and present their views. He also thanked Mr Jarvis-Child and Ms Lelievre for their excellent reports. Councillors subsequently went around the table outlining their views on submissions and staff recommendations, which provided Council with several scenarios that could be implemented.

All Councillors present gave their opinions and rationale for their preferred regulations with a wide variety of views expressed.

Bruce Inwards left the meeting at 1.01 pm

It was moved;

that option B in the staff report be adopted (increasing in season length to 6 weeks for grallards, no change in bag limit).

Barker/Sapich – CARRIED

Councillor Williamson wished to have his vote against the motion recorded.

It was moved;

that all other regulations be accepted in line with staff recommendations

Annan/Smith – CARRIED

Staff noted that there had been one further request which resulted in a minor boundary realignment of the lighthouse station registered release site

It was moved that the proposed boundary realignment be accepted.

Smith/Barker – CARRIED

Council rose for lunch at 1.30pm

The meeting reconvened at 2.10pm

6. CHIEF EXECUTIVE'S BI-MONTHLY REPORT AND FINANCIAL STATEMENTS:

6.1 Bi-monthly Chief Executives Report

Trout Releases: The Chair suggested that Council should formulate a trout release policy to clarify that releases in the Auckland/Waikato region are for put-and-take fisheries where there is insufficient natural recruitment to facilitate a wild fishery and focused in areas to facilitate fishing near major urban centres, primarily to provide opportunities for children and those with disabilities. The CE explained that he would raise this with the team's fisheries manager, draft some appropriate wording and suggested Council could formalise this when they conduct their next policy review.

EDNA monitoring: The Chair asked whether any agency was doing incursion investigations for perch in the likes of Karapiro using EDNA. The CE explained that EDNA may not be the best tool, given that during incursions, there may only be a few individuals that enter the new environment and may not be shedding enough DNA through a large lake like Karapiro to get a positive result until the population establishes.

Council Meetings: The Chair requested that Ms Simmonds sends electronic meeting invites out for Council meetings to all Councillors.

7. OUTGOING COUNCIL CORRESPONDENCE:

Council discussed the letter to NZC concerning the budget and levies for the current financial year. The CE was asked to provide an update. He confirmed no response had been

received, but he suggested that it would be on the agenda for the NZC meeting the following Thursday, although no agenda had been provided at this stage, so he could not confirm the process from here.

It was moved;

That that the Chief Executive wait until a after the NZC meeting for a formal response to the consultation letter. Based on whether the NZC address the concerns therein, the CE is to notify NZC and national office that the Auckland/Waikato region may be unable to pay its levy instalments due to its low reserves and will need to seek a resolution to the concerns outlined in the correspondence sent to NZC.

Cocks/Dell – CARRIED

8. 2026 COUCNIL MEETING DATES

It was moved;

That the draft meetings dates for 2026 proposed in the agenda be adopted.

Dell/Smith – CARRIED

9. LEGILATIVE REFORMS

Discussion was held around the reforms, noting further delays and new timeframes. In the interim Council noted that their meeting with Corina Jordan was helpful in clarifying the process and noted her suggestion that Council should begin drafting submissions and engaging with its licence holders. It was also noted that Councillor Dell has significant expertise in coms with his work in the media and further. It was moved;

That the CE work with Councillor Dell to prepare key communications to broadcast to licence holders in order to keep them informed about the reform process. The draft release should be circulated to council via email before sending.

Sapich/Kent – CARRIED

10. COUNCIL PERFORMANCE EVALUATION

Council requested that a register of interest be developed and maintained for all council members and that this be tabled each year at the AGM.

The 2025 Council and Chief Executive performance evaluations were tabled. It was noted that on average both were highly satisfactory. Further discussion ensued regarding areas which had received some lower scores and how those areas could be improved. It was also suggested that forms could be updated to provide more room for specific examples.

11. INFRINGEMENT SYSTEM AND COMPLAINEE POLICY

The CE outlined the police infringement system and some of the benefits it provides in terms of streamlining prosecutions. It would mean a significant reduction in overall workload for compliance staff compared to the current diversion process. The drawbacks include that the level of fines are generally much lower than what is currently imposed by the courts in our region.

Councillors questioned whether the compliance policy would impact our ability to maintain this regions policy of prosecuting offenders hunting or fishing without a licence. The CE explained that the option of prosecution will still be still available for regions depending on the circumstances of individual cases, but it is likely that if adopted there would be more defined pathways and a likely expectation that low level offences including Hunting and Fishing without a licence will be dealt with via infringement rather than court prosecutions.

That the CE draft a response to NZC on the infringement and compliance policy documents outlining councils' position and circulate to council via email before sending.

Williamson/Kent – CARRIED

12. HELTH AND SAFETY AND WELLBEING

The CE updated Councillors on progress with establishing the get home safe system. There appeared to have been no further progress at a national office and therefore the West Coast, Northland and Auckland/Waikato regions have joined single enterprise account that other regions can opt into as they decide to adopt the system. Being on a single enterprise account will mean better coordination and information sharing between regions. We have now ordered a new in-reach mini unit and plan to start using the system in the New Year as we get into our busy field season.

It was moved;

that the H&S&W report for November 2025 is accepted.

Cocksl/Williamson – CARRIED

13. GENERAL BUISNESS

Whangamarino: The CE updated Councillors on the latest anoxic event in Whangamarino after heavy October rainfall. Field staff had increased surveillance activities and it appears at this stage that the fish kills were localized and small scale. Subsequently the oxygen levels have settled and no further fish kills were observed in the previous 3 week period. The CE noted that temperatures are rising quickly so there is a strong likelihood that outbreaks will start occurring in the usual WWTP hotspots soon and contractors had begun their surveillance and dispersal regimes in line with approved botulism management plans.

Firearms on F&G Land: Ms Lelievre had received a request asking whether an exemption could be made to carry firearms on council wetlands for approved predator control operations. Councillor Cocks raised concerns that if exemptions are made, more people will want to have one and could then facilitate the use of firearms for other purposes. It was requested that Ms Lelievre go back to the individual to put a formal proposal to council at the next meeting.

The meeting closed at 4.12pm

Unconfirmed

**Bi-Monthly Chief Executive's Report
February 2026****OUTPUT 1: SPECIES MANAGEMENT**

Project 1111: Drift Diving**Drift Diving Review**

The Conservation Act 1987 requires Fish & Game councils to assess and monitor fish and game populations. Drift dives are used to monitor A/W fish populations in addition to spawning surveys when deemed necessary. A review of the drift diving program was conducted to determine what improvements could be made to increase the accuracy of data being collected. The review was also intended to prepare the council for proposed national monitoring standards that will allow for standardised reporting on monitoring by regions. Although a national drift diving SOP has been started several times the document has never been progressed to completion. As a result, regions often have different training and survey protocols. The A/W drift diving program follows standard dive protocols but generally only monitors one reach per river due to a lack of water clarity and access. Regions with braided rivers and ample access, like Wellington, monitor up to 60 km annually compared to the 11-12 km monitored by A/W staff.

The possibility of monitoring multiple reaches in rivers currently monitored in the A/W region was explored along with the possibility of adding additional streams to the program. Most streams monitored do have the potential of monitoring multiple reaches although water clarity may still be an issue for some. There is scope to expand the program by 5-10 km annually to improve the robustness of the estimates and to adhere to standard drift diving techniques (monitoring multiple sections of a river). The additional effort would require longer days and, in some cases, multiple days to complete a river system requiring additional hours to be allocated in the OWP.

Drift Diving

Poor weather has prevented any drift dives from being completed to date.

Project 1112: Banding/Shovler Study

The Parakai banding weekend was completed on the 17th and 18th January. A good number of ducks were banded, with 625 total (425 day 1 and 200 day 2). There were 40 recaptures. MPI tested their 320 birds on-site on the Saturday.

Hauraki Plains banding has been moved to the 4th and 5th of February due to continued adverse weather conditions, and too much water and alternative food sources available for the ducks.

Aka Aka and Opuatia are going ahead 31st and 1st of January and at this stage both sites are reporting good numbers of ducks.

Project 1114: Trend Counts

Dani carried out the swan and geese trend count mid-January. Total black swan numbers were looking healthy and slightly up on last year, and the 20 years prior to 2024. A large proportion of the swan numbers were once again seen in the western harbours, Kawhia (2649) and Aotea (1473), and the Taharoa lakes (910).

The paradise shelduck trend count is awaiting a weather window, but hopefully will be completed in the last week of January. The data will be analysed for trends and reported to the council when the paradise shelduck counts are completed.

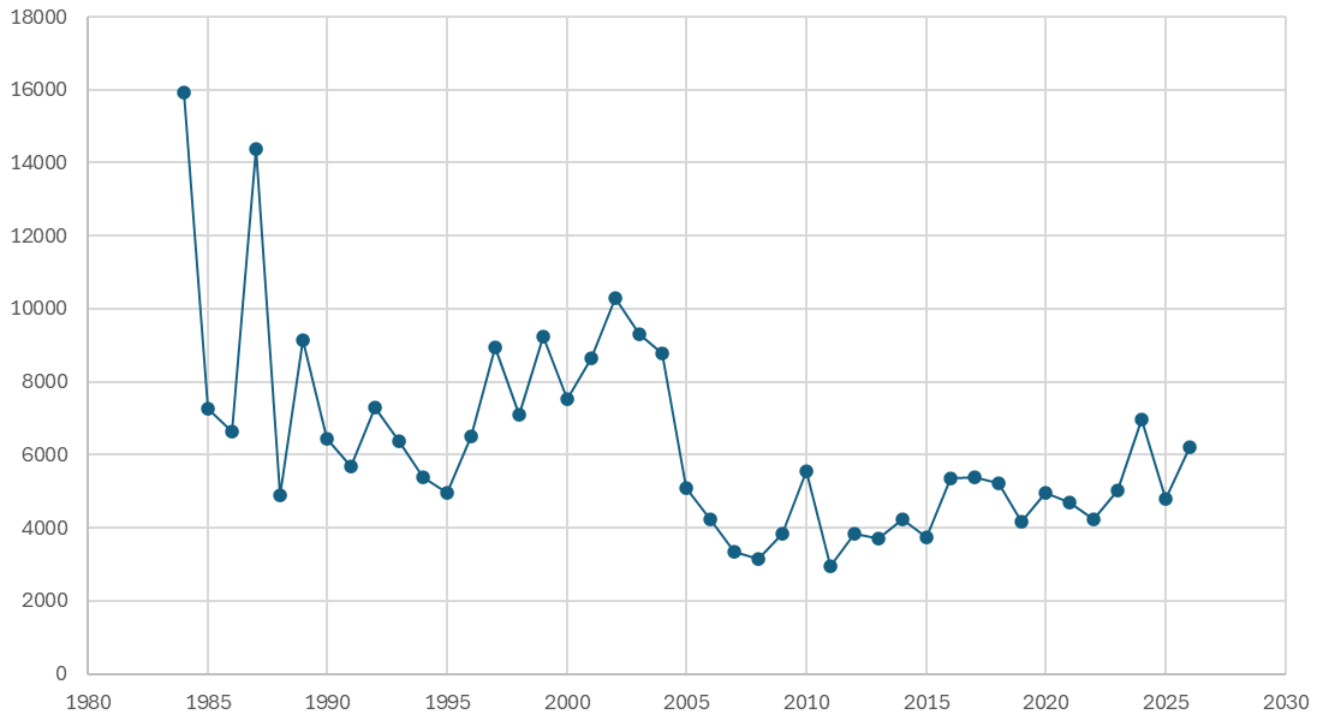


Figure 1. Total number of swan as counted across 26 sites in the Waikato

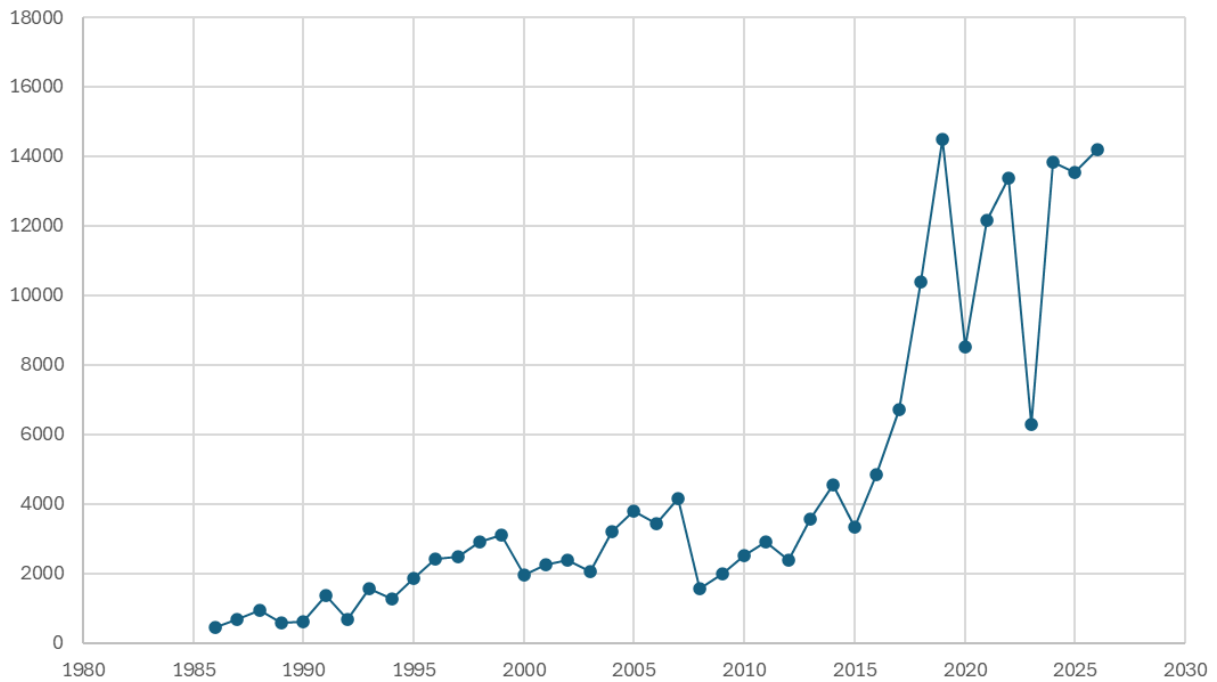


Figure 2. Total number of Canadian geese as counted across 26 sites in the Waikato

Project 1115: Population Surveys

Lake Arapuni Fishing Competition

A permit was issued for the Annual Arapuni Fishing Competition and staff will be attending the Sunday weigh in. The annual angler survey conducted at the competition is the only catch per unit effort or angler satisfaction data (required by the conservation act) collected in the A/W region. The 2026 competition will also mark the end of the Sterile Fish Project.

Project 1121: Fish Harvest Survey

Wild Tag Returns

Wild tag returns have ramped up with the additional tagging effort on the Whakapapa River by Ollie Bassett in addition to the efforts of George Brockhurst and Paul Fuller on the Mangatutu. Unfortunately, many reported returns lack adequate data. Staff have used real life and the magazine to inform anglers about the wild fish tagging program. Staff will use social media posts to inform anglers to be prepared to measure fish on the Whakapapa and Mangatutu.

Project 1161: Trout Releases

Potential Kids Fishing Lake

Adam visited the new Te Awa Lakes development that will feature multiple constructed wetlands and lakes. The site is under development but has potential to provide a fish out pond or lake. Like the narrows development ministerial approval would be required

(Conservation Act 26ZM). The developers have multiple lakes planned and a budget to “purchase fish” but were unaware of the legal requirements to transport or release fish.

Project 1173: Regulation

Regulation Change Feedback

To date staff have only received a small amount of feedback on the significant regulation changes that came into effect October 1st. The comments related to some confusion regarding the new boundaries for fly only waters on the Kaniwhaniwha and requested increased signage. There will be a regulation change survey at the end of the summer season that will be incorporated with an angler satisfaction survey in order to gauge angler satisfaction with the new regulations.

Project 1181: Game Bird Control

Dani and Beau provided summary feedback to council regarding the draft national policy for gamebird depredation. As part of this we reached out to everyone who had had a permit issued to them to cull or disturb gamebirds over the previous 12 month period to ask their thoughts on the current processes, proposed changes, and there they see potential improvement. In total 51 of the 126 people reached out to responded to the survey.

OUTPUT 2: HABITAT PROTECTION/MANAGEMENT

Project 1211: RMA

Island Block Pump Station Replacement Consent Application

Clare and David reviewed the Island Block Pump Station Replacement consent application and identified a number of technical, ecological, and statutory concerns. They provided feedback of these concerns which have not been addressed and was lodged on the 6th of December 2025.

The proposal involves removing the existing southern pump station and diverting its discharge to a new northern pump station, which would discharge directly into the Whangamarino Wetland without equivalent treatment. The southern pump currently has treatment ponds that provide sediment settlement and some contaminant attenuation; the proposed northern pump design does not include any treatment.

Modelling provided with the application predicts a maximum water-level increase of approximately 2 mm in the wetland from the additional discharge, with higher daily increases (up to 4.5 mm/day) possible in low-lying areas. AWFG considers that these estimates may underestimate localised ponding and cumulative effects, particularly given the very flat gradient of the Whangamarino Wetland, where water-level changes can have wide-area hydrological and ecological implications.

AWFG also considers there are limitations in the modelling approach, including reliance on LiDAR data and simplified assumptions without sufficient field validation of flow paths or contaminant dispersion.

From a statutory perspective, the application seeks a consent under Regulation 45 of the National Environmental Standards for Freshwater (NES-F) for the construction of specified infrastructure. AWFG considers this is insufficient because Regulation 45 does not authorise or assess the operational discharge of water to a natural wetland. Under the NES-F, such discharges are separately regulated (including under Regulation 39 where discharges may alter wetland hydrology).

AWFG's position is that the application fails to properly identify and assess the discharge of water as a distinct activity requiring its own consent pathway. Given the potential for adverse effects on wetland hydrology, sedimentation, water quality, and habitat values, reliance solely on Regulation 45 is inadequate, and the conclusion that effects are "less than minor" is premature without a clearer assessment of discharge characteristics and ecological consequences.

The application is proposed to be processed on an unnotified basis. As such, it is important that AWFG clearly communicates these concerns with the processing officers and urges them to assess the areas of concerns, including the need for an appropriate consent pathway for the operational discharge to the Whangamarino Wetland.

Waihi North Project (Fast-Track Consent)

Clare and Adam prepared and lodged a submission on the Waihi North Gold Mine Fast-Track consent application. AWFG was subsequently invited to comment on the proposed consent conditions with a short delivery, due on the 5th of December. In addition, Clare also wrote to the Waihi North Expert Panel seeking clarification on how key Fish & Game concerns had been considered in the Panel's Evaluation of Effects, particularly in relation to trout habitat, trout passage, cumulative effects, and the use of previously consented discharges as an ecological baseline.

The conditions which AWFG focused on include the following:

- Stronger protection of trout habitat in modified waterways;
- Enforceable receiving-environment water quality standards (particularly for turbidity);
- Requirements for effective trout passage;
- A targeted fish monitoring programme (including trout);
- Explicit inclusion of the Mataura Stream and wider Ohinemuri catchment within the Biodiversity Project Area; and
- Establishment of a Biodiversity Project Group that includes Fish & Game alongside iwi and DOC.

AWFG is seeking clarification from the Panel as to how these matters have been addressed, and whether there is scope for further explanation or amendment to consent conditions to

better protect trout and broader aquatic values; however, based on our experience with the Fast-Track process to date, such further consideration appears unlikely.

RM Reform – Natural Environment and Planning Bills

National office staff and KAHU Environmental, are leading a submission on the proposed Natural Environment Bill and Planning Bill, which aim to replace the Resource Management Act. While Fish & Game supports reform in principle, there are significant concerns that the draft legislation does not adequately protect freshwater ecosystems, wetlands, or the habitats that support trout, salmon, and game birds, nor does it recognise recreation and public access values.

A key issue raised is the exclusion of trout and salmon from the definition of ecosystem health and the limits framework. As valued introduced species and indicators of high-water quality. Without explicit recognition in the Bill, limits cannot be set to protect their habitat, undermining Fish & Game's statutory function and risking further decline in environmental quality and recreational fishing opportunities.

The submission also highlights the lack of clear environmental bottom lines, insufficient protection and definition of wetlands, and limited statutory recognition of Fish & Game's role in planning, national instruments, and enforcement. The submission is due in February, and Fish & Game regions are being asked to provide region-specific examples to demonstrate real-world impacts of habitat loss, reduced access, and declining environmental quality on fishing and hunting opportunities, to strengthen the national submission.

Evidence for Fish & Game legislation

Staff have been asked to contribute information for the national office submission on the Fish & Game legislation. The evidence is being prepared to show that Fish & Game are meeting our obligations under the Conservation and Wildlife Acts in anticipation of evidence to the contrary.

Whangamarino

The Whangamarino Working Group that David and Dani have continued to be a part of is reaching the pointy end of things, with the Whangamarino Action Plan Report having been drafted up. David was part of a subgroup which carried out an Options Assessment to narrow down around 200 options to around 20 which are outlined in the Draft Whangamarino Action Plan.

The draft Action Plan is being circulated last week of January (we are able to share this draft with any interested parties). The next meeting, 16th February, is the chance for everyone in the working group to provide feedback on the Draft Action Plan, into a "final" draft that will be sent out to everyone with links to Whangamarino for consultation (businesses, mana whenua, catchment groups, landowners, schools etc). At this point it will go out to all the duck hunters who had asked to be kept in the loop as part of the Community Engagement group.

Project 1241: Assessment and Monitoring

Mangatutu and Puniu Temperature Monitoring

Temperature loggers were installed in the Puniu River and Mangatutu Stream to compare the water temperature where anglers fish to the Mangatutu Stream monitoring station at Waikeria. The results showed that the Waikeria gauge was about 2°C warmer than the upper Mangatutu and the gauge could be used to predict water temperatures that are dangerous for catch and release. The information was passed on to anglers in a Reel Life article as part of the educational program to inform anglers about the danger of releasing fish in warm water. To date Adam has included the information in three club talks a magazine article and two Reel Life articles.

Gamebird Monitoring

Beau is in early stages of developing a monitoring programme for pukeko in our region.

Beau provided feedback on the New Zealand Harvest Report written by Matt and Heather from NC which it expected to be shared with councillors and the general public soon.

OUTPUT 3: PARTICIPATION

Project 1311: Access Negotiation

Stone Jug Road

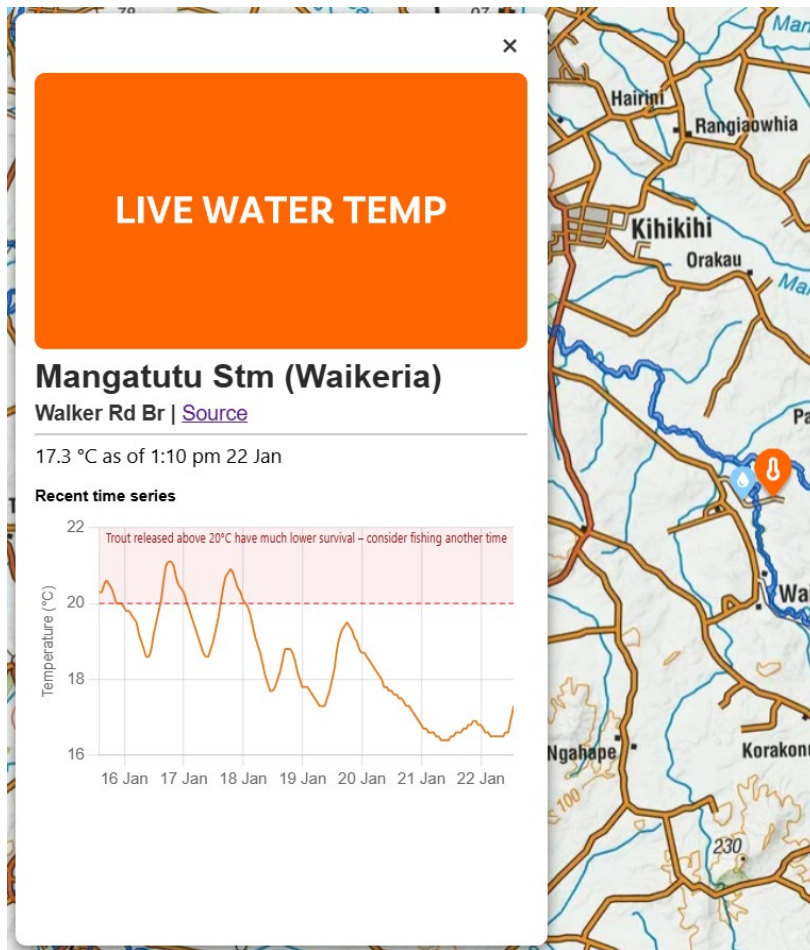
The easement and wording for the Stone Jug Road access has been completed and submitted to a solicitor to be registered on the property title. The process should take a couple of weeks.

Upper Waipa River Access

Adam met with the new owners of the Templeton Farm who were not thrilled about the access across their property. After explaining their legal obligations for access and the safety of anglers around dangerous stock the owners were happy to allow anglers to use their private tracks if they were called in advance. The new access information was added to the A/W Access Mapping System. Additional work on the track at this site may be necessary as the track on the DOC block is overgrown.

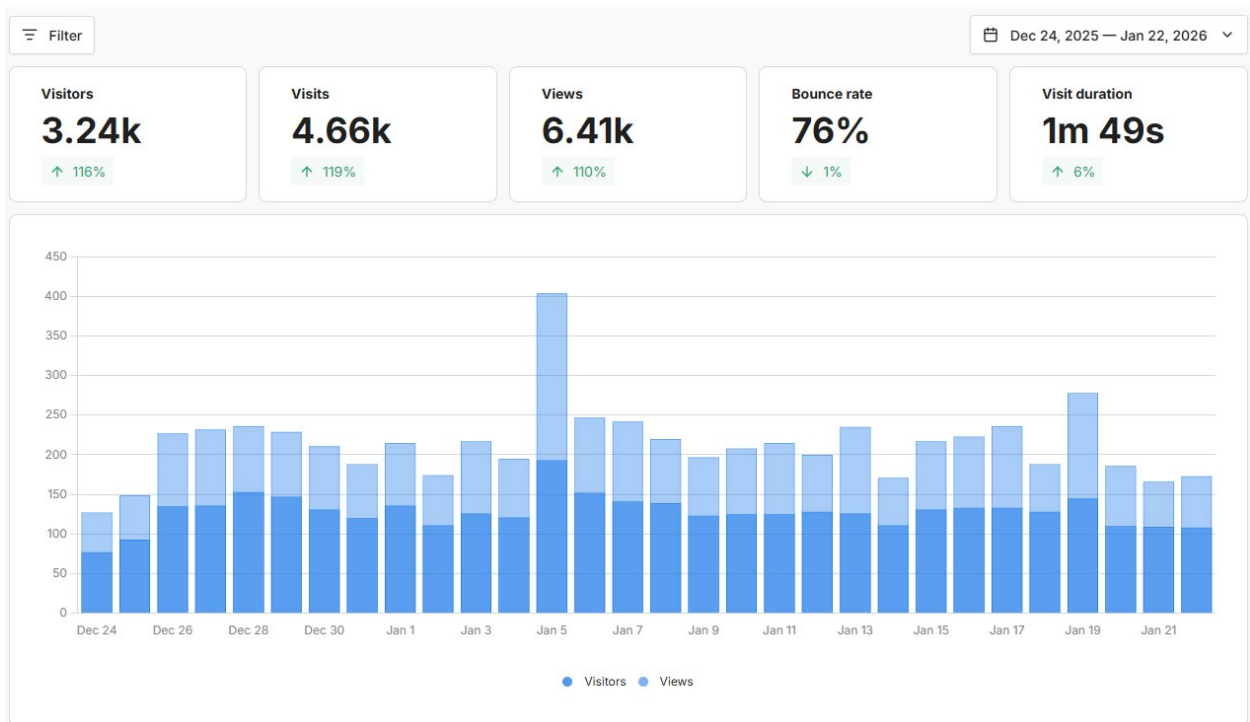
Flow and Temperature data Added

Live water flow and temperature data, sourced from the Waikato Regional Council has been added to the access map. The hope is that flow data will help anglers make good decisions about where to go fishing. Live temperature data will help anglers make informed decisions regarding catch and release, which relates to the educational approach agreed upon by the council.



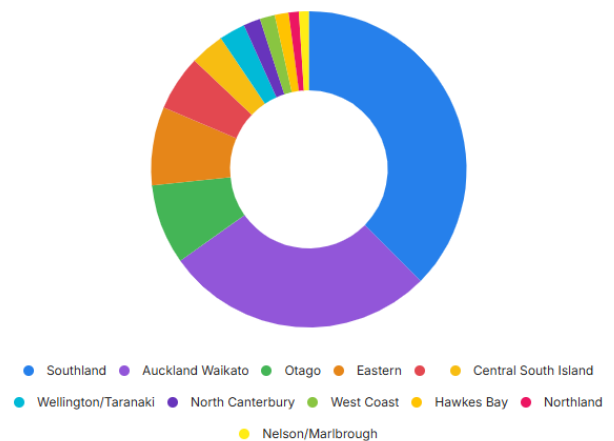
Caption: Screenshot of live temp data on the access map. Note the figure showing the temperature over the last week, with a red line indicating when it exceeded 20 degrees, and a note suggesting fishing another time.

A free web analytics platform has also been set up to monitor traffic and activity on the map. Happy to report it is getting steady use, and anglers are taking advantage of having access points for all of NZ.



Event
Property

region_code	Count	Percentage
Southland	5.59k	37%
Auckland Waikato	4.13k	28%
Otago	1.22k	8%
Eastern	1.20k	8%
Central South Island	848	6%
Wellington/Taranaki	518	3%
North Canterbury	399	3%
West Coast	260	2%
Hawkes Bay	227	2%
Hawkes Bay	215	1%
Northland	152	1%
Nelson/Marlborough	152	1%



Top figure: Screenshot of access map analytics for the last month. Note visitors are unique users, visits are “sessions”, and views when the page reloads. Bottom figure: number of times access points have been selected in the past month (with black being DOC huts/campsites) by region.

[Project 1331: Magazine](#)

Beau and Dani have contributed to the regional supplement of the F&G Gamebird magazine.

Project 1361: User group

Lake Arapuni Fishing Competition Burnsco Donation

Adam was able to secure a \$500 prize donation from Burnsco for the Lake Arapuni Fishing Competition. Burnsco would also like staff to conduct a spring fishing seminar to promote their new freshwater fishing section.

OUTPUT 5: LAW ENFORCEMENT

Project 1511: Ranging

Project 1531: Legal

Sports Fish Ranging

Sports fish ranging was conducted during routine work and when anglers were encountered. In total 22 contacts were made and no citations were issued.

OUTPUT 8: PLANNING REPORTING

Project 1841: National liaison

Gold Clam Compliance

The spread of gold clams to Taranaki and the increasing density of gold clams at Lake Karapiro (1000/m²) has resulted in access restrictions to Rotorua Lakes. Te Arawa Lakes Trust Board staff stated there would be lake closures if MPI did not fund decontamination or enforcement in the Waikato. To date MPI have just installed signs to prevent the spread of the gold clam. Adam has been working closely with Eastern and Taranaki Regions after threats to close some of the Rotorua Lakes due to a lack of enforcement or decontamination in the Waikato. Lake Rotomanu in Taranaki has now been closed to the public while the local council decided how to deal with the clams. Lake Rotomanu is a popular put and take trout fishery that was used for kids fishing days.

Adam set up a meeting between MPI and Clean Wake (Utah based decontamination firm) to discuss construction of a dip tank boat decontamination system in New Zealand. In addition, Adam met with Pulse Engineering who are keen to partner with Clean Wake to manufacture the dip tank. Te Arawa Lakes Trust Board staff were informed of the progress. The goal from a Fish & Game perspective is to make sure MPI has put in adequate infrastructure to prevent further spread of gold clams.

OUTPUT 9: ADMINISTRATION

Project 1912: Administration

Maritime

Boat Repair

The same oil leak that was repaired in December was detected in the boat. The vessel was returned to FC Boats who could not determine the cause of the leak at this time.

D. Klee
Chief Executive

Financial Report for February 2026 Meeting

Licence Sales: Fish licence sales in the region are tracking well despite periods of inclement weather and are currently 2 % ahead of the same time last year. By contrast, overall national licence sales remain down. Notably, family licence sales nationally have declined by approximately 2300, and this reduction has only been partially offset by an increase of fewer than 1000 adult whole season licences. This outcome reflects concerns raised at the time of the licence category review that changes to the family licence structure were based on incomplete or potentially misleading data, particularly in relation to the participation of women and secondary holders, and that any decline in family licence uptake was unlikely to be fully compensated by growth in other licence categories.

Other Revenue (November–December 2025)

Access Negotiation Income: A reimbursement of \$8,800.00 was received from Herenga ā Nuku Aotearoa in December relating to survey and professional costs incurred at the Stone Jug Road access site.

Mitigation Income: Mitigation funding of \$17,361.47 was received from Mercury NZ Limited in November in accordance with existing mitigation agreements.

Legal Funding (NZC): A total of \$14,146.60 was received from New Zealand Fish and Game Council across November and December relating primarily to Whangamarino Weir work and consultant reimbursements.

Game Bird Control Income: Income of \$635.85 was generated through zongun hire during the period.

Interest Income: Interest income of \$6,222.51 was credited across Westpac accounts, including income associated with the maturity of a term deposit.

Prosecution Fines: Prosecution fines totalling \$1,107.05 were received through the Ministry of Justice.

Habitat Stamp and Endorsements: Game Bird Habitat Stamp revenue totalled \$8.70 and Salmon and Designated Waters endorsements totalled \$45.72.

Expenditure (November–December 2025)

Annual Report and Audit: Audit costs of \$10,421.00 were incurred in December for Owen McLeod and Co Limited.

NZ Fish and Game Levy: The quarterly levy payment of \$50,406.52 was paid in November.

Legal and Court Prosecutions: Legal expenditure totalled \$6,161.83 and related primarily to Stainton Chelley prosecution work.

RMA and Planning Services: RMA related expenditure totalled \$8,055.15 relating to Whangamarino Weir and other consent matters.

Habitat Works on Fish and Game Land: Habitat works expenditure totalled \$1,819.87.

Banding and Game Bird Management: Banding and shoveler study costs totalled \$4,865.7 including bands and grain.

Fish Releases: Fish release related expenditure totalled \$4,159.47.

Vehicle Costs: Fuel and RUC costs totalled \$2,783.25, maintenance costs \$2,439.95, and registration costs \$240.40.

Office and Operational Costs: Office and operational expenditure remained within expected levels for the period.

Council and Governance Costs: Council meeting expenses totalled \$495.50.

Cash and Investments

A \$300,000 term deposit matured in November and was reinvested into new term deposits of \$200,000 and \$400,000.

Comment: Compliance costs have escalated due to several complex cases and a number of defendant no shows, resulting in a significant amount of staff and legal time being expended without resolution. While the majority of legal costs continue to be internalised through staff processing, the increased compliance activity undertaken in the region over recent years has led to a higher volume of cases requiring formal processing.

Banding at the Hauraki site was delayed by approximately three weeks due to adverse weather conditions, which is expected to result in increased grain costs. I recently became aware that MPI has entered into contractual arrangements with some South Island regions of up to \$200,000 to secure the same number of ducks required for HPAI screening that this region has provided annually for more than 20 years. This arrangement was not previously known to me and does not apply to this region or, to my knowledge, other North Island regions.

Historically, when this region has approached MPI for additional funding assistance to support HPAI screening, we have routinely been advised that no budget was available. MPI has now indicated that the South Island contracts sit within a different branch of MPI and are funded through a one off budget allocation. MPI has also advised that contract funding is provided to Fish and Game as a national entity and cannot be directed by MPI to specific regions, and that there is no additional budget available to increase support in the current financial year beyond prior year funding with a modest inflation adjustment.

I have advised MPI that, while we are prepared to continue supporting the HPAI screening programme in the short term, the region will not be in a position to continue doing so beyond this summer period without a formal contractual arrangement and increased cost sharing initiatives. The current approach places a disproportionate financial burden on this region and is not considered equitable.

While MPI has acknowledged the significance of this region's contribution and has indicated a willingness to formally recognise that contribution, any continuation of support for the HPAI screening programme in future years will be contingent on the development of a clear and equitable funding model. I have agreed, in good faith, to continue supporting MPI's HPAI screening programme over the coming summer by providing ducks through our existing banding operations on the express understanding that MPI will work with us to develop a formal contractual and cost sharing arrangement for future years.

David Klee

Chief Executive

National Fish Licence Sales YTD to 12 Jan

Channel		FWF	FWA	FWNA	FSLA	FLAA	FWIA	FLBA	FSBA	FDA	FDNA	FWJ	FWNJ	FDJ	FDNJ	FWC	FWNC	FDNC	SRSE	DWLR	DWLN	Total Fish	Fish LEQ	Fish Var	Fish \$	Inc/Dec
Northland	Public Online	40	95	57	12	10	0	0	15	63	78	21	5	18	7	56	4	1	0	0	0	482				
	Agency Online	8	32	5	8	0	0	0	4	0	4	0	2	0	0	3	1	0	3	5	0	71				
	Total	48	127	62	20	10	0	0	15	67	78	23	5	18	7	59	5	1	3	5	0	553	367		\$49,739	
2024-2025	Public Online	28	100	76	9	6	0	1	11	54	78	28	8	10	1	50	4	0	0	0	0	464				
	Agency Online	5	43	3	6	2	0	0	0	1	2	0	0	1	0	4	0	0	5	2	0	74				
	Total	33	143	79	15	8	0	1	11	55	80	28	8	11	1	54	4	0	5	2	0	538	385	5.0%	\$52,210	\$2,470
2025-2026	Public Online	361	855	105	179	106	0	12	81	454	235	239	10	97	5	472	2	1	0	0	0	3,214				
	Agency Online	137	428	28	99	38	0	4	44	77	5	50	0	10	0	51	0	0	23	23	0	1,017				
	Total	498	1283	133	278	144	0	16	125	531	240	289	10	107	5	523	2	1	23	23	0	4,231	2,780		\$377,057	
Auckland Waikato	Public Online	283	870	138	158	75	0	7	71	496	221	255	12	114	5	537	10	2	0	0	0	3,254				
	Agency Online	146	499	46	100	53	0	2	23	51	19	80	2	2	2	69	0	0	12	28	0	1,134				
	Total	429	1369	184	258	128	0	9	94	547	240	335	14	116	7	606	10	2	12	28	0	4,388	2,835	2.0%	\$384,519	\$7,462
2025-2026	Public Online	1,188	969	113	279	579	0	23	341	1,340	372	237	13	196	28	880	9	7	0	0	0	6,574				
	Agency Online	813	697	53	235	773	0	13	84	255	135	157	3	54	9	44	2	2	31	21	2	3,383				
	Total	2001	1666	166	514	1352	0	36	425	1595	507	394	16	250	37	924	11	9	31	21	2	9,957	6,739		\$914,170	
Eastern	Public Online	882	1,104	150	273	647	0	20	348	1,259	443	321	17	227	15	917	9	11	0	0	0	6,643				
	Agency Online	740	725	46	225	867	0	10	66	197	108	149	3	32	6	46	2	12	21	25	14	3,294				
	Total	1622	1829	196	498	1514	0	30	414	1456	551	470	20	259	21	963	11	23	21	25	14	9,937	6,574	-2.5%	\$891,742	-\$22,428
2025-2026	Public Online	193	540	117	109	81	0	10	76	226	127	209	7	61	2	344	2	4	0	0	0	2,108				
	Agency Online	104	331	66	125	69	0	4	16	77	154	81	1	10	1	67	0	0	5	15	35	1,161				
	Total	297	871	183	234	150	0	14	92	303	281	290	8	71	3	411	2	4	5	15	35	3,269	2,118		\$287,363	
2025-2026	Public Online	162	535	117	103	113	0	3	78	261	196	215	6	91	3	369	3	3	0	0	0	2,258				
	Agency Online	93	410	50	128	48	0	2	23	44	133	106	1	13	2	47	0	0	9	13	28	1,150				
	Total	255	945	167	231	161	0	5	101	305	329	321	7	104	5	416	3	3	9	13	28	3,408	2,133	0.7%	\$289,322	\$1,959
Taranaki	Public Online	76	240	73	41	18	0	0	20	80	179	72	5	38	3	345	1	2	0	0	0	1,193				
	Agency Online	30	143	4	50	13	0	2	7	19	9	49	0	5	0	52	0	0	5	7	0	395				
	Total	106	383	77	91	31	0	2	27	99	188	121	5	43	3	397	1	2	5	7	0	1,588	858		\$116,359	
2025-2026	Public Online	63	238	98	42	25	0	1	21	105	188	76	14	26	8	379	4	1	0	0	0	1,289				
	Agency Online	34	149	2	48	22	0	0	10	14	6	61	0	6	0	55	0	0	12	5	0	424				
	Total	97	387	100	90	47	0	1	31	119	194	137	14	32	8	434	4	1	12	5	0	1,713	915	6.6%	\$124,056	\$7,697
Wellington	Public Online	213	686	42	169	131	0	2	27	176	58	236	1	54	2	479	1	0	0	0	206	24				
	Agency Online	116	505	9	154	104	0	2	5	86	4	169	2	52	0	152	0	0	26	55	1	1,442				
	Total	329	1191	51	323	235	0	4	32	262	62	405	3	106	2	631	1	0	26	261	25	3,949	2,329		\$315,880	
2025-2026	Public Online	164	724	27	168	103	0	3	36	209	62	267	4	76	5	471	1	4	0	209	22	2,555				
	Agency Online	111	534	4	146	89	0	2	6	29	9	125	0	53	0	129	0	0	19	34	0	1,290				
	Total	275	1258	31	314	192	0	5	42	238	71	392	4	129	5	600	1	4	19	243	22	3,845	2,251	-3.3%	\$305,337	-\$10,543
Nelson/Marl	Public Online	319	568	155	142	104	0	4	46	239	231	210	7	92	5	469	7	1	0	781	115	3,495				
	Agency Online	292	666	164	208	91	0	4	20	55	117	100	6	11	1	102	0	5	171	769	192	2,974				
	Total	611	1234	319	350	195	0	8	66	294	348	310	13	103	6	571	7	6	171	1550	307	6,469	3,271		\$443,703	
2025-2026	Public Online	252	533	195	153	96	0	6	48	303	222	188	6	93	5	525	3	1	0	755	152	3,536				
	Agency Online	266	614	119	226	68	0	4	11	41	146	98	3	11	2	81	0	0	148	752	164	2,754				
	Total	518	1147	314	379	164	0	10	59	344	368	286	9	104	7	606	3	1	148	1507	316	6,290	3,058	-6.5%	\$414,815	-\$28,888
North Canterbury	Public Online	919	1,607	141	334	94	0	7	117	688	247	405	7	190	7	1,407	2	3	1,948	1,326	282	9,731				
	Agency Online	1,327	2,239	89	796	62	0	11	57	157	36	249	1	26	1	129	3	0	2,682	1,513	8	9,386				
	Total	2246	3846	230	1130	156	0	18	174	845	283	654	8	216	8	1636	5	3	4630	2839	290	19,117	8,679		\$1,177,283	
2025-2026	Public Online	688	1,586	150	314	100	0	9	136	710	340	437	5	167	8	1,268	5	4	1,551	1,278	214	8,970				
	Agency Online	970	2,519	89	865	41	0	7	43	126	59	297	4	17	2	111	4	1	2,188	1,450	2	8,795				
	Total	1658	4105	239	1179	141	0	16	179	836	399	734	9	184	10	1379	9	5	3739	2728	216	17,765	8,262	-4.8%	\$1,120,754	-\$56,529
West Coast	Public Online	281	405	113	78	85	0	5	78	207	153	141	4	49	1	368	2	1	0	558	75	2,604				
	Agency Online	70	141	4	53	53	0	4	8	4	96	46	2	3	11	4	0	10	43	42	0	594				
	Total	351	546	117	131	138	0	9	86	211	249	187	6	52	12	372	2	11	43	600	75	3,198	1,604		\$217,628	
2025-2026	Public Online	223	390	132	86	70	0	6	61	208	167	132	15	36	5	335	7	2	0	566	50	2,491				
	Agency Online	63	155	3	47	47	0	0	10	26	44	49	2	8	9	26	0	0	43	58	0	590				
	Total	286	545	135	133	117	0	6	71	234	211	181	17													

Account Transactions

Auckland/Waikato Fish & Game Council

For the period 1 November 2025 to 31 December 2025

Date	Description	Debit	Credit
Annual Report/Audit			
08 Dec 2025	Owen McLeod & Co Ltd - Audit fee for Auckland Waikato Fish and Gar	10,421.00	0.00
Total Annual Report/Audit		10,421.00	0.00
Bank Charges			
31 Dec 2025	Westpac - Bank Fees - BOL	0.38	0.00
Total Bank Charges		0.38	0.00
Business On Line Saver			
Opening Balance		262,791.46	0.00
Closing Balance		262,813.42	0.00
Cheque Account			
Opening Balance		695,744.52	0.00
Closing Balance		447,932.46	0.00
Commission on Sales Fish			
30 Nov 2025	Eyede Solutions - Commission - Fish	767.17	0.00
31 Dec 2025	Eyede Solutions - Commission - Fish	858.96	0.00
Total Commission on Sales Fish		1,626.13	0.00
Council Meeting Expenses			
13 Nov 2025	Roslyn Simmonds - Courier for council meeting	138.00	0.00
24 Nov 2025	Great River Catering Ltd - Catering council meeting	357.50	0.00
Total Council Meeting Expenses		495.50	0.00
Displays/Promotions PR			
06 Nov 2025	Danielle Lelievre - Mitre 1006/11/2025Buckets	19.50	0.00
08 Nov 2025	Coffee Geeks - Coffee	7.06	0.00
09 Nov 2025	Golden State Coffee - Coffee	20.05	0.00
Total Displays/Promotions PR		46.61	0.00
Expense - Access Negotiation			
01 Nov 2025	Digital Ocean - Usage	10.76	0.00
01 Dec 2025	Beau Jarvis-Child - Digital OceanInv:534043739	7.54	0.00
02 Dec 2025	Digital Ocean - Digital OceanInv:534043739	13.55	0.00
07 Dec 2025	one.nz - Broadband - Broadband	12.79	0.00
Total Expense - Access Negotiation		44.64	0.00
Expense - Banding/Shovler Study			
19 Nov 2025	Department of Conservation - Bands (2000)	1,909.57	0.00
16 Dec 2025	Danielle Lelievre - Norwest LiquorGift16/12/25	52.17	0.00
31 Dec 2025	Bunge New Zealand Ltd - Grain	2,904.00	0.00
Total Expense - Banding/Shovler Study		4,865.74	0.00
Expense - Fish Releases			
18 Dec 2025	Eastern Fish and Game Council - 1+ Rainbow Trout	4,030.00	0.00
31 Dec 2025	BOC Limited - Oxygen	129.47	0.00
Total Expense - Fish Releases		4,159.47	0.00

Expense - Game Bird Control (Zon guns)

05 Nov 2025	Online Fireworks - Fireworks	482.61	0.00
10 Nov 2025	NZ Post - Zon gun courier	10.37	0.00
11 Nov 2025	NZ Post - Zon gun courier	10.37	0.00
11 Nov 2025	NZ Post - Zon gun courier	10.37	0.00
12 Nov 2025	NZ Post - Zon gun courier	10.37	0.00
13 Nov 2025	NZ Post - CourierZon gun	10.68	0.00
13 Nov 2025	NZ Post - Zon gun24083094	10.37	0.00
17 Nov 2025	NZ Post - CourierZon gun15043635	10.37	0.00
21 Nov 2025	NZ Post - Courier for zon gun	10.37	0.00
25 Nov 2025	NZ Post - Courier for zon gun	15.20	0.00
25 Nov 2025	NZ Post - Courier for zon gun	15.20	0.00
27 Nov 2025	Electro-tek Engineering Ltd - Zon guns	1,349.00	0.00
01 Dec 2025	NZ Post - Courier of zon gun - 24083087	10.37	0.00
06 Dec 2025	NZ Post - Zon gun courier24083086	10.37	0.00
Total Expense - Game Bird Control (Zon guns)		1,966.02	0.00

Expense - Habitat Works F & G Land

11 Nov 2025	Farm Source - Weedmaster G360 & Pulse Penetrant	404.67	0.00
20 Nov 2025	David Cocks - Gas Cascades12/8/25Diesel	26.09	0.00
20 Nov 2025	David Cocks - Gas Cascades28/8/25Petrol	40.93	0.00
20 Nov 2025	David Cocks - Gas Cascades27/8/25Diesel	80.43	0.00
20 Nov 2025	David Cocks - Gas Cascades12/9/25Diesel	33.03	0.00
20 Nov 2025	David Cocks - Gas Cascades15/11/25Petrol	84.57	0.00
20 Nov 2025	David Cocks - Gas Cascades20/11/25Petrol	60.94	0.00
20 Nov 2025	Norwood - Tractor items	271.26	0.00
29 Nov 2025	Euan Williamson - Gull Mangwhai29/11/25Diesel	80.01	0.00
03 Dec 2025	Cartrack NZ - Cartrack sub	15.00	0.00
18 Dec 2025	David Howell-Walmsley - Wasp bait/traps	139.41	0.00
19 Dec 2025	Farm Source - Spray	583.53	0.00
Total Expense - Habitat Works F & G Land		1,819.87	0.00

Field Equipment Maintenance

14 Nov 2025	Garmin - David Klee - Satellite sub	17.39	0.00
14 Nov 2025	Garmin - Adam Daniel - Satellite sub	17.39	0.00
19 Nov 2025	Garmin - Beau Jarvis-Child - Satellite sub	17.39	0.00
14 Dec 2025	Garmin - Adam Daniel - Satellite	17.39	0.00
14 Dec 2025	Garmin - David Klee - Satellite	17.39	0.00
19 Dec 2025	Garmin - Beau Jarvis-Child - Satellite	17.39	0.00
Total Field Equipment Maintenance		104.34	0.00

Fish Licence Sales - Office

04 Dec 2025	Beau Jarvis-Child - Licence brought in error	0.00	135.65
18 Dec 2025	Qingsong Lin - Upgrade from local to whole	0.00	26.96
Total Fish Licence Sales - Office		0.00	162.61

Fish Licence Sales – AOL

30 Nov 2025	Eyede Solutions - Fishing Licences 25/26	0.00	15,507.53
31 Dec 2025	Eyede Solutions - Fishing Licences 25/26	0.00	17,281.53
Total Fish Licence Sales – AOL		0.00	32,789.06

Fish Licence Sales – POL

05 Nov 2025	A Sandiayagu - Upgrade from full to family	0.00	40.87
30 Nov 2025	Eyede Solutions - Fish Licences 25/26	0.00	49,108.70

31 Dec 2025	Eyede Solutions - Fish Licences 25/26	0.00	52,550.43
Total Fish Licence Sales – POL		0.00	101,700.00
Game Bird Habitat Stamp			
Opening Balance		0.00	26.09
30 Nov 2025	Eyede Solutions - Habitat Stamp	0.00	8.70
Total Game Bird Habitat Stamp		0.00	8.70
Closing Balance		0.00	34.79
Game Licence Sales - POL			
30 Nov 2025	Eyede Solutions - Game licences 25	0.00	115.65
Total Game Licence Sales - POL		0.00	115.65
Income - Access Negotiation			
11 Dec 2025	Herenga ā Nuku Aotearoa - Reimbursement for survey.Stone Jug Roa	0.00	8,800.00
Total Income - Access Negotiation		0.00	8,800.00
Income - Game Bird Control (Zon guns)			
05 Dec 2025	Rhys Darby - Zon gun hireSerial: 21073277Picked up - 4/9/25Returne	0.00	184.00
10 Dec 2025	Grant Richardson - Zon gun hireSerial: 21073276Courier - 10/11/2025	0.00	60.00
10 Dec 2025	Grant Richardson - Courier cost	0.00	10.37
11 Dec 2025	Murray Davies - Zon gun hireSerial: 23073277Picked up - 4/11/2025R	0.00	74.00
18 Dec 2025	Glen Evans - Zon gun hireSerial: 21073246Courier - 10/11/2025Retur	0.00	76.00
18 Dec 2025	Glen Evans - Zon gun hireSerial: 15043932Courier - 10/11/2025Retur	0.00	76.00
18 Dec 2025	Glen Evans - Courier costs	0.00	20.74
31 Dec 2025	Cairra Farms Ltd - Zon gun hireSerial: 24083086Couriered - 3/12/25R	0.00	54.00
31 Dec 2025	Cairra Farms Ltd - Courier cost	0.00	10.37
31 Dec 2025	Troyden Kuter - Zon gun hireSerial: 24083087Couriered - 1/12/25Retu	0.00	60.00
31 Dec 2025	Troyden Kuter - Courier cost	0.00	10.37
Total Income - Game Bird Control (Zon guns)		0.00	635.85
Interest Income			
01 Nov 2025	Westpac - Interest - 0099	0.00	6,200.55
30 Nov 2025	Westpac - Interest	0.00	10.80
31 Dec 2025	Westpac - Interest	0.00	11.16
Total Interest Income		0.00	6,222.51
KiwiSaver Employer Contribution			
14 Nov 2025	Superannuation	1,231.51	0.00
28 Nov 2025	Superannuation	1,231.51	0.00
12 Dec 2025	Superannuation	1,226.78	0.00
26 Dec 2025	Superannuation	1,231.51	0.00
Total KiwiSaver Employer Contribution		4,921.31	0.00
Legal Funding Received NZFGC			
03 Nov 2025	New Zealand Fish & Game Council - Reimbursement:S J OngleyInv:0	0.00	2,924.10
03 Nov 2025	New Zealand Fish & Game Council - Whangamarino Weir reimbursen	0.00	3,675.00
10 Nov 2025	New Zealand Fish & Game Council - Reimbursement:Tipu Whenua Lii	0.00	82.50
01 Dec 2025	New Zealand Fish & Game Council - Whangamarino Weir reimbursen	0.00	2,635.00
03 Dec 2025	New Zealand Fish & Game Council - Reimbursement:Kahu Environme	0.00	1,175.00
18 Dec 2025	New Zealand Fish & Game Council - Whangamarino Weir reimbursen	0.00	3,655.00
Total Legal Funding Received NZFGC		0.00	14,146.60
Legal/Court Prosecutions			

19 Nov 2025	Danielle Lelievre - PB Tech Hamilton	2 x USB	9.43	0.00
19 Nov 2025	Roslyn Simmonds - Nawton Stationery	Courier	6.43	0.00
03 Dec 2025	Stainton Chellew - Fees		3,952.50	0.00
03 Dec 2025	Stainton Chellew - Disbursements		50.00	0.00
03 Dec 2025	Stainton Chellew - Disbursements		253.80	0.00
03 Dec 2025	Stainton Chellew - Disbursements		12.17	0.00
03 Dec 2025	Stainton Chellew - Fees		1,827.50	0.00
03 Dec 2025	Stainton Chellew - Disbursements		50.00	0.00
Total Legal/Court Prosecutions			6,161.83	0.00

Mitigation Income MRP Genisis, Winstones

05 Nov 2025	Mercury NZ Ltd - PO-00004228	Mitigation contributions as per Agreem	0.00	17,361.47
Total Mitigation Income MRP Genisis, Winstones			0.00	17,361.47

NZ F&G Levy

11 Nov 2025	New Zealand Fish & Game Council - Quarterly Levy	Installment FY26I	50,406.52	0.00
Total NZ F&G Levy			50,406.52	0.00

Office Fish Sales to Eyede

30 Nov 2025	Eyede Solutions - 6746585 - Arulandandam Sandiayagu	Upgrade from	176.52	0.00
31 Dec 2025	Eyede Solutions - Qingsong Lin - Upgraded for local	to full	135.65	0.00
Total Office Fish Sales to Eyede			312.17	0.00

Office General

02 Nov 2025	Survey Monkey - Subscription		42.61	0.00
03 Nov 2025	Roslyn Simmonds - Kitchen items		45.72	0.00
04 Nov 2025	OpenAI - Subscription		36.02	0.00
08 Nov 2025	Arlo - Camera sub		13.03	0.00
10 Nov 2025	Xero (NZ) Limited - Auckland/Waikato Fish & Game Council. 6 Additio		24.00	0.00
10 Nov 2025	Xero (NZ) Limited - Auckland/Waikato Fish & Game Council. Monthly		83.00	0.00
21 Nov 2025	Woolworths - Kitchen supplies		22.70	0.00
24 Nov 2025	Woolworths - Kitchen supplies		49.34	0.00
25 Nov 2025	Mitre 10 Mega - Steel pegs for nets		6.36	0.00
27 Nov 2025	Fifo Supermarket - Kitchen supplies		11.55	0.00
28 Nov 2025	Adobe Systems Software - Acrobat standard		21.90	0.00
28 Nov 2025	Adobe Systems Software - Acrobat Pro		33.70	0.00
02 Dec 2025	Survey Monkey - Subscription		42.61	0.00
04 Dec 2025	OpenAI - Subscription		35.83	0.00
04 Dec 2025	Tank Pop Up - Coffee		19.57	0.00
08 Dec 2025	New World - Supplies for trip		100.61	0.00
08 Dec 2025	Arlo - Camera sub		13.03	0.00
09 Dec 2025	Auckland Transport - Parking		60.87	0.00
10 Dec 2025	Xero (NZ) Limited - Auckland/Waikato Fish & Game Council. 6 Additio		24.00	0.00
10 Dec 2025	Xero (NZ) Limited - Auckland/Waikato Fish & Game Council. Monthly		83.00	0.00
18 Dec 2025	Roslyn Simmonds - Coffee		14.17	0.00
19 Dec 2025	Fire Security Services - Certifying fire extinguisher		12.00	0.00
28 Dec 2025	Adobe Systems Software - Acobat Pro		33.70	0.00
28 Dec 2025	Adobe Systems Software - Adobe standard		21.90	0.00
Total Office General			851.22	0.00

Office Maintenance

03 Nov 2025	Mitre 10 Mega - Letterbox		123.48	0.00
04 Nov 2025	Dbwats Limited - 2 people on site at Brymer Road property - Tree rem		1,340.00	0.00
04 Nov 2025	Gold Lawn Mowing - Lawn Mowing		78.26	0.00

18 Nov 2025	Gold Lawn Mowing - Lawn Mowing 1. Line trim the perimeter or the lav	78.26	0.00
30 Nov 2025	Allied Security - Alarm monitoring	46.68	0.00
03 Dec 2025	Gold Lawn Mowing - Lawn Mowing 1. Line trim the perimeter or the lav	78.26	0.00
16 Dec 2025	Gold Lawn Mowing - Lawnmowing	78.26	0.00
29 Dec 2025	Gold Lawn Mowing - Lawnmowing	78.26	0.00
31 Dec 2025	Allied Security - Alarm monitoring	46.68	0.00
Total Office Maintenance		1,948.14	0.00

Office Power

06 Nov 2025	Meridian - Power	167.52	0.00
06 Dec 2025	Meridian - Power	167.20	0.00
Total Office Power		334.72	0.00

Office Premises Rates (inc Water)

18 Dec 2025	Hamilton City Council - Metered Water	118.26	0.00
Total Office Premises Rates (inc Water)		118.26	0.00

Office Purchases (Under 2,000)

21 Nov 2025	Harvey Norman - Fridge	656.52	0.00
Total Office Purchases (Under 2,000)		656.52	0.00

Photocopier

19 Nov 2025	Canon - Photocopier	299.34	0.00
19 Dec 2025	Canon - Photocopier	70.87	0.00
Total Photocopier		370.21	0.00

Postage

01 Dec 2025	NZ Post - Courier of book	16.60	0.00
Total Postage		16.60	0.00

Prosecutions Fines

20 Nov 2025	Ministry of Justice - Ridgeway/Kevin/Philip	0.00	108.02
20 Nov 2025	Ministry of Justice - Shelley/Joshua	0.00	144.00
25 Dec 2025	Ministry of Justice - Ridgeway/Kevin/Philip	0.00	135.03
25 Dec 2025	Ministry of Justice - Shelley/Joshua	0.00	180.00
25 Dec 2025	Ministry of Justice - Rattray/Rihare	0.00	117.00
25 Dec 2025	Ministry of Justice - Heta/Alex	0.00	18.00
25 Dec 2025	Ministry of Justice - Wilson/Jason/Glenn	0.00	405.00
Total Prosecutions Fines		0.00	1,107.05

Public Online Sales Fees Excl GST

30 Nov 2025	Eyede Solutions - Licence Bank Fees	996.77	0.00
31 Dec 2025	Eyede Solutions - Licence Bank Fees	1,018.96	0.00
Total Public Online Sales Fees Excl GST		2,015.73	0.00

Public Online Sales Fees Incl GST

30 Nov 2025	Eyede Solutions - Licence DPS Fee	98.69	0.00
31 Dec 2025	Eyede Solutions - Licence DPS Fee	113.68	0.00
Total Public Online Sales Fees Incl GST		212.37	0.00

Rates - F & G Land

10 Nov 2025	Auckland Council - 147 Bethells Road, Bethells	175.34	0.00
Total Rates - F & G Land		175.34	0.00

RMA

08 Nov 2025	Garden Place Car Park - Parking fee	5.65	0.00
10 Nov 2025	Tipu Whenua Limited - October ServicesPhone call and draft change t	82.50	0.00
24 Nov 2025	Waikato Regional Council - Annual resource consent chargesWattle R	502.00	0.00
30 Nov 2025	Kahu Environment - Planning services	1,175.00	0.00
30 Nov 2025	Resourced AF Limited - Preparation of a consenting timeline and assc	2,635.00	0.00
18 Dec 2025	Resourced AF Limited - Prepare for and attend meeting with DOC reg:	3,655.00	0.00
Total RMA		8,055.15	0.00

Salmon/Designated Waters Endorsement

Opening Balance		0.00	120.54
30 Nov 2025	Eyede Solutions - Salmon endorsement	0.00	4.16
30 Nov 2025	Eyede Solutions - Designated Waters	0.00	8.31
31 Dec 2025	Eyede Solutions - Salmon endorsement	0.00	8.31
31 Dec 2025	Eyede Solutions - Designated Waters	0.00	24.94
Total Salmon/Designated Waters Endorsement		0.00	45.72
Closing Balance		0.00	166.26

Stationery

25 Nov 2025	OfficeMax - Office items	163.83	0.00
18 Dec 2025	Roslyn Simmonds - Mouse x 2	33.03	0.00
Total Stationery		196.86	0.00

Telephone/fax/internet

03 Nov 2025	Danielle Lelievre - Inv:70340625BroadbandNov 2025	104.35	0.00
03 Nov 2025	PureLink - Voice services	69.00	0.00
07 Nov 2025	one.nz - Broadband - Broadband	118.00	0.00
10 Nov 2025	Spark - 0800 - 0800 Phone	20.00	0.00
17 Nov 2025	one.nz - Broadband - Broadband	105.21	0.00
19 Nov 2025	David Klee - StarlinkBroadbandNov-Dec 2025	138.26	0.00
23 Nov 2025	one.nz - Mobiles - Mobiles	270.16	0.00
26 Nov 2025	Beau Jarvis-Child - Inv:655253072 - BroadbandOct - Nov 2025	44.52	0.00
30 Nov 2025	Danielle Lelievre - Inv:70726476Broadband	104.35	0.00
02 Dec 2025	PureLink - Voice Service	69.00	0.00
10 Dec 2025	Clare Robertson - Inv:188488615BroadbandNov 2025	47.83	0.00
10 Dec 2025	one.nz - A Daniel - Broadband	105.21	0.00
17 Dec 2025	one.nz - A Daniel - Broadband - A Daniel	105.52	0.00
18 Dec 2025	Spark - 0800 - 0800 phone	20.00	0.00
19 Dec 2025	David Klee - INV-DF-NZL-2259104-88764-31BroadbandDec - Jan 202	138.26	0.00
23 Dec 2025	one.nz - Mobiles - Mobiles	282.47	0.00
Total Telephone/fax/internet		1,742.14	0.00

Vehicle Fuel & RUC

30 Nov 2025	BP Oil New Zealand Limited - Adam Daniel	409.34	0.00
30 Nov 2025	BP Oil New Zealand Limited - David Klee	203.48	0.00
30 Nov 2025	BP Oil New Zealand Limited - Beau Jarvis-Child	202.70	0.00
30 Nov 2025	BP Oil New Zealand Limited - Danielle Le Lievre	208.48	0.00
30 Nov 2025	Z Energy Limited - David Klee	116.94	0.00
10 Dec 2025	Clare Robertson - Travel reimbursementReturn trip to WRC Biodiversi	244.56	0.00
31 Dec 2025	BP Oil New Zealand Limited - Adam Daniel	428.82	0.00
31 Dec 2025	BP Oil New Zealand Limited - David Klee	325.62	0.00
31 Dec 2025	BP Oil New Zealand Limited - Beau Jarvis-Child	242.38	0.00
31 Dec 2025	BP Oil New Zealand Limited - Danielle Le Lievre	189.91	0.00
31 Dec 2025	Z Energy Limited - Adam Daniel	94.89	0.00
31 Dec 2025	Z Energy Limited - David Klee	116.13	0.00

Total Vehicle Fuel & RUC		2,783.25	0.00
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Vehicle Maintenance

04 Nov 2025	B Select Te Rapa - Tyres - 255/70R17 DUELER AT002 x 4Wheel align	1,342.16	0.00
16 Dec 2025	New Zealand Fish & Game Council - Seaflux	60.00	0.00
19 Dec 2025	David Klee - Seat covers	977.79	0.00
31 Dec 2025	New Zealand Fish & Game Council - Seaflux	60.00	0.00
Total Vehicle Maintenance		2,439.95	0.00

Vehicle Registration

11 Dec 2025	NZ Transport Agency - Rego - QKG972	240.40	0.00
Total Vehicle Registration		240.40	0.00

Westpac Term Deposit - 0099

Opening Balance		300,000.00	0.00
01 Nov 2025	Westpac - Maturity term deposit 099	0.00	300,000.00
Total Westpac Term Deposit - 0099		0.00	300,000.00
Closing Balance		0.00	0.00

Westpac Term Deposit - 0100

Opening Balance		0.00	0.00
06 Nov 2025	Westpac - Term Deposit - 0100	200,000.00	0.00
Total Westpac Term Deposit - 0100		200,000.00	0.00
Closing Balance		200,000.00	0.00

Westpac Term Deposit - 0101

Opening Balance		0.00	0.00
06 Nov 2025	Westpac - Term Deposit - 0101	400,000.00	0.00
Total Westpac Term Deposit - 0101		400,000.00	0.00
Closing Balance		400,000.00	0.00

Term Deposits						
			Term	Start Date	Matures	Interest paid
0086	\$300,000.00	5.20%	12 months	15-Dec-22	15-Dec-23	\$15,600.00
0087	\$100,000.00	5.20%	12 months	17-Jan-23	17-Jan-24	\$5,250.00
0088	\$200,000.00	5.40%	6 months	24-May-23	24-Nov-23	\$5,444.38
0089	\$200,000.00	5.70%	12 months	24-May-23	24-May-24	\$11,431.23
0090	\$300,000.00	5.75%	8 months	13-Jun-23	13-Feb-24	\$11,578.77
0091	\$200,000.00	5.74%	8 months	13-Jul-23	13-Mar-24	\$7,674.30
0092	\$300,000.00	6.10%	8 months	11-Dec-23	11-Aug-24	\$12,233.42
0093	\$200,000.00	6.00%	6 months	18-Dec-23	18-Jun-24	\$6,016.44
0093	\$300,000.00	6.05%	8 months	18-Jun-24	18-Feb-25	\$12,182.88
0094	\$200,000.00	5.95%	6 months	25-Jul-24	25-Jan-25	\$5,998.90
0095	\$200,000.00	4.60%	4 months	13-Aug-24	13-Dec-24	\$3,075.07
0096	\$200,000.00	5.75%	8 months	13-Aug-24	13-Apr-25	\$7,752.45
0095	\$200,000.00	5.25%	6 months	13-Dec-24	13-Jun-25	\$5,235.62
0097	\$200,000.00	4.80%	6 months	3-Feb-25	3-Aug-25	\$4,760.55
0098	\$200,000.00	4.40%	4 months	19-Feb-25	19-Jun-25	\$2,794.52
0099	\$300,000.00	4.10%	6 months	1-May-25	1-Nov-25	\$6,200.55
0098	\$200,000.00	3.50%	4 months	19-Jun-25	19-Oct-25	\$2,339.73
0097	\$200,000.00	3.90%	6 months	3-Aug-25	3-Feb-26	
0100	\$200,000.00	3.25%	4 months	6-Nov-25	6-Mar-26	
0101	\$400,000.00	3.55%	6 months	6-Nov-25	6-May-26	

Transaction List

Mastercard Business Card - 5474-33** -**** -*520

Current Balance as at 23/01/2026: \$1,282.74 DR

Payment Date	Description	Reference	Debit	Credit
29/12/2025	Adobe Saggart Dubl IRL	992912	\$33.70	
29/12/2025	Adobe com Saggart Dubl IRL	992912	\$21.90	
21/12/2025	Garmin Eastern Creek AUS	992112	\$20.00	
21/12/2025	RD 1 ONLINE HAMILTON NZL	992112	\$671.06	
19/12/2025	DIRECT DEBIT PAYMENT			\$2,689.53
16/12/2025	Garmin Eastern Creek AUS	991612	\$20.00	
16/12/2025	Garmin Eastern Creek AUS	991612	\$20.00	
13/12/2025	NZ TRANSPORT AGENCY EC PALMERSTON NO NZL	991312	\$276.46	
11/12/2025	AT Infringements Auckland AKL	991112	\$70.00	
10/12/2025	XERO NZ INV 10680772 WELLINGTON WEL	991012	\$123.05	
09/12/2025	NEW WORLD TE RAPA HAMILTON NZL	990912	\$115.70	
08/12/2025	ARLO CORK IRL	990812	\$14.99	
07/12/2025	NEW ZEALAND POST WELLINGTON NZL	990712	\$11.93	
05/12/2025	Tank Juice Hamilton Ham	990512	\$22.50	
04/12/2025	OPENAI SAN FRANCISCO CA	990412	\$41.20	
03/12/2025	SURVEYMONK T 47302590 DUBLIN 2 CO	990312	\$49.00	
02/12/2025	DIGITALOCEAN COM AMSTERDAM NH	990212	\$15.58	
02/12/2025	NEW ZEALAND POST WELLINGTON NZL	990212	\$11.93	
02/12/2025	NEW ZEALAND POST WELLINGTON NZL	990212	\$19.09	
30/11/2025	Adobe Saggart Dubl IRL	993011	\$21.90	
29/11/2025	Adobe com Saggart Dubl IRL	992911	\$33.70	
29/11/2025	FIFO SUPERMARKET HAMILTON NZL	992911	\$13.28	
26/11/2025	NEW ZEALAND POST WELLINGTON NZL	992611	\$17.48	
26/11/2025	NEW ZEALAND POST WELLINGTON NZL	992611	\$17.48	
24/11/2025	WOOLWORTHS NZ 9282 TE RAPA NZL	992411	\$56.74	
22/11/2025	HARVEY NORMAN AUCKLAND NZL	992211	\$755.00	
22/11/2025	NEW ZEALAND POST WELLINGTON NZL	992211	\$11.93	
21/11/2025	Garmin Eastern Creek AUS	992111	\$20.00	
21/11/2025	WOOLWORTHS NZ 9432 DINSDALE NZL	992111	\$26.10	
19/11/2025	DIRECT DEBIT PAYMENT			\$460.24
18/11/2025	NEW ZEALAND POST WELLINGTON NZL	991811	\$11.93	
16/11/2025	Garmin Eastern Creek AUS	991611	\$20.00	
16/11/2025	Garmin Eastern Creek AUS	991611	\$20.00	
15/11/2025	NEW ZEALAND POST WELLINGTON NZL	991511	\$12.28	
14/11/2025	NEW ZEALAND POST WELLINGTON NZL	991411	\$11.93	
13/11/2025	NEW ZEALAND POST WELLINGTON NZL	991311	\$11.93	
13/11/2025	NEW ZEALAND POST WELLINGTON NZL	991311	\$11.93	
13/11/2025	RD 1 ONLINE HAMILTON NZL	991311	\$465.37	
12/11/2025	NEW ZEALAND POST WELLINGTON NZL	991211	\$11.93	
11/11/2025	NEW ZEALAND POST WELLINGTON NZL	991111	\$11.93	
10/11/2025	GOLDEN STATE COFFEE NZ HAMILTON NZL	991011	\$23.06	
10/11/2025	XERO NZ INV 10560953 WELLINGTON WEL	991011	\$123.05	
09/11/2025	UNIQUE FOOD GEEK HAMILTON NZL	990911	\$8.12	
08/11/2025	ARLO CORK IRL	990811	\$14.99	
08/11/2025	Garden Place Car Park Auckland Auc	990811	\$6.50	
07/11/2025	ONLINEFIREWORKS AUCKLAND NZL	990711	\$555.00	
04/11/2025	OPENAI SAN FRANCISCO CA	990411	\$41.42	
03/11/2025	SURVEYMONK T 47243435 DUBLIN 2 CO	990311	\$49.00	
03/11/2025	WOOLWORTHS NZ 9282 TE RAPA NZL	990311	\$52.58	
02/11/2025	DIGITALOCEAN COM AMSTERDAM NH	990211	\$12.37	

BUDGET 2025/26				ACTUAL 2025/26 (as of 31/12/2025)			
Project	Expenditure	Income	Net Cost	Expenditure	Income	Net Cost	Variance
SPECIES MANAGEMENT							
POPULATION MONITORING							
Drift diving	3,520	1,500	2,020				(2,020)
Banding/shoveler study/wetlands stud	16,500		16,500	5,721		5,721	(10,779)
Aerial transects	-		-				-
Trend counts	7,500		7,500				(7,500)
Fish surveys	2,000	2,000	-				-
Gamebird Research				-			
HARVEST ASSESSMENT							
Gamebirds				220		220	220
RELEASES							
Fish	16,000	7,300	8,700	4,289		4,289	(4,411)
CONTROL							
Gamebirds (zon guns)	1,000	1,500	(500)	1,966	636	1,330	1,830
HABITAT PROTECTION/MANAGEMENT							
RESOURCE MAN. ACT							
R.M.A	5,000	-	5,000	17,325	18,932	(1,607)	(6,607)
FISH & GAME PROPERTIES							
Council Land-maint,grass,fence,spray	26,500	21,000	5,500	2,405		2,405	(3,095)
Rates	1,000		1,000	175		175	(825)
NON COUNCIL LAND							
Non Council Land	100,000	100,000				-	
MRP & Genesis mitigation monies	75,000	75,000			64,533	(64,533)	(64,533)
Trees	10,000	8,000	2,000	6,884			(2,000)
ASSESSING & MONITORING							
Assessment & Monitoring	1,000	-		-		-	-
PARTICIPATION							
ACCESS							
Access negotiation				2,463	8,800	(6,337)	(6,337)
Signs/tracks etc	2,500		2,500				(2,500)
NEWSLETTERS							
Magazine/Newsletters	-		-				-
OTHER PUBLICATIONS							
Pamphlets	200		200				(200)
PUBLIC PROMOTIONS							
Displays/promotions/PR	500		500	47		47	(453)
BUDGET 2025/26				ACTUAL 2025/26 (as of 31/12/2025)			
Project	Expenditure	Income	Net Cost	Expenditure	Income	Net Cost	Variance
COMPLIANCE							
RANGING							
Ranging	500		500	33		33	(467)
RANGER TRAINING							
Training	500	500	-				
COMPLIANCE							
Legal	20,000	6,000	14,000	14,800	1,602	13,198	(802)
COUNCILS							
COUNCIL MEETINGS							
Meeting costs	3,000		3,000	973		973	(2,027)
PLANNING/REPORTING							
REPORTING/AUDIT							
Annual Report/Audit	14,000		14,000	14,546		14,546	546

Budget without hours (2)

NATIONAL LIAISON								
National Liason								
ADMINISTRATION								
SALARIES								
Salaries	577,843		577,843		99,700		99,700	(478,143)
STAFF EXPENSES								
ACC Levy	2,300		2,300					(2,300)
Super/KS	36,000		36,000		10,463		10,463	(25,537)
Fringe Benefit Tax	7,000		7,000					(7,000)
Staff Training	4,950		4,950					(4,950)
Clothing	500		500					(500)
Reimb allowances	10,000		10,000					(10,000)
OFFICE PREMISES								
Rent	-		-				-	-
Rates	1,420		1,420		1,010		1,010	(410)
Maintenance	25,000		25,000		13,592		13,592	(11,408)
Insurance (includes off equipment)	7,000		7,000					(7,000)
Power	2,000		2,000		701		701	(1,299)
OFFICE EQUIPMENT								
Purchases (Under \$2,000)	2,500		2,500		1,020		1,020	(1,480)
Asset Replacement Funding								
Eqpmt Maintenance	1,500		1,500					(1,500)
COMMUNICATIONS/CONSUMABLES								
Telephone/fax	15,000		15,000		3,753		3,753	(11,247)
Postage	200		200		46		46	(154)
Courier								
Stationery	5,000		5,000		524		524	(4,476)
Photocopying	1,000		1,000		615		615	(385)
BUDGET 2025/26				ACTUAL 2024/25 (as of 31/12/2025)				
Project	Expenditure	Income	Net Cost		Expenditure	Income	Net Cost	Variance
GENERAL								
Donations								
Bank Charges (Interest calc by NZC)					20		20	20
General Office expenses	5,500		5,500		1,739		1,739	(3,761)
Insurance - General								
Legal - General	1,350		1,350				-	(1,350)
Public Liability insurance	3,000		3,000		1,170		1,170	(1,830)
GENERAL EQUIPMENT								
Purchases (Under \$2,000)	5,000		5,000				-	(5,000)
Asset Replacement Funding								
Equipment Maintenance	1,500		1,500		209		209	(1,291)
Equipment Insurance	-		-					-
Equipment Hire/rental/running expenses							-	-
VEHICLES								
Vehicle Maintenance	20,000		20,000		7,321		7,321	(12,679)
Vehicle Insurance	17,000		17,000					(17,000)
Vehicle Registration	1,000		1,000		502		502	(498)
Vehicle Fuel & RUC	36,000		36,000		5,267		5,267	(30,733)
	1,095,783	222,800	871,983		219,499	94,503	124,996	(746,987)

Aged Receivables Summary

Auckland/Waikato Fish & Game Council

As at 31 January 2026

Ageing by due date

CONTACT	CURRENT	< 1 MONTH	1 MONTH	2 MONTHS	3 MONTHS	OLDER	TOTAL
Cambridge Hunting & Fishing	47.00	-	-	-	-	-	47.00
Eyede Solutions	18,924.20	-	-	-	-	-	18,924.20
Game Bird Habitat Trust	-	-	-	-	-	2,379.86	2,379.86
Herenga ā Nuku Aotearoa	10,120.00	-	-	-	-	-	10,120.00
Ministry of Justice	-	1,010.02	-	-	-	-	1,010.02
Murray Davies	-	85.10	-	-	-	-	85.10
New Zealand Fish & Game Council	-	4,203.25	-	-	-	-	4,203.25
Total	29,091.20	5,298.37	-	-	-	2,379.86	36,769.43
Percentage of total	79.12%	14.41%	-	-	-	6.47%	100.00%



5 January 2026

Barrie Barnes

New Zealand Fish and Game Council

By email; nzcouncil@fishandgame.org.nz cc rcosgrove@fishandgame.org.nz

Dear Barrie

Consultation process, timeframes, and preliminary consultation feedback on current consultation documents

I am writing on behalf of the Auckland Waikato Fish and Game Council in relation to the current consultation on the draft crop depredation policy and the game bird monitoring paper and supporting technical report.

This letter sets out Auckland Waikato's preliminary observations and consultation process concerns. It does not constitute the Council's substantive consultation response, which will require further Council consideration and engagement with affected stakeholders.

Consultation timeframes and process

The first issue Council wishes to raise is the adequacy of the consultation timeframe. For the current consultation, the deadline for feedback is 13 February, while Auckland Waikato's next scheduled Council meeting is not until 15 February. Historically, the New Zealand Council operated a two-meeting consultation cycle to ensure regional councils had sufficient opportunity to consider material, engage with stakeholders, and provide informed and representative feedback. When NZC adopted its national policy for setting policy, this shifted to a requirement that regional councils be afforded reasonable time to respond.

Auckland Waikato's Council meeting schedule has been deliberately set to align with NZC Annual Budget and Meeting Schedule provided to the regions. Requiring regions to provide feedback outside established meeting cycles that already comply with NZC requested timeframes is, in Council's view, unreasonable and undermines the ability of regional councils to provide considered and robust input. Our Chief Executive recently raised this concern with the Chief Operating Officer in relation to the infringement policy consultation. Despite this,

Statutory managers of freshwater sports fish, gamebirds and their habitats.

Auckland/Waikato Region

156 Brymer Rd, RD 9, Hamilton 3289, New Zealand. Telephone (07) 849 1666

Email: aucklandwaikato@fishandgame.org.nz www.fishandgame.org.nz

timeframes were not extended and Auckland Waikato's feedback could not be considered when NZC made its determination at the most recent meeting.

Council has also noted ongoing issues with consultation feedback not being consistently included as incoming correspondence on NZC agendas. In a recent example, Councillor Williamson was required to raise Auckland Waikato's budget and levy consultation feedback, which had been formally provided to NZC through the Chief Operating Officer in October, because the Council's letter was not included on the agenda. As a result, even where regions provide consultation feedback within required timeframes, there is no assurance that this material is being formally presented to NZC. The previous letter has been re-attached to the current email for inclusion on the next NZC agenda. NZC agendas are also not being circulated or published on the website in a timely manner. The December agenda, for example, was uploaded the day before the meeting.

Preliminary observations on the draft crop depredation policy

This issue was briefly considered at a special Council meeting held recently, which has led to this preliminary response. However, Council considers that meaningful consultation requires engagement beyond Council table discussion alone. In particular, council has requested that our Chief Executive engages directly with stakeholders affected by the proposed crop depredation policy. Auckland Waikato plans to survey all recipients of crop depredation permits issued within the last three years to better understand practical implications and impacts.

I will also seek Council approval to raise the issue with local Federated Farmers chairs. Council's experience is that open and transparent engagement with the agricultural sector builds strong relationships and leads to more effective, credible, and durable policy outcomes.

Without preempting Council's substantive feedback, Auckland Waikato wishes to signal several preliminary concerns arising from an initial review of the draft crop depredation policy.

While presented as a national framework, the policy appears to function in practice as a detailed operational directive that would materially change existing regional practice. Initial assessment suggests that the policy significantly expands the role of regional staff, including requirements for formal investigation of complaints, verification processes, written assessments, and in some cases, staff directly undertaking or overseeing disturbance activities.

Given that Auckland Waikato issues close to 200 crop depredation permits annually, largely in response to pukeko impacts on market gardens, there are immediate questions regarding feasibility within existing staff capacity and budgets. Council also notes that the draft appears to draw heavily on a template developed for regions operating at a much smaller scale, raising concerns about proportionality and transferability.

Council also has preliminary concerns regarding ambiguous or operationally challenging provisions, including requirements for staff involvement in disturbance only activities during

time sensitive depredation events. These matters require further assessment, including legal, operational, and resourcing implications, before Council can provide a considered substantive response.

Council further notes that there has been limited early engagement with regional operational staff during the development of this policy. Given that regional councils are responsible for delivery on the ground, early involvement of operational staff will be essential to ensure the policy is workable across diverse regional contexts.

Preliminary observations on the game bird monitoring paper and supporting technical report

Council has similar preliminary concerns regarding process and implementation in relation to the game bird monitoring paper and its supporting technical report.

While the report is technically robust and articulates sound monitoring principles, initial review suggests that some methodologies promoted in the report have been previously trialled through nationally coordinated programmes when the Game Bird Research Committee was operational. Experience from those programmes indicated that certain approaches, including aerial transect surveys, were not suitable in large parts of the North Island due to topography, safety constraints, detectability issues, and the influence of flood events.

In response to those trials, several regions transitioned to banding as a primary monitoring tool. Banding has enabled analysis of survival rates, recruitment, harvest pressure, regulatory effects, and environmental drivers, and has supported adaptive harvest management approaches in some regions for more than a decade.

These observations reinforce, at a preliminary level, the importance of a hybrid monitoring model that allows regional councils discretion to apply methods that are fit for purpose within their landscapes and operational contexts. Council considers that further discussion is required to ensure any national framework recognises existing regional capability, avoids unnecessary duplication, and is supported by appropriate resourcing.

The report also identifies the need for sustained investment in training, data systems, quality assurance, and capacity building. These resourcing implications have not yet been clearly articulated or costed, and require further consideration before Council can assess feasibility and prioritisation.

Conclusion

Overall, Council considers that the issues identified in this letter are symptomatic of the current approach being taken in national policy development. Council also wishes to emphasise a broader governance principle that underpins many of the concerns raised above. Auckland Waikato considers that policy which is operational in nature should be developed through early

and direct engagement with regional operational staff, who are responsible for implementation and who hold the necessary technical and practical expertise. Councillors, by contrast, should be focused on governance, strategic direction, and oversight, rather than being placed in the position of resolving detailed operational design issues late in the policy development process. In Council's view, this approach would result in materially stronger draft policy and a more efficient and effective process overall.

In the present case, the limited early engagement with regions has resulted in draft policy documents that raise fundamental operational and feasibility concerns. As a consequence, both NZC and regional councils have expended considerable time and resource reviewing material that, in its current form, is unlikely to be successfully implemented on the ground.

Council remains committed to engaging constructively with NZC and to providing substantive, evidence-based feedback once appropriate Council consideration and stakeholder engagement has been completed.

In light of the above, Auckland Waikato Fish and Game Council asks that NZC engage with regions to agree on what constitutes reasonable consultation timeframes, including consideration of a return to a two-meeting consultation cycle for complex policy matters. Council also seeks assurance that regional feedback provided within consultation timeframes will be formally tabled and considered by NZC. Above all, Council requests that there is upfront engagement with regional staff, to ensure that regions with a direct interest in policy development, and those with relevant subject matter expertise, have a genuine opportunity to inform draft policy before it is presented to NZC.

Yours sincerely



Nigel Juby

Chair

Auckland Waikato Fish and Game Council

Good morning David

On Saturday you held the Annual General Meeting for the Fish and Game Council. I would like to thank you for the opportunity to be part of the discussion prior to the council formally setting the Auckland/Waikato Gamebird Regulations for the foreseeable future. I would also like to thank the Chair for taking the time to personally contact me after the meeting.

To ensure clarity around the issue that made me visibly livid and ultimately led to me leaving the meeting: the final two councillors expressed rather disdainful, personally smug comments during the concluding discussion about the waterfowl season length and bag limits. The final comment from the last councillor was that if a person had conflicting work or sporting commitments on a Saturday, they should “go and get a different job.” The previous councillor, with extreme arrogance, stated that if you need to use maize to shoot a duck, you should “go shoot clay birds.”

The words, even when written above, cannot fully convey the smugness and attitude with which those comments were delivered. I would expect opinions of this nature to be tabled from the floor, not from those sitting at council level. It was evident early in the meeting that there was a difference of opinion among the councillors, and I respect that people can agree to disagree. But for these two councillors to justify their decision-making with such a lack of moral compass spoke volumes about their character.

As previously outlined, I purchased a licence last year for my best mate. Over that time, he has often been unable to come shooting as he volunteers his time coaching senior-level sport. Last year he was the volunteer coach of a premier club level women’s rugby team in Auckland. Further to that, his wife qualified as a radiographer after three years of full-time university study and now works full roster at North Shore Hospital. She works shifts totalling 80 hours across a fortnight — meaning she has no regular set working hours and frequently works weekends. Often, he does too. And when mum works, dad’s on duty.

So here is a real family with three kids, trying to further themselves in life, outwardly time-poor and financially “getting by,” and I want to give my mate the ability to come and shoot a duck. If I were to heed the values of the last two councillors who spoke, my mate and his wife should “get different jobs,” and we should all “go shoot clay birds.” Hence, I threw my licence and peg at the pair of them in disgust.

I am already excited for the new season, my wife is happy as there’s reduced conflict and I have an opportunity to now get some mates directly involved and also an opportunity to maybe have a kids weekend to introduce them as well. Which may also earn me some brownie points, which historically have been very hard to earn this time of year!

Kind regards

Bruce Inwards

AUCKLAND WAIKATO FISH AND GAME COUNCIL**LEGISLATIVE COMPLIANCE 2025/26 FINANCIAL YEAR****Introduction**

Council adopted a Legislative Compliance Schedule and continues to update this as significant legislation impacting on the organisation is adopted or amended. The purpose of this schedule is to provide a framework for reporting on legislative compliance across relevant Acts and Regulations.

Changes in legislation**Financial Reporting Act 2013**

Changes to reporting thresholds have confirmed Auckland Waikato Fish and Game Council's requirement to report as a Tier 3 public entity. The Council's annual financial statements are prepared in accordance with Tier 3 standards and audited by the Office of the Auditor General.

Protected Disclosures Act 2022

Whistleblower protections and disclosure processes operate under the Protected Disclosures Act 2022. Council policies and procedures align with the updated statutory framework.

Employment legislation

There have been no material legislative changes affecting the Council's employment obligations during the last 12 months. Minimum pay rates, leave entitlements, and PAYE thresholds continue to be managed through the Council's payroll system.

Health and safety

Council continues to meet its obligations under the Health and Safety at Work Act 2015. Officers and managers maintain due diligence oversight of health and safety systems. The Chief Executive is currently updating the region's health and safety plan and awaiting further recommendations from recent regional H&S audits. No material compliance issues were identified during the reporting period.

Legislative Compliance Statement

In my opinion the Auckland Waikato Fish and Game Council has been compliant with its legal obligations under the Acts and Regulations listed below.

David Klee
Chief Executive
21 February 2026

Recommendation

That the Auckland Waikato Fish and Game Council notes that the Council currently complies with the relevant legislation described below.

AUCKLAND WAIKATO FISH AND GAME COUNCIL – LEGISLATIVE COMPLIANCE SCHEDULE

Act or Regulation	Key provisions	Comments	Responsibility
Conservation Act 1987	ss 17, 26R–26ZD, 40	Preparation of Fish and Game Plan, Anglers Notices, appointments, annual reporting, and statutory meetings	Council, Chief Executive
Fish and Game Council Election Regulations 1990	Regs 3, 20, 26	Conduct of Council elections and appointment of New Zealand Council member	Council, Chief Executive
Crown Entities Act 2004	ss 25, 150	Governance responsibilities and statutory reporting to Parliament	Council, Chief Executive
Public Finance Act 1989	s 43, Part 5, Schedule 4	Preparation of annual report including financial statements and service performance reporting	Chief Executive, Office Manager, Accountant
Financial Reporting Act 2013	Part 2	Tier 3 public entity financial reporting requirements	Council, Chief Executive
Public Audit Act 2001	s 4	Audit requirements for public entities	Council, Chief Executive
Wildlife Act 1953 and Wildlife Regulations	ss 15, 39, 44, 53, 54	Game management, enforcement, annual game season recommendations; exercise any written authority from the DG for taking or killing of game, permits, and compliance	Chief Executive, Fish and Game Officers, Rangers
Local Government	Parts 2 and 7	Conduct of meetings and responses to	Council, Chief

Official Information and Meetings Act 1987		official information requests	Executive
Resource Management Act 1991	Parts 3 and 6	Land use, structures, and wetland management and maintenance consent compliance.	Chief Executive
Health and Safety at Work Act 2015	Whole Act	PCBU duties and officer due diligence	Council, Chief Executive
Employment Relations Act 2000	Whole Act	Employment agreements and good faith obligations	Council, Chief Executive
Holidays Act 2003	Whole Act	Annual leave and public holiday entitlements	Chief Executive, Office Manager
Parental Leave and Employment Protection Act 1987	Parts 1 and 2	Parental leave entitlements	Chief Executive
Public Service Act 2020	Part 4	Good employer principles	Council, Chief Executive
Privacy Act 2020	Whole Act	Management of personal information and breach notification	Chief Executive, Office Manager
Public Records Act 2005	Whole Act	Record creation, retention, and disposal	Chief Executive
Protected Disclosures Act 2022	Whole Act	Whistleblower protections	Chief Executive
Maritime Transport Act	Part 2	Vessel safety and certification	Fisheries

1994			Manager
Income Tax Act 2007	Parts CX, RD	PAYE and FBT obligations	Office Manager, Chief Executive
Goods and Services Tax Act 1985	Parts 2 and 3	GST obligations	Office Manager, Chief Executive
KiwiSaver Act 2006	Parts 2 and 3	KiwiSaver enrolment and contributions	Office Manager, Chief Executive

Item Number	NZC Crop Depredation Policy Feedback
Author	Chief Executive and Staff who are required to execute operational requirements.
Purpose	For Decision
Executive Summary	<p>The NZC has provided the following policy draft and background information and now seek regional council feedback.</p> <p>The policy requires significant restructuring to clearly separate policy from operational guidance, tighten statutory and governance settings, and reduce legal and operational risk. Staff recommend the policy be revised to a shorter, principle-based document, supported by separate procedural and guidance material developed with direct operational input.</p> <p>In addition, staff provide some feedback around the proposed operational directives, which, on top of being removed from the policy document, should be reconsidered via consultation with regional staff. We also present a summary of feedback from permit holders on what is working well and what can be improved in our permit process.</p>
Discussion/Analysis	<p>Proposed feedback on the policy:</p> <p>The draft policy would have benefited from earlier engagement with regional operational staff. In the Auckland Waikato context, this appears to have contributed to limited consideration of species that are prevalent in the North Island and form the majority of permit requests in this region.</p> <p>From an operational perspective, a key issue is that the draft does not clearly distinguish between provisions that are intended to be mandatory and those that are advisory. Where elements are intended to be mandatory, the associated operational, resourcing, and legal implications for regions are not clearly identified.</p> <p>Staff consider that a more effective approach would be the development of a concise and principle-based policy that clearly reflects Fish and Game’s statutory functions and is supported by a consistent national strategy. That policy could then be supported by separate operational material, including;</p> <ul style="list-style-type: none"> • standardised landowner advice material to support consistent messaging • consistent permit templates • operational guidelines or standard operating procedures • guidance on conflict resolution and escalation pathways <p>From a staff perspective, many of the matters addressed in the draft extend beyond what would normally be expected in a high-level policy document. These matters would more appropriately sit in supporting guidance or standard operating procedures, where they can provide operational direction without creating unintended policy obligations.</p> <p>However, if New Zealand Council determines that these matters are to be included within a formal policy, staff have identified the following operational issues with the draft as written.</p>

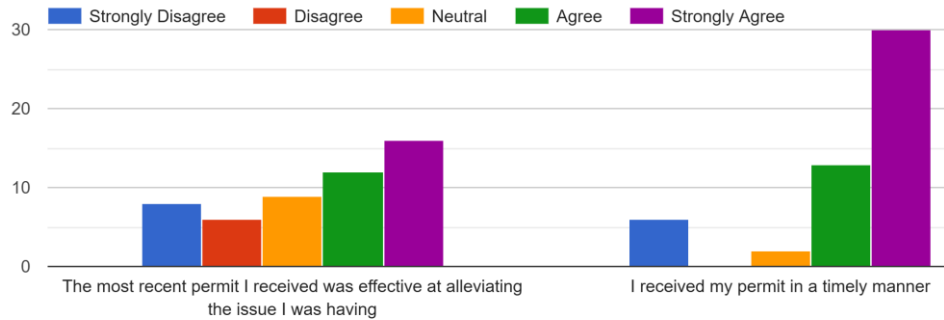
	<p>The flow chart does not clearly align with the response plan, and it is unclear whether either or both are intended to be mandatory or advisory. In addition, the flow chart does not adequately account for situations where control during the gamebird season is not practical or lawful, such as residential or peri urban environments where the use of firearms is not feasible.</p> <p>The draft also does not clearly recognise situations where the risk of not addressing bird damage may be greater than the risk associated with removing birds, including food safety considerations.</p> <p>There is limited recognition of the time and cost implications associated with mandatory site visits, including staff time and travel, particularly in regions with a high volume of permit requests.</p> <p>The policy does not sufficiently acknowledge that different species may require different management approaches, based on the nature of the impacts they cause and their responsiveness to disturbance methods.</p> <p>From an operational perspective, mandatory follow up requirements may deliver limited additional value in regions operating at scale. In many cases, permit holders are satisfied with the permit issued and will make further contact if issues persist. Conversely, where permit holders are dissatisfied, repeated follow up without a change in outcome is unlikely to improve compliance or relationships.</p> <p>The draft also does not provide an efficient pathway for trusted pest control operators or landowners with frequently recurring issues, which may limit opportunities for operational efficiency.</p> <p>In the Auckland Waikato region, pukeko account for a significant proportion of permit requests, with more than 100 permits issued in 2025. Pukeko are not explicitly addressed in the draft policy, which presents challenges given that they are often less responsive to non lethal disturbance methods and require different management approaches. The scale of pukeko related issues also raises questions about the feasibility of mandatory site visits. These are operational nuances that should be left to regional expertise to ensure appropriate techniques are implemented rather than attempting to make a one size fit all policy.</p> <p>Staff also note that landowners contacting Fish and Game are often seeking to address issues quickly and within the law. Where permitted responses are perceived as ineffective or overly burdensome, there is a risk that landowners may disengage from the permitting process.</p> <p>Under the current Department of Conservation delegation, permit holders are required to report back on how permits have been exercised. There may be scope to consider a more formal process to support compliance with reporting requirements, including implications for future permit eligibility where reporting does not occur.</p> <p>Finally, advice within the draft encouraging immediate action to prevent initial bird build up may not reflect the circumstances under which many landowners seek assistance, as contact is often made once impacts are already occurring.</p>
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Provide a summary of permits issues to provide context:

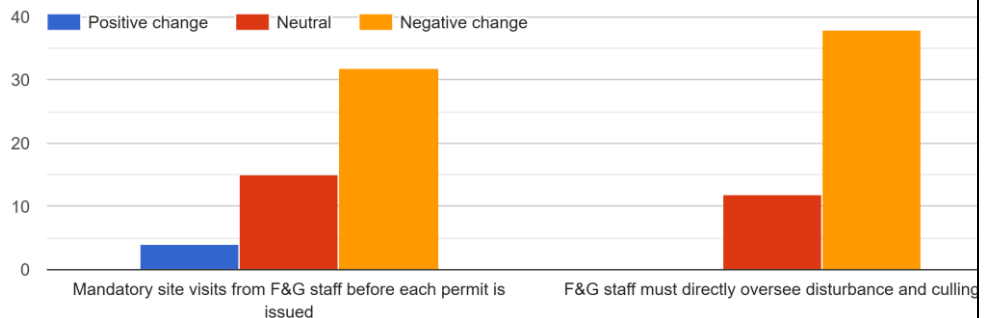
Permits to:	2023	2023	2024	2024	2025	2025
	Cull	Disturb	Cull	Disturb	Cull	Disturb
Mallard	13	4	24	9	28	11
Paradise Shelduck	27	2	30	16	27	13
Pukeko	84	0	85	4	107	4
Upland	1	0	1	0	1	0
Black Swan	9	0	2	1	5	2

Provide a summary of responses from permit holders (X responded of X surveyed) in the prior year:

How much do you agree with the following statements



What is your sentiment towards potential future changes to how permits are issued and carried out?



Summary of the general feedback as received from 41 of the respondents; as follows:

Overall, responses show strong support for the current permit process, with most respondents describing it as fast, streamlined, and easy to navigate. Many permit

	<p>holders felt the system works well as it is, commonly using language such as simple, efficient, and timely, and several explicitly stated there was no need to change a process that is already effective (n=15). A related theme was appreciation for helpful and responsive staff, with respondents noting they found Fish & Game staff easy to deal with and supportive throughout the process (n=6).</p> <p>A dominant concern raised by respondents was that proposed changes—particularly mandatory site visits and/or Fish & Game oversight during control activities—would make the process slower, more costly, and less practical. Many viewed travel time and coordination requirements as disproportionate to the typical scale of permits, particularly where only small numbers of birds were approved (e.g., 3–6 birds). Respondents frequently described mandatory visits as unnecessary or “a waste of resources,” and raised concerns that additional steps would create delays and reduce the system’s effectiveness (n=12). Several respondents noted that if access became harder, pest control would likely continue anyway but outside of the permit system, reducing compliance and weakening the ability to gather information and maintain oversight.</p> <p>Timing emerged as a key issue underpinning the support for the current system. Several respondents emphasised that damage from problem birds can occur rapidly, and therefore an effective permit system must enable a quick response. The current process was repeatedly described as robust and timely, with respondents warning that if processing times increased, the risk of significant crop or pasture damage would rise and the perceived value of applying for permits would decline (n=6). Some also noted practical timing constraints, such as birds only appearing at dusk or in large numbers during short windows, which makes pre-arranged staff visits or supervision difficult.</p> <p>A recurring theme in the comments was that permit conditions and limits can be too restrictive, particularly for pukeko, paradise shelduck, and other high-abundance species in northern regions. Many respondents argued that low permitted numbers were ineffective at reducing damage, in some cases describing the effort as not worth it if only a fraction of the birds could be removed (n=8). This was especially pronounced among commercial bird controllers and landowners experiencing sustained or large-scale damage, who argued that larger or more flexible cull limits and longer permit timeframes would improve outcomes. Several also emphasised the need for flexibility due to shooter availability, weather, and access constraints, and suggested that permit renewal or extension should be easier when control could not be completed within the initial permit period (n=6).</p> <p>A smaller group provided constructive suggestions focused on improving efficiency without adding delay. These included implementing an online portal to support applications, document uploads, status tracking, compliance history, and the use of desktop/GIS-based site assessment for suitable permits rather than physical visits (n=3). A few respondents also suggested minor operational improvements such as prepaid return courier labels and better packaging for zon gun returns (n=2).</p> <p>Finally, a notable subset of respondents framed the issue as a broader policy question around species status, arguing that certain species—particularly pukeko, paradise shelduck, and black swan in northern regions—should be treated primarily as pests rather than managed gamebirds, with permits issued more readily and with less restrictive caps (n=4). While most respondents opposed mandatory oversight as a default setting, a smaller number supported targeted, discretionary oversight, such as staff involvement for sensitive species, high-risk cases, or problem sites where over-culling might occur (n=4). This suggests that while permit holders</p>
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	<p>strongly favour a streamlined baseline process, there is some acceptance of Fish & Game involvement when it is clearly justified and proportionate.</p> <p><i>*Any additional feedback provided by councillors can be added to the list</i></p>
Links to Previous Papers/Decisions	
Attachments	To follow are the papers presented to NZC including the draft policy.
Recommendation	That the CE write to the NZC with the feedback described above.

Decision Record	<p>Moved by:</p> <p>Seconded by:</p> <p style="text-align: right;">Carried / Lost:</p>
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DRAFT NEW ZEALAND FISH AND GAME POLICY FOR ADDRESSING CROP DEPREDACTION ¹

INTRODUCTION

Fish and Game Councils are responsible for managing, maintaining and enhancing the game bird resource in the recreational interests of hunters.

We anticipate that a new authorization from the Director General will be provided to cover damage to crops under Section 53, 54 and 56 of the Wildlife 1953. The template provided by DOC enables our existing authorization from DOC (2018) to work in the mean time so that the relevant regional council to respond to farmers experiencing crop depredation.

It has been and will continue to be a significant challenge for Fish and Game to provide recreational opportunities that hunters demand while simultaneously managing game bird conflicts with people. Game bird species that Fish and Game manage provide recreational, ecological, and aesthetic benefits to the New Zealand public; balancing and prioritising the often conflicting needs of everyone will continue to be difficult. The following definition comes from the Wildlife Act 1953 relating to hunt or kill:

***hunt or kill**, in relation to any wildlife, includes the hunting, killing, taking, trapping, or capturing of any wildlife by any means; and also includes pursuing, disturbing, or molesting any wildlife, taking or using a firearm, dog, or like method to hunt or kill wildlife, whether this results in killing or capturing or not; and also includes every attempt to hunt or kill wildlife and every act of assistance of any other person to hunt or kill wildlife*

Activity that requires a permit from Fish and Game

Any activity that results in the handling or harming of birds, or requires the use of firearms needs a permit from Fish and Game. Actions that harm birds or their nests without express authority to do so could be subject to legal action by Fish and Game.

The Regional Fish & Game Council will liaise closely with the farming community to provide sufficient advice to assist farmers in dispersing game birds from crops. Regions may be able to loan gas guns, however the dispersal of game birds in perpetuity is the farmer's responsibility.

PROCEDURES FOR ADDRESSING CROP DEPREDACTION

To maintain adequate game bird populations Fish and Game New Zealand depends a great deal on landowners. As natural habitat decreases, it is becoming increasingly crucial that farms are managed with consideration for the requirements of birds. Fortunately, many farmers appreciate that game birds provide added interest and sporting opportunities.

¹ Updated and based on the 2003 NZC Crop Depredation Policy

Some farmers take active steps to encourage the use of their land by game birds. There are times, however, when game birds can cause damage to certain crops or pasture. This need not be a serious problem if the correct action is taken quickly.

Fish & Game Councils are Crown Entities ultimately responsible to the Minister for Hunting and Fishing for managing sports fish and game birds in New Zealand. That responsibility is carried out on behalf of all New Zealanders, but the management costs are borne almost entirely by the purchasers of hunting and fishing licences. The fees for those licences are spent on restoring and creating wetlands, maintaining and enhancing water quality, and retaining and improving public access to water bodies.

As managers of game bird populations, Fish and Game has some responsibility to also manage their impacts on the farming community. Whilst we have a responsibility to game bird hunters to have as many ducks as possible flying on the first weekend in May, we cannot do this to the detriment of the farming community. Therefore, we have a working relationship with farmers, assisting those who contact us when they have a problem with game bird impacts on crops.

SPECIES

Mallards – Mallards are a short-lived species and can rear many young when conditions are suitable. The mallard population does not continually increase but fluctuates depending on conditions encountered during the breeding season. Generally, if we have a wet spring, we have lots of ducks, but a dry spring does not have so many. Wet spring conditions provide plenty of surface water, allowing young ducks to satisfy their high protein demands with plenty of worms, grass grubs, and porina grubs so more of them survive.

Paradise Shelduck – The “Parrie” is one of our native game birds and is longer lived than the mallard. Whilst they can also produce significant numbers of young, they do not start breeding until they are at least two years old. Like all native game birds, they lack some of the guile and cunning of their mallard counterparts. This makes them easier to manage with hunter harvest. Parries eat grass and are often attracted to grain being fed out in the winter.

Black Swan – Is another native game bird. They are longer lived, and do not start breeding until they are at least two years old. Swans typically feed on submerged aquatic vegetation but, at times, can graze on grasses around lake shores causing property owners to complain.

Pukeko and pheasant are two other species that can damage pasture and crops.

SUSCEPTIBLE CROPS

Both Mallards and Paradise Shelduck prefer peas, barley, oats, and wheat. However, with the introduction of highly palatable brassicas and other crops such as chicory,

mallards have found a ready food source to fill in the period between nesting and harvest season. The problem has been exacerbated by “chemical ploughing” and direct drilling. Ducks are attracted to the yellowing grass that yields a ready diet of insects and then stay on to graze the young brassica leaves as they pop out of the ground. Paradise Shelduck can be a problem on peas, but mainly become a nuisance on young grass paddocks.

Some regions have issues with game birds feeding on market garden crops for example Pukeko damaging pumpkins and feeding on or pulling out planted seedlings.

SOLUTIONS

Vigilance

The key to minimising damage to crops is vigilance. Game birds usually take some time to establish a new feeding site, so it is important to spot the potential problem when the first 20 or 30 start into a crop. These initial ducks are relatively easy to move on, whereas big mobs are not. A regular look around the farm at dusk or dawn during the cropping season will detect where ducks are feeding. Ducks do not like to land directly into a standing crop. Therefore, they prefer to have a low spot from which to attack a crop. If an area of the crop has become too wet, resulting in stunted growth, mallards will generally start landing in this area and walk through the crop from this point on. As they themselves knock more of the crop down they will change their initial landing zone. They will also start to attack crops from a grass paddock next door. Crops near ponds and wetlands supporting large numbers of game are likely to be attacked. Crop protection in these situations requires extra vigilance and effort.

Act immediately

Farmers who experience game bird crop-feeding damage should apply immediately to their Regional Fish and Game Council office for assistance. If acted upon early enough, dispersal can generally be achieved without killing birds. In isolated cases, usually involving persistent species such as pukeko, it may be necessary to capture or kill the birds.

Permits

Under section 54 of the Wildlife Act 1953, there is a provision to issue permits for farmers to hunt or kill game birds that are damaging crops. A permit is needed when a firearm is used to disperse or kill birds or where they are trapped for removal.

Permits are intended to assist land owners to disperse game birds who are preying on crops. Permits are not intended for providing hunting opportunities outside the hunting season (dates of season vary by region and species).

Land owners shall report to Fish and Game on the number of birds killed. Fish and Game will be able to report to Director General number of permits issues and number of birds killed in relation to this policy.

METHODS FOR DISPERSING GAME BIRDS

1. Propane-powered bird scarer

Gas-operated scare guns can be purchased from several retailers across the country. Occasionally, arrangements can be made to hire a gun through the local Fish and Game Council. The scarer is particularly valuable to farmers in areas where game birds consistently cause damage or show a tendency to return to paddocks from which they have been scared. If you are likely to have annual problems with game birds, it may be advisable to purchase a gas gun.

2. Firing over birds

Firing loaded or blank cartridges near the birds can be effective. Firing shots, running of dogs, and extensive human activity are helpful preliminary tactics to the installation of static scaring devices. Shooting ducks/swans is less effective than dispersing them via nonlethal methods. It is far better to have 'scared ducks/swans' than 'dead ducks/swans'. When landowners are given permission to disturb ducks/swans, Fish & Game recommend that they purchase ammunition of small shot size, #8s or so. The smaller the shot, the more pellets you actually fire at birds; therefore, the more birds you are likely to hit in a distant mob. The use of smaller shot also prevents wounding birds as the pellets won't penetrate unless ducks are very close.

3. Flashing lights, scarecrows and flags

Flashing lights, spotlights, and scarecrows may be used in conjunction with other scarers to increase effectiveness. A sheet, or piece of unbleached calico, suspended between two 2-metre posts and allowed to flap in the wind, makes a successful scarer, especially if erected before a crop is vulnerable. This method is even more effective if used with flashing lights. Flags 1m x 2m in size can be made of colourful plastic sacks or polythene sheeting. When they are attached to poles 2 or 3 metres high and spaced 200 metres apart about the field, wind causes them to flap and crackle loudly, making them a very useful and cheap scaring method.

4. Flames and smoke

Small oil drums filled with sacking and waste oil may be placed around the crop. When the contents of the drums are set alight, the flames and smoke will scare birds. "Burning off" the stubble in adjacent fields has a similar effect, taking note of any local fire bans.

5. Chemical repellents

A chemical repellent is available through some seed merchants. The active ingredient of the chemical is methiocarb, which has insecticidal, molluscidal and bird repellent properties. The compound is mixed with the seed at planting or is sprayed onto the foliage. It is used to protect grapes, seedling cereals and vegetables. Methiocarb has a nauseating effect on birds attempting to eat the treated crop, which they soon learn to avoid. The chemical has

been successfully used to protect sprouting maize from pukekos. It is illegal in all circumstances for a landowner to use poison or narcotics such as alpha-chlorolase on game birds.

6. Human activity – essential

All scare devices lose their effectiveness if left in one position for days. They should be shifted before this value is lost. Human disturbance, where it can be maintained, is always best and will significantly reinforce the effect of static devices.

7. Lasers

Lasers have been recently developed with exceptional results in dispersing game birds. These powerful lasers can be programmed to run during specific times of the day, and to cover specific areas. They can run on a 360-degree rotation, with the speed of turn determined by the user. They are an effective passive tool. They are charged with solar or plugged in.

8. Trapping and removing

This method of counteracting damage can be used on the written authority of the Regional Fish and Game Council. It has proved effective with some species, such as pukeko. Most game birds have a strong “homing instinct” and must be moved many miles away from the trapping site. Consequently, this method becomes impractical in many cases. When transferring pukekos and ducks, it is necessary to clip the primary feathers on one wing. The new habitat, therefore, must be a suitable one with plenty of natural food available, and the birds should not be released where they can cause further damage.

9. Electric fencing

A hot wire about 40cm above the ground and operating at normal voltages will deter swan or geese from walking onto lakeside pastures. It may be useful against ducks in similar situations if set near the ground.

10. Diversionary feeding areas

Feeding areas have been used in North America for many years as a significant and most successful means of damage prevention and control. A *lure crop* is a field set aside to provide a feeding area for ducks or geese in order to keep them off surrounding fields. A *feeding station* is designed to keep ducks on a lake by spreading grain along the shoreline until the harvest on farmlands is completed. Feeding stations may be operated by placing grain in fields, as well as stubble paddocks.

The advantage of diversionary feeding areas is in concentrating large numbers of waterfowl in a small area and troubling fewer farmers and ducks. Ducks can be fed on much less grain than they might destroy through wide-ranging field feeding, trampling and fouling. Feeding areas are most effective when operated in conjunction with a scaring programme on the susceptible crops. It is vital that lure crops and feeding stations be left undisturbed. Diversionary feeding areas are little used in New Zealand. However, the technique is briefly described should an opportunity for use arise.

SUMMARY

To protect your crop from damage by game birds, you should:

1. Be prepared by checking crops regularly for any sign of trouble.
2. Act as soon as there is any indication that birds are being attracted.
3. Apply to your Regional Fish and Game Council for advice and assistance.
4. Apply for a permit if you intend to use a firearm to disperse birds.

Further advice on specific problems relating to crop damage by game birds can be obtained by contacting your Regional Fish and Game Council.

FISH AND GAME RESPONSE TO GAME BIRDS CAUSING DAMAGE

Fish and Game Staff will, upon receiving a complaint of game birds causing damage, respond in the following way:

1. An application will be provided to a landholder seeking assistance to disturb game birds that are causing damage to crops. Such application may only be made by the landholder or leaseholder of the property concerned.
2. Staff will investigate the complaint to confirm that it is valid and, respond to the affected landholder and provide advice on the best course of action to mitigate the problem, including authorizing disturbance, at the Regional Manager's discretion.
3. We will telephone the land owner and discuss the case and ask the following information for our investigation: This will include the location of the property affected, the number and species of gamebirds causing the damage, the crop or property being damaged, the name of the landholder or leaseholder, and the name(s) of the people to be authorized by either the permit holder or Fish and Game staff to undertake disturbance.
4. The completed assessment and the terms and conditions of the draft permit will be provided to the applicant for verification and signature to confirm agreement. On receipt of the signed assessment and agreement to the terms and conditions

of the draft permit from the applicant, Fish and Game will issue the permit in a timely manner.

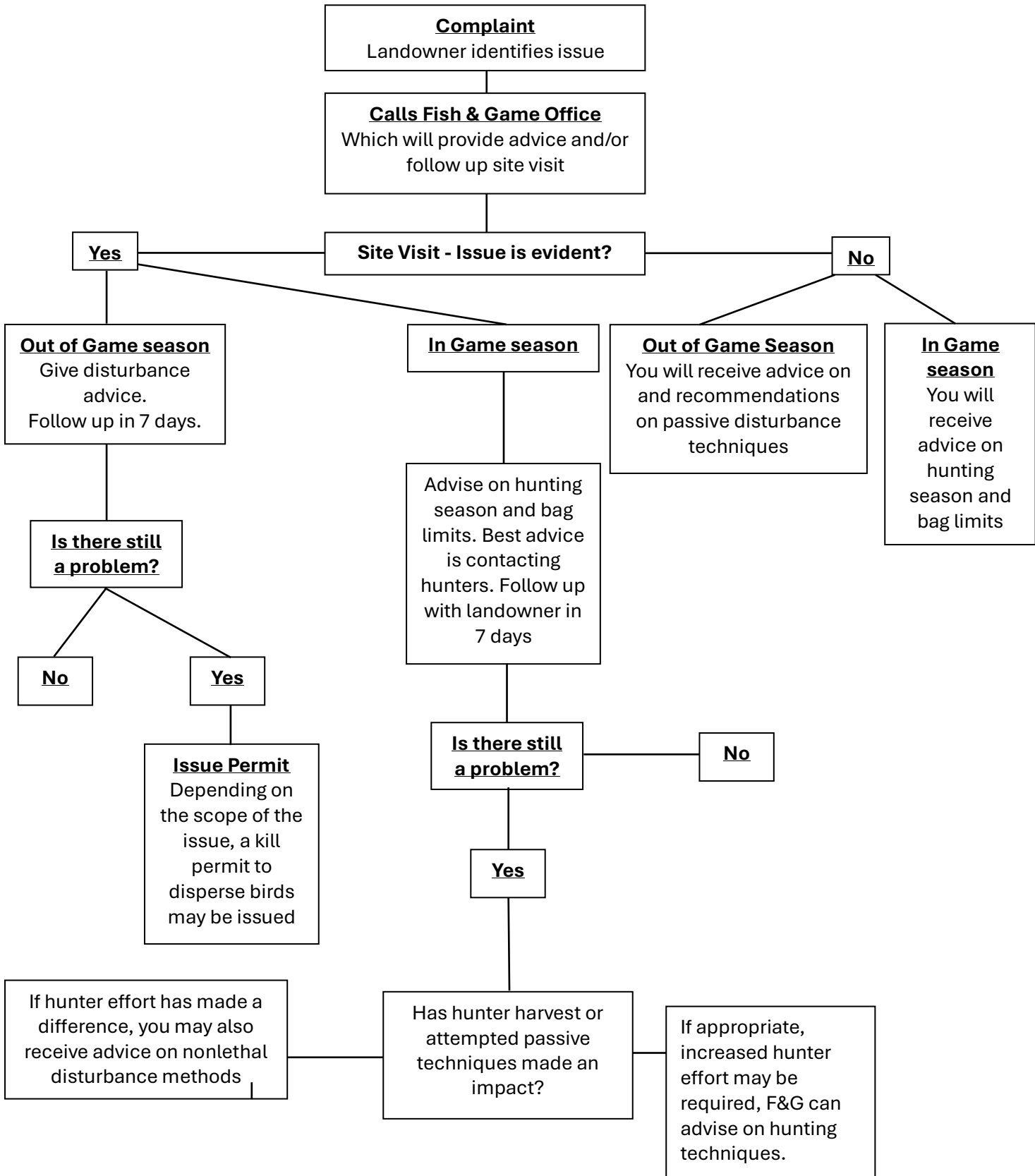
5. All permits must be issued under s53, 54 and 56 as relevant. If the main activity is disturbance, the number of days that the permit is valid and when relevant the number of birds of each species that can be killed.
6. The Council will maintain devices to disperse game birds and mitigate the effects of crop damage. These will be available for loan or rental to properties affected by game birds.
7. Property owners experiencing their first case of crop depredation by game birds will be instructed in methods to mitigate the adverse effects on their crops. A demonstration of techniques, including the loan of a scaring device, if available, will be given.
8. All property owners who are affected by crop depredation will be encouraged to purchase devices as appropriate to mitigate damage in the future. The principle of self-determination will be encouraged for landholders seeking assistance following the initial demonstration and advice.
9. Permits to disturb will be issued pursuant to 54 of the Wildlife Act (1953) and under the limitations of this Policy.
 - When Staff have verified that game birds are causing damage, they will decide on a course of action from within the disturbance only methods and advise the landholder.
 - Staff will undertake or directly oversee the disturbance only exercises.
10. Permits to disturb and, where the Regional Manager considers necessary, kill game birds causing damage will be issued pursuant to relevant Sections 53, 54 & 56 of the Wildlife Act (1953) under the limitations of such delegations as may be made by the Minister of Conservation or the Director General and this Policy. Permits will detail when the permit can be used (and when it cannot), devices to be used and where, and expiry of permit, and maximum number of game birds by species that can be killed (if appropriate to situation).

- When it is deemed necessary to kill game birds for the disturbance to be effective, the killing shall be carried out by the landowner or delegated person at the discretion of the landowner.
- Staff may oversee the disturbance exercise but must advise the property owner accordingly.
- Staff will conduct compliance inspections randomly or where some irregularity under the permit is suspected.

11. Property owners are required to provide a written report confirming the number of birds killed (if allowed in their permit).

12. Council staff will check compliance with permit conditions. Failure to provide correct information within the report may result in future permit applications being declined or a prosecution taken at the discretion of the Regional Manager.

GAME BIRDS DAMEAGE COMPLAINT PROCESS



Item Number	NZC Statistical Monitoring Report Feedback
Author	David Klee, Chief Executive
Purpose	For Decision
Executive Summary	<p>The New Zealand Council has provided the <i>Statistical considerations for game bird monitoring at a national scale</i> report and supporting technical material for regional consideration.</p> <p>The Proteus report is technically robust and sets out sound statistical principles for game bird monitoring. Council has previously received advice on this matter and has undertaken a preliminary review of both the monitoring paper and the supporting technical report.</p> <p>Initial consideration highlights the importance of ensuring that any national monitoring framework recognises existing regional capability and datasets, and allows sufficient flexibility for regions to apply monitoring approaches that are fit for purpose. Council also notes that the report identifies significant requirements for training, data systems, quality assurance, and capacity building, which have not yet been clearly articulated or costed.</p> <p>Further workshopping with expert regional staff is required before the feasibility, prioritisation, and implementation of any nationally coordinated monitoring framework can be fully assessed.</p>
Discussion/Analysis	<p>Acknowledge that the Proteus report is technically robust and provides a comprehensive overview of contemporary statistical approaches to game bird monitoring.</p> <p>Note that several methodologies promoted in the report, including aerial transect surveys, were previously trialled through nationally coordinated programmes when the Game Bird Research Committee was operational.</p> <p>Record that experience from those programmes indicated that some approaches, including aerial transect surveys, were not suitable across large parts of the North Island due to topography, safety constraints, detectability issues, and flood driven habitat variability.</p> <p>Note that, in response to those trials, several regions including Auckland Waikato transitioned to banding as a primary monitoring tool. Banding has enabled analysis of survival rates, recruitment, harvest pressure, regulatory effects, and environmental drivers.</p> <p>Reinforce the importance of a hybrid monitoring framework that allows regional councils discretion to apply monitoring methods that are fit for purpose within their landscapes, operational constraints, and management objectives.</p> <p>Note that national consistency in monitoring is only appropriate where regions have comparable monitoring needs and management risk profiles. Council considers it neither efficient nor statistically justified to apply the same monitoring intensity,</p>

	<p>resourcing, and effort across regions with fundamentally different hunter numbers, harvest pressure, and population dynamics.</p> <p>Note that any national framework should recognise existing regional datasets and capability, and avoid unnecessary duplication or displacement of effective long running monitoring programmes.</p> <p>Record that the report identifies the need for sustained investment in training, data systems, quality assurance, and capacity building. Council notes that these resourcing implications have not yet been clearly articulated or costed, and require further consideration before feasibility and prioritisation can be assessed.</p> <p>Request that any draft national policies or SOPs are first and foremost put to expert staff in the regions for feedback prior to going to governors for consideration.</p> <p>It is essential that any draft national policies, frameworks, or standard operating procedures relating to monitoring or operational matters are first provided to regional operational staff with subject matter expertise for review and feedback prior to being presented to governors for consideration.</p> <p>Council notes that regional staff are responsible for implementation on the ground and hold the technical, statistical, and operational knowledge necessary to test feasibility, identify unintended consequences, and ensure that proposed approaches are workable across diverse regional contexts.</p> <p>Council considers that early engagement with expert regional staff would materially improve the quality of draft national documents, reduce the risk of impractical or inefficient monitoring requirements, and support more effective and informed governance decision making when matters are subsequently considered by councils.</p>
Links to Previous Papers/Decisions	
Attachments	To follow are the papers presented to NZC including the draft policy.
Recommendation	That Council receive this report and the CE provides feedback in line with the above analysis

Decision Record	Moved by: Secoded by: Carried / Lost:
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Statistical considerations for game bird monitoring at a national scale

Stefan Meyer, Heloise Pavanato and Darryl MacKenzie

Report for New Zealand Fish & Game Council



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1. Introduction

Monitoring game bird populations is a critical component of effective game bird management in New Zealand, providing essential information to guide harvest regulation, habitat enhancement and long-term conservation planning. Historically, monitoring has been implemented independently by each regional Fish & Game Council, resulting in variation in methods, data quality and reporting standards. While locally tailored approaches offer important benefits, the absence of a consistent national framework has limited the ability to compare results across regions, assess national trends and coordinate management responses (Department of Conservation, 2025).

Recent reforms to the governance structure of Fish & Game New Zealand, as outlined in Department of Conservation (2025), are intended to address these issues by clarifying roles and strengthening national coordination. Under the revised structure, regional councils will retain responsibility for local delivery, while the New Zealand Fish & Game Council will take on a stronger leadership role in administrative and regulatory functions, including oversight of core monitoring activities. This shift is expected to support greater methodological consistency, improve data integration and enable more robust assessments of population trends at both regional and national scales.

This report provides background to inform the development of a unified monitoring framework aligned with these structural changes. It provides the foundation for a coordinated, best-practice approach to game bird monitoring that balances national consistency with regional relevance. It synthesises current approaches that could potentially be used to monitor game bird species in New Zealand, and presents a framework for improving the scientific rigour, consistency and utility of game bird monitoring at a national scale. It draws on foundational work by MacKenzie (2014, 2018), the Department of Conservation's bird monitoring guidelines (Dowding 2012), and relevant international models such as adaptive harvest management in North America (Johnson et al., 2015). The report also builds on recent advances in monitoring technology, data integration and hunter satisfaction research.

Central to this framework is the recognition that monitoring should be driven by management objectives, and designed not merely to detect trends, but to provide

timely and actionable insights. This includes the use of quantitative thresholds to guide harvest regulations, the integration of biological and social indicators, and, where applicable, the adoption of statistically robust field designs that account for detectability and sampling bias.

Equally important is the need for modernised data infrastructure. Effective data management and reporting are critical for ensuring that monitoring outputs are accessible, interpretable and used appropriately. A national approach to data standardisation, validation and reporting will improve transparency, facilitate integration across data streams (e.g., aerial counts, harvest returns, and banding data) and support advanced analyses such as integrated population models.

This report outlines the statistical principles that should underpin a national monitoring framework, proposes best practice recommendations and introduces a set of draft Standard Operating Procedures (SOPs) to support consistent monitoring implementation. The goal is to build a scientifically robust, operationally feasible and regionally adaptable monitoring programme that supports sustainable harvest and conservation outcomes for New Zealand's game bird species.

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2. Game bird species overview

New Zealand's game bird species include waterfowl (e.g., mallards, grey ducks, mallard-grey hybrids, paradise shelducks), upland birds (e.g., pheasants, California quail) and others (Table 1 and Table 2). Mallards are the most monitored species due to their prevalence and importance for recreational hunting. Each species groups and/or species have unique ecological characteristics, such as seasonal movements, habitat use and detectability.

Table 1: List of New Zealand game bird species as listed in the Wildlife Act 1953 (No. 31). These birds are declared to be game throughout New Zealand, with the exception of the Chatham Islands.

Common name	Scientific name
Grey duck	<i>Anas superciliosa</i>
Mallard duck	<i>Anas platyrhynchos</i>
Australasian shoveler	<i>Anas rhynchotis</i>
Paradise shelduck	<i>Tadorna variegata</i>
Black swan	<i>Cygnus atratus</i>
Pūkeko	<i>Porphyrio porphyrio melanotus</i>
California quail	<i>Callipepla californica</i>
Brown quail	<i>Synoicus ypsilophorus</i>
Bobwhite (Virginian) quail	<i>Colinus virginianus</i>
Cock pheasant	<i>Phasianus colchicus</i>
Pheasant (any bird of the genus)	<i>Phasianus sp</i>
Red-legged partridge	<i>Alectoris rufa rufa</i>
Grey partridge	<i>Perdix perdix</i>
Chukar	<i>Alectoris chukar</i>

Game bird species overview | Classic adaptive management cycle

Table 2: List of New Zealand game bird species by region as listed in NZ Gazette No. 2025-gs1230 "Open Season for Game in Fish & Game Regions" (2025). Grey partridge is not listed as this species is not distributed in the wild.

Species	Northland	Auckland/ Waikato	Eastern	Hawke's Bay	Taranaki	Wellington	Nelson/ Marlborough	West Coast	North Canterbury	Central South Island	Otago	Southland
Grey duck	X	X	X	X	X	X	X	X	X	X	X	X
Mallard duck	X	X	X	X	X	X	X	X	X	X	X	X
Australasian shoveler duck	X	X	X	X	X	X	X	X	X	X	X	X
Paradise shelduck	X	X	X	X	X	X	X	X	X	X	X	X
Black swan	X	X	X	X	X	X	X	X	X	X		X
Pūkeko	X	X	X	X	X	X	X	X	X	X		
California quail	X	X	X	X	X	X		X	X	X	X	X
Brown quail	X	X		X		X						
Bobwhite (Virginian) quail		X			X					X		
Cock pheasant	X	X	X	X	X	X	X	X	X	X	X	X
Pheasant (any bird of the genus)		X				X				X		
Red-legged partridge		X			X	X				X		
Chukar								X		X	X	X

3. Monitoring objectives and management framework

Management of New Zealand's game bird populations requires clear, objective-based regulation. By aligning monitoring, data collection and analysis with management objectives, councils can make informed, timely decisions that support both ecological sustainability and the needs of recreational hunters. In that way, monitoring objectives guide the entire process, from monitoring efforts to decision-making.

Some examples of potential management objectives include (but are not limited to):

- Population sustainability: Maintain annual post-breeding population indices for key game bird species (e.g., mallard) above a predefined threshold.
 - Example: Ensure the post-breeding mallard population index remains above XX birds per sample unit.
- Habitat protection and restoration: Maintaining or restoring essential habitats for breeding, feeding and shelter.
 - Example: Achieve a net gain of XX% in high-quality wetland area (as defined by native vegetation cover and water permanence) in each management region over five years.
- Hunter satisfaction: Providing recreational hunting opportunities that are consistent with societal values and expectations, while ensuring sustainability.
 - Example: Achieve a hunter satisfaction score of XX% or higher (via annual surveys) and ensure the harvest does not exceed XX% of estimated post-breeding population.

Once the defined management objectives are established, they should directly inform the management framework. In addition to well-defined objectives, a successful harvest management requires recognition for uncertainty in management outcomes

and avoid overly subjective and complicated decision-making (Johnson & Williams, 1999). To achieve that, a management framework is required. Adaptive management is a structured, iterative approach to resource management that explicitly acknowledges uncertainty and incorporates learning into decision-making (Walters, 1986). In the context of harvest regulation, adaptive management recognises that outcomes, such as changes in game bird populations in response to hunting limits, cannot be predicted with complete certainty.

As outlined by Johnson et al. (2015), adaptive management typically addresses three primary sources of uncertainty:

- Environmental variation: Natural fluctuations in weather, habitat conditions or predator-prey dynamics that affect game bird populations.
- Partial controllability: The limited ability of managers to fully direct outcomes, such as the effectiveness of regulations or the compliance and distribution of hunters.
- Structural uncertainty: Incomplete knowledge about ecological processes, such as reproduction rates, mortality or the effects of harvest on long-term population viability.

To manage these uncertainties, adaptive harvest management is built around a cycle of observation, decision-making, action and learning:

- Managers observe the current state of the system (e.g., bird population trends, habitat health, harvest levels).
- They select and implement a management action (e.g., changing season length, bag limits or area closures).
- The system responds, influenced by both the management intervention and uncontrollable environmental factors.
- Managers monitor the outcomes, assess effectiveness, and feed the findings into future decisions.

This iterative process enables adjustments based on real-world results, rather than relying on static rules or assumptions. The ultimate goal is to meet long-term objectives, such as sustainable harvests, healthy ecosystems and hunter satisfaction, while improving understanding of how the system works. Three examples of adaptive management approaches are described here.

3.1. Classic adaptive management cycle

The foundational model involves continuous learning-by-doing. Here, no strict thresholds or predefined rules are used. Instead, managers:

- Test different regulatory strategies (e.g., varying bag limits),
- Observe how populations respond,
- Use those findings to refine future decisions.

This approach is flexible and responsive, particularly useful where system dynamics are poorly understood. However, it may lack the transparency and predictability of more structured frameworks.

3.2. Threshold-based adaptive management

This approach uses predefined population thresholds to trigger regulatory responses, for example those used in the Wellington Region. The game bird population is monitored annually and categorised into zones representing different levels of concern:

- Green zone: Population is within target range; standard regulations apply.
- Yellow/Red zones: Population is declining or below sustainable thresholds; more restrictive regulations or habitat interventions are considered.
- Blue zone: Population exceeds upper thresholds; liberalised hunting opportunities may be introduced.

This model is adaptive, as it adjusts based on new data each year, but also prescriptive, as actions are tied to specific threshold zones. It offers a balance between flexibility and regulatory clarity.

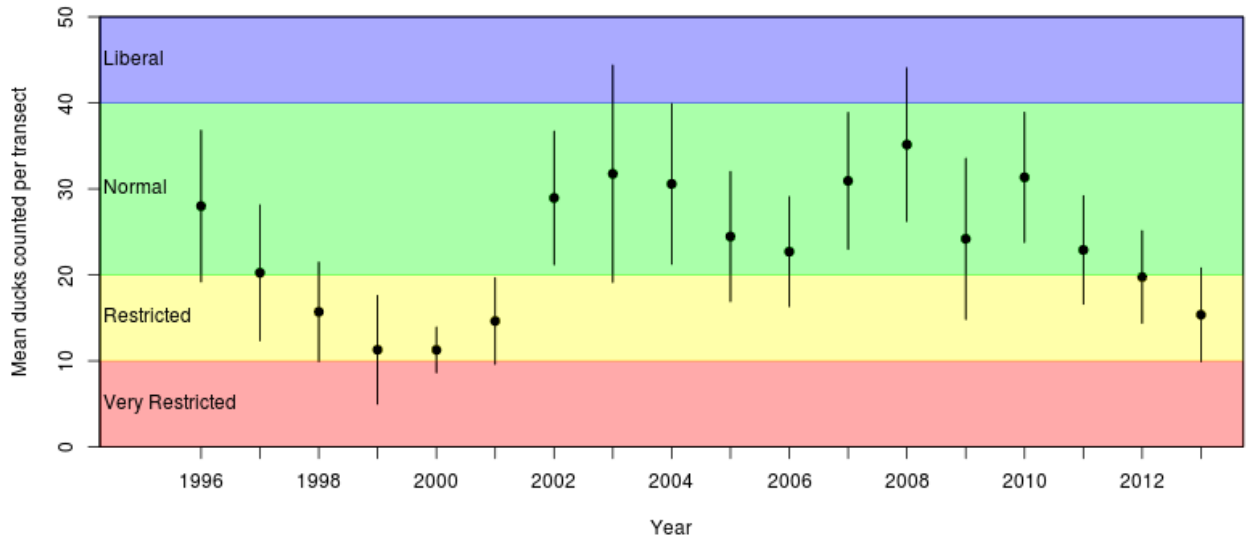


Figure 1: Chart used by Wellington Region to track population status through time relative to levels of management concern; mean number of ducks counted with 95% confidence intervals. Coloured regions indicate limits of different regulations and management actions; and implicating concern about the population status. Blue indicates liberal regulations (duck population too high); green is normal regulations (duck population is within target range); yellow is restrictive regulations (duck population slightly lower than desired) and red is very restrictive regulations (duck population is much lower than desired).

3.3. Rule-based regulatory decision-making

A more structured form of adaptive management is demonstrated by the U.S. Fish and Wildlife Service (USFWS), which uses explicit rule tables to determine hunting regulations based on combinations of biological indicators. For example, waterfowl harvest regulations are determined by variables such as:

- Breeding population size
- Pond numbers

Regulatory options include:

- Closed
- Restrictive
- Moderate
- Liberal

Once the appropriate regulatory package is selected, it translates into specific season lengths and bag limits for each flyway, as shown in Table 3. For example:

- Under a liberal package in the Central Flyway, hunters may be allowed a 74-day season with a 6-duck bag limit (including 5 mallards, 2 of which may be hens).
- A restrictive package in the same flyway allows only 39 days and a 3-duck bag limit.

Table 3: U.S. Fish and Wildlife Service regulatory packages for the 2010 hunting season, reproduced from MacKenzie (2018).

Regulatory Package	Flyway			
	Atlantic	Mississippi	Central	Pacific
	Shooting Hours			
All	one-half hour before sunrise to sunset			
	Framework Dates			
Restrictive	Oct 1–Jan 20	nearest Oct 1 to the Sunday nearest Jan 20		
Moderate	Saturday nearest September 24 to the last Sunday in January			
Liberal				
	Season Length (days)			
Restrictive	30	60	39	60
Moderate	45	45	60	86
Liberal	60	60	74	107
	Bag Limit (total / mallard / hen mallard)			
Restrictive	3 / 3 / 1	3 / 2 / 1	3 / 3 / 1	4 / 3 / 1
Moderate	6 / 4 / 2	6 / 4 / 1	6 / 5 / 1	7 / 5 / 2
Liberal	6 / 4 / 2	6 / 4 / 2	6 / 5 / 2	7 / 7 / 2

This method offers predictability and consistency, while still being adaptive using annually updated biological data. Unlike threshold zones, this approach does not rely on subjective scoring but uses predefined combinations of variables to determine regulations. Each approach offers trade-offs between responsiveness, clarity and complexity (Table 4). The choice of framework depends on the availability of data, stakeholder expectations and the management objectives.

Table 4: Overview of adaptive management approaches based on key attributes and example applications.

Approach	Structure	Flexibility	Transparency	Example location
Classic adaptive cycle	Low	High	Moderate	General/Theoretical framework
Threshold-based	Moderate	Moderate	High	Wellington Region (NZ)
Rule-based tables	High	Low–Moderate	Very high	U.S. Fish & Wildlife Service

The process by which management objectives and frameworks are set, will differ depending on whether a top-down or bottom-up approach is used. Each model has distinct implications for how monitoring is designed, who collects data and how decisions are made and coordinated across regions.

In a top-down approach, management objectives are defined by central authorities, such as national wildlife agencies or government ministries. These objectives are typically aligned with broader conservation strategies, legal mandates or international agreements, and aim to ensure consistency across jurisdictions. For example, in the United States, the USFWS uses a nationally coordinated framework to manage migratory waterfowl. This approach enables uniform standards for season lengths and bag limits across large regions, a centralised data collection and analysis, ensuring comparability and consistency, and prescriptive decision rules, reducing ambiguity in how management actions are triggered. However, top-down systems may lack flexibility to respond to local conditions or community priorities and can lead to disengagement among regional stakeholders who feel excluded from decision-making.

In contrast, a bottom-up approach relies on locally driven objective setting, where regional councils, community groups, or co-governance bodies (such as iwi and hapū) define management goals based on local values, knowledge and ecological conditions. The benefits of the bottom-up approach include locally relevant objectives that are informed by ground-level knowledge and cultural values, flexible monitoring protocols adapted to regional capacity and priorities, and greater community engagement and trust in management outcomes. However, while this approach enhances responsiveness and local ownership, it can pose challenges for data standardisation, coordination and ensuring that regional decisions align with broader conservation goals.

An alternative is to adopt a hybrid approach, combining national oversight with regional flexibility. For example, a central body may provide the scientific models and policy frameworks, while regional councils retain autonomy to adapt actions based on local monitoring and consultation. This shared governance model allows for consistent national outcomes while still recognising local variation and stakeholder input.

However, regardless of the governance structure, the design of a monitoring programme must be carefully embedded within a broader framework for the effective management of game resources. It should reflect the specific information needs of each region, particularly as some areas may experience greater pressure on game bird populations, and thus, require more rigorous and detailed monitoring. A critical step is therefore determining exactly what type of information is needed to answer the objectives. For example:

- Should species be monitored individually, or is grouping sufficient (e.g., monitoring all duck species together)?
- Is an abundance index adequate, or is a calibrated estimate of absolute abundance necessary?
- Are breeding population sizes or pre-harvest numbers more relevant for setting regulations?
- Is demographic information, such as survival or recruitment rates, also required?

The answers to these questions guide the design of monitoring programmes and ensure their relevance to management goals.

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4. Key statistical concepts

Sound statistical principles are critical to the design, implementation and interpretation of game bird monitoring programs. Without a clear understanding of the underlying statistical framework, data may be misinterpreted or fail to support effective decision-making. This chapter outlines core statistical concepts relevant to game bird monitoring in New Zealand, with a focus on how they underpin the estimation of abundance, survival and other relevant metrics. Before establishing a game bird monitoring programme, it is important to consider the statistical population of interest, how to sample from the population (i.e., decide where data will be collected from), potential sources of bias and precision, and general options for estimating demographic parameters.

4.1. Statistical population

A clear understanding of the statistical population for a monitoring programme will make the process of designing the monitoring programme much more straightforward. It is important to appreciate that the statistical population for a monitoring programme will be defined by the management objectives associated with the programme and may differ from the biological population of interest. A further consideration is the manner in which data is to be collected about the biological population of interest, as the field methods used may define what constitutes a sampling unit, where the statistical population is the collection of all possible sampling units from which data could be collected. Oftentimes, the statistical population in ecological monitoring applications will be the physical area where the data is to be collected from rather than the biological population within that area.

For example, consider the situation where fixed-wing aircraft are to be used to conduct line-transect surveys within a region to estimate mallard population size within that region. The statistical population in this case is the region of interest, and specifically, the collection of all possible transects that could be flown, with the transects being the sampling units of the population. This statistical population is not the population of mallards within the region. The number of mallards on each transect (i.e., on each sampling unit) is the relevant quantity of interest for estimating the biological population size.

An important general consideration when defining the statistical population is recognising that sample units may be arbitrarily defined (e.g., equal-sized quadrats or line transects) or naturally defined (e.g., known waterfowl habitat like ponds, lakes or wetlands). Both approaches can be valid depending on monitoring goals, logistical feasibility and landscape characteristics. Arbitrary units often offer greater design flexibility and can be physically consistent areas over time, while naturally occurring units may better reflect ecological relevance in some regards, but be more dynamic over time, which may require continual adjustments to the sampling frame.

4.2. Sampling from the statistical population

Inference from the sample to the population is only valid if the sample is representative. This requires careful attention to survey design, as using a method that systematically results in an unrepresentative sample, such as surveys that are concentrated in easily accessible (e.g., road-side surveys) or high-density areas, will result in estimates that are unlikely to reflect the true population status. The key is to use a well-defined probabilistic sampling scheme to select sample units from the statistical population that has been defined. There are a range of robust sampling schemes that could be applied, although key common concepts are randomness, replication, independence and stratification.

Randomness should be incorporated into any sampling scheme to avoid unintentional preferential selection of particular types of sampling units. Whether using simple random sampling or systematic designs with random starts, the goal is to ensure that sampling locations are not chosen based on convenience or prior knowledge, which could skew results. Including an element of random selection increases the defensibility of the results and is fundamental to the assumptions underlying most inferential statistical techniques and provides a way for estimating variability in sampling units that are treated as being similar (Elzinga et al., 2001; Yoccoz et al., 2001, Eberhardt & Thomas, 1991).

Replication is essential for quantifying variability at different relevant scales, and consequently, replication may have to be considered at multiple scales (e.g., number of transects searched per year, and number of years of data collection). Inadequate replication creates the risk of having insufficient data to obtain estimates with the required levels of precision to be useful for management decisions. Power analyses or other studies to evaluate the expected performance of a proposed design, conducted during the planning phase can guide decisions about the level of replication (i.e., sample sizes) needed to detect specified effect sizes with acceptable levels of confidence (Block et al., 2001, Green, 1979; Morrison et al., 2008).

Independence of observations from sampling units is a common assumption for most statistical analyses, and the method used to select sampling units plays an important role in determining observation independence. The independence assumption is also

an often misunderstood assumption, with people confusing independence of the observations due to the sampling process and independence of the values of the observations themselves. While the latter is what many people focus on in practice, the key assumption for most analyses is that units are selected independently of each other from the statistical population. That is, the probability of selecting a unit is unconditional on the outcome of another unit being selected. For example, it is common to have spatial correlation in many biological settings, where the values of observations from nearby sample units tend to be more similar than values from sample units that are further apart, which is a situation where the values of the observations themselves are not biologically independent. In such a case, many people would suggest applying a buffer such that nearby units cannot be selected to meet the independence assumption. However, doing so is unnecessary to enable valid statistical inference provided that a sampling scheme is used whereby units are selected independently of each other (e.g., random sampling).

Stratification describes the process of dividing the sampling units (e.g., landscape) into ecologically or operationally meaningful groups (strata) with similar characteristics. For example, strata might represent different habitat types, regions subjected to varying levels of hunting pressure or management zones. Stratification of sampling based on known sources of variation or heterogeneity can reduce the uncertainty of estimates, because variation across strata has been specifically accounted for (Elzinga et al., 2001; Thompson et al., 1998). In game bird management, stratifying by habitat quality or wetland stability, for example, may help differentiate population dynamics driven by environmental variability from those influenced by human activity.

Commonly applied probabilistic sampling schemes include (with or without stratification) simple random sampling, systematic sampling, cluster sampling and two-level sampling (i.e., a sample of primary-level units is selected first, followed by sampling of secondary-level units within selected primary-level units). Less common, but potentially useful, sampling schemes include adaptive cluster sampling, balanced sampling and generalised random tessellation stratified (GRTS) sampling.

4.3. Bias and precision

All monitoring data are potentially subject to some level of bias (systematic error) and imprecision (random error). Recognising and managing these issues is central to producing reliable estimates of population status and trends (Yoccoz et al., 2001; Williams et al., 2002). In ecological monitoring, these sources of error are not just statistical abstractions – they directly shape the conclusions that can be drawn about whether populations are stable, declining, or responding to management interventions.

Bias describes the expected difference between the estimates obtained by a given method and the "true" value of the quantity of interest, such as population size (Hone, 2008). It can arise from sources such as unaccounted detection probability (Moore &

Kendall, 2004, Ruiz-Gutierrez et al., 2016) and lack of randomisation in sampling design (Johnson, 2002). In game bird monitoring, bias can specifically stem from non-random site selection (e.g., choosing easily accessible wetlands or roadside surveys), heterogeneous detection probabilities across habitats or times of day, or consistent observer error in identifying or counting individuals. Such biases compromise the accuracy of estimates and, if unrecognised, can mislead management decisions (Anderson, 2001; Johnson, 2002).

Precision describes the level of certainty associated with estimates, and can be quantified using standard errors, confidence intervals or coefficients of variation (CV). Even if a measure is unbiased, low precision reduces the reliability of inferences, such as whether an apparent trend reflects a real biological change or simply random sampling variation (Thompson, 2012). Low precision in abundance estimates (for example) leads to uncertainty about true population status and may weaken confidence in management recommendations.

Because monitoring programmes operate under financial and logistical constraints, there is always a trade-off between bias, precision and cost. International best practice in ecological monitoring (Lindenmayer & Likens, 2010; Nichols & Williams, 2006) emphasises that while it may not be feasible to eliminate all bias, acknowledging its presence and designing surveys to minimise or correct for it is essential. This might involve randomised or stratified sampling designs, repeated measures to account for imperfect detection or analytical frameworks that explicitly model detection probability (MacKenzie et al., 2017).

4.4. Demographic parameters and estimation approaches

Demographic parameters are characteristics of the biological population of interest, and include, in the game bird context, population size (and associated derivative, e.g., density), distribution and proportion of area occupied (i.e., occupancy), survival, harvest mortality, movement, dispersal, recruitment and reproduction. There are a range of methods that could potentially be used to estimate demographic parameters, and here the methods are categorised by those that explicitly incorporate detection probabilities and those that do not.

Most game bird monitoring methods are subject to imperfect detection: not all birds present during a survey will be observed or recorded. In this context, detection probability can refer to the likelihood that a bird or a flock present in the survey area is detected by observers, for example. Even highly skilled observers will miss some birds due to factors such as vegetation cover, bird behaviour, weather conditions and survey timing.

When present, failure to account for detection probability leads to bias in estimates of abundance, occupancy and other demographic parameters. When detection remains consistent across time periods (i.e., counts have a constant, linear relationship with

true abundance) or other factors of interest, this bias does not affect the ability to estimate relative changes, such as trends in abundance over time or differences between areas. For example, if two habitat types were sampled and detection probability was the same in each, the ratio of counts uncorrected for detection would reflect the ratio of abundance. Likewise, if the same site is surveyed in different years, changes in counts can only be interpreted as changes in population size if detectability remains relatively constant between years.

However, when this assumption cannot be met, as is often the case in real-world field conditions, not accounting for detection probability undermines comparisons across time and space. An example would be when habitat and vegetation is changing over time in an area, either naturally or human induced (e.g., successional changes in vegetation, or changes in land cover types from changes in land management practices). In these situations, explicit estimation and adjustment for detectability are critical to producing reliable abundance estimates and ensuring that management decisions are based on biological reality rather than artefacts of survey conditions.

4.4.1. Detection-based methods

Several analytical methods can be used to estimate abundance or occupancy (i.e., presence/absence) and correct for detection probability:

- Double sampling
- Distance sampling
- Mark-recapture
- Occupancy modelling (estimates occupancy)
- Royle–Nichols model (estimates occupancy)
- Royle’s replicated count model

Most of these approaches are more labour- and resource-intensive than index-based methods but are needed for reliable inference when detection is likely to vary across observers, habitats or time periods. Provided, that is, that the detection component of the method is modelled with sufficient flexibility to account for the relevant sources of variation in detection probability.

Double sampling method (Cochran, 1977) uses a regression of a primary quantity (e.g., total ground counts) on a second quantity (e.g., aerial counts) in the overlap units to estimate a slope which is then used to adjust the second quantity for detection bias. This calibration-based approach to account for imperfect detection has been consistently used since 1961 for duck monitoring in the North America (Smith, 1995).

Distance sampling includes line transects and point transects (see Section 5.1.2), and is able to estimate absolute abundance by modelling the decline in detection probability with distance (Buckland et al. 2001). Key assumptions include certain detection at zero

distance, random placement of transects or points relative to the species distribution, accurate species identification, detection at the animal's initial location, precise distance measurements or distance band estimation and independence of detections. Violations of these assumptions can introduce substantial bias. If detection is uncertain at distance zero, methods such as mark–recapture distance sampling should be used (Burt et al. 2014).

Mark–recapture models, including **band-recovery models**, are a robust approach for incorporating detection probability into estimates of survival and recruitment rates, and population abundance. Relying on the capture and marking of individuals, and then on successive recapture of marked and unmarked individuals during repeated sampling events, detection probability and demographic parameters can be estimated based on the proportion of marked individuals that are recaptured. The simplest model to estimate abundance (i.e., the Lincoln–Petersen estimator; Lincoln, 1930; Chao et al., 2008) assumes that the population is closed during the sampling period (i.e., no births, deaths, immigration or emigration), that all individuals have an equal probability of capture and that marks are not lost or misidentified. It also assumes that marking does not influence an individual's behaviour or survival, and that each sampling event is effectively instantaneous to prevent demographic changes during the survey.

More complex models relax some of these assumptions and can account for time-varying detection, individual heterogeneity in capture probability and open population dynamics (i.e., survival and recruitment), such as in the Cormack-Jolly-Seber or Jolly-Seber models (Cormack, 1964, Jolly, 1965; Seber, 1965). A relevant extension of mark-recapture methods includes multi-state mark-recapture (MSMR; Ruzicka et al. 2023) models. The MSMR model enables the assessment of large-scale movement by incorporating an index of area (e.g., management units or regions) into the true states individuals can be found (e.g., alive in area A, alive in area B).

For many harvested species, including game birds, there may be limited effort directed towards recapturing live individuals, with most information about previously marked individuals coming from hunter-reported recoveries of harvested animals. Band recovery models (e.g., Williams et al. 2002) can be used to estimate survival and harvest probabilities, although some parameters may be partially confounded without additional assumptions or ancillary information.

Further to estimating population size, understanding demographic rates such as survival and mortality is very useful for predicting future population trajectories and assessing the sustainability of harvest. These parameters are typically estimated using data from banding programmes and analysed using either mark-recapture or band-recovery models. Details on these methods are given in Section 5.2.

Double-observer and **time-to-first-detection**, are two specific methods that have been used to account for imperfect detection in count-based surveys that use mark-recapture methods. In a double independent observer situation, two observers keep

independent records of which individuals each person detects, and the records are compared at the end of the survey to determine which individuals were detected by both or only by one of them, resulting in mark-recapture-like data for abundance estimation. A double dependent observer method has one observer as the primary spotter, and one observer as the secondary observer (often acting as the data recorder). The primary observer indicates all individuals they detect, which the secondary observer also identifies, and then the secondary observer is also recording individuals they detect but the primary observer missed. This yields slightly different form of mark-recapture data, but can still be used to estimate abundance. Both double-observer methods require the ability to match observer detections of individual birds, pairs or flocks.

The-time-to-first detection method requires subdividing a survey into multiple intervals (e.g., subdivide a 10-minute point count into five 2-minute intervals), then recording the number of individuals detected for the first time during the survey in each time interval. Theoretically, when detection probability is relatively consistent across intervals, the number of birds detected for the first time should decrease. However, a practical challenge can be keeping track of individuals across time intervals if they move around the surveyed location, which may result in the misidentification of previously counted birds being recorded as new individuals (i.e., first recorded in a later time interval).

Occupancy modelling estimates the proportion of sample units occupied by a species while explicitly accounting for imperfect detection (MacKenzie et al., 2018). It is particularly useful when individuals cannot be uniquely identified, such as cryptic or low-density species. The basic model estimates the probability that a sample unit is occupied by the target species, and the probability of detecting the species in a survey given species presence. For that, the model assumes closure using repeat surveys in space or time within a pre-defined season (e.g., week or month). Covariates such as habitat type, elevation or proximity to human activity can be included to investigate ecological drivers of occupancy, while survey-level covariates (e.g., weather, observer) can be used to explain detection variability. If modelling occupancy over time (i.e., seasons), multi-season models estimate colonisation probability (i.e., probability of occupying a sample unit that was unoccupied in the season before) and persistence probability (i.e., probability of an occupied sample unit to remain occupied from one season to the next) over time. Survey design must consider the number of sample units and visits per unit, where low detection rates require more surveys be conducted per unit to obtain reliable results. Data from a range of sources can be used with occupancy models, e.g., camera traps, acoustic recorders or repeated point counts. Note that, this method uses presence / absence data to assess species distribution, and it is not intended to estimate abundance or density.

Royle–Nichols models estimate abundance by modelling detection probability as a function of local abundance (Royle and Nichols, 2003) and are an extension of occupancy models. The method uses detection/non-detection data and attributes

variation in detection due to variations in local density. Model assumptions include independent detections and population closure across surveys, with individuals being restricted to a single sample unit and constant detection probability over time. An extension of the Royle-Nichols model is the **Royle's replicated count model** or N-mixture model, which uses repeated counts of individuals to estimate point abundance, assuming detection probability is positively related to abundance (Royle, 2004). Both approaches can be useful to estimate abundance when individuals cannot be marked or identified, although model assumptions need to be very carefully assessed. As with other methods, violation of the model assumptions, such as unmodelled heterogeneity in abundance or detection probability and false-positive errors (i.e., counts of the same individual within a single sampling occasion), can cause substantial bias in abundance estimates (Nakashima, 2020).

4.4.2. Non-detection-based methods

Methods that do not account for imperfect detection are typically count or binary data, which are analysed using common statistical analyses such as generalised linear models (GLMs), generalised additive models (GAMs) and their extension (mixed models), or point-process models. These may be based on direct observations of individuals (e.g., number of birds counted on a transect) or indirect observations of individuals (e.g., number of bird calls heard). As noted above, a key assumption in not accounting for detection probability is that detection probability is either constant relative to the factors of interest for the underlying demographic parameters, or is very high (i.e., detection probability close to 1.0). When this assumption is satisfied, valid inferences about the biological populations can still be made using these methods.

5. Population monitoring methods

This section outlines the primary survey approaches for monitoring game bird populations, grouped into two broad categories: **count-based surveys** and **mark-recapture approaches**. Count-based surveys may be conducted using aerial or ground-based platforms, while mark-capture approaches for game birds would typically require banding of birds to enable individual identification. This chapter focuses on the survey platforms and techniques, with further detail on the specifics of some statistical approaches, as they relate to field consideration, where appropriate.

5.1. Count-based surveys

Count-based surveys provide direct observations of birds and can be implemented using aerial or ground-based platforms. These surveys can yield indices of relative abundance, absolute abundance (less often) or be integrated with statistical estimation techniques to estimate absolute abundance, depending on the design and data collection protocols. Count-based surveys can be analysed using a range of statistical techniques, and aside from detection-based methods discussed elsewhere, commonly applied methods such as generalised linear models (GLMs), generalised additive models (GAMs) and point-process models. Count data can also be used to define categories (e.g., low, medium and high numbers of individuals) or converted to presence/absence data if appropriate.

5.1.1. Aerial surveys

Aerial surveys are a valuable tool for monitoring waterfowl species, particularly across large, remote or otherwise inaccessible areas. These surveys allow efficient coverage using fixed-wing aircraft, helicopters or increasingly, unmanned aerial vehicles (UAVs). Depending on the objectives and resources available, aerial surveys may aim to estimate either relative (index-based) or absolute abundance of waterfowl. The key distinction lies in how they account for detectability: relative methods do not adjust for undetected birds, while absolute methods correct for detection probability, often by integrating aerial with ground-based surveys using the double sampling method (see Section 4.4.1).

Aerial surveys commonly use line transects, flown at a consistent altitude across clearly defined areas within designated sampling units. Altitude, observer experience, weather and habitat structure influence detection rates. Maintaining a constant flight height in

relation to the ground is important for ensuring consistency in the covered area and minimising undetected individuals due to topography. For example, standard North American waterfowl surveys are flown at altitudes of 30–50 m at a speed of approximately 193 km/h (Smith, 1995).

Each observer is typically responsible for counting all birds within a pre-defined sampling width (e.g., 200 m) on each side of the aircraft, with birds beyond this width being excluded. To aid in maintaining consistent transect width during surveys, tools such as clinometers or physical reference markers (e.g., tape on windows or wing struts) can be used. Given the sampling width and transect length, the approximate area surveyed can be calculated. However, if the terrain is uneven and maintaining a consistent altitude is not feasible, line transect surveys are not recommended, and quadrat surveys could be considered.

Quadrats can be surveyed using either fixed-wing aircraft or helicopters, though fixed-wing aircraft may require continuous turning, making observer comfort a potential concern. Quadrat size should be small enough to allow efficient and thorough searching within a short time frame, yet large enough to permit an effective and practical flight pattern, particularly when using fixed-wing aircraft.

An alternative to surveying transects or quadrats is defining the survey area in terms of naturally occurring units, such as lakes, ponds and wetlands. Discrete waterbodies identifiable via GIS, satellite imagery or local knowledge can serve as sampling units. Large systems (e.g., rivers) can be subdivided (e.g., into 5-km segments) for consistency. This method is best suited to landscapes where key habitat features are permanent or predictable, but may be less practical when such features are more dynamic (e.g., temporary wetlands) as survey planning will be more challenging. In these cases, interpretation is less straightforward as the sample frame and statistical population of interest will be regularly changing.

When temporary wetlands or flooded areas are of interest (e.g., for waterfowl species), those areas may be unknown prior to the survey being designed. To accommodate this, sample units of an arbitrarily-defined size, that are relatively small compared to the expected size of the wetlands or flooded areas, could be used (e.g., grid cells or short transects). Units to survey are selected from the population of interest (which may contain areas with permanent and ephemeral waterbodies, and other areas), using an appropriate probabilistic sampling scheme. Although, only those units that contain suitable waterfowl habitat as identified in the field are actually surveyed. That is, the population of interest is composed of areas of potentially suitable and unsuitable habitat, where the location of those areas is unknown prior to the survey. The first assessment of a selected sample unit is the presence of suitable habitat, and if present the unit is surveyed for waterfowl. If the unit is considered unsuitable, no waterfowl survey is conducted.

During aerial surveys, observers are presented with a fleeting bird's-eye view of the waterfowl below. Correctly identifying species during these low-level flights can be challenging and requires adequate training. Errors in species identification can introduce significant bias if species-specific estimates are required. For this reason, pairing aerial surveys with ground count surveys provides a practical solution for improving species identification. Most importantly, total ground count surveys also offer the opportunity to account for detection and availability biases (see Section 5.1.2 for details).

Another challenge during aerial surveys is estimating flock size, defined as the number of birds observed together in a discrete group. This becomes particularly relevant outside the breeding season, when waterfowl tend to form larger aggregations, in contrast to the breeding season when birds are more commonly observed as pairs or single individuals. In such situations, observers often underestimate the number of birds present, particularly in large or densely packed flocks. To address this, trained observers can apply a method of visually dividing flocks into smaller, more manageable units (e.g., groups of 10 or 100 birds) and aggregating these sub-totals to form an overall count. This technique is typically developed through practice under simulated flight conditions to improve speed and consistency. Several factors can influence estimation accuracy, including plumage contrast¹, flock density, background conditions and viewing angle. For very large flocks, aerial photography or higher-altitude flights may help reduce disturbance and improve count reliability.

Use of UAVs (drones)

UAVs have recently emerged as an effective alternative or complement to manned aircraft. They come in a range of sizes and specifications, for example, multirotor (e.g., quadcopters) to large, fixed-wing drones, which differ in autonomy time (e.g., from minutes to hours), sampling width, ability to cover large areas and sensors (e.g., thermal).

One of the main advantages of drone surveys over manned aircraft (and/or those with mounted cameras) is their ability to cover remote areas at relatively low cost (particularly in locations that may be unsafe or impractical for manned aircraft), fly at a lower speed, and reduce bird's disturbance. When flown along defined transects as would traditional aerial surveys, UAVs can improve detection accuracy, with studies reporting higher counts of waterfowl, such as broods and ducklings, compared to conventional methods, thereby reducing underestimation due to observer limitations (Dundas et al., 2021). In addition, drones are a better tool to collect demographic data such as sex ratios, support species identification and enable flock size estimation

¹ In sexually dimorphic species, brightly coloured males are generally more visible than duller females, leading to undercounts of females during surveys. This bias is greater in female-skewed or even sex ratios flocks. An exception is the female paradise shelduck, which is more conspicuous than the male due to its distinctive white head.

(Dundas et al, 2021). Flying at carefully defined altitudes helps minimise disturbance to game birds, reducing behavioural responses like displacement that could affect detection rates. Additionally, modern workflows increasingly leverage artificial intelligence (AI) to automate bird detection and habitat classification from drone imagery, improving consistency and reducing processing errors (Zhai et al., 2023).

Despite these advantages, drone-based monitoring presents several challenges. The acquisition and maintenance of UAVs, along with the software and expertise needed for image processing and AI analysis, involve substantial upfront investment. While automation is improving, processing large volumes of imagery remains time-consuming and may delay results (Zhai et al., 2023). Furthermore, regulatory restrictions, with drone pilots having the same responsibilities under the Civil Aviation Act 2023 that aircraft pilots have, as well as weather sensitivity, can limit operational flexibility and survey timing.

Given this context, UAVs may be most effective when integrated with traditional aerial and ground-based methods to complement their strengths and mitigate their limitations. For example, line transect surveys can use fixed-wing or helicopters to cover large scale waterbodies, while UAV can be employed to survey some of the transects to enable, for instance, species composition and flock size estimation.

Regardless of platform, aerial survey data can be analysed using analytical methods suitable for non-marked populations, such as density or abundance indexes (i.e., GLM or GAM not addressing detection probability), the double sampling method (e.g., when using a double-observer protocol, or when integrated with ground-based or UAV approaches), occupancy models, Royle-Nichols models and Royle's replicated count model (see Section 4 for details).

5.1.2. Ground-based surveys

While aerial surveys are suited to large scale monitoring, ground-based surveys provide an alternative when monitoring relatively smaller areas, or for more complex habitats (e.g., bushy land cover) where visibility from air could be compromised. In some situations, they may be more cost-effective and accessible than aerial techniques. Ground-based methods include total counts, distance sampling methods (line and point transect surveys), point counts, camera traps and passive acoustic monitoring.

Total ground counts

Total ground counts involve counting every individual within a specific area, providing a complete estimate of the population size. These counts may be conducted by one or more observers using different methods depending on the habitat and species. Approaches include walking along line transects, conducting road strip counts (i.e., driving along a network of representative roads while recording observations), or scanning entire waterbodies in the case of waterfowl.

Ground counts can also be used in conjunction with manned aerial surveys (using observers) to improve accuracy of abundance estimates. This approach is especially useful as aerial surveys can efficiently cover large areas in a short period, making them practical for broad-scale monitoring. It involves undertaking ground counts on a subset of areas that overlap with aerial survey coverage. The resulting counts are then compared with aerial detections to derive a visibility correction factor (VCF) to upscale aerial counts across the entire surveyed area (Smith, 1995). In such designs, ground surveys are typically treated as the primary sampling method as they are considered to yield more accurate counts than the aerial surveys. A commonly used approach is the combined ratio estimator, where the total number of birds observed on the ground is divided by the number observed from the air, stratified by area and species. The reliability of VCF depends on adequate sample sizes. A minimum of 40 birds per species within an area is generally required for a stable estimate, and coefficients of variation (CVs) are typically used to assess the precision of each VCF. If precision is low (e.g., $CV > 20\%$), estimates may be pooled across strata or years (Smith, 1995).

In addition to serve as a correction factor for aerial surveys, ground counts can also provide with better identification of species, flock size estimation (particularly outside breeding seasons when large aggregations form), and other demographic factors, such as age group and sex.

Distance sampling methods: line and point transect surveys

Distance sampling methods, including line and point transects, are commonly used to estimate the absolute size of wildlife populations, with potential to be used to monitor upland game birds. The method can be more labour intensive than other count methods as it requires specific training of field personnel to estimate and record distance or distance bands.

In the line transect method, observer(s) walk along a predefined path and record the perpendicular distance to each detected individual bird, pair or flock. The key input for estimating detection probability is the distribution of detection distances, which typically decreases with increasing distance from the transect line. Detection probability is then used to adjust the number of observed birds, providing an estimate of total abundance. The point transect method differs in that the observer(s) remain stationary at a fixed point for a set period and record the radial distance to each detection. Both methods rely on the same underlying principles and assumptions.

Three key design-related assumptions of distance sampling are:

- 1) Line-transects or points are placed randomly with respect to the distribution of individuals.
- 2) No responsive movement of individuals from the observer(s) before being detected.

- 3) Objects (individual bird, pair or flock) on the line or point are detected with certainty, i.e., detection probability at zero distance is 1.0, or data is available allowing the detection probability at zero distance to be estimated.

The first two assumptions are required to ensure that the distribution of objects relative to transects (on average, across all transects) is uniform, which is required for unbiased abundance estimation. In practice this typically means that transects should not be placed only on landscape features (e.g., roads or ridgelines) when the density of objects changes with distance from those features. Use of a robust probabilistic sampling method should almost ensure this. Observers should also be aware of potentially flushing individuals prior to detection, and adopt suitable protocols where appropriate (e.g., aim to detect before flushing, or wait for a given period of time between arriving at a transect and starting the survey, allowing the birds to become accommodated to the observer).

Perfect detection at zero distance² is required for conventional sampling (Buckland et al. 2001). Alternatively, it can be estimated when surveys are conducted by two or more observers that are independently recording detections of objects in a manner that allows detections to be matched. In this latter case, mark-recapture distance sampling can be used (Burt et al. 2014).

Furthermore, distance sampling protocols only correct for imperfect detection of those objects that are *available* to be detected by the observers, i.e., those objects within the sampling width that have a non-zero probability of being detected. Objects that are completely obscured from the observers, such that there is a zero probability of being detected during the survey (e.g., individuals hiding amongst long-grass or vegetation, or obscured by topography), are considered to be *unavailable*. The abundance estimate is therefore of the number of *available* objects (i.e., not an estimate of absolute abundance). Estimation of availability normally requires additional information to be collected to account for availability if estimates of absolute abundance are required.

Point counts

In a point count survey, the observer remains stationary at a pre-determined location for a fixed period (commonly five or ten minutes) and records all birds seen and/or heard. The five-minute bird count method is well established in New Zealand and has been used widely for decades (Hartley, 2012). It is particularly suited to forested or densely vegetated habitats, where detectability may be higher when the observer is

² Note that mark-recapture distance sampling does not require the estimation of the detection probability at zero distance (i.e., on the trackline or point). It may be set at an arbitrary distance further away from the observer if required.

stationary, and for monitoring vocally active species such as upland game birds (e.g., pheasant, quail and partridge). Point counts require minimal equipment, making them cost-effective and practical relative to other ground-based methods. This efficiency permits the sampling of numerous site units and makes the method attractive for long-term monitoring programmes.

Like point transect sampling, point count surveys are a commonly used method for estimating bird population trends. Both techniques rely on detecting birds from a fixed location and can be used to monitor relative changes in abundance over time. Often, point counts may be conducted without collecting additional data enabling detection probability to be estimated (e.g., distance measurements for distance sampling, using a double-observer, or recording time-to-first-detection), and therefore, only yield indices of relative abundance.

The validity of the indices, as a measure of absolute abundance, depends on how detection probability varies in time and space, irrespective of the level of analysis complexity. Covariates may be used to account of variation in the counts that may be due to variation in detection, to enable improved inferences about absolute abundance from uncorrected point count data, provided that such variables are not also covariates for absolute abundance. Inclusion of variables in analyses of count data that may potentially affect both detection and abundance (e.g., habitat, time), may lead to inappropriate inferences about absolute abundance as it will be unclear whether the covariate is explaining variation in detection or abundance, or a combination of both.

Case studies with native birds, such as robin monitoring in Fiordland, have shown that five-minute counts may fail to detect true population changes under certain conditions, particularly when calling rates are affected by factors such as breeding timing or skewed sex ratio (Greene & Pryde, 2012). In such cases, point counts may be combined with complementary methods, including dog-assisted detections, call playback, faecal counts (Evans et al., 2007) or time to detection methods (Farnsworth et al., 2002).

In a quantitative assessment of alternative methods to estimate upland game bird density, Evans et al. (2007) evaluated two approaches – playback of territorial calls and dropping counts – as potential substitutes for dog-assisted counts of red grouse (*Lagopus lagopus scoticus*) in the UK. Playback surveys, which involved broadcasting territorial calls at fixed points, consistently triggered male responses and proved highly effective at predicting grouse density. The number of males detected per point explained over 90% of the variation in total densities (males and females combined), as verified by dog counts, indicating that male vocal activity is a strong proxy for overall population size. In contrast, dropping counts – based on the presence of fibrous faecal roost piles along fixed transects – also showed a positive correlation with total density but with lower precision. While less accurate than playback, dropping counts offer a cost-effective and low-impact alternative when dog surveys or playback methods are impractical.

Camera traps

Camera traps can provide valuable ecological information on relative abundance of species, presence/absence, brooding, nest predation and other behaviours. O'Brien and Kinnaird (2008) reviewed avian applications and highlighted its broad potential, especially for large, ground-dwelling species such as pheasants. Camera traps can be particularly effective for species that are difficult to detect through conventional survey techniques due to their inconspicuous behaviour or sensitivity to human presence (e.g., quail species).

A key advantage of camera traps lies in their ability to produce temporally explicit photographic records, which can be translated into detection histories and analysed using a variety of statistical frameworks, such as occupancy models and Royle-count models. Camera's locations must be optimised to maximise detection rates while reducing the likelihood of missed detections or behavioural disturbance, although the practice of placing cameras in open areas to maximise the field of view has consequences on the sampling frame for the statistical population of interest (i.e., heavily vegetated areas are excluded from the area of inference due to this practice). Due to the relatively small area being surveyed by a camera, the method may not be practical for large scale monitoring unless a large number of cameras (i.e., 50-100 or more) are deployed.

In addition, deployment and servicing cost can be reasonable high, even though new technology such as passive sensor activation systems and new battery technology has contributed to minimise required servicing and optimising data acquisition (Wearn & Glover-Kapfer, 2019). Another important consideration with camera traps is the large volume of images produced, including many "empty" images from false triggers (e.g., vegetation blowing with wind), which require processing (Penn et al., 2023). Emerging AI and machine learning tools can help expedite tasks such as detecting and classifying wildlife, though their associated costs for developing or obtaining processing algorithms should also be factored in (Leorna & Brinkman, 2022), although some cameras now have the capability for onboard AI processing of images. Furthermore, thermal cameras may be more sensitive for image capture than traditional infra-red beam trigger cameras, although species identification from thermal cameras can sometimes be problematic. Nevertheless, camera technology is fast evolving and improving, and future advances may increase the utility of the technique for game bird monitoring.

Passive acoustic monitoring

Passive acoustic monitoring (PAM) using autonomous recording units (ARUs) involve recording environment sound and subsequently extracting relevant data from audio to meet specific monitoring objectives, such as species detection or environmental sound metrics. Like other passive methods, ARUs minimise the human disturbance that can affect animal behaviour, and hence, wildlife detectability (Darras et al., 2018, Gibb et

5.2. Banding and studies using marked individuals

Bird banding is a long-established method used to monitor population parameters such as survival, recruitment and harvest rates. The technique involves attaching uniquely numbered bands, usually metal bands, to the legs of captured birds, which are then released and may later be recovered through hunter reporting or live recapture. Ducks are typically captured in baited crayfish-type or funnel traps during summer banding operations⁴. Demographic information, such as age and sex, are recorded before fitting each bird with the leg band.

Banding has been applied in New Zealand since the 1940s across a wide range of game bird species. Current upland species that have been banded include California quail, cock pheasant, chukar, grey partridge and red-legged partridge, while banded wetland species include mallard, grey duck, Australasian shoveler, paradise shelduck and black swan (Williams, 2024). However, banding projects were often short-term with limited continuity across years and regions. Banding records can be sometimes incomplete, with metadata such as capture method or location lacking. The reliance on hunter-reported recoveries of bands from harvested individuals (as opposed to live recaptures) leads to relatively low recovery rates. Together, these factors result in most banding data never being analysed (Williams, 2024).

In the context of game bird monitoring, band recovery studies offer the possibility of estimating demographic parameters such as survival and recovery rate (Brownie et al., 1985), and large-scale movement (Hestbeck et al., 1991), and when combined with other data sources, potentially recruitment rates and abundance (Roberts et al., 2023). This can provide useful information to managers on how bird populations work and how they respond to management actions and harvest. For harvested species, most re-observed band data comes from shot birds that are reported by hunters (i.e., recovery data), while a smaller proportion may come from live recaptures (i.e., recapture data) of previously banded birds during banding operations.

The traditional Cormack-Jolly-Seber (CJS) model uses recapture data to estimate survival (and hence, mortality) and recapture probabilities in populations that are open (i.e., individuals can enter or leave the population via migration and birth/death). The model assumes that individuals are first captured and marked and then recaptured during subsequent sampling occasions. Burnham (1993) extended the CJS model to incorporate recovery data, enabling improved survival estimation. It introduces an additional parameter representing the recovery (or reporting) probability, alongside survival and recapture (or resighting) probability. This model is currently implemented in Program MARK (White and Burnham, 1999).

⁴ Information retrieved from: <https://www.fishandgame.org.nz/game-bird-hunting-in-new-zealand/hunters-for-the-environment/mallard-duck-research/hopes-for-better-duck-hunting-season/>

Information from banding studies can also be used to estimate abundance, based on the ratio of banded vs unbanded birds obtained during the harvest (McDougall & Amundson, 2017). The accuracy of the resulting estimates depends on obtaining reliable estimates of the harvest ratio of banded and to unbanded birds. This ratio is obtained by first estimating the total harvest within a region via hunter effort (e.g., hours hunted) and hunter participation⁵, then the number of banded birds is estimated from band returns, typically derived from the Band Returns Office, and the band reporting rate, typically derived from hunter surveys (McDougall & Amundson, 2017). The 'Banding Together' campaign⁶ by Hunting & Fishing NZ in association with Banded Avery is an example of a reward band scheme. Prize draws provide incentives for hunters to submit band details – including band code/number, age, sex, estimated age and harvest location – to help maintaining high reporting rates and strengthen data quality.

Alternative methods for estimating the harvest ratio between banded and unbanded birds include:

- Opening weekend hunter surveys: Include a question on the number of banded vs unbanded birds shot.
- Hunter diaries: Hunters record the number and band numbers of harvested birds.
- Fish & Game Officer checks: Rangers tally banded and unbanded birds during bag and licence checks.

Each of these methods has practical advantages and limitations. Hunter-based surveys and diaries may introduce recall or response bias, while officer-led bag checks require greater staff effort and may not yield random samples. In some cases, these biases can be addressed through stratified sampling designs or by focusing efforts during peak harvest periods.

An important assumption for band recovery and mark-recapture studies is that banded individuals are a representative sample of the biological population of interest. Careful attention should be given to where banding sites are located. If birds exhibit strong site fidelity and banding occurs in areas of unusually high or low hunting pressure, estimated quantities from these birds may not be applicable to a wider population.

⁵ When game bird hunters purchase a hunting license they are required to record contact details, providing a representative sample of all hunters from which to derive harvest and effort data.

⁶ Information retrieved from: <https://www.fishandgame.org.nz/game-bird-hunting-in-new-zealand/hunting-in-action/banding-together/>

6. Harvest monitoring

Reliable estimates of the harvest of game bird populations are necessary for the management of populations. Harvest monitoring of game birds involves recording and tracking the number of birds of each species harvested by licensed hunters during the hunting season, and how many days during the season hunters were active.

Two of the most widely used methods of regulating harvest are hunting season length (i.e., the total number of legally permitted days of hunting) and bag limits (i.e., maximum allowable daily harvest). Hunter effort (i.e., per capita hours hunted per season) and harvest rates (i.e., the proportion of the population that is shot and recovered; an index of kill rate) can be influenced by substantial changes in season length and, most importantly, bag limits (McDougall & Amundson, 2017).

Data collected during the game bird harvest surveys of licenced hunters, conducted by each Fish & Game region, is used to estimate the level of harvest in each region, and occasionally, at wider scales. Harvest rates (proportion of game bird population harvested) can also be estimated from band recovery data, provided specific ancillary data is available to disentangle confounded parameters. In combination with estimates of game bird population size immediately prior to hunting, estimates of the total harvest can be estimated. Here the two approaches are briefly outlined.

6.1. Licenced hunter harvest surveys

Fish & Game has been conducting annual licenced hunter surveys using telephone interviews since 1993 (Garrick & Garrick, 2025a). Licenced hunters are randomly selected and interviewed after the opening weekend and then every fortnight during the hunting season and are asked the following information specifically:

- Number of birds of each species shot;
- Of those birds shot, how many were not recovered;
- Hours hunted;
- Fish & Game Region.

Note that surveys are not conducted of unlicensed hunters, which includes those that do not require a licence (i.e., those who hunt in their own private land) and those who illegally hunt game birds, as hunter contact details are obtained from the licence registration information.

Gamebird harvest can be estimated from hunter surveys using relatively straightforward sampling techniques. For instance, a standard random sampling estimator multiplies the average number of birds of a single species or group (e.g., mallards and grey ducks) harvested per hunter by the total number of licensed hunters to generate a population-level harvest estimate. The double sampling method (Cochran, 1977) extends this approach by incorporating ratios such as birds per hunter and hunting-days per hunter.

To illustrate this approach, consider the harvest estimates for West Coast licence holders during the full 2024 game bird season (Fish & Game New Zealand, 2024). Interview surveys of 100 licence holders resulted in average hunting effort of 9.09 hours per hunter, and a harvest rate of 1.68 birds/hour. These sample-based averages were then applied to the total population of 387 West Coast licence holders, resulting in an estimated total harvest (calculated as average hunting hours × harvest rate × number of licence holders) equals 5,905 game birds for the whole region (Figure 2).

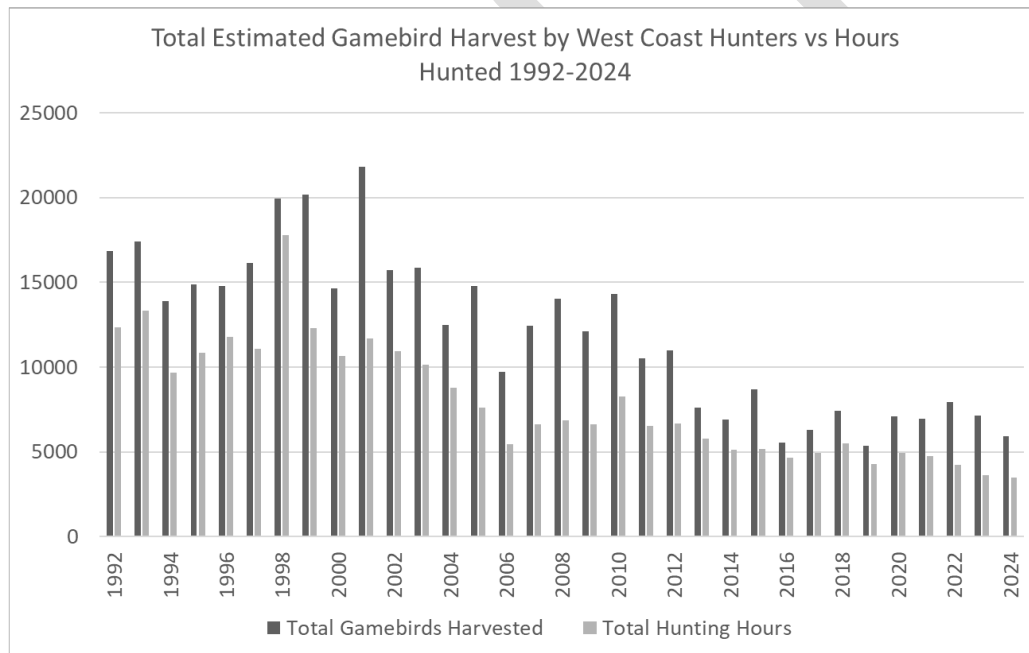


Figure 2: Estimate of game birds harvested by West Coast licence holders vs. hours spent hunting in the 2024 season. From Fish & Game New Zealand (2024).

In countries such as the United States and Canada, these estimators are supported by structured part-collection programmes, where selected hunters are asked to submit bird parts to enable estimation of species composition, age structure and sex ratios within the harvest. New Zealand does not currently operate a national part submission programme and rely, primarily, on the species-specific harvest information supplied during the telephone surveys.

More sophisticated approaches make use of different data sources, such as harvest reporting, demographic data and banding data in integrated population modelling

frameworks that allow for robust estimation of latent variables like survival, recruitment, abundance and trends (Roberts et al. 2023, Smith et al. 2021).

A key consideration for planning the telephone surveys is the number of surveys to conduct (i.e., the sample size), which is a prime determinant of the precision of the estimated game bird harvest and harvest effort. Currently each region specifies the number of surveys to conduct in their region, with the aim of achieving a desired level of precision in the estimated harvest levels. When there is interest in estimating harvest at wider scales (e.g., North Island, South Island or nationally) the minimal sample size for each region to obtain a desired level of precision in the overall estimate could be determined using stratified sampling results.

Another consideration is potential non-response bias (Barker 1991), which would be caused by a situation where hunters that choose to not participate in the survey have systematically different hunting experiences and outcomes to those hunters that do participate in the survey. This is difficult to adjust for without an additional source of information from non-respondents. Similarly, recall bias can also be an issue, where respondent hunters systematically under-, or over-, report their hunting success, although the current harvest survey protocol of conducting interviews after opening weekend, then at two-weekly intervals, is intended to minimise recall bias.

6.2. Band-recovery data

Game bird harvest can be estimated from band-recovery data, provided appropriate ancillary data is available. The recorded recovery of a band involves three general steps:

1. The banded bird is shot (i.e., harvested).
2. The shot bird is retrieved by the hunter.
3. The hunter reports the band details.

The parameters associated with these steps can be defined as the probabilities of harvest, retrieval and reporting respectively. The retrieval probability may be less than 1.0 due to crippling loss (i.e., birds that are shot and eventually die, but escape and are unable to be retrieved by the hunter), and not all bands from retrieved birds are reported. Without additional information, these three probabilities are confounded and only their product can be estimated from band-recovery data, where the product is often referred to as the recovery probability (Williams et al. 2002).

Reward bands can be used to estimate reporting probabilities (e.g., Nichols et al. 1991), with the current 'Banding together' campaign run by Fish & Game being an example such a programme. Retrieval probabilities can be estimated from hunter responses in the harvest survey, where hunters are specifically asked about the number of shot birds that are not recovered. Inclusion of these other data sources requires either an integrated modelling approach (i.e., analysing all data sets in a single

modelling framework) to properly account for the uncertainty in the various components, or use of an adjustment method that carries through uncertainty in each probability to the estimated harvest probability.

Finally, estimation of game bird harvest requires multiplication of the harvest probability estimated from the banding data (and other data sources), by an estimate of the total pre-harvest game bird abundance. Therefore, estimating harvest from banded individuals requires that suitable data has been collected for estimating game bird abundance.

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7. Hunter satisfaction monitoring

According to the Conservation Act 1987, Fish & Game is responsible for assessing “the success rate and degree of satisfaction of users of the game resource”. For the first time in 2024, Fish & Game coordinated a hunter satisfaction survey, run in conjunction with the traditional phone harvest survey, to gather information on hunters’ satisfaction (Garrick & Garrick, 2024a). In 2025, all the 12 regions conducted the satisfaction survey (Garrick & Garrick, 2025b). The goal with satisfaction surveys is to connect satisfaction scores to hunter success and harvest expectations, and relate those with regional regulations (Garrick, 2025).

Key questions asked of hunters are:

- How satisfied they are with their opening weekend experience (five-point scale, with 1 being very dissatisfied and 5 being very satisfied)?
- How many game birds of each species they expect to harvest?
- How many game birds did they actually harvest?
- How satisfied they are with the number of birds of each species they seen?

Use of a five-point scale results in categorical data, which can be analysed using the properties of the multinomial distribution to obtain estimated proportions and standard errors. These properties can also be used to assess the number of surveys to conduct to obtain a desired level of precision, although at present the hunter satisfaction survey questions are included as part of the opening weekend harvest phone survey, which determines the sample size. More complex analyses to quantify relationships between satisfaction scores and other variables could be conducted using ordinal or multinomial logistic regression techniques.

Initial results from the 2024 survey indicated a clear relationship between bag limits and harvest expectations. As bag limits increased, so did hunter’s expectations for the number of birds they would shoot (Garrick, 2025). However, actual harvests remained relatively constant across regions, regardless of bag limit. This suggests that higher limits inflated harvest expectations without increasing yield. When the number of ducks harvested fell significantly short of these expectations, satisfaction dropped sharply.

This aligns closely with earlier findings by Kerr (2017), who investigated marginal satisfaction from harvests in New Zealand big game hunting (e.g., deer). Kerr’s analysis confirmed the economic theory of diminishing marginal utility. The first kill provides a substantial boost in satisfaction, but each additional kill contributes progressively less.

This concept helps explain why bag limits and inflated expectations may not be as influential on satisfaction during opening weekend as they are later in the season.

Kerr (2017) also highlighted the diversity of big hunter motivations, distinguishing between harvest-oriented hunters and those driven by social, aesthetic or traditional reasons. This was shown by Garrick (2025), which found that New Zealand duck hunters generally fall into three categories:

- Those whose satisfaction depend almost entirely on meeting harvest expectations.
- Those moderately influenced by harvest, but who value other aspects of the experience.
- Those who are largely indifferent to harvest outcomes.

Another factor that could be considered is weather, which was not explicitly included in either study but is known to influence both expectations and satisfaction (Gruntorad et al., 2024). Hunters may carry high expectations into opening weekend due to large bag limits or regional traditions, but inappropriate weather for hunting can limit success. This creates a scenario where the gap between what hunters expected and what actually occurred is magnified by uncontrollable factors, potentially lowering satisfaction.

Given the recreational nature of game bird hunting in New Zealand, hunter satisfaction is potentially a key aspect for management objectives. Achieving and maintaining desired satisfaction levels may involve a different set of management actions compared to objectives that focus on the status and trend of game bird populations and harvest levels, or at least a different prioritisation of management actions. Management objectives and frameworks should guide the required level of understanding about factors that affect hunter satisfaction, and hence the level of resourcing that should be devoted to hunter satisfaction monitoring.

8. Data management and reporting

Robust data management and clear, consistent reporting are essential to ensure the credibility, efficiency and utility of any game bird monitoring programme. Given the wide range of methods used across Fish & Game regions – including aerial and ground surveys, harvest surveys and banding – standardised data practices across regions, through use of common data entry templates or portals, and providing minimal requirements for documentation and metadata, enable meaningful comparison across regions, support national-level synthesis and inform evidence-based management decisions.

8.1. Centralised and standardised systems

The development of a centralised data management and reporting system will improve the efficiency of sharing information between regions, and potentially reduce overheads associated with regions maintaining their own data management systems. A centralised system could be accessed by authorised users for data entry and management tasks, data extraction and report production. Note that a centralised system may extend beyond the storage and reporting of data collected from field surveys of game birds, hunter surveys, banding data (including returns), spatial data, etc. and could also include, for example, the centralised storage of metadata files (e.g., raw data sheets), document and spreadsheet template files, and important national and regional policy documents. Such a centralised system may exist across multiple platforms or databases in practice, depending on specific requirements, with the key feature being that the procurement, development, organisation, governance and management of the system is centrally managed (with appropriate mechanisms for regional stakeholder's engagement and input).

Use of a centralised system will improve the consistency of data collected nationally and encourage the use of standardised templates and portals for data capture. Associated economies of scale will improve the feasibility of implementing technological advancements for data capture via apps on mobile devices (e.g., phones, tablets or laptops) that may be cost-prohibitive to individual Fish & Game regions.

Important considerations for a centralised system include:

- Identification of national and regional staff requirements
- System specifications development
- Design of databases for storage of field data
 - required tables and attributes
 - primary and secondary keys for table linking
 - data validation checks
 - database documentation
 - table and attribute descriptions
 - controlled data vocabulary (e.g., species codes, region identifiers, naming and spelling conventions, etc.)
 - version number
 - interoperability and compatibility with existing external databases (e.g., DOC's FALCON for bird banding)
 - user-friendly interface(s)
- Platform and structure for storage and retrieval of metadata files, templates, documents and other files
- Data governance policy and procedures
- System security and maintenance
- User training
- Data QA/QC

Some of these issues are expanded on below.

8.2. Metadata

All field datasets should be accompanied by detailed metadata describing the sampling design, timing, personnel and environmental context. This metadata ensures that data are interpretable, repeatable and usable in the long term, while providing important context to future data users.

8.3. Data validation and quality assurance

Data quality issues – such as missing values, species misidentification or inconsistent spellings – can introduce bias into analyses and undermine management decisions. Before any data are used in reporting or modelling, they should undergo systematic validation, including:

- Automated checks for outliers, inconsistencies or improbable values
- Manual review of unusual records or trends
- Cross-checking across datasets (e.g., comparing harvest returns with band recoveries)

Sound data quality assurance/quality control (QA/QC) procedures should be developed.

The national use of standardised tools (e.g., R scripts or Excel templates) and training in these processes will aid to ensure consistent QA/QC practices, as will automatic data validation rules incorporated into centralised databases that are implemented during data entry or uploading. Restricting field values during data entry through drop-down fields and lookup tables is a useful tool for controlling input data and avoid issues such as inconsistent spellings or case usage for important variables (e.g., species names, geographic locations, etc.).

8.4. Reporting and communication

Clear, timely reporting is crucial for informing regional and national decision-making. A tiered reporting framework should be established to meet the needs of different audiences:

- National Council: require national-level summaries to guide policy and provide feedback on national-level management decisions.
- Regional Fish & Game Councils: require detailed region-specific reports to support local regulation and management decisions.
- Hunters: benefit from summaries and visualisations that demonstrate the value of them contributing to monitoring efforts, and engagement on the condition of game bird populations.

Standardised annual reporting templates should be developed that present the required information, enabling ease of production and dissemination. To improve efficiency and reduce error, reporting could be semi-automated using scripting tools or web-based dashboards.

8.5. Data governance policy

A clear data governance policy should be established that clearly defines:

- What types of data are to be stored and outlines system requirements
- Data QA/QC requirements
- Who owns and stewards each dataset
- What data can be shared and with whom
- Data access permissions and security
- Privacy and legal compliance
- System lifecycle management and backups

The policy should be reviewed regularly (e.g., every three years) to ensure it reflects current best practices.

8.6. Training and capacity building

Data management systems are only as effective as the people who use them. Ongoing investment in training is essential to build capacity in:

- Data entry and validation procedures
- Spatial and statistical analysis (e.g., R, QGIS)
- Reporting and communication best practices
- Sharing of resources and practice should be encouraged across regions to foster consistency and continuous improvement.

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9. Recommendations for best practice monitoring

Effective management of game bird populations in New Zealand requires robust, consistent and scientifically defensible monitoring. Fish & Game intends establishing a nation-wide team dedicated to the organisation, coordination and oversight of game bird monitoring. This centralised approach will provide strategic leadership, ensure methodological consistency, and support the development of standardised protocols that meet both regional and national management needs.

The following sub-sections outline our recommended steps for developing national monitoring programmes.

9.1. Define management objective and framework

As outlined in Chapter 3, effective game bird monitoring should be based on the information and feedback requirements of three key components: (1) a clearly articulated management objective; (2) a management framework that accounts for uncertainty and avoids overly subjective or complicated decision-making; and (3) a governance process to oversee the management framework.

9.1.1. Management objective

The design of a game bird monitoring programme should begin with a clearly articulated management objective. In principle, the purpose of monitoring is to generate actionable information that enables managers to evaluate whether game bird populations are tracking relative to stated management objectives, and to assess the consequences of previous management actions, such as adjustments to harvest regulations, wetland restoration, predator control or habitat enhancement. This aligns with a broader principle from conservation biology: monitoring must be embedded in decision-making frameworks rather than treated as an end in itself (Nichols & Williams, 2006).

What constitutes actionable information, however, depends entirely on the clarity, specificity and operational relevance of the management objectives. In practice, these

objectives are often vaguely defined or entirely absent, creating ambiguity in monitoring priorities and data interpretation (Lindenmayer & Likens, 2010; Lyons et al., 2008). Monitoring without a clear link to decision-making can lead to inefficient use of resources and the collection of data that are not ultimately useful to managers or stakeholders.

We recommend developing well-defined objectives that meet the criteria of being specific, measurable, achievable, relevant and time-bound (SMART). For example, rather than a general goal to “support sustainable populations” or “detect a 10% decline in game bird population size”, a more useful management objective might be: “Maintain a post-breeding population of at least 5,000 paradise shelduck in region XX while allowing for a harvest of 1,000 birds per year over the next five years.” This level of specificity allows for direct links to monitoring indicators (e.g., total abundance, harvest returns) and desired specific outcomes of management actions.

As noted above, management objectives may be multifaceted (i.e., include statements about biological populations, harvest and hunter satisfaction), or multiple management objectives may be defined. However, typically it is useful to express management objectives into a single objective statement or function when using a formal decision-theoretic management framework.

9.1.2. Management framework

Importantly, management objectives should be viewed as dynamic, over a longer-timeframe. As new data emerge, stakeholder values evolve, or as climate and land-use conditions change, objectives may need to be revised. Ultimately, monitoring should be viewed not just as a data collection exercise, but as a core component of an evidence-based management system. By clearly linking objectives to indicators, and indicators to decisions, monitoring can shift from being reactive and descriptive to proactive and strategic. When done well, this approach not only improves management outcomes, but also builds credibility and trust among stakeholders.

We therefore recommend that a monitoring programme should be adaptive, not only in its methods, but in its framing of what matters and why. This underscores the importance of institutional mechanisms for regular review and updating of objectives, ideally timed to coincide with key planning cycles or policy evaluations. While we recommend an adaptive management framework, the exact approach might depend on the objective itself, and regional factors such as affordability. As explained in Section 3, potential approaches can involve learning-by-doing, with no strict thresholds or predefined rules (Classic adaptive management cycle), be more prescriptive with pre-defined population thresholds to trigger regulatory responses (Threshold-based adaptive management), or include explicit rule to determine hunting regulations based on combinations of biological indicators (Rule-based regulatory decision-making).

9.1.3. Governance process

In the context of game bird management, objectives are likely to differ across regions due to variation in ecological conditions, land use, hunting pressure and cultural or stakeholder priorities. For example, one region might prioritise maintaining high harvest yields for mallards while another may focus on protecting populations of shoveler ducks. We therefore recommend that management objectives and framework should be achieved through an iterative and participatory governance process involving key stakeholders, including regional Fish & Game councils, iwi/hapū, hunters, landowners and conservation agencies.

While management objectives and frameworks can be either set from top-down (i.e., defined by central authorities) or bottom-up (i.e., locally driven objective setting) approach, we recommend a hybrid approach. Specifically, we suggest a collaborative approach where objectives are initially developed at the regional level, with review, alignment and coordination given by the national Fish & Game management team to ensure a cohesive approach that also allows national-level priorities to be addressed. This process can help to identify overlapping or complementary objectives across regions. For instance, if multiple regions aim to maintain sustainable harvest levels of the same species, a shared monitoring protocol and modelling approach may increase efficiency and allow for national-level synthesis. Alignment can also facilitate the development of national indicators, shared decision rules (e.g., harvest thresholds), and coordinated data collection, storage and dissemination strategies.

A centrally coordinated management framework should not be confused with a “one-size fits all” approach. While management objectives and key monitoring indicators may be aligned at a national level to provide consistency across regions (where applicable), that does not preclude regional flexibility in application. Localised monitoring tailored to regional objectives can generate greater stakeholder buy-in and allow programmes to reflect the ecological and social realities of different landscapes. For example, a region with extensive ephemeral wetlands may require different survey timing and effort than a region dominated by permanent water bodies. Similarly, different survey platforms may be required in different regions due to topographical differences, but a coordinated approach across regions with complementary survey designs will enable efficient combining and scaling up of results. Structured decision-making frameworks are particularly useful in this context, providing a transparent and replicable process for identifying objectives, evaluating trade-offs, and linking monitoring to management choices (Gregory et al., 2012; Conroy & Peterson, 2013).

9.2. Identify key indicators and state variables

Once clear management objectives have been established, the next step is to identify which components of the system should be measured to evaluate progress towards

those objectives. These components represent critical attributes of the system that are directly or indirectly influenced by management actions and ecological processes. In the context of game bird management, these components may include abundance, survival, recruitment, movement, harvest totals or rates, and habitat occupancy.

The selection of indicators should be guided by their relevance, measurability and interpretability in relation to the stated management objectives (Lindenmayer & Likens, 2010; Nichols & Williams, 2006). For example, if the goal is to maintain sustainable harvest while conserving population viability, then annual estimates of abundance and harvest are potential variables. Conversely, if the management objective relates to habitat quality or landscape connectivity, then indices of habitat occupancy or breeding success may be more appropriate. If an aspect of the management objective is to provide enjoyable hunting-related experiences, hunter satisfaction would be a key indicator.

The choice of indicators should also reflect the temporal and demographic scope of the management objectives. Sustainable population management could be evaluated on the basis of annual abundance estimates alone. However, if a deeper understanding of population dynamics is required, which may lead to better quality management decisions under an adaptive management approach, information on annual survival and recruitment will be required. In such cases, demographic indicators derived from banding data are crucial for parameterising population models and guiding future decision-making.

A common pitfall of many monitoring programmes is the over-reliance on raw counts or indices that fail to account for detection probability when absolute (rather than relative) measures of indicators are required. Where appropriate and logistically feasible, indicators should be based on methods that correct for imperfect detection, such as double sampling, double-observer, distance sampling, mark-recapture models or occupancy models.

Finally, indicators should be selected considering regional and national comparability. Even when regional constraints limit the use of some methods, efforts should be made to ensure that core indicators are estimated using standardised protocols. This enhances the ability to synthesise results across regions, identify national trends and support integrated decision-making at broader scales (Lyons et al., 2008).

9.3. Survey methodologies

Decisions on where and how to collect monitoring data will also be inexplicitly linked to management objectives and are also interdependent on each other. It should also be noted that collection of demographic information about game bird populations will require careful attention to spatial sampling protocols – the goal is to obtain representative data, not to observe as many birds as possible. The statistical population

of interest for the monitoring programme's sampling frame should be discernible from a well-defined management objective, keeping in mind that the statistical population may differ from the biological population of interest. It is strongly recommended that appropriate probabilistic sampling schemes are used to select sample units from the population of interest for surveying. Spatial areas that are very unlikely to support substantial populations of the game bird species of interest (e.g., urban areas, low-lying areas for upland game birds, etc.), could be excluded from the population of interest.

Consistency in how statistical populations are defined across regions is particularly important. Standardising the definition of management populations and reporting units allows regional results to be aggregated into a coherent national picture. That is not to say that all regions need to use the same definition, but complementary and comparable definitions should be used. Recommendations are given below based on the type of indicators of interest.

9.3.1. Abundance

Most waterfowl species will be widely dispersed across most regions, and aerial surveys in combination with double sampling ground counts or drone surveys are recommended (presuming that ground or drone surveys result in near-perfect counts). Surveys should be conducted when species tend to be aggregated, and pre-harvest abundance is likely to be most applicable in many situations, although hunting season regulations may have to be set prior to when pre-harvest surveys are ideally conducted (e.g., March–April). Establishing fixed sample units, that are surveyed on each of the required years (i.e., a longitudinal design), is recommended to reduce the additional source of temporal variation that would be introduced by surveying different sample units each year. Sample units should be defined as transects of an arbitrary length and may be of different sizes in each region to suit local conditions, although consistency is recommended where possible.

Where suitable waterfowl habitat is dynamic in nature, sample units may be assessed prior to surveying for waterfowl habitat presence in a given year. If suitable habitat is present within the sample unit, the unit is subsequently surveyed to determine the number of waterfowl within the sample unit. If the unit fully consists of non-habitat, this implies waterfowl abundance will be zero within the sample unit, and a zero count may be recorded. Suitable metadata information should be recorded for the surveying of each sample unit.

Double sampling is recommended to calibrate the aerial survey results, using either ground or drone surveys (assuming each yields a near-perfect count of waterfowl). Sample units for the ground or drone surveys should be a sub-set of those used for the aerial surveys and may be a fraction of the aerial survey sample units (e.g., if aerial surveys use a 10 km transect, a random 1 km section of that may be selected for the ground or drone survey).

Where the ground or drone surveys are not expected to be near-perfect waterfowl counts, then those surveys should be conducted using a protocol that will enable detection probability to be estimated and accounted for, to obtain absolute abundance estimates for the double sampling sample units.

For upland game species, the choice of survey method is less clear, but is likely to be ground-based due to the more limited geographic distribution of the birds, whereas aerial surveys using fixed-wing aircraft or helicopters are likely to be inefficient given the ground cover and size of the birds. Variations of total ground counts, point transect distance sampling or point counts with double-observer protocols are likely to be most effective. Camera traps may also be an option, although inference is limited to open areas (strictly speaking). Call counts or PAM surveys could also be an option, although estimation is of number of calls rather than individuals in an area.

Hunting of pūkeko tends to be limited to only a few regions within New Zealand. Roadside surveys have typically been used to monitor their populations in these areas, but this results in no statistical justification for extrapolating the status of the pūkeko population to areas away from roads. Without data from sample units other than roads, how representative roadside surveys are of the overall pūkeko population is unknown. From a statistical perspective, roadside surveys are not recommended and that a proper probabilistic sampling scheme be used to select transects or points for surveying.

As noted in Section 5, banding data may be used for any species to estimate abundance where it is available, although it is not recommended as a primary survey method for abundance estimation. Where it is available, banding data may be a useful alternative to estimating abundance via other methods.

9.3.2. Harvest and hunter satisfaction

The current telephone survey protocols appear to be functioning at supplying the main sources of information to allow the estimation of game bird harvest and hunter satisfaction. That is not to say there is no room for potential improvement or refinement (either in terms of additional data or number of surveyed hunters), although any changes would wholly depend on management objectives.

As above, banding data may be used to estimate harvest in combination with other data sources, although it is not recommended as a primary survey method.

9.3.3. Survival and movement

For all species, estimation of survival and movement is best obtained from banding studies, using either band recovery or mark-recapture methods (when sufficient live recaptures of birds are recorded). Data from banding studies has the potential to greatly increase the knowledge of population dynamics, while also provide information on other important population parameters. Whether it is worth the investment

depends on the value and priority placed on understanding population dynamics by management objectives and the management framework.

Should banding studies be undertaken, then careful attention should be given to where banding programmes are conducted, as the intent should be to band a representative sample of birds from the biological population of interest.

9.3.4. Summary

Species ecology strongly influences the choice of method. When the aim is to estimate relative or absolute abundance, aerial surveys are appropriate for species that inhabit open areas and are less likely to be obscured by vegetation or other environmental features, i.e., birds that are readily available to be seen from the air. These can be conducted using fixed-wing aircraft, helicopters or UAVs, and may be designed to produce either indices of relative abundance or, when paired with ground-based validation (e.g., total ground counts), estimates of absolute abundance. Aerial surveys are less suitable for species inhabiting densely vegetated uplands due to availability bias.

Upland game bird monitoring, including pheasants, partridges and quail, are more suitable using ground-based approaches due to their cryptic behaviour and preference for covered habitats. For vocal species such as quails and pheasants, point counts incorporating playback calls are particularly appropriate, as they may enable achieving high detection rates. Regardless of method, survey points or transects should be selected using a probabilistic sampling scheme, with sufficient replication to allow trend detection and spatial comparisons.

Banding remains a reliable method for estimating demographic parameters across all game bird groups. For wetland species, pre-season banding followed by hunter harvest recovery supports survival and harvest rate estimation, provided that reporting rates and total harvest are known. Where possible, banding sites should be spatially distributed and coordinated with known hunting pressure zones to ensure representative recapture probabilities.

Table 5 summarises the recommended survey methods by game bird group, including options for estimating relative and absolute abundance, as well as survival and movement.

Recommendations for best practice monitoring | Survey methodologies

Table 5: List of survey methods that can be applied to game bird groups, along with preferred methods to estimate abundance (absolute and relative) and survival and movement for New Zealand species.

Group	Species	Absolute Abundance	Relative abundance	Survival and movement
Waterfowl	Mallard, Grey duck, Paradise Duck, Australasian shoveller, Black Swan	Aerial (using helicopter or fixed-wing) combined with a total or detection-corrected ground count, or drone survey	Aerial surveys (using helicopter or fixed-wing)	Banding
Upland	Pheasants, Red-legged partridge, Grey partridge, Bobwhite quail, Brown quail, California quail, chukar	Total ground count, double-observer point count, distance sampling	Point count (without detection correction; including playback), camera trap, passive acoustic monitoring	Banding
Pūkeko		Total or detection-corrected ground count, or drone surveys	Point count (without detection correction; including playback), camera trap, passive acoustic monitoring	Banding

Irrespective of the chosen field method, a key consideration when designing a monitoring programme is to ensure collected data is representative and aligns with the requirements of the management objective. We recommend the use of an appropriate probabilistic sampling framework, with consideration of the full range of habitats, population densities and environmental conditions relevant to the target species. It is important to avoid biases caused by convenience sampling or repeated surveying of the same easily accessible areas or areas of anticipated encounters with the target species. The number and placement of sampling sites, as well as survey timing, should be designed to maximise representativeness and provide adequate precision or statistical power.

Pilot surveys may be a useful initial approach to identify logistical issues, refine protocols and estimate detection probabilities, prior to a full-scale roll-out of any new survey. This would also help setting clear minimum survey effort requirements (e.g., number of sites, frequency and timing) for each species group to ensure alignment with management objectives. If possible, integrating monitoring data with hunter harvest returns and other complementary datasets could strengthen population assessments. Overall, where possible, all survey designs should include methods to estimate or control for detection probability (e.g., double-observer counts, repeated visits, distance sampling, camera trap analysis). Where this is not feasible, or the level of survey effort is not justified for the species, survey conditions (observer skill, timing, weather, equipment) must be standardised and documented.

9.4. Data storage and management

To ensure the sustainability and impact of game bird monitoring programmes, long-term data management must be treated as a key aspect of game bird management strategy. It is strongly recommended to establish a centralised, standardised database system that serves not only as a repository of raw and processed data but also as a decision-support platform. This system should be designed in consultation with end-users (e.g., regional Fish & Game staff, analysts, policy-makers) and should include standardised electronic field data forms, metadata fields and documentation of all processing pipelines. The database would ideally accommodate all core data types – raw field observations, processed survey results, banding records, spatial survey metadata and quality control flags.

We recommend that all monitoring plans include metadata that explicitly describes the sampling design, geospatial coverage, survey timing and data collection protocols. These plans should be reviewed and approved against national guidelines prior to implementation. Each survey effort should use mandatory electronic data collection that standardise data fields. Templates should also prompt for notes on any deviations from planned protocols to ensure auditability. All metadata must be submitted alongside the raw data into the centralised database to allow traceability and reuse.

To maintain high data quality and consistency across time and regions, national training workshops should be regularly provided for field staff and data managers. These workshops should be compulsory for new personnel and refreshed on regular basis for experienced staff. Training should cover not just survey technique (e.g., point counts, aerial survey protocols, banding methods), but also data entry procedures, the rationale behind specific variables and how to flag issues encountered in the field. This system should be complemented by regional peer-review systems during the field season and automated quality control scripts that identify outliers, incomplete records or protocol violations at the point of submission.

Finally, a best-practice data governance policy and procedures should be established to ensure ongoing maintenance and review of the database, and that it remains fit for purpose. This governance framework should cover issues such as data accessibility and security, quality assurance and quality control procedures, minimum standards, audit processes, and maintenance and upgrade frequency.

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11. Appendices: Example Draft Standard Operating Procedures (SOPs)

NOTE THAT THESE ARE EXAMPLE SOPs AND NOT FINAL SOPs WHICH WILL BE DEVELOPED IN PHASE 2 OF THIS PROJECT.

Appendix A. Proposed aerial transect survey standard operating procedure

It is presumed that the survey area of interest and any potential stratification have already been clearly identified.

Survey effort:

A minimum of two days. Should enable at least 400 km of total transect length.

Survey timing:

Should be dictated by management requirements. Suggest late March/early April (and no later than three weeks before opening weekend) for pre-harvest population size. Surveys may be conducted at other times of year if 'abundance' is defined differently.

Survey conditions:

Wind <20km/hr, ideally <15 km/hr. Flights conducted between 0900-1600.

Aircraft:

High-wing aircraft enabling one observer on each side of the aircraft (e.g., Cessna 172). Use of two dedicated observers is preferable. Aircraft should be fitted with GPS navigation equipment enabling pre-loading of intended flight path and recording of actual flight path. Any pilot flying game bird counts on behalf of Fish & Game MUST comply, where appropriate, with Civil Aviation Authority Rules 61 (part) and 135 (part).

Appendices: Example Draft Standard Operating Procedures (SOPs) | Proposed aerial transect survey standard operating procedure

Height and speed:

As near as possible, a consistent height above the terrain and speed should be maintained during surveys. A height of 400 ft is recommended, although a target height of between 200-500 ft may be acceptable. Surveys should be conducted as slow as practical for the type of aircraft used; a ground speed of 80 knots would be considered ideal.

Transect Selection:

Overlay the survey area with a series of parallel baselines that are oriented perpendicular to the desired direction of the transects. The distance between each line should be the desired transect length (note a single baseline could be used if transects are to be of unequal length). Determine the total length of the baselines and select random distances that represent the random start point of each transect, or alternatively, select a random start point for the first transect and have equally spaced transects in either direction along the baseline thereafter. Clearly, portions of the transects that lie outside of the survey area need not be surveyed. Where stratification has been used solely for the purpose of different transect line orientation (i.e., stratum-specific abundance estimates are not required) the baselines for all strata can be combined rather than selecting transects independently for each stratum. Generally, it is better to have many short transects than few long transects. Central South Island and Wellington Regions currently use transects approximately 10 km long. Once selected, the coordinates for transect endpoints should be obtained and loaded as waypoints in the aircraft's GPS navigation system.

Distance from aircraft searched:

The maximum distance that can be reliably searched will depend upon aircraft height due to the search angle, however 150 m – 250 m is suggested as a maximum, noting that greater distances are possible at greater heights (although ducks will be smaller and likely less detectable at greater heights). If using guide markings on the aircraft

Appendices: Example Draft Standard Operating Procedures (SOPs) | Proposed aerial transect survey standard operating procedure

window or wing struts, observers should be mindful that relative head position could affect the actual areas being searched on the ground. An inclinometer may be useful to confirm area being based upon search angle and aircraft height. Note that the area directly underneath the aircraft will not be observable hence a substantial portion of the transect will be unsurveyed. This is a form of detection probability that can be corrected for with ground counts.

Observers:

All observers should undergo a training period to become familiar with the onboard procedures to counting and recording the number of the dabbling ducks. Ideally one dedicated observer on each side of the aircraft should be used. Observers should count all dabbling ducks seen within the search area on their side of the plane. The use of digital dictaphones with time stamps are recommended during the flight so that observers can continually search for ducks with the sightings transcribed on hardcopy or electronic recording sheets after the flight. If using multiple observers, dictaphone times should be synchronized. Time synchronization with the aircraft's GPS unit will also enable the location of any sightings to be reliably determined.

All ponds (regardless of whether ducks are counted on them or not) should be recorded. It may also be useful to record major habitat types along a transect to consider habitat or land-use changes.

Video or still photography could also be used as another form of observation with time (and ideally location) stamps, although resulting video or photography will require processing to count the number of ducks captured on film. The effective search area will also have to be determined.

Appendix B. Proposed aerial waterbody survey standard operating procedure

It is presumed that the survey area of interest and any potential stratification have already been clearly identified.

Survey effort:

A minimum of two days. Should enable at least 80 waterbodies to be searched.

Survey timing:

Should be dictated by management requirements. Suggest late March/early April (and no later than three weeks before opening weekend) for pre-harvest population size. Surveys may be conducted at other times of year if 'abundance' is defined differently.

Survey conditions:

Wind <20km/hr, ideally <15 km/hr. Flights conducted between 0900-1600.

Aircraft:

Most likely a small helicopter should be used as some waterbodies will be too small to effectively survey with a fixed-wing aircraft. Aircraft should be fitted with GPS navigation equipment enabling pre-loading of intended flight path and recording of actual flight path. Any pilot flying game bird counts on behalf of Fish & Game must comply, where appropriate, with Civil Aviation Authority Rules 61 (part) and 135 (part).

Height and speed:

As near as possible, a consistent height above the terrain and speed should be maintained during surveys. A height of 400 ft is recommended, although a target height of between 200-500 ft may be acceptable. Height should not be so low that it may disturb ducks (or stock). Aircraft should fly as slow as possible; helicopters may hover as needed.

Appendices: Example Draft Standard Operating Procedures (SOPs) | Proposed aerial waterbody survey standard operating procedure

Waterbody selection:

Identify all waterbodies of interest and number them sequentially (large waterbodies could be split into numbered subunits for the purpose of the surveying). Select which waterbodies are to be surveyed either completely at random or randomly select one waterbody and then select every n^{th} waterbody on the list thereafter (e.g., if 400 waterbodies on the list and 80 are to be surveyed, randomly select a number between 1-5, then also select every fifth waterbody on the list).

Observers:

All observers should undergo a training period to become familiar with the onboard procedures to counting and recording the number of the dabbling ducks. Observer configuration will depend on the type of aircraft used. Observers should count all dabbling ducks seen within the search area on their side of the aircraft, on and around the margins of the waterbody. While double counting should be avoided, it is not critical if some ducks are accidentally counted more than once if the count is to be regarded as an index of abundance or will be calibrated with ground counts. The use of digital dictaphones with time stamps are recommended during the flight so that observers can continually search for ducks with the sightings transcribed on hardcopy or electronic recording sheets after the flight. If using multiple observers, dictaphone times should be synchronized. Time synchronization with the aircraft's GPS unit will also enable the location of any sightings to be reliably determined.

Video or still photography could also be used as another form of observation with time (and ideally location) stamps, although resulting video or photography will require processing to count the number of ducks captured on film. The effective search area will also have to be determined.

Appendix C. Proposed ground count survey standard operating procedure

The intended purpose of the ground count is to obtain a more accurate count of the number of ducks within an area, and to also ascertain the species composition of dabbling ducks. While these may be viewed as secondary concerns relative to surveying broad areas with aerial methods, because the ground counts are considered as the more accurate source of information (and will be used to calibrate the aerial counts) they are the primary sampling method when employed. Therefore, the number of locations where ground counts are performed will have a major effect on the precision of the final abundance estimate, and it may ultimately be more beneficial to conduct more ground counts at the expense of fewer aerial surveys.

Survey effort:

A minimum of 10% of the area surveyed from the air, preferably closer to 20%.
Approximately 4-6 survey days.

Survey timing:

Should be dictated by management requirements Suggest late March/early April (and no later than three weeks before opening weekend) for pre-harvest population size. Surveys may be conducted at other times of year if 'abundance' is defined differently. Within 3 days of an aerial survey.

Survey conditions:

Wind <20km/hr, ideally <15 km/hr. Surveys conducted between 0900-1600.

Sampling unit:

If transects were surveyed, then subdivide them into 1 km segments and the segments should be considered as the ground count sampling unit. Segments should be searched 50 m beyond the nominal distance from the transect line that was being searched from the air to allow for variation or measurement error in the actual distance searched

Appendices: Example Draft Standard Operating Procedures (SOPs) | Proposed ground count survey standard operating procedure

from the air. For quadrat- or waterbody-based aerial surveys, then these should be regarded as the ground count sampling unit (although large waterbodies may need to be subdivided for practical surveying)

Sampling unit selection:

Select units completely at random, or randomly select first unit, and systematically thereafter. A greater number of units should be selected than anticipated in the event of landowners preventing access to some areas.

Search method:

A minimum of two observers is recommended. The exact manner of searching a ground count sampling unit may depend upon local topography and vegetation cover, and how the unit has been defined, but the main goal is to have consistent, thorough search effort across the entire unit. Recall that, for the purpose of calibrating the aerial counts, the ground survey is assumed to be a complete (i.e., perfect) count of the ducks in that area. A systematic search pattern may be useful in many situation (e.g., series of parallel transects spanning the sampling unit). Care should be taken to not flush ducks, particularly if vehicles are being used.

Observers should count all dabbling ducks seen and identify them to (at least) species and gender. Double counting should be avoided as much as possible.



R3 Regional implementation - pilot programme

New Zealand Fish and Game Council Meeting 178: 5-6 December 2025

Prepared by: Maggie Tait, Principal Communications Advisor, NZ Fish and Game Council

Kōrero taunaki - Summary of considerations

Purpose

This report seeks Council approval to consult with regions on a pilot R3 Regional Implementation Strategy for 2025-2026.

Financial considerations

Nil Budgetary provision / Unbudgeted

Risk

Low Medium High Extreme

Executive Summary - Whakarāpopoto

1. This paper proposes a pilot R3 (Retention, Reactivation and Recruitment) regional implementation pilot for the remainder of this financial year.. The strategy builds on the 2019 R3 Roadmap and leverages national infrastructure now in place, including the ReWild campaign, new website, and developing CRM system.
2. Given that regions have already established their operational work plans for the current period, this is proposed as a pilot programme with flexible goals. Regions would be invited to participate on a voluntary basis, with success measures adapted to reflect available resources. For example, regions without access to fish-out ponds would set different event targets than those with such facilities.
3. The plan focuses on six priorities: access restoration, events and education, women and junior outreach, rural relationship building, ReWild campaign support, and local marketing. The purpose of this paper is to seek Council approval to consult with regions on this proposed pilot.

Background - Takenga mai

4. The 2019 R3 Roadmap identified strategic priorities for growing participation in fishing and hunting. Since then, Fish & Game has established key national foundations, including the ReWild brand, new website infrastructure, and CRM development. Regional implementation has been discussed but not formally structured.
5. Regions are at different stages of R3 implementation and face varying resource constraints. Some regions have dedicated staff for outreach activities, whilst others have limited capacity. Access to facilities like fish-out ponds, shooting ranges, and suitable event locations also varies significantly between regions.

Discussion - Kōrerorero

6. Strategic Context:
 7. National foundations are now in place with the ReWild campaign launched, new website live, CRM system planned, national EDM marketing plan circulated to regions, and extension resources being created. This provides the infrastructure for effective regional implementation.
 8. This strategy is proposed as a pilot programme with the following characteristics:
 - A. Voluntary participation: Regions choose whether to participate based on capacity and alignment with existing work plans
 - B. Flexible goals: Success measures would be adapted to regional resources (e.g., regions without fish-out ponds would run fewer events, regions with limited staffing would set proportionate targets)
 - C. Consultation first: Council seeks regional input before finalising any expectations or measures
 - D. Learning opportunity: Pilot allows testing and refinement before broader rollout
 9. Regional priorities (for consideration):

1. Access Restoration & Improvement

Systematically identify, restore and promote access to fishing and hunting areas. This issue is consistently the number 1 concern for licence holders.

Regional actions:

- Conduct workshop with staff and stakeholders to map lost access areas in your region

- Document why access was lost (landowner relationships, signage, information gaps, legal barriers)
- Select 2 priority access locations to restore/improve
- Develop action plans with timelines for each priority location
- Partner with Herenga ā Nuku Aotearoa (the Outdoor Access Commission), DOC, LINZ, local councils and primary sector where relevant
- Create communications campaign highlighting restored access using ReWild branding (supported by NZC)
- Celebrate and hero landowners who provide access by creating articles/videos

Success measure: 2 priority access locations re-established per region by June 2026 (flexible based on regional circumstances)

2. Events & Education Programme

Deliver quality retention and recruitment events using extension resources.

Regional actions:

- Audit current events against R3 objectives (Who are we targeting? What outcome are we seeking?)
- Focus events on: Retention (skills development courses, safety training, how-to sessions); Reactivation (organised hunts/fishing events, competitions, welcome back initiatives); Recruitment (introductory workshops, open days, school programmes)
- Survey participants at all outreach events: Keep surveys very short - ask about communication channels they use, rate event content, gather suggestions for improvement
- Utilise national extension resources (videos, how-tos, and resources) as they become available
- Maintain regular communications (river conditions, fishing/hunting reports, seasonal tips)
- Issue regular EDMs (Electronic Direct Mail) to licence holders: Critical for retention and reactivation

Success measure: Minimum 6 targeted R3 events per region annually, with documented participant outcomes; EDMs issued as set out in schedule.

Targets flexible based on regional resources (e.g., regions without fish-out ponds would set different event numbers).

3. Women & Junior Focused Outreach

3. Targeted programmes addressing underrepresented demographics.

Regional actions:

- Develop women-specific initiatives: Introductory workshops in safe, supportive environments; mentorship connections with experienced female anglers/hunters; skills-based courses; women's fishing/hunting events; target all-girls schools for presentations
- Strengthen junior programmes: Family fishing events with consistent branding; school holiday programmes; youth mentor matching; consider child fishing licence data collection (starting age 12)
- Promote threshold experiences that convert interest into commitment
- Success measure: 25% increase in women and junior licence sales by June 2030

4. Rural Relationship Building

- Rebuild trust and collaboration with rural landowners and communities.
- Regional actions:
- Staff actively participate in catchment groups
- Share environmental expertise on habitat and wetland management
- Offer collaborative support on common interest areas (water quality, biodiversity, pest management)
- Recognise shared values between Fish & Game and rural communities
- Develop respectful local relationships through consistent positive engagement
- Position Fish & Game as environmental partner, not just enforcement agency
- Publicly celebrate and profile supportive landowners

Success measure: Active involvement in minimum 3 catchment/community groups per region; documented collaborative projects; 2 articles in media

5. ReWild Campaign Support: Feed regional stories and successes into national brand campaign.

Regional actions:

- Provide regular stories to NZC team: Field work successes, event highlights, research findings, ranger/staff achievements, licence holder stories, advocacy wins, access improvements
- Use ReWild branding consistently across all regional communications
- Amplify national ReWild messages through regional channels
- Align regional social media with national campaign themes
- Success measure: Minimum 12 regional stories/content pieces provided to NZC annually

6. Local Marketing and Advertising for Licence Sales

- Drive licence sales by reaching local communities through targeted advertising and media coverage.
- Regional actions:
- Paid advertising (focus on conversion):
- Social media advertising: Run targeted campaigns on Facebook/Instagram
- Local newspaper advertising: Place ads in community newspapers and rural publications
- Local radio advertising: Run spot ads on community radio stations
- Use compelling offers and timely messages
- Free media coverage (editorial/PR):
- Build relationships with local journalists and rural reporters
- Provide regular story angles: Conservation work, research results, opening day previews, success stories, access improvements
- Write opinion pieces and letters to editor on relevant local issues
- Offer spokespeople for interviews on fishing/hunting topics
- Send media releases on regional achievements, events, and initiatives
- Provide high-quality photos and videos for media use
- Community engagement:

- Present at local agricultural shows, field days, and community events
- Partner with local outdoor retailers for in-store promotions
- Engage with local clubs and organisations
- Build presence at farmers markets and community gatherings

Success measure: Quarterly paid advertising campaigns run across at least 2 channels; minimum 12 pieces of free media coverage secured per region annually; documented licence sales attribution; community event presence at minimum 6 local events annually

Considerations for Decision-Making - Whai whakaaro ki ngā whakataunga

Financial Implications

No additional central funding is proposed at this stage. Regions would implement activities within existing budgets and operational work plans. Some activities (such as local advertising) may require regional budget allocation. The pilot approach allows assessment of resource requirements before any potential future funding decisions.

Legislative Implications

4. No legislative changes are required.

Section 4 Treaty Responsibilities

5. The strategy supports improved access and participation opportunities that could benefit all New Zealanders including Māori. Regional implementation would include engagement with local iwi and hapū as appropriate.

Policy Implications

6. The strategy aligns with the 2019 R3 Roadmap and supports Fish & Game's mission to provide fishing and hunting opportunities. It complements existing regional activities and the national ReWild campaign.

Risks and Mitigations

7. Risk: Regional capacity constraints limit participation

8. Mitigation: Pilot structure with flexible goals; voluntary participation; no mandatory targets during existing work plan period
9. Risk: Inconsistent implementation between regions
10. Mitigation: Clear framework with support from NZC; best practice sharing; quarterly reporting for learning

Consultation

11. Regional consultation is the purpose of this paper. If approved, the strategy would be circulated to all regions for feedback on:
12. Alignment with regional priorities and capacity
13. Appropriateness of success measures and flexibility provisions
14. Support requirements from NZC
15. Interest in participating in the pilot

Next Actions - Ngā mahinga e whai ake nei

16. If agreed:
17. Circulate strategy to regions for consultation (December 2025)
18. Gather regional feedback (December 2025 - January 2026)
19. Report back to Council with consultation outcomes and recommendations (February 2026)
20. Subject to Council approval following consultation, support interested regions to commence pilot implementation



New Zealand Fish and Game Council

Health and Safety Audit

Consolidated Report

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Summary

Thank you for asking us to undertake a Health and Safety (H&S) audits of four selected regions of Fish and Game (F&G). At all Regions the teams were welcoming but were also apprehensive in what this audit will uncover and how this could be used against their Region.

The Regions visited and audited were:

- Northland
- Eastern
- North Canterbury
- West Coast

As requested during the audit, information was supplied and it showed at the region level the lack of understanding of H&S as three out of the four sites audited didn't understand why there were questions on governance and how their Councils understood and controlled H&S at their level.

The regions selected gave a representation of two smaller regions and two larger regions providing a cross-sectional view of the likely situation in all regions.

One region had very good governance which led from having many experienced people in their Regions Council. The other Regions are doing the best that they can with the knowledge and understanding that they have.

Areas where there were significant gaps where it would leave the Region seriously exposed, were identified as **GAPS**. Opportunities for improvement (**OI**) were added where work is required to assist the organisation to meet their H&S obligations to the organisation and employees alike. I separated them so as not to overwhelm the regions with GAPS, but these should all be taken into consideration as areas of risk. I have listed all Opportunities and Gaps together under their areas of risk.

Note that many are similar as they have been taken from the different regions reports which shows a consistent theme across regions.

The main area of concern is :

- each region seem to be doing their best with the budgeted funds ; and
- meeting their operational work plans, and
- keeping staff,

rather than upgrading their systems into a cohesive management system which should cover not only H&S but all business management.

The upgrades undertaken to date have not been cohesive and as change management does not seem to be understood or followed, proper planning on the risk and controls required for change have not been completed meaning that systems are not as complete as an outcome.

It has been a pleasure to meet with the teams and see their work environments and some of the challenges they face day to day. Their passion for what they do serves them very well and this was very clear in the discussions held at each region.

Gaps and Opportunities for improvement

Context of the Organisation

Opportunity 01

- A document is required to list who the interested parties are to the organisation. This would be beneficial to identify their needs and expectations. The list includes all stakeholders, such as farmers, employees local Councils, licence holders and public. Needs and expectations may be legal requirements or other requirements.

Opportunity 02

- Fish & Game needs to determine the full scope of their H&S management system and to develop a plan considering the external and internal issues as per the context of the organisation as well as work that is being planned or currently performed.

Leadership and Worker Participation

H&S Policy

Opportunity 03

- There were different H&S policies in use in the regions. Not one was the same. Only one region had adopted the NZC H&SW policy but had it as an addendum to their policy which didn't make sense and confused the reader to the overall purpose of the policies. The balance of other regional policies required updating as they were out of date and/or they were missing important information.

GAP 01

- Ensure the H&S Policy version used by the region, is reviewed and updated.
- Ensure the version meets today's business requirements legislation, accountability and responsibility of the organisation and employees with a review timeframe. The Health and Safety Policy cover all things health including wellness & fatigue as well as safety.
- This policy is the overarching document to drive the whole H&S management system and should be developed stating the commitments and responsibilities the organisation has, including the leaders and employees.
- Whether it is a national or regional council policy is not important but being a PCBU the policy used needs to reflect the organisations commitment and process.

Opportunity 04

- A review is required of the strategic document used by the organisation to ensure that it is comprehensive, detailing the business risk including H&S, (health, wellness, and safety).

Opportunity 05

- Having a monthly H&S meeting captures relevant information in one place within the minutes. Currently some information is within the Monday planning meeting, but other information could be missed.
- Set up a calendar invite for all team members as a recurring meeting, and this will ensure planning around it and attendance.
- Ensure your meeting minutes fulfil the needs of the organisation and shows tracking of the actions. Ensure attendees are listed as well as those that are away. Put the date on the minutes.

- Ensure when adding actions to your minutes add in who is responsible for the action and timeframe for its completion. The following meeting these actions should be monitored and details of either close out or progress should be added to the minutes until fully closed.
- For staff who miss the meeting they should be provided with a copy of the minutes and have an opportunity to discuss them. Once done they should acknowledge their understanding of the minutes. An initial on the minutes would suffice.

GAP 02

- Requirement to set up at least quarterly H&S meetings.
As covered in OI 10 it is of more benefit to have monthly meeting, with a set agenda which will cover changes to procedures, processes, any incidents, accidents, in consultation with the team. This helps the organisation to meet the HSWA Regulations of employee participation and consultation.

GAP 03

- Consultation and participation of employees when developing OHS policies and procedures is a legal requirement within the HSWA Regulations and is to be incorporated into the process of change which is also required.

Opportunity 06

- The H&S report prepared for the Council is being completed based on headings recommended from NZ F&G Council staff. Minimal information is shared in this report format.
- Consider identifying the more high-risk areas of the business and set your own headings. Incidents are always a good one, this would include reported non-conformances etc.
- Projects being undertaken such as the migration to SharePoint of the H&S management system, the 'SafeatHome' App implementation progress, benefits, and limitations.
- Staffing and feedback from compliance work.

Opportunity 07

- The governance document in one region for Risk Management was last reviewed February 2022, as shown on the cover of their document while in Council Meeting Minutes, it showed that this document is reviewed every two months generally focussing on financial risk and co-ordination of the work.
- This is an organisational risk document for managing risk to the business, and a review of all types of risk including health and safety, should be undertaken quarterly or more frequently where there is a higher risk to the business.
- Any changes including to the management of change should be recorded in the meeting minutes and in the document.

Organisational Roles and Responsibilities.

Opportunity 08

- In relation to H&S the job descriptions evidenced were missing important information on the responsibilities and accountabilities all employees have with H&S at each level of the organisation.

Opportunity 09

- It would be to the benefit of the Senior role in each region to have more in-depth KPI and outcomes listed, particularly where it comes to governance, and legal liabilities i.e. HSWA Act and Regulations including Maritime and Transport Acts and Regulations.

Opportunity 10

- A review of staff position descriptions is necessary to clearly define duties, KPIs, skills, relationships, and main accountabilities and responsibilities as specified in the H&S Policy.

Opportunity 11

- Ensure the staff reviews and personal development plans are documented and records of it occurring are held confidentially in the management system whether under HR or H&S.
- These plans will have timeframes for completion and should be reviewed quarterly to ensure they stay on track or to record any changes that may be required.

Opportunity 12

- Noted the Management and Remuneration Policy dated August 23, is overdue for its next review August 25.

GAP 04

The concept and legislation around “Privacy” is not understood in the regions.

- Policy regarding control of personal information must be shared with the regions to prevent occurrences of personal information posted to notice board on accident forms.

Planning, Address risks and opportunities.

Opportunity 13

- It is necessary for the organisation to implement a document control procedure.
- This process helps to determine the requirement of documents and availability where and when they are needed; and to control the access, retrieval, distribution and use including the storage and preservation of documents.
- The organisation will then be better protected from loss of confidentiality, improper use or loss of integrity.
- A document control procedure should also cover managing version control for updates, as well as overseeing how documents are kept and disposed of.

Opportunity 14

- Involve staff in the process of reviewing and updating the hazard and risks controls.

Opportunity 15

- All meeting minutes need to list who is present and who is away. Ensure details of discussed actions and completion dates are documented with assigned responsibilities to actions.
- Ensure these actions are carry forward to the next meeting actions until closed out.

Opportunity 16

- Review what is reported on in terms of H&S at Regional Council Meetings and NZC.
- Identify the more high-risk areas of the business and set your own headings. Incidents are always a good one and should include reported non-conformances etc.
- Ongoing projects in some regions include migrating the Health & Safety management system to SharePoint, along with an examination of the associated benefits and limitations.
- It would be of value if there was one document management system across the organisation with staffing and feedback from compliance work and other projects is also included.
- It would be of value to have an organisation wide H&S management system

Opportunity 17

- Every incident needs to be reported.
Record all small cuts, grazes, or nicks in a notebook. If a sticking plaster is needed, document it and report the incident during your health and safety meetings.
- Every injury, whether minor or major, must be recorded in the reporting system. The notebook in the first aid kit is also available to write down details of a significant event as it unfolds as people lose track of time and actions in the rush of caring for a casualty.

Opportunity 18

- Business objectives are part of the strategy of the organisation and should include H&S objectives. All objectives should use the S.M.A.R.T principal so they can be specific, Realistic, time framed, measurable and be achievable.
- A review of these should occur at Governance level at least quarterly and this review documented in the minutes of the meeting.

Opportunity 19

- The Dangerous Goods on site and the chemicals in all areas need to be on one chemical register with current SDS and monitored regularly and stored as per the Regulations.
- The people responsible for the chemicals on site should undertake a Chemicals Handlers Training Certificate. You will need this if a location licence is necessary.

GAP 05

- The legal requirement of HSWA Hazardous Substance Regulations is that a register to clearly outline what is held on site, the quantity, where it is stored and controls around the storage and use including PPE requirements and control of unplanned spills is necessary
- Each chemical requires a current Safety Data Sheet (SDS) not older than 5 years from date of issue to be held on site where the chemical is being used for workers to use.
- The main register should benefit from having a copy of all required SDS held with it.
- Current procedure on site does not clearly guide the worker in the storage and controls required.
- WorkSafe have a chemical register on line and is useful to identify the controls, quantities and limitations required. However you must use the chemical name to ensure all chemicals the same with a different brand name are listed together.

H&S Objectives and planning to achieve them

GAP 06

- Currently there are a series of objectives and targets but there is no way to measure them or plan on how they are going to achieve them.
- Objective and targets are an area where the Region can benefit from some training as to how to plan, manage, measure and time frame their objectives, including the reporting on them quarterly.

Hazard and Risk Management

Opportunity 20

- Involve staff in the process of reviewing and updating the hazard and risks controls they know the job and risks more intimately than anyone.

Opportunity 21

- Every incident needs to be reported.
- There should be an accident recording process/system in place to ensure they are all reported and investigated appropriately.
- Training appears to be lacking in this area in most regions. Where there are minor cuts, abrasions bruising ensure these are also recorded in a notebook, especially if first aid supplies are used. Keep these records and report it during your Health & Safety meetings.
- All injuries no matter how light or significant are to be reported into the reporting system.
- .
- The notebook in the first aid kit is also available to write down details of a significant event as it unfolds as people lose track of time and actions in the rush of caring for a casualty.
- All this information feeds into your hazard and risk management and controls. All incidents, whether near hits, or non-conformances in audits or other staff threatening situations must be reported so they can be investigated and followed through to close out.
- This helps to provide a picture of what is occurring and controls developed to prevent these hazards occurring in the future.
- A single organisation wide system enables easier access to data for management of change and improvements to procedures where applicable

Opportunity 22

- The Hatchery areas need to be tidied, ensuring that everything kept has an assigned location and that chemicals are managed in accordance with Gap 02.

Opportunity 23

- The workshop areas were, in the main very untidy and requires a tidy up with everything having a home and the unused items removed from site.

Competence and awareness

GAP 07

- Reporting of all incidents, accidents, near hits, non-conformances, negative people interaction that are aggressive should be reported on and investigated fully. A report should be prepared and reported at council meetings.

- A organisation wide process needs to be determined, documented and staff trained in it.

Opportunity 24

- Training in investigation is needed to identify the root cause, as understanding of it is not clearly demonstrated.
- Ensure there is at least 3 -4 persons trained in this area across the organisation.

Opportunity 25

- There is a need to gain deeper knowledge of contractor management and to establish a straightforward process that is simple to follow.

Documented Information

GAP 08

- There is a requirement to manage documented information in relation to the size of the organisation and what purpose it provides. Requirements such as demonstrating legal compliance, product or process, or if there are complex processes or interaction and a specific level of competence of workers is required.
- Creating, updating, format, storage, retention, distribution must be considered when creating this procedure.
- As you will have seen in Gaps and Opportunities there is a significant gap in the management of documents across all regions.

Management of Change

Opportunity 26

- Management of change is a process to control planned temporary and permanent changes that impact H&S performance.
- This includes areas such as new services, products, services including process or changes to exiting products, services and processes, areas such as workplace locations and surroundings, work organisation, working conditions, equipment, workforce, changes to legal and other requirements, changes in knowledge or information about hazards and H&S risks, and development in knowledge and technology. This prevents any unplanned events occurring.
- Currently this process is not undertaken and a procedure is required to be developed and used.

GAP 09

- It is recommended that the organisation develops a process to undertake Management of Change.
- Management of change is a process to implement and control of planned temporary and permanent changes. This may include new products, processes, or a change from what is currently being done.
- This helps to identify any legal implications, changes in knowledge and or information about hazards and risks, developments in knowledge and technology and identify any consequences of unintended changes and then take identifiable action to mitigate any adverse effects where necessary. This includes:
 - Workplace locations and surroundings,
 - Work organisation,
 - Working conditions,

Equipment,
Workforce (including staffing changes). *Reference ISO 45001: 2018*

Contractor Management

Opportunity 27

- There is a need to gain deeper knowledge of contractor management and to establish a straightforward process that is simple to follow to prevent bringing risk to workers and other members of the public when the contractor is undertaking work on behalf of the region.

Emergency preparedness and response

GAP 10

- There is a requirement for all workplaces to have a current evacuation plan in place to cover all likely types of evacuations, not just fire. All sites need to undertake a review of their emergency plans to address all types of emergencies, not just at the office buildings but on the job.

GAP 11

- Legal requirements for emergency evacuation drills to occur at intervals no greater than 6 months apart. Whilst this has been incorporated into regions emergency plans they do not occur. These must occur and be recorded.
- This is a breach of the Fire and Emergency NZ (Fire safety, Evacuation Procedures, and Evacuations Schemes) Regulations 2018. Section 7 and 29.

Performance evaluation

Opportunity 28

- The monitoring, measurement and analysis and performance evaluation of the organisation.
- Information comes from internal audits, accident, incident reporting, outcomes from objectives and targets meeting (or not) the organisations strategic plan. Is the organisation meeting its legal requirements, have all identified hazards, risks and opportunities been monitored, as well as the effectiveness of operations controls.
- This is an area that requires development in all regions and learnings from these are shared so all regions benefit from this.

Internal audits

Opportunity 29

- This is part of the process for performance evaluations and should occur at least monthly. Checks on the systems and process to ensure they are working as desired.
- Any non-conformance found or gaps in checks identified should be reported into the organisations reporting system for follow up investigation and remedy required, identified and carried out.
- This is how an organisation knows it is working as per the procedure and if not why. Audits find that these are done haphazardly, and records are generally not kept of this important function.

Management Review

Opportunity 30

- Council Meetings are the Management Review,
- The H&S reporting into the Council meetings should be reviewed to ensure that it is a full report on the organisations H&S performance.

Improvement

- Comment: This is identified when all the actions are undertaken and changes or additions are undertaken to improve the overall outcome of the H&S management system.

Opening Meeting with Teams on Site

All Regions I had a meeting with the staff separate to the Manager/CEO to understand the level of knowledge and understanding each level on the organisation had for H&S.

Staff have a good strong knowledge of risk within the work areas they work. For example, when carrying out compliance work, maintenance work and the environment they work in away from the office. Health and safety infiltrates all this work and it was understood very well. There were noticeable gaps in Health and Safety (H&S) knowledge at all other areas of the work. As an example, workshops were very untidy bar one region, chemicals are not controlled as per the HSWA Hazardous Substances Regulations bar one region. Health and safety had a negative response from most staff. Whereas the Regional Managers/CEO/Operations Managers were positive and open to improve.

Context of the Organisation

Understanding the organisation and its context is primary in understanding the internal and external issues that are relevant to its purpose and that affect its ability to achieve the intended outcome(s) of its H&S management system. Examples such as understanding the needs and expectations of workers and other interested parties. i.e. Public, Govt., Workers, licence holders, Regions Council, NZC, members of the public, anti-gun lobby, Climate Change Activists, etc

We need to understand what legal requirements and other requirements is related to H&S that these interested parties will want or need to have in place, and how as an organisation you can meet these requirements.

The current regional structure provides opportunity for the organisation to miss relevant and important factors due to their small size and separate management structures.

All the information above must be taken into account along with the work planned or performed by work related activities to develop the scope of your H&S management system. This scope should be included in your documented information.

This area is non-existent within the Regions or understanding of its purpose.

Leadership and Worker Participation

Leadership comes from leaders who demonstrate leadership and commitment with respect the H&S management system by:

- taking overall responsibility and accountability for the prevention of work-related injury and ill health and the provision of safe health workplaces and activities.
- Ensuring the H&S policy and related H&S objectives are developed and are compatible with the strategic direction of the organisation.
- Ensuring integration of the H&S management system requirements into the organisations business processes.
- Ensuring that the resources needed to establish, implement, maintain and improve the H&S management system are available.
- Communicating the importance of effective H&S management and conforming to the H&S management system requirements.
- Ensuring the H&S management system achieves its intended outcome(s).

- Directing and supporting persons to contribute to the effectiveness of the H&S management system
- Ensuring and promoting continual improvement.
- Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.
- Developing, leading and promoting a culture in the organisation that supports the intended outcomes of the H&S management system.
- Protecting workers from reprisals when reporting incidents, hazards, risks and opportunities.
- Ensuring the organisation establishes and implements a process(es) for consultation and participation of workers.
- Supporting the establishment and functioning of health and safety committees.

There are major gaps identified at each of the regions reviewed based on the Leadership and worker participation. Some regions do work with their employees in consultation generally on the Monday morning meeting with the workplan. There will be some H&S discussed along with meeting the weeks targets. Meeting minutes are completed normally but without the details required to be a useful document. Actions are not carried through to the next meeting if not closed off, attendees are generally not noted as absent persons. The meeting is focussed on the work planned for that week and any other factors that may impede completion. The format for meeting minutes varied from region to region and no one really had a suitable format in use.

Documents on site have been developed to meet a need. There is no document control, standard format and in many cases, records have been lost.

The H&S Policies evidenced at the Regions require review and updating to meet the legal requirements as well as documenting the organisations commitment to H&S.

A review of the accountabilities and responsibilities of roles in the organisation was undertaken. Position Descriptions overall lacked their accountability for H&S and were very open in the job roles.

Due to the regions having the choice to accept or not the NZC policies there is a disjointed approach to some areas such as drug and alcohol, health, safety and wellness to mention a couple of examples. One region has recently adopted the NZ Council Policy for Drug and Alcohol but have held off adopting the NZC H&S and Wellness Policy as it duplicates and causes confusion to who has accountability and responsibility. (the region or the whole organisation)

Not all councils have the benefit of members with good governance expertise. Governance training is required at the majority of regions, Even with the recent training many still have a poor understanding. Having a governance person available to mentor the councils would benefit them.

As a PCBU there are other areas of governance required such as the business risk register. These take different forms in the regions. Some use the risk register and break it down by activity and others identify all risk and manage it this way. There should be one type or version used for business risk and a separate version for risk register for operational works. There is

currently no procedural document available at any region on how to develop and maintain a business risk register.

Regions who have thought they have a good system have this based on the primary level of the old ACC WSMP programmes loosely based on the AS: NZS 4801:2001. However, this document created by ACC does not cover all areas of risk including governance management. The AS/NZS 4801 standard has been replaced by ISO 45001:2018, which is now the current guideline.

Some regions have made inroads into transferring their H&S management system into SharePoint. This hasn't been controlled, and each region has a different structure in SharePoint. Most still have a hard copy of the H&S management system in use. A management of change process is required when undertaking any change within the workplace from electronic systems to staff changes. This is more covered in its own section.

Hazard and Risk Management

Each Region has a risk document, and each region has undertaken it differently. Risk in one region is identified within each work activity, and each activity has its own spreadsheet. However, there are other risks which have been missed entirely. This is due to more to a lack of understanding of what risk is.

Other regions have a risk register and have tried to develop it into a working document. Identifying the risk and looking at the level of risk and determining the controls. However, many miss the completion of the residual risk and what controls may be required over and above what they have put in place.

An area for improvement is to get all staff involved in the process of reviewing hazards as the team who undertake the work often have a better understanding of the risks and controls required.

As many regions do similar work a team of 3-4, each person from a different region should meet and undertake recognising risks in certain work and then consult on it with their team in their own region. Another team will work on different aspects, and this can break a big job down into bite size pieces.

A standard procedure for this undertaking would benefit the whole organisation to ensure all regions are following a process which captures all risk whether it is total business risk or operational hazards and risks. Staff must be involved in this process as they are the ones undertaking operational work and know it best.

Not all regions have their hazardous substances controlled well. Some have minimal on site and others have large inventories of hazardous chemicals. The HSWA Regulations (Hazardous Substance) is not being followed on the majority of sites. A chemical register is required for an inventory of what is on site, the quantities held and where they are stored. The regulations also outline the maximum quantities that can be hold of certain chemicals. Where the quantities are over this limit then a Location License is required. Control on how the chemical is stored should be in place along with the requirement of having suitably trained personnel on site to manage them. There is a requirement to have a Safety Data Sheet available for all chemicals held on site(these have a life span of five years from date of issue). Most sites did have them but

they were out of date. At the time a couple were sources of the most hazardous chemicals and given to the sites.

Most staff have a motor vehicle provided to undertake their work. In some regions these are sign written and in some areas these are magnetic which can be removed outside work hours. This is due to an identified hazard of aggression from persons within their community, who may have an issue with F&G. Staff training covers de-escalation of situations and planning for compliance activities. Particularly on Opening Day for Duck shoot season. Planning is done in advance for this with staffing, on likely issues or hazards.

Management of Change

There is no formal Management of Change process or procedure evident in the H&S management systems reviewed. Previous sections regarding policy updates and personnel changes failed to specify which areas required review and revision.

This is an area that should be considered as part of the H&S management system review to incorporate a process and documented procedures to assist the organisation in going some way to meeting its Legal and PCBU requirements.

Competence

From the sites visited there is currently no one on site elected as a H&S Representative (HSR) or any H&S specific training other than fire extinguisher and first aid is undertaken. Some regions benefit from have rangers who have been in the role for periods greater than 22 years and their experience.

Regions have Honorary Rangers, who are trained to the level of holding Warrants like the F&G Rengers and CERT training.

The teams I met are passionate about their work and have grown their experience over a long time. There is some disconnect between the longer-term rangers to the some of the newer rangers in their perceptions to training and risk documented procedures.

The staff interviewed advised they have had significant training over and above their Ranger Warrant and CERT Ticket, such as first aid, boat masters, spraying to mention a few. Not all have all the same qualifications. The training is provided for those working in specific areas where their job role requires it.

Some regions have a basic skills matrix available. Document control is an area still requiring work to ensure there is a regular review of this document to ensure training is kept current and the register has a date of last review to show it currency.

Document Control & Operations

Document Control is an area of concern and requires some work to ensure it is robust, and all staff are using it appropriately. This helps to identify the most current document, the format of the document when created the version in use, along with protection of sensitive information. A Management Review is conducted for the Work Annual Plan, with progress reports presented at each council meeting. An external audit of the system occurs annually as part of the constitution. This report reviews the outcomes and reports on them as such. They are not measured against the annual work plan or any other criteria.

Once the strategic plan and objectives and targets are developed annually using the SMART process this would provide a much more robust report on outcomes for the regions. The metrics from the annual work plan can be incorporated into this as well.

The Manager of the Region should have an annual performance review undertaken by members of the Council. All performance reviews for staff are to be undertaken by the Manager in the region. Managers believe that the employment and management of staff has been devolved to their role by the Council. These reviews do not always occur as regular as planned.

The regions use the national policy Management and remuneration policy dated August 24 2023 when undertaking this process

Employee consultation and participation is active in the regions. A record is not always kept of this activity as many do not have H&S committee meetings due to the size of the region. All regions plan a weekly planning meeting on the Monday to discuss and plan for the weeks work ahead. H&S can be part of this meeting. Meeting minutes are taken with notes. Any outstanding actions from the prior meeting are not brought forward to record progress or close out.

Specific Health and safety meetings do not occur at most of the regions visited. H&S meetings should occur at least quarterly with the whole team. Though monthly meetings keep the information more current when discussing H&S matters at the time it is fresh in people's minds. This give the team an opportunity to be more involved in H&S within the organisation.

A H&S report is part of the Council Pack prepared prior to the Council Meetings. The headings offer little benefit, and only limited details are given. A review is required of this report to develop it so it is of value to the Council and Region.

Communication varies between regions. When out on the job each region has its own version of communication. One region uses What's App used by the group to communicate. The staff also take with them a personal locator beacon and Mobile phone. Other regions use SafeAtHome APP along with their "Track me until". Others use a version of the above systems but do not use the full capability of them. At least they all have a SOS button with them to activate if required. Not all apps in use are as good as others and the NZC should consider one version for all.

Contractor Management

The regions use contractors to undertake different work. The responsibility for use of contractors was not fully understood. The examples seen showed that the region needed a document procedure on the engagement of contractors. If an incident had occurred with a contractor engaged by the region there are legal responsibilities that they have the competency, insurances and work planned so as not to harm themselves or others. This is a priority to review and understand prior to the work commencing. If a long-term contractor used periodically then a review process should be used to ensure the insurances and training is kept current.

A lot of regions had written in the H&S management a procedural document for management of contractors but had not been followed. Even if out of date it was better to follow the older version procedure than none.

Emergency Management and Preparedness

The regions all had some emergency management in place. Some had firefighting equipment in place and others not. Those in place were being checked regularly. Some Regions undertake fire drills as per the legislative requirement however some haven't. This is a serious break of workplace safety, and each region must undertake these as per the legislation.

Generally, there are posters at the regions offices giving details of the evacuation and covered at reception for visitors. These need document control such as version numbers and dates to ensure these are current. Wardens are required and this responsibility is to be assigned to a staff member and a backup in their absence. Training in the process of evacuation should be undertaken as well as fire extinguisher use. Some regions have a building warrant of fitness in place which requires the fire drill to be undertaken 6 monthly.

Site Visits

Site visits were undertaken at the regions. Some to wetlands, others to undertaking compliance of rivers or lakes and the last region visited as it was a large complex we did a review of the site. The procedures used to track a worker outside the office environment generally are robust. Communication is good however some of their work takes them outside cell phone cover, but they still have GPS signal with the SOS button if required. I saw one region using a check in hourly when away from the office which is a great initiative.

Two of the sites visited were very tidy, and storage of items well set up. A credit to them. The other two sites were untidy in their workshops, sheds. Control of chemicals was poor as was the management of electrical items, and gases. Their site report has covered these in depth as there were some legislative controls that were not being met at these sites. Test and tagging of electrical items, Hazardous Substance controls examples were evidenced.

All items on the site needs a home and any waste and non-useful or old equipment items removed from site to reduce clutter which provides trip hazards. In one region there were loads of sheds and these have items stored in them for different activities undertaken.

Item Number	Fish and Game Reforms NZC Will Say Table Auckland Waikato Draft Positions
Author	David Klee, Chief Executive
Purpose	For Decision
Executive Summary	<p>The New Zealand Fish and Game Council has prepared a Will Say table setting out its preliminary positions in relation to the proposed Fish and Game reforms.</p> <p>In response, the Chair and Chief Executive have added an Auckland Waikato column to the table, setting out draft regional position statements. These draft positions have been developed based on previous Council feedback, resolutions, and discussions, and are intended to reflect Auckland Waikato Fish and Game Council's established views on key aspects of the reforms.</p> <p>The purpose of this paper is to present the draft Auckland Waikato positions to Council for consideration prior to the meeting. Council discussion will enable confirmation that the draft positions appropriately capture Council's views, and will provide a clear foundation for any further engagement, including preparation of a select committee submission should this be required.</p>
Discussion/Analysis	<p>The Will Say table has been developed by NZC as a communication and alignment tool to articulate proposed national positions on the Fish and Game reforms.</p> <p>Recognising the significance of the reforms and the likelihood of further consultation, the Chair and Chief Executive have prepared draft Auckland Waikato position statements to ensure that the region's views are clearly articulated, internally consistent, and grounded in previous Council feedback.</p> <p>The draft Auckland Waikato positions draw directly on matters previously raised by Council, including governance roles and responsibilities, regional autonomy, proportionality of national policy settings, resourcing implications, consultation processes, and the importance of early engagement with regional operational expertise.</p> <p>Council consideration of the draft positions prior to the meeting will assist in confirming that they accurately reflect Council's views. This will ensure that any subsequent discussions with NZC, Ministers, or officials are informed by a clear and agreed regional position.</p> <p>Should the reforms progress to a select committee process, an agreed set of Auckland Waikato positions will also provide a robust foundation from which a formal submission can be prepared.</p>
Links to Previous Papers/Decisions	Previous meeting workshops captured in meeting minutes discussing councils' position on the various reform topics.
Attachments	NZC Will Say Table Fish and Game Reforms with Auckland Waikato draft position statements.

Recommendation	That Council consider the draft Auckland Waikato position statements included in the NZC Will Say table, and confirm whether they appropriately reflect Council's views to inform further discussion at the meeting and any subsequent engagement, including preparation of a select committee submission if required.
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Decision Record	Moved by: Seconded by: Carried / Lost:
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Appendix Three – Schedule of Legislative Amendments for Fish and Game Governance and Organisational Improvements Amendment Bill

Key to abbreviations used in table:

NZC = New Zealand Fish and Game Council; **FGC** = Fish and Game Council;

CA = Conservation Act 1987; **FFR** = Freshwater Fisheries Regulations 1983; **FGCER** = Fish and Game Council Elections Regulations 1990; **SFGMP** = sports fish and game management plan;

WA = Wildlife Act 1953; **WR** = Wildlife Regulations 1955; **TFR** = Taupo Fishery Regulations 2004

Implementation Timing assumes Royal Assent occurs before 1 August 2026 – Y1 1 Sept 2027; Year 2 1 Sept 2028

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
Functions Phase 1: day after Royal Assent					
Nationwide policy consistency					
1.	<p><i>General policy functions.</i></p> <p>NZC is responsible for coordinating the work of FGCs but currently lacks the function to develop policies for FGCs, limiting national coordination.</p>	<p><i>NZC to develop national policies.</i></p> <p>NZC gains the ability to develop national policies for the work of Fish & Game. These will be non-binding (except for specific areas below) to maintain FGC independence in regional work.</p>	Support	Improves national coordination, increases organisation efficiencies, while respecting regional independence.	Supports national policy that either ensures compliance with government legislation, or improves efficiency, organisational cohesion and outcomes for license holders. Binding policy must be limited to areas where legal and statutory outcomes require a united organizational approach (eg H&S, some financial reporting and formats of reports to go to the government). Binding policies must not override regionally determined priorities, work programmes, and impact regional autonomy to prioritize objectives set in regional operational work plans.

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
					<p>To achieve a balanced approach to policy development NZC need to run a sound consultation process that includes a diverse representation of expert regional staff for operational matters. This approach is currently lacking.</p> <p>Risk that NZC policy will dominate: the Minister confirms broad NZC powers and expectations of compliance, with limited recourse for regions.</p> <p>Consultation requirements must be genuine, early, and iterative—not a tick-box exercise after NZC direction is set.</p>
2.	<p><i>Compliance</i></p> <p>Year 1 1/9/2027</p> <p>Regional inconsistency in compliance/enforcement creates questions of natural justice.</p>	<p><i>NZC to set binding compliance policy.</i></p> <p>In consultation with FGCs, NZC will set binding policy on:</p> <ul style="list-style-type: none"> • Standards of behaviour/approach for compliance activity. • Annual reporting of compliance activity. • Spatial coverage of compliance work. • Application of infringement policy. 	Support	<p>The change should provide greater consistency in approach across the organisation, with policies able to account for local circumstances.</p> <p>The policy and minimum compliance activity will be set in consultation with FGCs.</p>	<p>Supports greater consistency in compliance standards.</p> <p>Minimum compliance levels and spatial coverage must be set by regions.</p> <p>Except for the opening weekend of the gamebird hunting season. The Auckland/Waikato region lacks areas and times where there are large aggregations of licence holders. Therefore, any policy requirements must take into account feasibility within individual regions.</p> <p>National policy should set some minimum standards but should not dictate exact nature and extent of regional compliance activities. These</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<ul style="list-style-type: none"> Minimum levels of compliance work to be undertaken by FGCs. Procedures, training and standards for compliance activity. <p>The Minister will continue to approve any infringement policy.</p> <p>Note: this is not a complete list.</p>			<p>details should correctly fall upon regions to priorities in their annual OWPs determined by regional needs and resourcing/allocation priorities.</p> <p>Annual reporting must not be overly onerous to avoid prioritising reporting over on ground compliance activities.</p>
3.	<p><i>Monitoring</i></p> <p>Year 1 1/9/2027</p> <p>Inconsistent monitoring methodologies lead to incomplete national data.</p>	<p><i>NZC to set binding monitoring policy.</i></p> <p>In consultation with FGCs, NZC will set binding policy on:</p> <ul style="list-style-type: none"> Standardised methodologies (resources, licence holder activity, habitat) Spatial coverage of different types of monitoring Reporting standards Minimum levels of monitoring work 	Support	<p>The expected outcome of this provision is consistency across FGC activities and more accurate reporting, which will support national comparisons, organisational cohesion and increased efficiencies.</p> <p>Each FGC will then develop its local plan around this framework and may choose to increase monitoring effort for particular species or habitat beyond the minimum.</p>	<p>Oppose current proposal: National minimum monitoring levels must not redirect resources away from long running Auckland/Waikato datasets or higher priority regional species and habitats</p> <p>Requiring all regions to adopt the same monitoring approach dictated by national policy is not viewed as being a sound use of limited resourcing. For example, it makes little sense for regions with little top-down harvest pressure to put the same resourcing and staff effort into monitoring and evaluating duck population dynamics as we do in the Auckland/Waikato where top-down harvest pressure has the potential to a real and significant risk to population sustainability.</p>

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		Note: this is not a complete list.			<p>We support policy that requires some minimum monitoring standards to ensure regions can implement science-based management decisions. Policy should not dictate the precise nature of the monitoring to be undertaken. Current attempts to set national policy for species monitoring have failed to consider regional specific monitoring needs and sufficient consultation with regional expert staff to ensure policy is robust and nuanced enough to capture regional needs.</p> <p>Any policies also need to ensure they consider sensitive populations which require monitoring that goes beyond minimum standards and this needs to be adequately resourced.</p>
4.	<p><i>Corporate & Business Systems</i></p> <p>Duplication of effort and inconsistent standards/salaries across regions.</p>	<p><i>NZC to set binding corporate policy.</i></p> <p>In consultation with FGCs, NZC will set binding policy on:</p> <ul style="list-style-type: none"> • Business processes and systems • Corporate and personnel policies (e.g., salary bands) • Health and safety (minimum standards) 	Support	<p>Efficiency gains are expected from reducing duplication of effort and resources across regions.</p> <p>Further efficiency gains will come from the NZC setting common templates/forms and timeframes, as well as employing specialist staff to work across regions.</p>	<p>Oppose in part. Some efficiency gains may be possible, but Auckland Waikato already operates at a lean scale. Mandatory corporate frameworks risk increasing administrative burden without offsetting resourcing or demonstrable efficiency gains.</p> <p>Increased reporting, auditing, and compliance requirements must be explicitly resourced, not assumed to be met through “efficiencies” that do not exist in small regional offices.</p> <p>Thus far, policies generated by NZC have increased</p>

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		Note: this is not a complete list.			<p>the complexity and reduced the efficiency of reporting.</p> <p>Mandatory adherence to NZC-set corporate and policy frameworks may reduce regional flexibility and slow decision-making.</p>
5.	<p><i>Advocacy</i></p> <p><i>Phase 1 Needed by Royal Ascent</i></p> <p>Some regional advocacy/court actions have conflicted with wider F&G interests.</p>	<p>NZC to set binding advocacy policy on:</p> <ul style="list-style-type: none"> • General advocacy to advance the interests and aspirations of anglers and hunters. • Statutory advocacy. • Court and tribunal proceedings • NZC can intervene if FGC action contradicts binding policy. <p>A national advocacy strategy may be developed to support this work.</p> <p>All FGC court actions, other than for enforcing offences, will be subject to the direction of the NZC, except when the FGC is challenging the NZC or another FGC, in</p>	<p>Support in principle [likely with amendments]</p> <p>[wording of the Bill will be important here and NZC position may change depending on the Bill]</p>	<p>The Minister is clear that Fish & Game’s advocacy function will remain strong.</p> <p>FGCs retain their advocacy roles but must act within the parameters of the advocacy policy defined by the NZC (in consultation with FGCs). FGCs will still decide what advocacy activities to undertake.</p> <p>A national binding advocacy policy will guide FGCs’ and the NZC’s advocacy actions to ensure they are consistent and are taken in the interests of the organisation and licence holders.</p> <p>The NZC, and sometimes the Minister, will have a role in approving court action relating to advocacy.</p> <p>Minister approval for court proceedings will only be needed where the proceeding:</p> <ul style="list-style-type: none"> • challenges the NZC or another FGC; or, • involves a conflict of interest; or • falls outside Fish and Game’s statutory functions; or 	<p>Does not support NZC or Ministerial approval being required for regional advocacy or court action. This creates unacceptable risk of missed statutory deadlines and undermines the ability to respond quickly to local environmental threats.</p> <p>A “national advocacy policy” must not restrict regionally nuanced positions and must not be used to silence regional positions on local RMA or freshwater issues.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<p>which case Ministerial approval will be needed.</p> <p>NZC to be empowered to intervene in local advocacy actions undertaken by FGCs when such actions are contrary to the agreed-upon binding advocacy policy.</p>		<ul style="list-style-type: none"> is inconsistent with Fish and Game’s advocacy policies; or exceeds pre-determined triggering thresholds (e.g. financial cost, reputation risk, or resource demands, etc.) as developed by the NZC, in consultation with FGCs, and approved by the Minister. <p>The binding advocacy policy will describe the powers of the Minister in relation to advocacy functions. The Bill will be scrutinised to ensure the Minister’s powers to intervene in advocacy matters are set at an appropriate level.</p>	
6.	<p><i>Sports Fish and Game Management Plans</i></p> <p><i>Phase 1 – Royal Ascent</i></p> <p>NZC cannot currently determine policy content in SFGMPs.</p>	<p><i>NZC to determine minimum provisions.</i></p> <p>In consultation with FGCs, NZC can set minimum provisions for draft SFGMPs regarding:</p> <ul style="list-style-type: none"> Compliance & enforcement Monitoring Statutory planning processes 	Support	<p>NZC policies should allow regional choice within the agreed framework.</p> <p>This approach is based on other conservation planning documents.</p> <ol style="list-style-type: none"> Legislation provides the highest-level direction. General Policies provide direction and guidance on how the legislation should be implemented in general. Local management plans step out what is to be done in the local context. 	Supports minimum content standards only. NZC must not prescribe substantive management outcomes or constrain regionally tailored responses to local fisheries and hunting pressures.
Functional support					
7.	<p><i>NZC Work Plan</i></p> <p><i>Year 1 1/9/27</i></p> <p>Need for transparency/ accountability with new NZC functions.</p>	<p><i>Annual Operational Work Plan</i></p> <p>NZC will be required to prepare an annual operational work plan (mirroring the FGC</p>	Support	The new provision in the Fish and Game Bill will sit alongside other annual report requirements.	<p>Support NZC submission in part</p> <p>Agree that there needs to be greater transparency of NZC work programmes. NZC operational plans</p>

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		requirement) to provide outcomes/measures for reporting.			<p>must be clearly costed so regions can see what is being funded nationally versus regionally.</p> <p>NZC should keep a publicly available log of real time progress on work plan implementation.</p>
8.	<p><i>Specialist staff</i></p> <p><i>Phase 1 Royal Ascent</i></p> <p>Small FGCs struggle to engage specialist staff (scientists, planners, etc.).</p>	<p><i>NZC to provide specialist expertise.</i></p> <p>There will be a new function for NZC to employ specialist staff (planners, ecologists, lawyers, etc.) to work across multiple regions.</p>	Support	F&G Bill to enable NZC employment of specialist staff.	<p>Oppose</p> <p>We absolutely support regions having access to specialist expertise where it complements and supports existing regional capability. Specialist roles should be designed to assist regions rather than replace or override regional technical judgement and on ground experience.</p> <p>Allowing NZC to reallocate staff resourcing nationally without clear constraints or safeguards creates an unacceptable risk that experienced frontline regional staff will be removed from regions and replaced by centrally based roles with limited understanding of regional conditions, statutory responsibilities, and stakeholder relationships. This would weaken delivery at the regional level and reduce organisational effectiveness.</p> <p>Auckland Waikato does not support additional resourcing being directed toward employing new technical staff based in Wellington. Regions already employ highly skilled, passionate staff with deep technical expertise and strong local knowledge</p>

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					<p>who are well placed to undertake specialist functions where required and who also assist with other regions when they are needed.</p> <p>In the Auckland Waikato region, staff already contribute significantly to national priorities, including national species monitoring and research projects, biosecurity response, maritime functions, website development, and other cross regional initiatives. This support is currently delivered through structured secondments and collaborative arrangements, which are viewed as the least disruptive and most efficient mechanism for providing specialist capability to NZC and smaller regions while retaining frontline capacity and institutional knowledge within regions.</p> <p>We consider that any future approach to specialist resourcing should prioritise the use of regional expertise through secondments or similar models, with clear safeguards to protect regional delivery and ensure that national coordination functions remain enabling rather than directive.</p>
9.	<p><i>Servicing and reporting</i></p> <p>Servicing councillors, business planning and performance reporting need more support.</p>	<p><i>Minimum work programmes:</i></p> <p>NZC to determine (in consultation with FGCs) minimum work programmes for FGCs regarding:</p>	Support	It is NZC's responsibility to ensure these minimum programmes are adequately funded.	<p>Oppose</p> <p>Regions should not be expected to absorb additional servicing or reporting work within existing budgets. If a region functions well, with good governance and performance – they shouldn't have any "servicing" imposed on them. If</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<ul style="list-style-type: none"> • Servicing FGC meetings/councillors • Annual business planning & performance monitoring 			<p>they don't perform well, they should have it imposed at their cost (or split equitably)</p> <p>Regions all have their own cultures that reflect regional differences. As long as statutory requirements are met, regions don't need the added bureaucracy and expense of being "serviced" and monitored.</p>
10.	<p><i>Templates and timeframes</i> Phase 1 – Royal Assent.</p> <p>Inconsistent formats make national collation/comparison difficult.</p>	<p>NZC to determine forms/templates and timeframes for:</p> <ul style="list-style-type: none"> • Work planning & annual reporting • SFGMPs • Anglers and Game Notices 	Support in principle	Improves efficiency and alignment between regions.	<p>Support with Amendments</p> <p>Consistent templates and reporting timeframes are supported where they demonstrably reduce duplication and improve clarity. There is value in greater national consistency where this simplifies reporting requirements and improves transparency without increasing compliance burden.</p> <p>However, recent experiences indicate that there are risks. Fore example, the consolidated annual reporting framework recently proposed by NZC introduces new metrics and reporting requirements that duplicate existing statutory, financial, and performance reporting obligations already met by regions. In particular, the introduction of additional three-monthly reporting and expanded national metrics represents a significant increase in administrative effort for limited additional benefit.</p>

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					<p>Regions are already subject to established Tier 3 reporting standards, external audit requirements, and multiple layers of internal and external accountability. The proposed approach risks creating parallel reporting systems that increase complexity rather than streamlining it. This has the practical effect of diverting staff time away from frontline delivery.</p> <p>There is also concern that the level of prescription within the proposed metrics does not adequately recognise differences in regional scale, complexity, risk profile, and workload. A one size fits all reporting framework is unlikely to be proportionate across regions and may unintentionally disadvantage smaller or operationally focused councils.</p> <p>Templates must therefore remain flexible and scalable, allowing regions to report in a way that is commensurate with their size, functions, and statutory responsibilities. Reporting requirements should build on existing audited processes wherever possible rather than introducing new layers of reporting.</p> <p>We recommend that the proposal be amended to explicitly require early and ongoing consultation with regions in the development and refinement of all templates. Regional staff expertise should be used to ensure reporting frameworks are practical, efficient, and aligned with existing obligations, and</p>

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					that they support improved outcomes rather than increased bureaucracy.
Issuing of licences Phase 1 Royal Assent					
11.	Multiple handling of money via regions is inefficient.	<p><i>NZC to issue licences & collect revenue</i></p> <p>NZC will issue all licences and receive all fee revenue directly. "Special licences" renamed "Special permits".</p> <p>The existing method of selling licences would continue (central website operated by a specialist contractor, with agents selling via a portal).</p>	Support	This should reduce the administrative burdens (such as avoiding triple handling of licence money) in the current system and provide more effective management and distribution of licence fee income.	<p>Support in part</p> <p>We support centralised licence issuing where it improves administrative efficiency and consistency. Administrative systems should remain simple and proportionate to avoid unnecessary cost escalation and complexity.</p> <p>However, we do not support the use of centralised licence issuing as a justification for increased central control of regional revenue. At present, there is no clear NZC budgeting policy and there is limited transparency around how regional funding allocations are determined through the national budgeting process.</p> <p>Without a transparent and agreed allocation framework, further centralisation of revenue management risks weakening regional autonomy</p>

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					<p>and reducing certainty for regional planning and delivery. Any administrative efficiencies achieved through centralised systems should benefit regions directly and must not be used to shift decision making authority over regional revenue away from regional councils.</p> <p>If regions are funded according to a standard funding model, it doesn't really matter who collects the revenue.</p>
<p>Allocation of funding</p> <p>Collection from Royal Assent, Funding model in place for 2027/28 financial year.</p>					
12.	<p>Current historical-based allocation doesn't always align with need/activity.</p> <p>The annual allocation of funding to each FGC (after redistribution by NZC) is largely based on the level of funding received by each FGC in previous years. This means management effort is not always directed to areas of greatest potential benefit to licence holders.</p>	<p><i>New funding model.</i></p> <p>The new funding model is yet to be fully developed and criteria will be set by Minister in secondary legislation.</p> <ul style="list-style-type: none"> • Allocation determined by NZC according to a model set in secondary legislation. • Funding for the NZC to cover the cost of its core activities. • Bulk of funding based on licence holder activity in region. 	Support with amendment	<p>The NZC identified this provision could have significant benefits for the organisation. However, if it is not drafted well, the risks are also significant.</p> <p>A key concern is that DOC is developing the funding model on behalf of the Minister. It will be important that the funding model takes into account the work of F&G, and activity.</p> <p>The NZC supports setting resource allocation through secondary legislation. The draft allocation model should be consulted on with the organisation before it is embedded through secondary legislation.</p> <p>The NZC would like firm commitment that the organisation will have an ability to review and provide submission on the funding model, as it is drafted and prior to the Ministers final decisions through secondary legislation.</p>	<p>Support with amendments</p> <p>The funding model is critical to the effective operation of the organisation and remains insufficiently defined. Auckland Waikato does not support implementation through secondary legislation without full consultation and a clear opportunity for regions to make submissions prior to finalisation.</p> <p>Greater transparency is required regarding the committee that has been established to consider funding allocation, including its membership, mandate, decision making criteria, and reporting obligations to regions.</p> <p>Granting NZC control of revenue represents a significant shift in central authority and must be accompanied by strong safeguards to prevent unchecked growth in national office expenditure.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<ul style="list-style-type: none"> • Must ensure funding for key activities, national research, and NZC work. • Includes a contestable fund. <p>The NZC will also have a new function to develop, in consultation with FGCs, a financial strategy.</p>		<p>The Minister also wants to encourage FGCs to explore alternative funding mechanisms to deliver projects that benefit anglers and hunters.</p>	<p>There is a clear risk of top slicing of regional revenue to support national office expansion without adequate justification or accountability. AW region will only support a national funding model if in tandem with capping NZC or national office funding and adopting a formula based allocation approach, similar to that proposed for regions. It is suggested that any cap be set as a fixed percentage of total organisational revenue to provide certainty, discipline, and transparency.</p> <p>It is also imperative that regions retain the ability to seek and receive external funding to supplement licence holder derived income. Such funding should remain entirely independent of licence holder revenue allocation and the national budgeting process, ensuring that regional initiative and partnership development are not discouraged or penalised.</p> <p>A national funding model is not compatible with a highly prescriptive organisation. Essentially, bulk funding regions according to a model is one option but centrally dictating processes through binding policies is in conflict with this approach.</p>
Transparency and reporting					

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
Performance reporting Phase 3 2027/28 first year of reporting					
13.	<i>Performance measures</i> Operational work planning lacks accountability and transparency, and is not aligned with existing annual reporting requirements for Fish and Game	<i>Enhanced OWP Requirements:</i> <ul style="list-style-type: none"> • A concise explanation of what each class of outputs is intended to achieve • A concise explanation of how the performance of each class of outputs will be assessed. NZC and FGC annual operational work plans to be considered final once dated and signed by the Chair and the Manager of the respective FGC or NZC. The OWP must align with SFGMP and NZC binding policy.	Support	Recommend strike out section 26Q (3) (a – e) and include all OWP provisions for NZC and regions in the F&G Bill. The changes will introduce a better link between planning and work programmes and more transparency.	Support subject to clarification. We support improved alignment between the OWP and annual reporting processes. Better alignment has the potential to reduce duplication and improve clarity where it is implemented in a practical and coordinated manner. Any additional reporting requirements must be proportionate, clearly justified, and appropriately resourced to avoid administrative creep. Without this, increased reporting obligations will materially reduce staff capacity for frontline and field-based delivery.

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
14.	<p><i>Report against performance</i></p> <p>Misalignment with Public Finance Act 1989/Crown Entities Act 2004.</p>	<p><i>Annual reports</i></p> <p>Must contain statements of performance against the Annual Operating Plan. Each FGC annual report to be dated and signed by the FGC Chair and FGC Manager before submission to NZC.</p>	Support	<p>Recommend strike out section 26Q (3) (a – e) and include all OWP provisions for NZC and regions in the F&G Bill.</p> <p>The combined annual report will indicate performance across the organisation.</p>	Support NZC Position
15.	<p><i>Full reporting on enforcement</i></p> <p>FGCs must report annually on enforcement activity under an infringements system, but not on actions leading to court action (complaints from public, adherence to procedures, etc.)</p>	<p><i>Expanded reporting</i></p> <p>FGCs must report annually on all enforcement work (including warnings, interactions, etc.) under any infringement system.</p>	Support	<p>The changes will enhance transparency across the organisation. DOC needs this data to ensure legislation meets enforcement needs (Wildlife Act/Conservation Act).</p>	<p>Support subject to clarification</p> <p>We support improved transparency in enforcement reporting.</p> <p>However, the scope of enforcement reporting must remain simple and proportionate. If reporting requirements become overly detailed or prescriptive, there is a real risk that compliance staff time will be diverted away from field-based enforcement and education activities into administrative roles, reducing overall compliance effectiveness and frontline presence.</p>

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16.	<p><i>Combined annual report</i></p> <p>NZC and each FGC is independent and provides its own separate annual report to Minister, none of which are reviewed individually, or across Fish and Game as a whole.</p>	<p><i>Single combined report</i></p> <p>The NZC will compile all 13 annual reports (NZC and FGC reports) into a single annual report for the Minister to present to the House.</p> <p>The NZC combined annual report will be required to:</p> <ul style="list-style-type: none"> • Contain the statements of performance against performance expectations for the NZC and each FGC (as provided by each FGC); and • Summarise any discrepancies between the performance and performance expectations of the NZC and each FGC; and • Provide an overall review of Fish and Game (all 13 councils) as a whole. 	Support	<p>The timeframe to achieve this and set up chartered accounts to make input information consistent must be set realistically.</p> <p>It remains a requirement under the Conservation Act 1987 for each FGC to prepare a separate annual report – as each FGC has its own management and operational plans, activities and associated expenditure.</p> <p>There is no requirement for each FGC to use the same auditor.</p>	<p>Support subject to amendment</p> <p>We support the use of a combined annual report provided it does not obscure regional accountability or dilute the visibility of regional performance and achievements.</p> <p>The current proposal, which requires regions to prepare an independent annual report while also supplying a separate and different set of information for a consolidated national report, risks unnecessary duplication and increased administrative burden.</p> <p>Any combined reporting approach should build on existing regional annual reports and audited processes rather than introduce parallel reporting requirements.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<p>The NZC combined annual report must be dated and signed by the NZC Chair and NZC Manager before submission to the Minister.</p>			
17.	<p><i>Information to enable coordination</i> NZC hindered by lack of information flow from FGCs and vice versa.</p>	<p><i>Power to require information</i></p> <p>The NZC to have a clear oversight function and a new power to require FGCs to provide information on request related to:</p> <ul style="list-style-type: none"> • financial information • performance reporting information • compliance information (including actions of enforcement officers) • monitoring information and data • matters relating to adherence with 	Support	<p>Sharing of information will enable regions to share work more easily. Information will be more transparent and efficiencies can be gained.</p> <p>F&G Bill to be in addition to s26C of the Conservation Act (Functions of NZC) to enable systems in the organization to better provide for sharing of information.</p>	<p>Support subject to clarification</p> <p>We support reciprocal information sharing between NZC and regions.</p> <p>However, any information requests must be reasonable, clearly defined, and directly relevant to statutory or agreed reporting purposes. Requests should not create open ended or ongoing compliance obligations that increase administrative burden or divert staff from core regional delivery functions.</p> <p>Any programmes around information sharing must demonstrably improve outcomes and efficiencies for the organisation – not just create more bureaucracy and take staff out of the field.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<p>corporate policies, including personnel policies (subject to Privacy Act considerations for staff employed by the FGC rather than the NZC).</p> <p>FGCs will have a new power to require the NZC to provide information on request related to:</p> <ul style="list-style-type: none"> • financial information • performance reporting information • compliance information (including actions of enforcement officers) • monitoring information and data • matters relating to adherence with corporate policies, including personnel policies (subject to Privacy Act considerations for staff employed by the 			

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<p>NZC rather than the FGC)</p> <ul style="list-style-type: none"> matters relating to the development by the NZC of binding policies. 			
18.	<p><i>Information for audits</i></p> <p>Phase 1 – Royal Assent</p> <p>NZC has a function to audit the activities of FGCs but lacks power to require financial info for audits.</p>	<p><i>Audit powers</i></p> <p>The NZC is to have a function to audit the activities and performance of FGCs, and of Fish and Game as a whole.</p> <p>A FGC must provide any information (including financial, performance, or other information on its activities, assets or liabilities) that is requested by the NZC as part of an audit.</p>	Support	F&G Bill to be in addition to s26C of the Conservation Act (Functions of NZC) to enable obtaining information to inform audit processes.	<p>Support subject to clarification</p> <p>Auckland Waikato supports improved audit transparency and clarity of audit powers in principle.</p> <p>However, the scope, frequency, and application of audits must be clearly defined, proportionate, and risk based. Audit activity must not duplicate existing external audit, statutory reporting, or established operational assurance processes already undertaken by regions.</p> <p>Information requests made for audit purposes must be reasonable, targeted, and directly relevant to the audit being undertaken. Audit powers should not be used to create open ended or routine information demands that increase administrative burden or divert regional staff from core statutory and frontline delivery functions.</p>
<p>Reporting to DOC</p> <p>Phase 1 Royal Assent</p>					
19.	DOC is not always aware of legal proceedings under the CA, despite having	<p><i>Mandatory reporting</i></p> <p>NZC and FGCs are to be required to report to DOC on</p>	Oppose	The Fish and Game Bill will be in addition to s26C of the Conservation Act (Functions of	<p>Support NZC Postion: We do not support mandatory reporting to the Department of Conservation on legal proceedings. This</p>

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	accountability for administering the Act	circumstances and results of all legal proceedings made under the CA, as is currently required under WA.		NZA) to enable obtaining information to inform audit processes. Legal cases are already reported to NZC every 2 months. The proposed provision creates unnecessary bureaucracy.	requirement would introduce unnecessary additional process and would duplicate existing reporting and accountability arrangements already in place through NZC.
Modernising Fish and Game					
Phase 1 Royal Assent					
20.	<i>Communication with licence holders</i> Fish and Game can have difficulty communicating with licence holders on matters of interest or consultation through newspapers alone.	<i>Electronic communication</i> Provide that, in addition to newspapers, Fish and Game may place public notices and consult with licence holders via websites or email.	Support	The SFGMP consultation requirements could be strengthened to align with the NZC SFGMP policy.	Support NZC Position modern communication tools to improve engagement with licence holders and consultation effectiveness.
21.	<i>Online meetings</i> There is uncertainty about legality of NZC and FGC meetings held online.	<i>Legalise online meetings</i> Allow NZC and FGC meetings to be held online, and votes taken (including electronically), as if meeting was in person.	Support		Support NZC Position
22.	<i>Role clarity (notices)</i> There has been uncertainty within Fish and Game about the	The role of the NZC will be to collate and edit (form, readability and useability only) Anglers and Game	Support		Support subject to clarification We support improved role clarity regarding the preparation and approval of Sports Fish and Game

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	<p>NZC's role in processes for approvals of SFGMPs, Anglers Notices, and Open Season for Game Notices.</p> <p>Anglers Notices and Game Notices are becoming unnecessarily complex and different between regions, but there is also a need to maintain FGC independence over local resource management decisions.</p>	<p>Notices before submitting them to the Minister for approval.</p> <p>NZC may provide independent advice to the Minister on the suitability of provisions in draft SFGMPs submitted to the Minister for approval by FGCs.</p> <p>However, the NZC will not be able to amend or decline notices before submission to Minister.</p>			<p>Management Plans, Anglers Notices, and Open Season for Game Notices.</p> <p>NZC must not have the ability to amend, override, or decline regional notices prior to submission to the Minister. Regional Fish and Game Councils must retain independent decision-making authority over local resource management and regulatory settings.</p> <p>Consistency should not come at the expense of regional responsiveness or local management outcomes.</p> <p>Where the Minister seeks further information or clarification regarding the rationale for regional decisions contained in Anglers Notices or Game Notices, direct engagement with the relevant regional council is recommended. This approach would improve efficiency, reduce delays in publication, and preserve clear accountability for regulatory decisions.</p>
<p>Ministerial powers</p> <p>Phase 1 Royal Assent</p>					
23.	<p>Review function</p> <p>Minister has no explicit function to review the operations or performance of FGCs and NZC</p>	<p><i>Ministerial review</i></p> <p>Minister to have a function to review operations and performance of Fish and Game as a whole, or</p>	<p>Oppose in part</p>	<p>NZC will continue holding regular meetings on topical issues and no surprises advocacy work, with copies of submissions going to Minister's office with 5 working days for comment.</p> <p>Reviews of NZC or FGCs should be undertaken by an independent panel. There is precedent of</p>	<p>Support NZC Position: We do not support unilateral Ministerial review powers. Any review of NZC or regional Fish and Game Councils should be undertaken by an independent panel to preserve organisational independence, transparency, and confidence in the review process.</p>

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		<p>individual FGCs or the NZC at any time.</p> <p>NZC and FGC will be required to provide any information requested by the Minister as part of a review, including any financial, performance, or other information on their activities, assets, or liabilities.</p>		<p>this from 2021, when an independent review was successfully completed. This is our preferred approach to organisational review.</p> <p>NZC is concerned that the responsibility of review will fall to DOC through this provision. DOC is not the appropriate authority to review Fish and Game because their philosophies and mandates do not align. DOC do not have a deep understanding of the functions and needs of Fish and Game.</p> <p>The NZC would like to reiterate that if the Minister asks for information through NZC then it will be provided.</p>	
24.	<p><i>Anglers Notice amendment</i></p> <p>Minister cannot currently amend Anglers Notices (unlike Game Notices).</p>	<p><i>Power to amend</i></p> <p>Minister to be able to approve OR amend a draft Anglers Notice.</p>	<p>Support with amendment</p>	<p>The Minister already has the power to amend the Open Season for Game Notice before approving it under the Wildlife Act.</p> <p>The proposed changes would extend a similar power to Anglers Notices.</p> <p>We support this provision with the specification that the Minister should engage with FGCs prior to making amendments to Anglers. We would like to see a feedback process developed to ensure Fish and Game can understand why the changes occurred.</p> <p>The NZC will advise the Minister on regulations.</p>	<p>Support NZC position. We support this provision in principle, subject to safeguards. Any Ministerial amendment to an Anglers Notice should require prior engagement with the affected Fish and Game Council or Councils. A clear feedback process should also be established so that regions are informed of the reasons for any changes and can understand how and why amendments were made.</p> <p>This approach would support transparency, maintain constructive relationships, and ensure that regional expertise and local management considerations continue to inform regulatory settings</p>

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25.	<p><i>Game Notice amendment</i></p> <p>Minister cannot amend an approved Game Notice until after season begins.</p>	<p>Minister to be able to amend an approved Game Notice before or during the Open Season that it relates to.</p>	<p>Support with amendment</p>	<p>Same as above</p> <p>Legislation requires a tweak to align both anglers and game notices and the NZC role</p>	
Governance					
Eligibility to vote in elections					
Phase 2 Aug 2027 elections					
26.	<p>Restrictive eligibility (only current adult whole-season holders).</p>	<p><i>Expanded eligibility</i></p> <p>All New Zealand residents who have held an adult sports fishing or game bird hunting licence in the three years leading up to a Fish and Game election to be eligible to vote in that election.</p> <p>Buyers of licences to be automatically included on electoral roll, rather than needing to ask to be on roll.</p> <p>The partner of the holder of a family whole-season licence to be able to vote in FGC elections.</p>	<p>Oppose in part</p>	<p>We support more participation and engagement, but there needs to be a meaningful balance between the type of licence (day vs. seasonal) and time that licence has been held, and the ability to stand and vote in elections.</p> <p>This provision would mean any person who has held an adult hunting or fishing licence at any point in the 35 months immediately preceding the close of the roll for the election will be able to vote. This risks licence holders who have little interests in Fish and Game being able to stand and vote – we oppose this.</p> <p>We propose any whole season licence holder and both partners on a family licence should be eligible to vote.</p> <p>Junior licence holders who have not bought a licence since they turned 18 will not be able to vote in Fish & Game elections.</p>	<p>Support NZC position .</p>

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				We support buyers of licences being automatically included on the electoral roll.	
27.	<p><i>One vote only</i></p> <p>Licence holders currently vote in the regions they buy their whole-season licence(s) from, and if they buy their fishing and hunting licences in different regions, they may vote in elections for two regions.</p>	<p><i>Single region voting</i></p> <p>Licence buyers will be required to select a voting region for election purposes when buying a licence, and will no longer be able to vote in two regions.</p> <p>Where a person purchases more than one licence to hunt or fish in the three years before an election, the FGC region specified at the time the most recent licence was purchased shall be the region they are entitled to vote in.</p>	Support		Support NZC Position: Single region voting to avoid duplication and confusion.
28.	<p><i>No subregions</i></p> <p><i>Phase 1 Royal Assent</i></p> <p>The current subregions do not deliver local representation as voters vote for candidates in all subregions and a candidate can stand anywhere.</p>	<p>Remove provisions for Fish and Game regions to have subregions.</p> <p>All candidates stand for the whole region; all voters vote for the whole region.</p>	Support	Sub-regions do not provide for better local representation and complicate voting administratively and for voters. All voters vote for candidates in all regions, and a candidate can stand in any region.	Does not oppose removal of subregions but notes loss of local representation risk in large and diverse regions.
29.	<p><i>Electoral roll maintenance</i></p> <p>Phase 1 – Royal Assent</p>	NZC will maintain electoral rolls rather than FGCs.	Support	This will formalise current practice.	

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	FGCs must maintain electoral rolls, but in practice this is being done centrally.				
Elections procedures Phase 2 1 August 2027					
30.	<i>Allow electronic voting</i> The CA provides for electronic (online) voting, but the FGCE do not.	Electronic voting to be provided for in regulations. Voting papers able to be provided via email and Internet links, in addition to via post.	Support	Regulations will provide for both electronic (online) voting and postal voting. Voting papers may be sent to voters via email/internet links or by post, depending on each voter's choice.	Support NZC Position
31.	The requirement for alphabetical listings on ballot papers favours candidates with surnames earlier in alphabet, affecting election outcomes.	Remove requirement for election candidates to be listed alphabetically by surname on ballot papers.	Support	New process should be prescribed so that name order on voting papers has a transparent process.	Support NZC Position
32.	<i>Publicity for elections and rolls</i> Elections and results currently advertised only via newspapers. Personal contact details are currently publicly available	Elections and election results will also be advertised via website and email. Voter contact details (email/address) on the roll will no longer be publicly available.	Support	Discussion required on whether the Fish and Game Bill should prescribe details, or whether it is better to have another operational document such as a election process document that is adopted by NZC and then used by all regions.	Support NZC Position

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	via electoral roll, which has raised privacy concerns.				
33.	<p><i>Keeping elections aligned</i></p> <p>The discharge of a FGC would currently result in that FGC having future elections at different times to all other FGC elections.</p>	<p>FGC election timing will be kept aligned across all regions in the event of a council being discharged by Minister.</p> <p>A council elected to replace a discharged council will hold office only until the next three-yearly elections (unless this would result in a term of less than 1 year, in which case the term shall be until the end of the term and for an additional 3 years.</p>	Support		Support NZC Position
NZ Council membership					
Phase 2: 1 Aug 2027					
34.	<p>NZC will have increased functions and responsibilities.</p> <p>FGCs may replace their NZC representative at any time, which leads to NZC members focusing on maximising benefits for their FGC, not all licence holders nationally.</p>	<p><i>Chairs as members</i></p> <p>The NZC will be comprised of the Chairs of the FGCs, in recognition of the additional roles and responsibilities.</p> <p>To deter FGCs changing their NZC representative frequently (creating policy and governance continuity difficulties):</p>	Support	<p>We oppose the proposed solution because the NZC and regional chairs already have a large workload. The proposal would place further pressure on Chairs who are volunteers with existing significant regional duties.</p> <p>The proposed solution does not resolve the perceive conflict of interest of regional representatives. No evidence is provided about that perceived conflict of interest. Continue current approach of each FGC appointing its own representative to NZC.</p>	<p>The current system is inefficient and promotes conflict.</p> <p>Regional chairs also being NZC councilors will ensure strong regional focus at NZC level, promote an efficient NZC and reduce duplication. Currently much of the chair's time is spent responding to NZC decisions that could be much more efficiently addressed at NZC level.</p> <p>With regions funded by formula, NZC workload and conflict will be reduced.</p>

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	<p>NZC may replace its Chair at any time for any reason, creating policy continuity risks.</p>	<ul style="list-style-type: none"> If a FGC replaces its Chair, the FGC must advise the NZC and Minister in writing of that replacement and the reasons for that replacement If the NZC replaces its chair, the NZC must advise the Minister in writing of that replacement and the reasons for that replacement. <p>The NZC and FGCs will appoint their own Chairs as currently occurs.</p>			<p>But if a regional chair is unable to also be a NZ councilor, an avenue should exist to put in a substitute.</p>
<p>FGC membership Phase 2 Aug 2027</p>					
35.	<p><i>Council size</i></p> <p>The current size of 12 councillors per FGC is too large given the level of decision making required.</p>	<p><i>Reduce Size</i></p> <p>Maximum of 8 elected members (plus co-opted/appointed).</p> <p>Having 12 members on FGCs does not support agile decision making and has proven difficult to sustain with many councils unable to attract a good range</p>	<p>Support with amendments</p>	<p>We support this provision with the amendment that 'maximum' is removed. We propose FGCs should have 8 elected members (no more or no less).</p> <p>FGCs would retain the ability to co-opt council members as needed, regardless of the number of elected councillors.</p> <p>We acknowledge that some regions are concerned about representation if council size is</p>	<p>Oppose</p> <p>While reducing council size to eight members may improve agility, it also risks a loss of representation, particularly in geographically large regions that continue to have contested elections.</p> <p>We do not support a fixed reduction to eight councillors. Instead, it is suggested that councils have a minimum of eight and a maximum of twelve councillors to ensure flexibility, adequate</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		<p>of suitable candidates. Shifting to eight members is a better match for Fish & Game's size and membership. It should also ease organisation of meetings, streamline decision making and make it easier to fill vacancies.</p>		<p>reduced. However, we want to support the FGCs to be agile decision-makers and to fill their elected member spaces at each election. We believe a council of 8 members would achieve both those goals.</p> <p>In addition, we propose NZC comprise of 12 elected members to ensure all 12 regions are represented.</p>	<p>representation, and responsiveness to regional scale and diversity.</p>
36.	<p><i>Include wider interests</i></p> <p>Criteria for FGC membership are too narrow, and exclude many anglers and hunters from being councillors (and exclude the interests they might represent)</p>	<p><i>Eligibility to stand</i></p> <p>Any resident adult who has held a sports fishing or game bird hunting licence in the three years prior to an election to be eligible for election to a FGC.</p> <p>The partner of the holder of a family whole-season licence (held in the three years prior to an election) to be eligible for election in FGC elections.</p>	Oppose in part	<p>As above, we support more participation and engagement, but there needs to be a meaningful balance between the type of licence (day vs. seasonal) and time that licence has been held, and the ability to stand in elections.</p> <p>This provision would mean any person who has held an adult hunting or fishing licence at any point in the 35 months immediately preceding the close of the roll for the election will be able to stand for election. This risks licence holders who have little interests in Fish and Game being able to stand, which we oppose.</p> <p>We propose amending the eligibility criteria to include whole season licence holders (sports fish or game bird), including partners on a family licence (sports fish).</p> <p>Amend s26U of Conservation Act or strike out and have all election provisions in F&G Bill.</p>	Support NZC position

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37.	<p><i>'Fit and proper person' test</i></p> <p>Current criteria whereby people are deemed unsuitable to hold FGC membership are too narrow –convictions for offences involving firearms, freshwater habitat, or any freshwater fish are as relevant as existing matters; matters from s.30 of Crown Entities Act 2004 are also relevant.</p>	<p>A person is to be not eligible to stand for election to a FGC (or remain a councillor if in office) if they:</p> <ul style="list-style-type: none"> • Are an undischarged bankrupt • Have been convicted of an offence involving freshwater fish, or game, or protected wildlife, or freshwater habitat, or the use of firearms (whether an offence under the CA or any other Act) • Have been convicted of an offence punishable by imprisonment for a term of 2 years or more, or who has been sentenced to imprisonment for any other offence, unless that person has obtained a pardon, served the sentence, or otherwise suffered the penalty imposed on the person • Are disqualified under another Act. 	Support	<p>Support provisions that require FGC members to be suitable people.</p> <p>The provisions may need amendment to make them more administratively efficient, for example a declaration from candidates and a check of elected members before position confirmed.</p> <p>Reference to 'disqualified under another Act' is too broad and uncertain and needs amendment.</p> <p>Amend s26U of Conservation Act or strike out and have all election provisions in F&G Bill.</p>	Support NZC position

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		<p>MoJ Criminal record check and public register check to be required of all election candidates to confirm eligibility prior to election (paid for by the FGC and facilitated by returning officer). Candidates to also sign a statement to that effect.</p> <p>(Note that committing an infringement offence would not prevent someone from standing for election.)</p>			
38.	<p><i>Employees as councillors</i></p> <p>Allowing people to be both councillors and employees can create accountability problems</p>	<p><i>Prohibition</i></p> <p>No FGC or NZC councillor is able to be an FGC or NZC employee while the councillor is in office.</p>	Support		Support
39.	<p><i>Avoiding immediate re-election</i></p> <p>If a person is removed from a FGC by the Minister there is nothing preventing them being immediately re-elected to office.</p>	<p><i>Stand down period</i></p> <p>If an elected councillor has been removed from office by the Minister, that person is ineligible to be a FGC member for a period of three years from the date of removal (i.e. a full term stand-down).</p>	Support		Support

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40.	<p><i>Declaration of previous removal</i></p> <p>If a person has previously been removed from office by the Minister, there is no requirement for electors to be advised of this.</p>	<p><i>Disclosure</i></p> <p>If an elected councillor has previously been removed from office by the Minister (for any reason) and that person stands again for election, they must advise electors of the previous removal.</p>	Support		Support
41.	<p><i>Remedying skills gaps</i></p> <p>Elected FGCs sometimes lack the full range of skills required for good decision-making</p>	<p>Minister may appoint up to two members (additional to elected members) onto a FGC.</p> <p>Such appointed members to be entitled to vote on any matter, but may not be elected as the FGC chair by the council members.</p>	Support	<p>Details about any payment for appointees need to be clarified. If the Minister wants to appoint a paid member onto a FGC, the Minister should pay that appointee.</p> <p>There should be some criteria for skills to avoid a scenario where councillors are appointed for reasons unrelated to skills on council.</p> <p>The DOC RIS states criteria should be included to require skills to enhance:</p> <ul style="list-style-type: none"> i. public sector governance ii. financial management iii. te ao Māori capabilities iv. technical, ecological, or scientific skills <p>The Minister disagreed with this approach and requested the ability to appoint for any reason.</p>	<p>Support subject to amendment: Appointments only to remedy genuine skills gaps. Appointees should be funded by the Crown and appointed against clear criteria.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
				We support these criteria be included in the Bill to ensure Ministerial appointees are filling a legitimate skills gap on FGCs.	
42.	<p><i>Transparency of resignation</i></p> <p>Any FGC member may resign by writing to Minister only, and NZC may not be immediately aware of situation and potential issues.</p>	<p><i>Process</i></p> <p>Any member of a FGC may at any time resign from a FGC by writing addressed to the Minister, signed and dated, with a copy to the FGC and NZC.</p>	Support		Support
43.	<p><i>Non-democratic process to fill vacancies</i></p> <p>Process for replacing elected FGC members who resign is not democratic.</p>	<p><i>Filling vacancies</i></p> <p>At any election, all vacant positions must be filled unless there are fewer eligible candidates standing than vacancies.</p> <p>A FGC can choose to fill a vacancy or vacancies, or not, by election at any time during its term if the number of its elected members is below eight but at or above a minimum of three.</p> <p>A FGC must hold an election to fill all vacant positions if FGC membership falls below the minimum number of three elected members.</p>	Support	Remove election provisions from Conservation Act and have all provisions in F&G Bill.	Support NZC position

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44.	<p><i>Member of multiple FGCs</i></p> <p>It is possible for someone to be elected as a member of two FGCs at the same time, and potentially the chair of both leading to potential uncertainty about NZC voting rights.</p>	<p><i>Prohibition</i></p> <p>Fish and Game councillors to be prohibited from serving on more than one Fish and Game Council at the same time.</p>	Support		Support
<p>Behaviour while in office</p> <p>Phase 1 Royal Assent</p>					
45.	<p><i>Removal of councillor for 'just cause'</i></p> <p>Circumstances under which Minister may remove a councillor from office are outdated and not aligned with similar legislation.</p>	<p><i>Updated powers</i></p> <p>The Minister to be able to remove any member of a FGC from office at any time for any "just cause", including misconduct, inability to perform the functions of office, neglect of duty, and breach of any of the collective duties of the FGC or NZC or the individual duties of FGC or NZC members (depending on the seriousness of the breach).</p>	Support		Support
46.	<p><i>Standards of conduct</i></p>	<p><i>Code of conduct</i></p>	Support	Developing a separate standard in the Gazette is unnecessarily time consuming. It is	Support NZC position

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	<p>Conduct of FGC meetings and behaviour of some councillors has often been less than optimal, including in relation to conflicts of interest.</p>	<p>Ensure council meetings and councillor conduct is consistent with good public entity standards and practice, including noting and taking account of conflicts of interest, by enabling the Minister to establish by notice in the <i>Gazette</i>:</p> <ul style="list-style-type: none"> • rules for the conduct of all NZC and FGC meetings • rules for the conduct of all NZC and FGC councillors while performing their duties. <p>Compliance with these rules to be mandatory for all council meetings and councillors.</p>		<p>recommended the code of conduct for public entities under the SSC is used instead. The NZC should then develop standing orders and rules for all FGC.</p>	
<p>Fees and expenses</p> <p>Phase 1 Royal Assent</p>					
47.	<p><i>Expenses</i></p> <p>FGC and NZC members cannot be reimbursed for expenses.</p>	<p><i>Reimbursement</i></p> <p>Enable NZC and FGC councillors to be reimbursed for actual and reasonable expenses (funded from licence fee revenue) incurred in</p>	Support	Support Councillors to be reimbursed for expenses.	Support

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
		performing functions as a councillor.			
48.	<p><i>Fees</i></p> <p>Elected FGC and NZC councillors will continue to be volunteers, but FGC councillors appointed by the Minister are also unable to receive remuneration for their services.</p>	<p><i>Proposed meeting fees</i></p> <p>Enable Ministerial appointees to FGCs to be paid meeting fees in accordance with Cabinet Fees Framework (funded from licence fee revenue).</p> <p>Elected FGC councillors and NZC members to continue to be volunteers, but the Minister to retain the ability to pay councillors in future (enabled by a regulation process).</p>	Support with amendment	<p>Fees of Ministerial appointees should be paid by the Minister, not FGC (i.e. If the crown appoints the crown pays).</p> <p>We propose the circumstances in which the Minister can make appointments are clearly articulated in the Bill and subsequent Corporate Policy. For example, the Minister may be able to appoint an expert or mana whenua representative to a FGC.</p> <p>We propose extending this provision to create a mentor or guidance role, which is paid by the crown. This role would support the governance of the NZC and FGS – providing mentorship, training and coaching.</p>	<p>Oppose? We do not support inequitable fee allocation between elected and appointed councillors. Remuneration arrangements should be fair, transparent, and applied consistently to all councillors, regardless of appointment method.</p>
49.	<p><i>No compensation for loss of office</i></p> <p>Remove any entitlement to compensation or payment if no longer a council member.</p>	<p>An NZC or FGC councillor who leaves or is removed from their position as a councillor shall cease to be paid and will not be entitled to compensation for loss of office.</p>	Support		<p>Support</p>
<p>Mergers of Fish and Game Regions</p> <p>Phase 1 Royal Assent</p>					

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
50.	<p><i>Regional mergers</i></p> <p>Currently merger provisions under the CA are inadequate to manage assets, end councillor terms of office, etc.</p>	<p><i>Facilitate mergers</i></p> <p>The Minister will have power to alter or merge FGC regions, and consider requests for mergers from FGCs.</p> <p>When regions are merged or altered, the Minister to be able to allocate and transfer assets as Minister considers appropriate.</p> <p>All proceedings by or against an FGC may be continued.</p> <p>Land Registrars will be empowered to give effect to any transfer of land.</p> <p>All fishing and hunting licences, Anglers Notices, Game Notices, and SFGMPs in respect of affected regions to continue in force until their expiry, replacement or cancellation.</p> <p>All councillors of a region that is abolished to continue to hold office until the end of the three-year term of office and (for clarity) at the election the old council(s) and region(s) cease to exist, and new ones come into existence.</p>	Support in part	<p>We support the Minister being able to approve boundary changes, as is provided for currently.</p> <p>We are concerned that the proposed wording could allow the Minister to merge regions without a request from those regions, or if the affected regions are opposed to the merger.</p> <p>Mergers should only occur at the behest of the affected regions.</p> <p>We propose adding a requirement to develop a strong business case for any requested merger to ensure the merger will result in a long-term value for Fish and Game.</p>	<p>Oppose</p> <p>We do not support forced or Minister led mergers. Any merger should be region initiated, evidence based, and demonstrably beneficial, with clear support from affected regions.</p> <p>A formula-based funding model, coupled with output monitoring means that regions can chose to either live within their financial means or merge if efficiencies can be gained.</p> <p>Under the wording of the proposal, the minister could merge two regions and dispose of assets – for example give them to DOC.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
51.	<p><i>Minimum number of regions</i></p> <p>Too many regional mergers could leave NZC with too few councillors, or FGCs with insufficient local knowledge.</p>	<p>Number of Fish and Game regions to be no fewer than 7 and no more than 12.</p>	<p>Support</p>		<p>Support</p> <p>Maintaining a minimum number of regions to protect local knowledge and delivery capacity.</p>
<p>Needs of other interests</p> <p>Phase 1 Royal Assent</p>					
52.	<p><i>Treaty partners</i></p> <p>Treaty partners sometimes wish the periodic transfer of sports fish to isolated fisheries to cease, to meet cultural objectives. Minister responsible for Fish and Game currently has no ability to prevent this.</p>	<p><i>Ministerial prohibition</i></p> <p>The Minister will have a new power to prohibit the transfer of live sports fish to a location where the species already exists.</p> <p>The proposed power addresses situations where releasing additional fish could conflict with Treaty expectations or scientific advice. DOC anticipates the new power would be used only in rare circumstances.</p>	<p>Oppose</p>	<p>We recommend the new Fish and Game Bill requires Fish and Game to give effect to Treaty Principles, and be consistent with Treaty Settlements. FGCs should have the autonomy to determine how to best meet treaty obligations, alongside mana whenua, without the Minister being the ultimate decision maker.</p>	<p>Support NZC position;</p> <p>Decisions should be region led rather than imposed through Ministerial override.</p>
53.	<p><i>General functions and other interests</i></p> <p>FGC management to maximise angler and hunter</p>	<p><i>Subject to limitations</i></p> <p>The FGC function to manage, maintain, and enhance sports fish and game resources in the recreational interests of</p>	<p>Oppose</p>	<p>The functions of Fish and Game should not be 'subject to' the proposed conditions, because this implies subservience.</p>	<p>Support NZC position</p> <p>We do not support Fish and Game functions being made subordinate to undefined or open ended other interests. Any limitations on Fish and Game</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
	benefit often overrides the needs of other interests, and has sometimes impacted aviation safety and threatened native fish.	<p>anglers and hunters to become subject to the following:</p> <ul style="list-style-type: none"> • ensuring aviation safety is not compromised • ensuring the conservation of isolated populations of threatened native fish is not impeded • having regard to the impact of management on other natural resources and other users of the habitat 		<p>The terms ‘conservation’, ‘isolated populations’ and ‘impeded’ are vague and need defining.</p> <p>‘Isolated populations’ is vague because most populations are isolated given the geography. If they mean land locked populations of galaxids they should say that.</p> <p>80% of native fish are threatened. Trout may have very little to do with that, and management of trout may not change it. The new Bill needs to be specific about where there is a conservation benefit of excluding trout from a rare or isolated population, that is negotiated with DOC.</p> <p>The final condition is too vague and could result in the functions of Fish and Game being restricted by competing land users.</p> <p>The wording in the RIS is more appropriate:</p> <ol style="list-style-type: none"> a. Have regard to the needs of other users and resources b. A specific list of interests in legislation that take precedence over Fish and Game’s needs due to their conservation significance or because people’s health and safety are at risk (e.g. ensuring aviation safety). <p>Give authority to FGCs to act as required with respect to game birds causing damage or risk without the need to obtain permission from DOC.</p>	functions must be clearly specified, evidence based, and tightly framed to ensure certainty, accountability, and protection of statutory responsibilities.
54.	<p><i>Provisions in SFGMPs</i></p> <p>Similar to the above, the current requirement for sports fish and game</p>	Have new requirement that SFGMPs must include provisions to:	Oppose	<p>S 17L of the CA already states SFGMP cannot derogate from any conservation strategy or plan.</p> <p>FGCs already must have regard to impacts on other natural resources users (e.g., farmers,</p>	Support NZC position

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
	management plans (SFGMPs) to maximise angler and hunter opportunities often overrides the needs of other interests	<ul style="list-style-type: none"> • ensure aviation safety is not compromised • ensure the conservation of isolated populations of threatened native fish is not impeded • describe how any conflict between sports fish and game management and “other natural resources and the needs of other users of the habitat” (i.e. non-hunting interests) will be managed. 		<p>mana whenua) when developing Sports Fish and Game Management plans.</p> <p>This proposal adds a requirement for FGCs to outline in SFGMPs how they will manage conflict between, for example, game bird management and farming operations (i.e., “other users of habitat”). However, the wording is too vague and risks Fish and Game becoming hindered by other users.</p> <p>Not compromising aviation safety or conservation of isolated populations of threatened native fish (i.e., non-migratory galaxiids) will be requirements, given their importance</p>	
55.	<i>Require compliance with policy</i> FGCs have not always complied with their approved sports fish and game management plans and there has been no way to make them comply.	<p>Have a clear requirement that FGCs and NZC must comply with:</p> <ul style="list-style-type: none"> • any approved SFGMPs • any General Policies under conservation legislation • any binding policy determined by the NZC (applies to FGCs only). 	Oppose in part	<p>We support the requirements that FGCs and the NZC must comply with any approved SFGMPs and any binding policy determined by the NZC.</p> <p>We oppose the requirement that Fish and Game must comply with any General Policies under Conservation legislation. For clarity, such policies would likely include the Conservation General Policy and National Park General Policy.</p> <p>Conservation policies prioritise indigenous species and seek removal of introduced species on conservation land, especially national parks.</p>	Support NZC position

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
				<p>Complying with conservation policies would require the total removal of trout from conservation estate.</p> <p>Conservation policy is not written to address needs of hunters and anglers, except as a control mechanism. Making new F&G bill subservient to secondary policy that has a different purpose will not work.</p> <p>In addition, conservation policies are generally out of date, which goes against the aim of modernizing Fish and Game.</p> <p>Current law (17LCA) already states SFGMP cannot derogate from any conservation strategy or plan. The proposed wording is a much more stringent requirement and there is no policy justification for it.</p>	
56.	<p><i>Empowered to manage game</i></p> <p>FGCs have a function to manage game birds but lack the powers needed to manage game birds impacting farm crops or aviation safety. Requiring case by case permits from DOC is impractical.</p>	<p>Director-General of Conservation to be able to delegate to FGCs the DG's powers to directly manage game birds impacting crops, etc, subject to any conditions specified by the DG.</p> <p>The DG would be able to revoke the delegation if an FGC used the delegation inappropriately or in ways contrary to any conditions required by the DG.</p>	Support	<p>Further change may be needed to implement this. Conservation land classification restrictions on vehicles, motorized boats, dogs and shotguns means F&G cannot do ranger or management activities on many DOC land types.</p> <p>F&G would need to be resourced to carry out work to benefit private land, work eg bird culls where necessary. F&G already issue permits for this task.</p>	Support NZC position.
57.	<i>Enable establishment of commercial preserves</i>	Commercial upland game preserves to be authorised by Notice (in the same way that	Support in principle	The NZC supports the move for commercial preserves to be established by way of Notice,	Support subject to amendment

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
	<p>Authorisation of commercial upland game preserves currently requires an Order in Council, which is an unnecessary level of process.</p>	<p>non-commercial preserves are authorised).</p>	<p>More detail required</p>	<p>rather than via an Order in Council. This follows the process for non-commercial preserves.</p> <p>We propose NZFGC be responsible for authorising preserves under the Fish and Game Act. We are the experts on game bird management and are across best practices for animal welfare.</p> <p>We propose the NZC should write a binding policy on Preserves. FGCs would be responsible for implementing the policy and would be required to monitor Preserves on an annual basis.</p> <ul style="list-style-type: none"> Further information is needed on how preserves will be established and at what level a criteria for authorisation will be set (e.g. in legislation, or in the NZC policy). 	<p>We support the proposal in principle, subject to the development of clear criteria, an agreed national policy framework, and the retention of regional authority for implementation and decision making.</p> <p>Monitoring and reporting obligations for preserves must be appropriately resourced. Given that preserves operate as commercial enterprises, any additional monitoring and reporting requirements should be undertaken on a cost recovery basis to avoid placing pressure on licence holder derived funding.</p>
<p>Other matters and removal of spent provisions</p> <p>Phase 1 Royal Assent</p>					
58.	<p><i>Creation of Separate Act</i></p> <p>There is a need to better recognise Fish and Game's role as a key organisation in the hunting and fishing sector.</p>	<p>Create a standalone Fish and Game Act, maintaining all necessary linkages with CA and other legislation (as modified by the reforms elsewhere in this schedule) but making no other changes to policy.</p>	<p>Support with changes</p>	<p>We support the creation of a standalone Fish and Game Act.</p> <p>We believe the Fish and Game Bill should contain all provisions relating to Fish and Game. There should not be any provisions left in conservation legislation that could lead to implementation and administration issues.</p> <p>Where provisions in the conservation legislation are key to fish and game management (e.g. access and enforcement authorisation, protection for FGCs and the ban of sportfishing rights and sale of access to hunting and fishing resources), care should be taken to make sure no existing</p>	<p>Support NZC position.</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
				<p>functions, duties and rights of Fish and Game are lost in the transfer to new legislation.</p> <p>The Conservation Act will need to be scrutinised to ensure all relevant provisions are picked up and applied to FG Bill, e.g. the ability to close fishery if access is closed.</p> <p>We propose a new schedule is introduced to the Conservation Act that lists valued introduced species.</p>	
59.	<p><i>Appointment of staff</i></p> <p>The CA has NZC and FGC councillors appointing all staff, not only NZC and FGC managers.</p>	<p>Clarify that elected councillors appoint managers, and that managers appoint other staff.</p> <p>Appointments of managers and staff will be subject to staff policy determined by NZC.</p>	Oppose in part	<p>The Councils are the employer of all staff. Councils can delegate authority to the manager to appoint and manage staff. However, Council remains the signatory on contracts and JD's. Regional Councils as the employer they can at any time seek information from staff ie JD's, Contracts, work programs.</p>	<p>Support</p> <p>We support the Minister's proposal to enable regional managers and Chief Executives to employ staff and to be responsible for staff management. This approach supports clear accountability, efficient decision making, and effective regional delivery, and aligns with governance and management arrangements used by comparable organisations.</p>
60.	<p><i>Use of money from court fines</i></p> <p>Section 46(7A)(b) of CA largely restricts the uses of fines recovered to the operation of hatcheries.</p>	<p><i>Flexible use</i></p> <p>Align with similar provisions in WA such that money from court fines under CA may be applied for purpose of any FGC functions.</p>	Support	Allow funds to be put to the best use.	<p>Support subject to amendment</p> <p>We support the proposal subject to amendment that any money received from fines be returned to the region in which the court action was taken. This supports fairness and transparency and assists with cost recovery associated with investigation,</p>

No.	Summary of problem	Summary of proposed changes	Preliminary position	Rationale	Draft Auckland Waikato position, subject to Council approval.
					prosecution, and court action undertaken by regions.
61.	<i>Remedy appointment gap</i> Sections 26FA(1) and (2) of CA allows appointment for the purposes of the CA but not the Wildlife Act.	Allow appointments of enforcement officers for the purposes of WA also.	Support		Support
62.	<i>Update headings</i> Sections 26H and 26W of CA call NZC and FGCs “Crown Entities” when they are no longer such.	Update cross-headings to reflect current legislation (Public Entity status).	Support		Support
63.	<i>Remove transition provisions</i> Provisions relating to Transitional Fish and Game Council became spent over 30 years ago.	Remove spent provisions relating to transitional Fish and Game Councils from FGCER.	Support		Support

Auckland/Waikato Fish & Game Council Annual Drift Dive Monitoring Program Report 2025



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1. Executive summary

Drift dive surveys are conducted annually to ensure fish populations can sustain the current bag limits and to detect catastrophic collapses of the fish population requiring emergency closures. Events like chemical spills, large storms, slips, volcanic eruptions, droughts and heatwaves can cause trout populations to collapse. Long term monitoring also allows Fish & Game to improve the management of streams by looking at increases or declines in trout populations corresponding with land use change or management actions such as fencing and riparian planting.

Drift dive surveys were successfully conducted on the Awakino, Waihou, Waitawheta, Whakapapa and Kauaeranga Rivers (Table 1.1). Drift dives were conducted from mid-January to early March of 2025. Rainfall was above average during December but below average during January and February resulting in low flow conditions for most of the drift dives. There were no significant recruitment failures or other alarming findings amongst the Auckland/Waikato Streams monitored during the 2025 drift dives. However, the flood that occurred in the Awakino River on 15 October 2025, was one of the largest ever recorded and has likely devastated the trout population based on historical floods of this size. Staff will request a voluntary closure from anglers and will assess the damage as soon as possible. An emergency closure can be approved by the minister if required.

Table 1.1. Drift dive study reach elevation, trout >30 cm counted per kilometre, mean number of fish counted per kilometre during the previous three surveys, water temperature and water clarity during the last dive.

	Whakapapa	Awakino	Mangatutu	Waihou	Waitawheta	Kauaeranga
Elevation (m)	580	150	100	100	180	150
Fish km ⁻¹	37	117	31	53	8	3
Mean fish km ⁻¹	29	29	19	47	7	5
Dive Temp (°C)	8	18	16	13.4	16	19.8
Water clarity (m)	6	3.3	3.7	5.4	4	8

2. Introduction

Auckland/Waikato Fish & Game is tasked with managing the region's freshwater sports fisheries for present and future generations with the goal of maintaining and improving wild, self-sustaining populations (Ben Wilson 2021a). To successfully manage the region's wild trout population staff are required to monitor populations and their trends over time (Ben Wilson 2021a). Detecting significant changes in trout populations is important for setting bag limits and emergency closures if trout populations are significantly impacted. Drift diving is the primary tool used to monitor the Auckland/Waikato region's trout populations.

It is impractical to monitor all the region's streams, so a diverse set of representative streams that meet the criteria for drift dive monitoring are selected annually and surveys are conducted mid-summer. Drift dives also allow staff to monitor water quality, check on access, discuss issues with landowners and conduct compliance.

Drift diving is not the most precise means of monitoring fish with fish count accuracies of 21-90% (Hagen and Baxter 2005; Young and Hayes 2001). Inexperienced divers often count 50% fewer trout compared to seasoned divers, introducing significant error into counts. Water

clarity is the primary factor affecting accuracy of drift dive counts. Low water clarity, similar to that found in the upper North Island (4 m), can result in fish counts that represent only 20% of the actual population; water clarity approaching 16 m can increase accuracy to nearly 90% (Hagen and Baxter 2005). However, most drift dive accuracy assessment work has been done on larger rivers where divers cover 5m lanes (Hagen and Baxter 2005) with flows of at least 2 m³ per diver. In contrast Auckland/Waikato divers cover about 2.5 m lanes with flows of about 0.7-1.6 m³ per diver.

Despite not being a total count of a river's trout population, drift dive data is very useful for monitoring long term trends in the same river. Several variables like instream habitat, depth, flow, and water clarity make comparisons between rivers dubious. But comparing the same reaches under similar conditions in consecutive years controls for these variables, providing a good low-cost monitoring tool. The standard error of drift diving data in water clarity below 10 m is likely to be very high ($\pm 30\%$) and thus the data should only be used to make management decisions when large shifts (40%+) in trout populations are indicated.

The size and number of fish counted in a stream can be driven by habitat quality or fishing pressure but in the Auckland/Waikato Region water temperature (influenced by elevation and latitude) is likely to be a key driver. The southernmost waters in the Auckland/Waikato Region consistently have high numbers of large trout, likely due to cooler summer temperatures and higher elevation (Tables 2.1 and 2.2). Air and water temperatures in small streams are highly correlated, and the median air temperature is three degrees colder in the southern portion of the region providing more suitable conditions for trout (Figure 2.3). Inversely streams like the Waitawheta and Kauaeranga have excellent water quality and habitat but are far too warm to support populations of large trout.

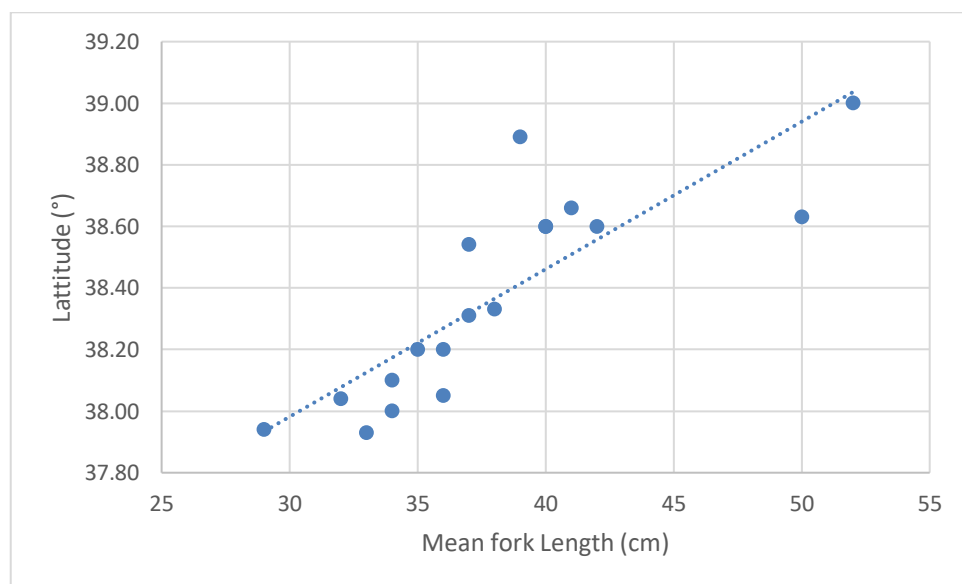


Figure 2.1. Mean fork length (cm), plotted against the latitude of streams in the Auckland/Waikato region based on unpublished wild trout tagging data.

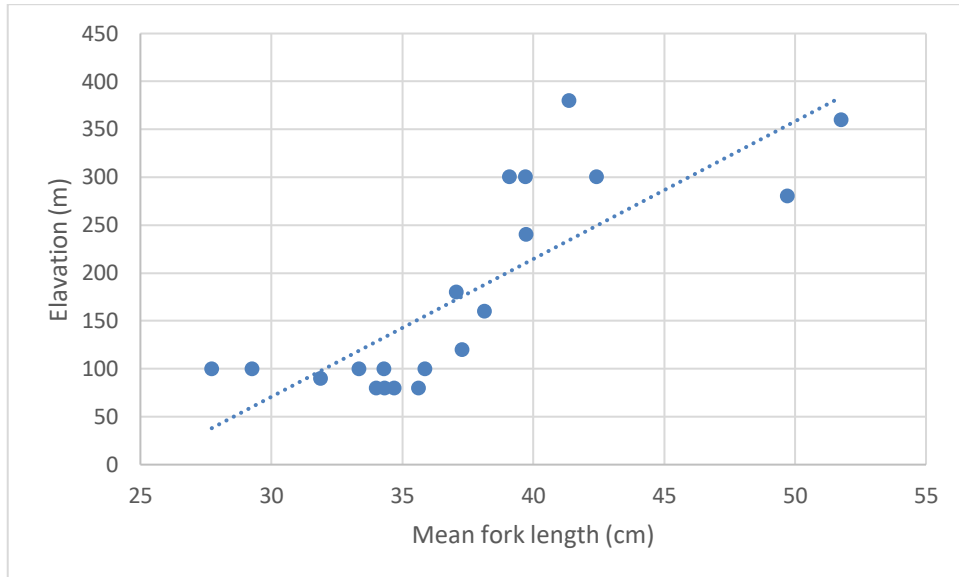


Figure 2.2 Mean fork length (cm), plotted against elevation of streams in the Auckland/Waikato region based on unpublished wild trout tagging data.

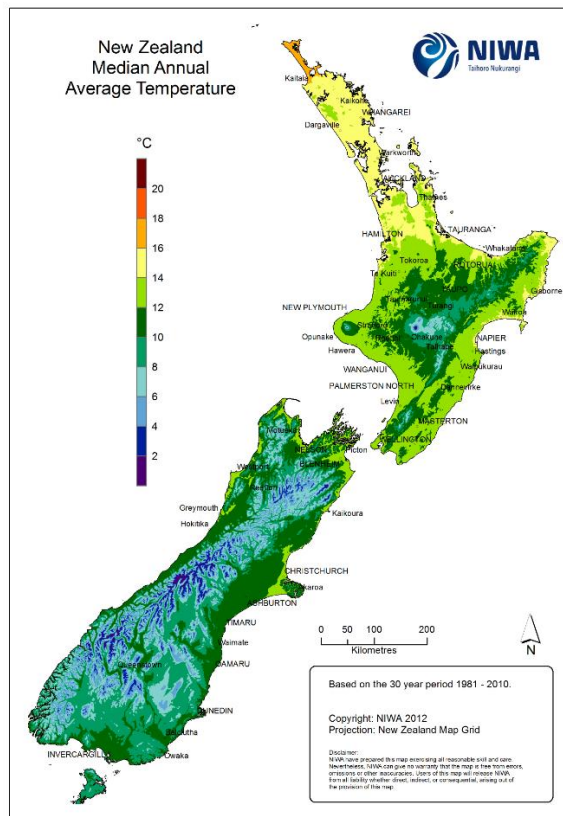


Table 2.3. The long-term median air temperature of New Zealand provided by NIWA.

3. Methods

Drift dives in the Auckland/Waikato Fish & Game Region (A/W) are conducted in streams with at least 3.5 m of visual clarity and depth of at least 300mm. Poor water clarity excludes most streams in the region from being monitored. Dive reaches are 0.9 to 2 km long and are surveyed for obstructions and dangerous rapids prior to each dive. Although it is preferable to survey multiple reaches of a river, poor visual clarity, high water temperatures, low water or limited access restrict most river surveys to one or two reaches.

Drift dives are conducted with two to four divers drifting in a parallel line downstream equipped with wetsuit, mask, snorkel, and wrist-mounted recording slates. Divers maintain a parallel line perpendicular to the bank, spaced so they can see the banks and their adjacent diver or divers. The number of divers needed to survey a river is dependent on their ability to see the bottom of the river and their corresponding diver. To avoid double counting fish, divers only count fish passing in the upstream direction. Dive teams stop at the end of each pool or reach to tally fish numbers and compare notes. Fish are sorted into species and size classes (<10 cm, 10-20 cm, 20-30 cm, 30-40 cm and 40+ cm) by each team member during each stop. Data is recorded by each individual diver on slates attached to their arm and then combined on a data sheet by the team leader at the end of each dive.

Prior to diving, water clarity is measured using a 20 cm black disc. The disk is walked backwards as it is observed using an underwater viewer. When the black disk just disappears, the distance to the viewer is recorded. Water temperature is recorded, and dive surveys only preceded in reaches with water temperatures of <19°C as fish commonly migrate out of warmer areas.

4. Awakino River

4.1. Awakino River introduction

The Awakino has had consistent recruitment failures when base flows exceed 200 m³ during the winter spawning and rearing season July-September;(Wilson 2009). The winter of 2024 was extremely mild with flows below 50 m³ during the critical winter period (Figure 4.1). In addition to high flow related reductions in recruitment, the Awakino River also has a reduction of adult fish during low flow years as observed in 2013-2014. Since 2015 no major floods have been recorded in the Awakino River, and summer temperatures have not been excessive during the last four years. Although the Awakino does not have a water temperature monitoring station, the Waipa and Mangatutu Rivers had relatively mild peak summer temperatures making it unlikely trout were impacted by high water temperature in the Awakino River.

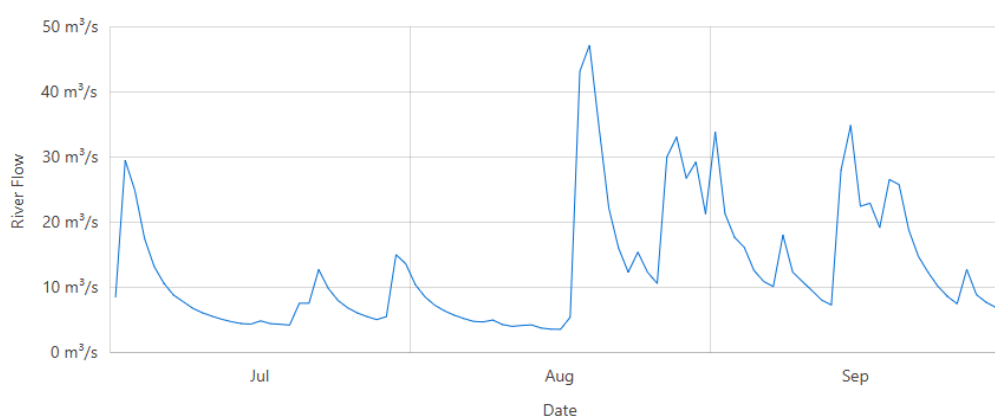


Figure 4.1. The flow of the Awakino River from July to September 2024 ([Waikato Regional Council Monitoring Data](#)).

Water quality in the upper reaches of the Awakino River is generally high but gradually deteriorates downstream as the river flows through pastoral land. There is a noticeable

decline in water quality immediately downstream of the confluence with the Mangaorongo Stream. The Awakino catchment is one of many hill country areas that would benefit from mandatory fencing rules. The dissolved reactive phosphorous in the Awakino River is in the C band and E. Coli in the D band despite much of the catchment being in bush.

Rainbow and brown trout reproduce naturally in the Awakino River, so there is no artificial supplementation of the trout population even in years of recruitment failure. Brown trout contribute less than 2% of the historic angler catch and drift dive counts (B Wilson 2004).

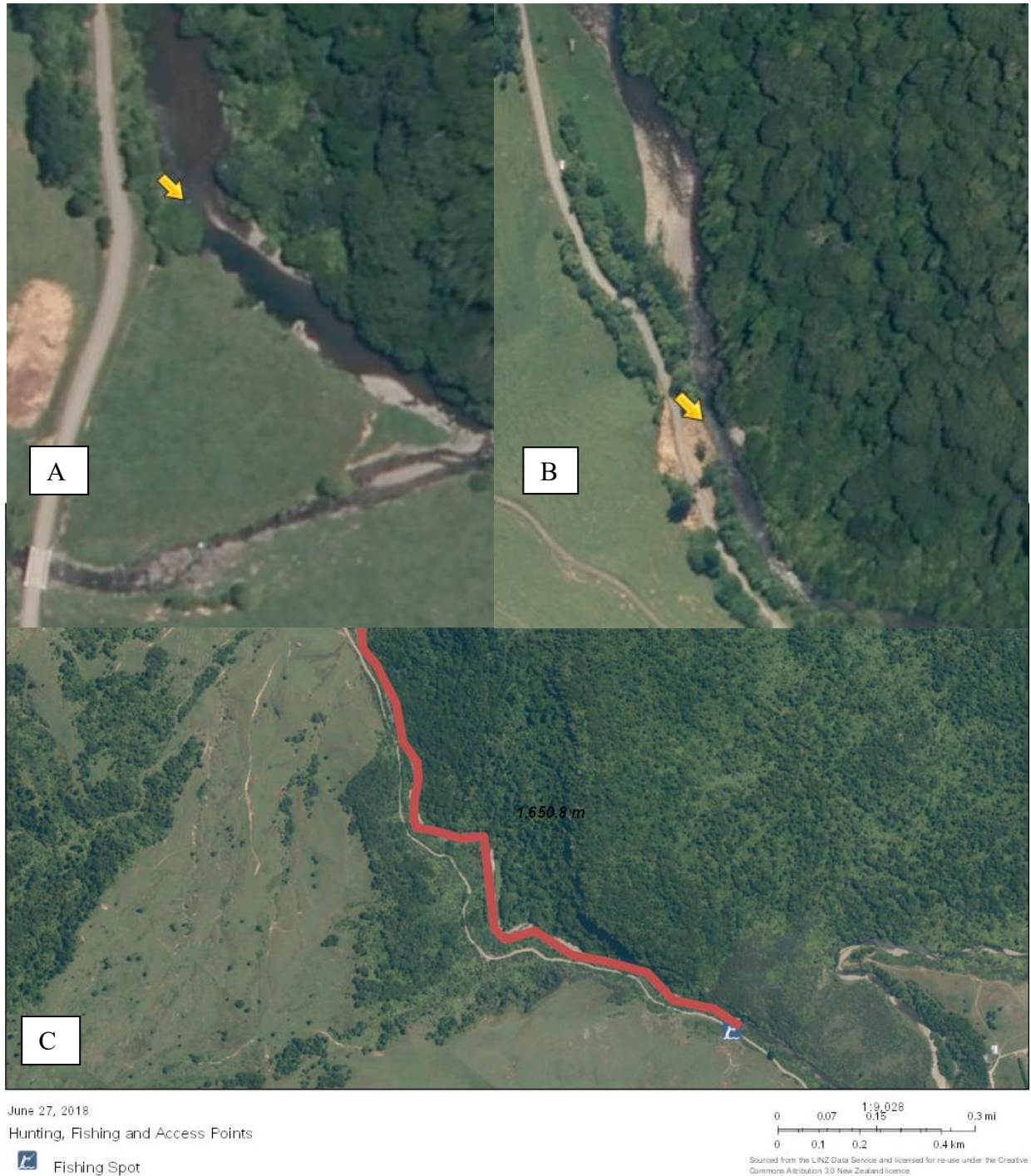
4.2. *Awakino River study area*

The Awakino River has a catchment area of 226 km² in the steep rolling hill country of the Herangi Ranges on the west coast of the North Island. In the upper reaches, upstream from the village of Mahoenui, the Awakino River meanders through mixed podocarp hardwood forest and pastoral land, providing a procession of runs and pools over a riverbed of gravel, cobble, and small boulders. River flow is measured by the Waikato Regional Council at Rauroa Farm Bridge (NZTM:1754098, - 5725781). Minimum flows are about 2.5 m³/s, mean flows about 13 m³/s, and maximum flows can be over 300 m³/s.

4.3. Awakino River methods

The upper Gribbon Road drift dive (Figure 4.2; Appendix A) was conducted in 2025. GPS positions for the start and end points of the monitoring site are listed in Appendix A. Results of the dive were adjusted to fish per kilometer for comparison to previous surveys and other catchments. The drift dive survey was conducted with two experienced divers.

Figure 4.2. Map of the 2025 upper Awakino drift dive start “A”, finish “B” and total



monitoring reach “C”.

4.4. Awakino River results

The Awakino drift dive survey began at 12:00 pm on the 27th of February 2025. Water clarity and flow were very low for the Awakino River at 3.3 m and 1.2 m³. Very little rainfall occurred between January and April of 2025, potentially impacting fish stocks after the

drift dive due to heat and drought stress. The water temperature was 18°C. No large floods were recorded during the winter of 2024, with only moderate floods occurring in July 2022 (Figure 4.3) that were about half of what would be required to pose a risk to recruitment.

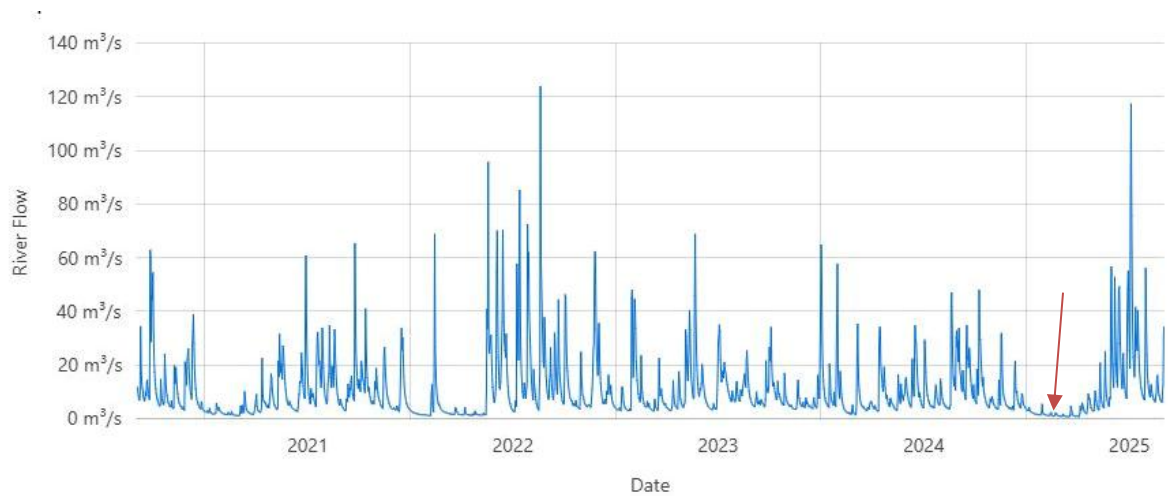


Figure 4.3. Awakino River hydro graph from the Waikato Regional Council website September 2020 to September 2025. Drift dive shown with red arrow.

Despite the low visibility there were good numbers of 40+ cm adult rainbow trout observed in 2025. Fish were likely concentrated in the monitoring area due to low flows (forcing fish out of tributaries) and high water temperatures downstream (forcing fish upstream into the study area). The number of medium and age zero fish were a positive sign, indicating a relatively healthy fishery (Table 4.1 and Figure 4.4). Counts for all size classes were high or exceptionally high. A combination of low flows pushing fish out of tributaries and into the main stem and warm temperatures forcing fish upstream into the monitoring area may have contributed to the record count of 40cm+ fish.

Table 4.1. The size, frequency and species of trout seen in the upper Awakino River on the 2024-2025 drift dive surveys. Trout less than 20 cm in length were not identified to the species level. Trout identified as rainbow trout (R), or brown trout (B) are labelled as such.

Year	<10 cm	10-20 cm	20-30 cm	30-40 cm	40+ cm
2023	21	27R	7R	4R	6R 3B
2024	18	139R	36R	9R	19R 4B
2025	1	51R	24R	29R	86R 3B

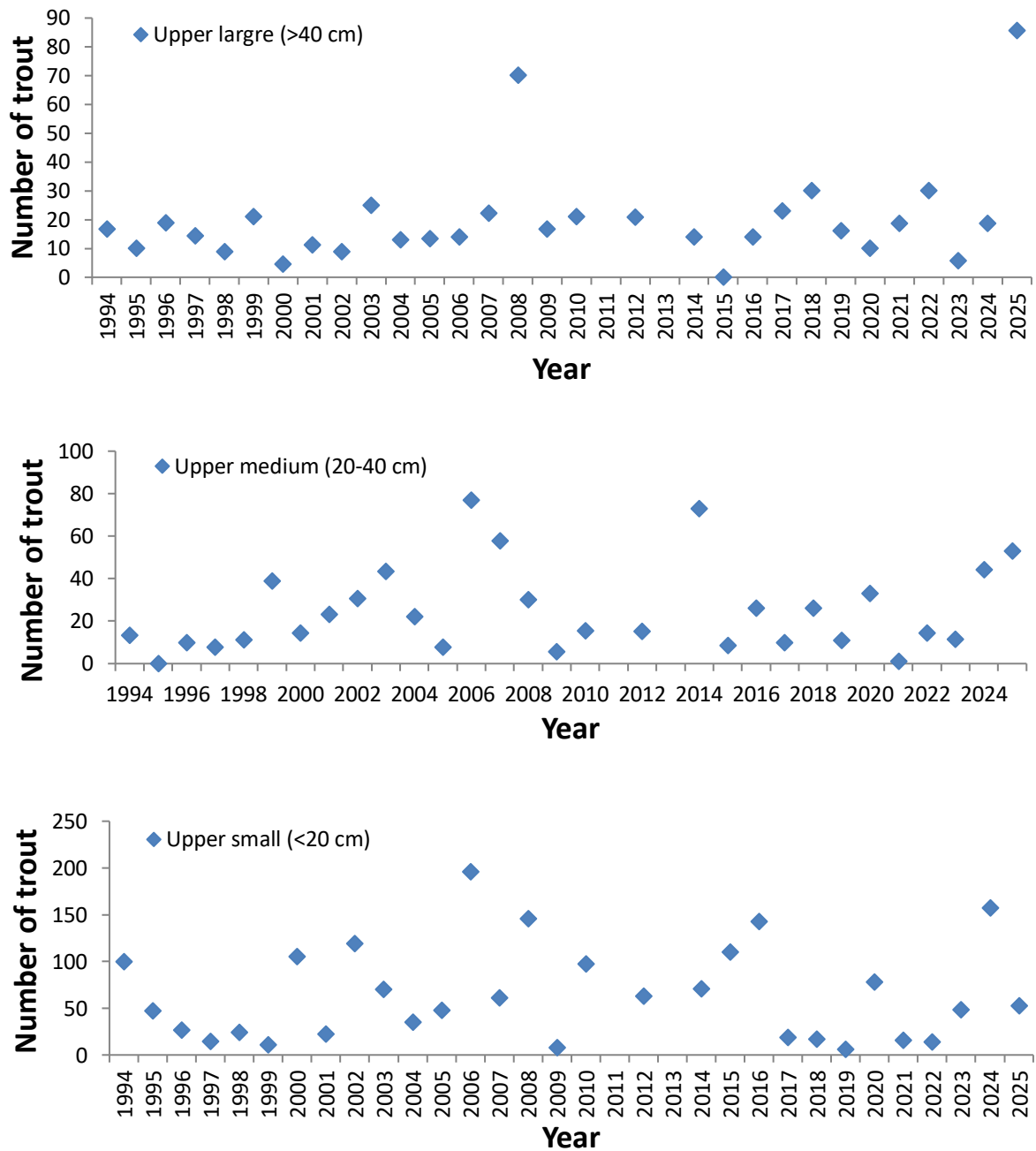


FIGURE 4.4. Large, medium, and small rainbow trout per km (blue squares) counted from 1994 to 2025 during the Awakino River drift dives.

4.5. Awakino River discussion

Although the Awakino River trout population was in good shape during the drift dive in February the flood that occurred 15 October, was one of the largest ever recorded and has likely devastated the trout population based on historical floods of this size. Staff will request a voluntary closure from anglers and will assess the damage as soon as possible. An emergency closure can be approved by the minister if required.

5. Whakapapa River

5.1. Whakapapa River introduction

The Whakapapa River is the only major fishery in the region that has had a steady increase in angler use over time (Figure 5.1), as it has recovered from the devastating Mount Ruapehu eruption in 1995. In 2021 Whakapapa River angler use was 3772 angler days (Stoffels and Unwin 2023). It is likely that angler use has increased, and staff expect the angler use of the Whakapapa to surpass the angler use of Lake Arapuni to become the region's most popular fishery. Fish & Game's management objective for the upper Whakapapa River is to maintain a trophy trout fishery. Increasing access to the Whakapapa has also been identified as important to maintaining quality fishing as angler use grows. Since 2011, trophy trout numbers have leveled off at what may be the carrying capacity for the Whakapapa River under the current flow regime, but angler use is still climbing. New fees imposed by iwi in the Taupō fishery have increased use by guides and YouTube influencers, boosting publicity and use of the Whakapapa fishery.

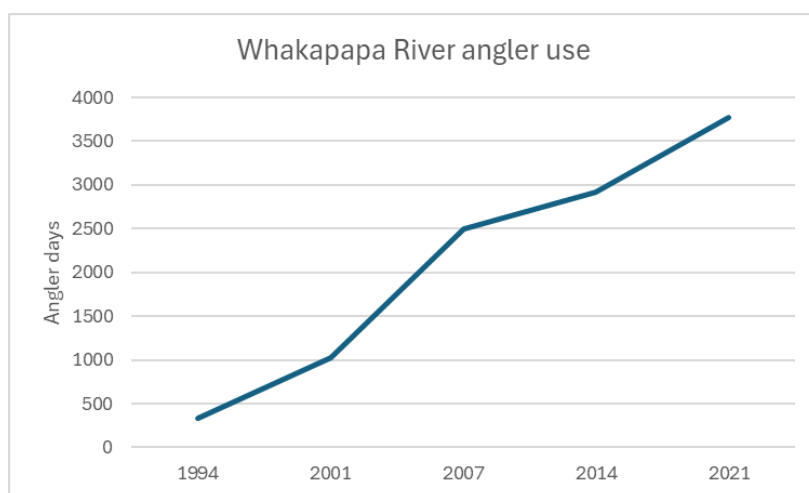


Figure 5.1. Angler use (angler days) 1994 -2021 derived from Stoffels and Unwin (2023).

The Whakapapa & Whanganui River Angler Use Monitoring Study completed in 2016 (Daniel 2017) confirmed that limited access above Owhango has led to low angler use and improvements to angler access in the upper river are still required. The closure of the Whakapapa Intake Road has exacerbated the issue and reopening the road is a high priority for staff. The overall angler use (>0.5 km from parking areas) of the upper Whakapapa in 2014 and 2015 was very low at only 2 anglers per month on average (Daniel 2017) due to the lack of public access. The successful purchase of 1.2 km of the lower river just upstream from the Kakahi landing in 2019 helped spread out anglers but the limited access available is becoming overcrowded. The Angler Access Fund, established in 2024, is intended to address significant access issues like the upper Whakapapa with the intent of purchasing property that provides access to the upper Whakapapa River.

5.2. Whakapapa River study area

The Whakapapa River is formed by the joining of the Whakapapa-nui and Whakapapa-iti Streams. Both streams drain small glaciers and snowfields on the western slopes of Mt. Ruapehu and are cold, swift and clear. The only major nutrient or sediment inputs in the upper Whakapapa River are runoff and wastewater discharge from the Whakapapa Village. DOC has proposed upgrades to the wastewater treatment plant that should increase consistency of the discharge and reduce the overall impact to the Whakapapa

River but have been held up in the RMA process for nearly a decade. In addition, there is also seasonal disturbance from the Whakapapa Ski fields and corresponding access roads.

The Whakapapa Intake of the Tongariro Power Scheme is located about two kilometers downstream from the confluence of the Whakapapanui and Whakapapaiti streams. The Whakapapa Intake structure is a major impediment to the river's trout population as it blocks significant spawning and critical summer habitat for fish that move upstream to avoid the extreme summer heat in the Whanganui River below Taumarunui. Although there is good access to the Whakapapanui and Whakapapaiti, the Whakapapa intake structure isolates this population limiting fish density.

Below the intake, the Whakapapa is a turbulent river alternating between steep rapids and short deep pools. Here the river is quite narrow, generally about 10 to 20 m wide. Access to the intake is via the Whakapapa Intake Road through the Taurewa Station and was closed to the public in 2019. The gauging foot bridge is the starting point for the traditional upper river drift dive, and it is located about 1 km below the Whakapapa Intake structure. Unfortunately, legal access to the upriver site is no longer accessible to staff.

5.3. Whakapapa River methods

There are currently two monitoring sites on the Whakapapa River including the new upriver site at Oio Farms and the traditional Owhango Bridge site. Due to poor water clarity only the upper Oio Farm site was surveyed in 2025. The Oio Farm monitoring reach begins 5 km downstream from the Whakapapa Foot Bridge (old Whakapapa Intake Road Site; Figure 5.2). GPS positions for the start and end points of the monitoring site are listed in Appendix A. The Whakapapa is a large swift river, and the rapids are a safety risk to divers so only pools and rifles are surveyed. As a result, only a proportion of the available habitat is surveyed.



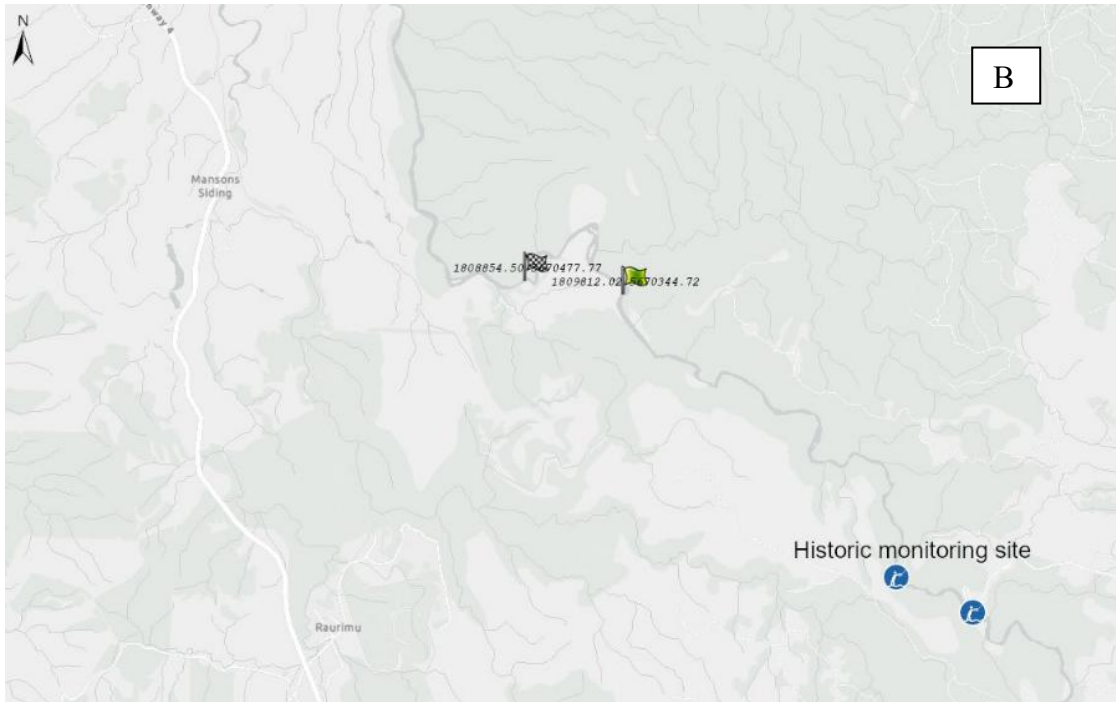


Figure 5.2. Oio Farm drift dive monitoring area (A). The put in site is marked with a green flag and the takeout site is marked with the checkered flag. The Oio Farm site is shown (B) in relation to the historic Gauging Bridge monitoring site (historic monitoring site).

5.4. Whakapapa River results

The Oio Fram dive survey started at 12:00 pm on the 11th of March 2025. Water clarity was 8.0 m with a temperature of 8.0°C. The Oio Farm reach had one of the highest counts of large fish (40+ cm) on record (Figure 5.3; Table 5.1) for the Whakapapa River. Brown trout were seen in low numbers similar to previous counts (Figure 5.3; Table 5.1). Small fish (age 0-1 year) were spotted in low numbers, but the habitat surveyed was not ideal for small fish.

Table 5.1. Number of fish counted during each of the last three Whakapapa River drift dives 2021 (Owhango site), 2024 (Owhango site) and 2025 (Oio Farm site). Trout that were identified are labeled by species including rainbow trout (R) and brown trout (B).

Year	<10 cm	10-20 cm	20-30 cm	30-40 cm	40+ cm
2021	0	2	0R	0R	11R
			0B	0B	3B
2024	14	41	15R	6R	27R
			0B	0B	4B
2025	0	0	1R	1R	30R
			0B	0B	5B

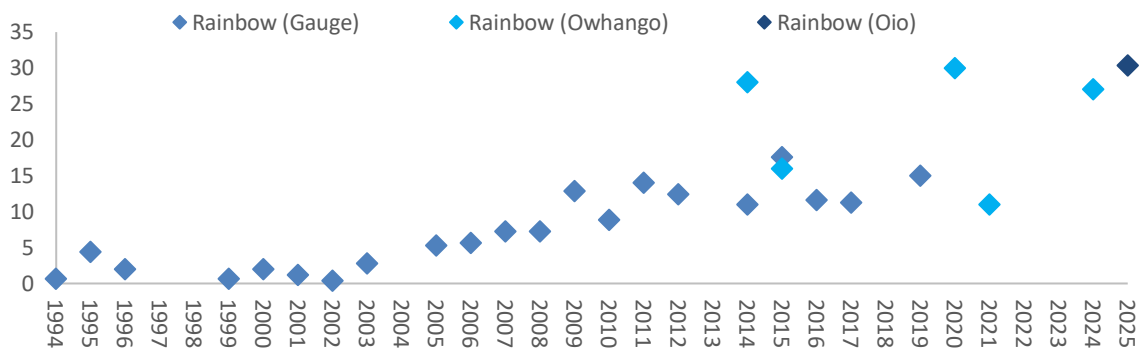


Figure 5.3. Number of large (≥ 40 cm) rainbow trout per km of the upper Whakapapa River at the gauging station bridge (gauge), above the Owhango Bush Road (Owhango) and the Oio Farm site (Oio) from 1994-2025.

5.5. Whakapapa River discussion

The Oio Farm site has similar habitat and comparable fish number to the Owhango monitoring site. Overall, the Whakapapa fishery has moderate to high numbers of large (40+ cm) rainbows and moderate to low numbers of brown trout. Water clarity during the 2025 survey at the Oio Farm site was good at 8 m. The rainbow trout population was healthy, and this section of the Whakapapa is virtually untouched due to the low angling pressure. The Oio Farm reach will be a good control site for the Owhango monitoring reach that has high angling pressure. Due to the changes in monitoring sites long-term trends are not possible currently.

In terms of long-term management, the Whakapapa and Whanganui Rivers will be a key focus area for Auckland Waikato Fish & Game due to the high quality of the fisheries. Angling pressure is currently low to moderate on the upper Whanganui River and increasing water quality to improve the fishery will ultimately take pressure off the Whakapapa (Daniel 2017). Improving access to the Whakapapa River is a priority but maintaining the existing access will become increasingly difficult as landowners receive more pressure from increased use.

6. Waihou River

6.1. Waihou River introduction

The upper Waihou has easy access and abundant small fish making it a great location for beginners and experienced anglers. The Whites Road section of the Waihou River is well developed with walking paths in the riparian zone that extend for over four kilometers upriver of the car park and include a composting toilet. The location, water clarity, fish numbers and ease of access make the Waihou River a priority asset in terms of the Auckland/Waikato Region's current fisheries.

The Waihou is a large spring-fed river near Putāruru and is one of the most popular fishing waters in the Auckland/Waikato region, with angler usage in the 2021-22 season estimated at 1018 angler days, a significant drop from 1930 angler days during the 2013-14 season (Unwin and Rouse 2016). (Stoffels and Unwin 2023b). Most of the angling

pressure occurs immediately above the Whites Road bridge near the Blue Spring where the water is clear. Water quality rapidly declines as the river flows through several intensive dairy farms.

6.2. *Waihou River study area*

The Waihou River starts as small streams that wind through scrub and plantation pine forest on the Mamaku Plateau. Near Putāruru, land use transitions to dairy and flow is increased by a series of large springs.

Immediately downstream from the Blue Springs, water clarity is high with visibility exceeding 10 m. Most of New Zealand's bottled water is sourced from the Waihou River near the study site. However, water quality quickly deteriorates and 2 km downstream from the springs at the end of the drift dive survey reach, water clarity is typically less than 6 m. Water quality continues to deteriorate and was measured at less than 3.5 m at the confluence of the Waimakariri Stream just 3.8 km downstream from the walkway.

A 4.7 km walkway extends from Whites Road to the Blue Springs upper parking lot. During the past decade most of the upper Waihou has been fenced. However, buffer widths are far too narrow and critical source areas on neighboring farms still deposit fine sediment into the stream at an alarming rate. Despite much of the river being fenced and planted, water quality still deteriorates quickly, likely due to the intensive agriculture throughout the catchment. The lower Waihou is among the dirtiest rivers in the North Island with significantly elevated nutrient levels and heavy sediment loads.

6.3. *Waihou River methods*

The drift dive was 1.7 km and the GPS positions for the start and end points are listed in Appendix A and shown in Figure 6.1.





Figure 6.1. Maps of the reaches covered in the 2025 drift dive surveys of the upper Waihou River including: “A” Waihou survey reach, “B” end point, “C” start point.

6.4. Waihou River results

The 2025 Waihou drift dive was conducted on the 30th of January at 10:00 am. Water clarity on the Waihou was similar to previous dives at 5.4 m and clarity did diminish during the dive due to diver interaction with the substrate. As in previous years only rainbow trout were observed on the dive. The size and frequency of rainbow trout observed on the last three drift dives (2023-2025) are summarized in Table 6.1. The Waihou River had moderate numbers of rainbow trout compared to previous years (Table 6.1 & Figure 6.2).

Table 6.1. The size and frequency of rainbow trout seen per kilometre in the Waihou River during the 2023-2025 drift dive surveys.

Year	Size and frequency of rainbow trout per kilometre of river			
	<20 cm	20-30 cm	30-40 cm	>40+ cm
2023	71	74	42	17
2024	7	44	23	6
2025	194	71	41	12

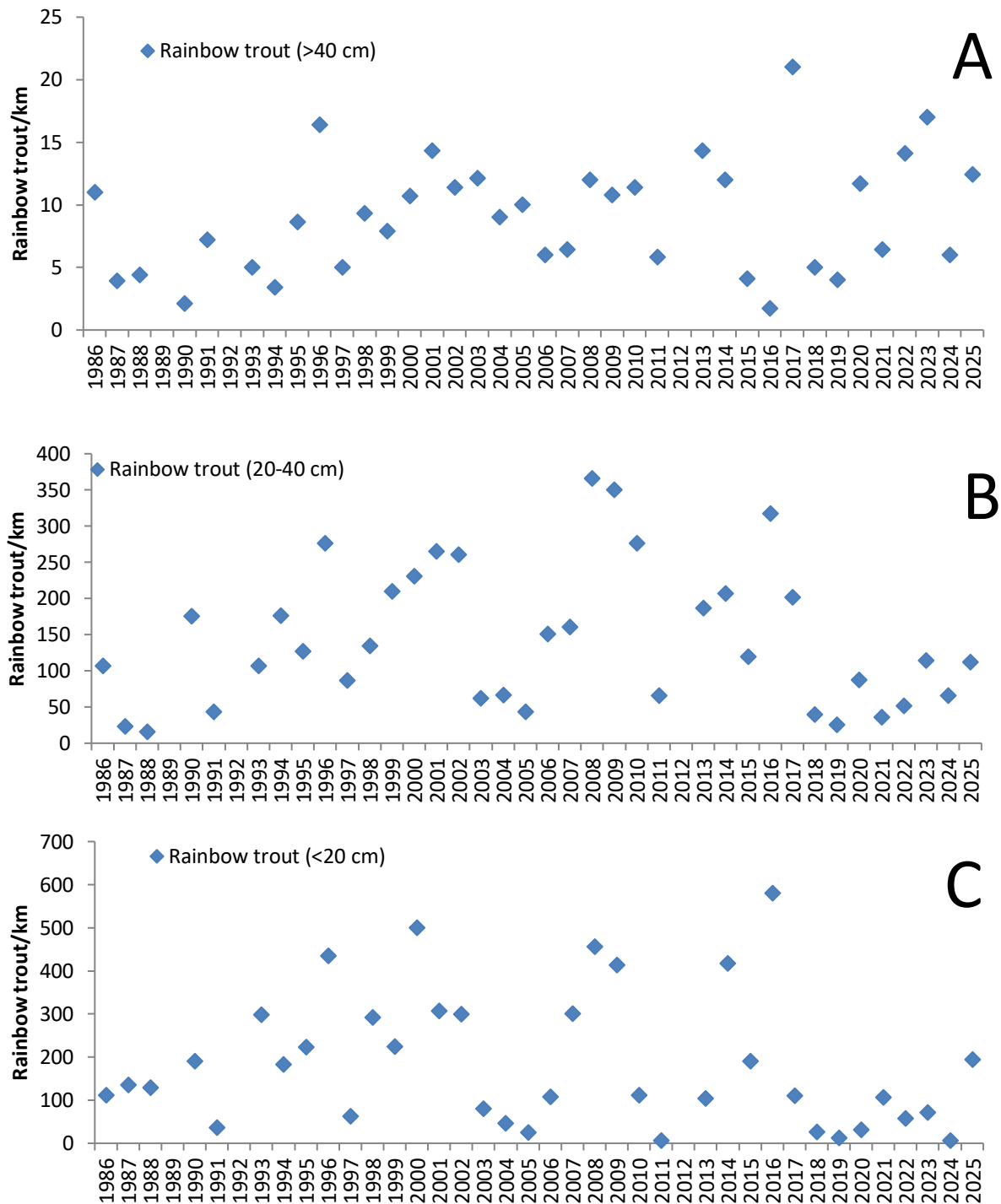


Figure 6.2. Number of rainbow trout per kilometre of the Waihou River above Whites Road as observed on drift dive surveys undertaken since 1986. Fish are grouped into small (<20; A), medium (20-40 cm; B) and large (>40 cm; B) categories.

6.5. Waihou River discussion

The Waihou fish count was in the middle of the expected range in 2025, indicating a healthy fishery with ample fish in each size class (Figure 6.2). Although large schools of small fish have not been counted since 2016, larger fish counts have been increasing. The Waihou River rainbow trout population appears stable with hundreds of rainbow trout per kilometer of river. The 2025/26 regulation changes will lower the daily limit on the Waihou River potentially increasing the survival of small fish, but significant population changes are unlikely.

7. Waitawheta River

7.1. Waitawheta River introduction

The Waitawheta River rises on the eastern slopes of Mt Aroha in the Kaimai-Mamaku State Forest and then flows for about 20 km northward before entering the Ohinemuri River opposite the township of Karangahake. The Waitawheta is a critical spawning tributary and thermal refuge for the once productive Ohinemuri River. The historic Masonry Dam near the town of Waihi prevents fish passage to the upper reaches of the Ohinemuri River that would provide both thermal refuge and spawning habitat making the Waitawheta a critical spawning tributary and thermal refuge. Although high summer water temperature and fish passage limits trout production during most summers, the catchment is still a popular destination due to the proximity to Auckland. Extensive fencing and planting upstream could improve conditions for trout in the Ohinemuri but ultimately climate change is working against restoration efforts in this catchment. The Ohinemuri and Waitawheta trout populations do bounce back after cool summers like the conditions observed in late 2022 and early 2023 Figure (7.1).

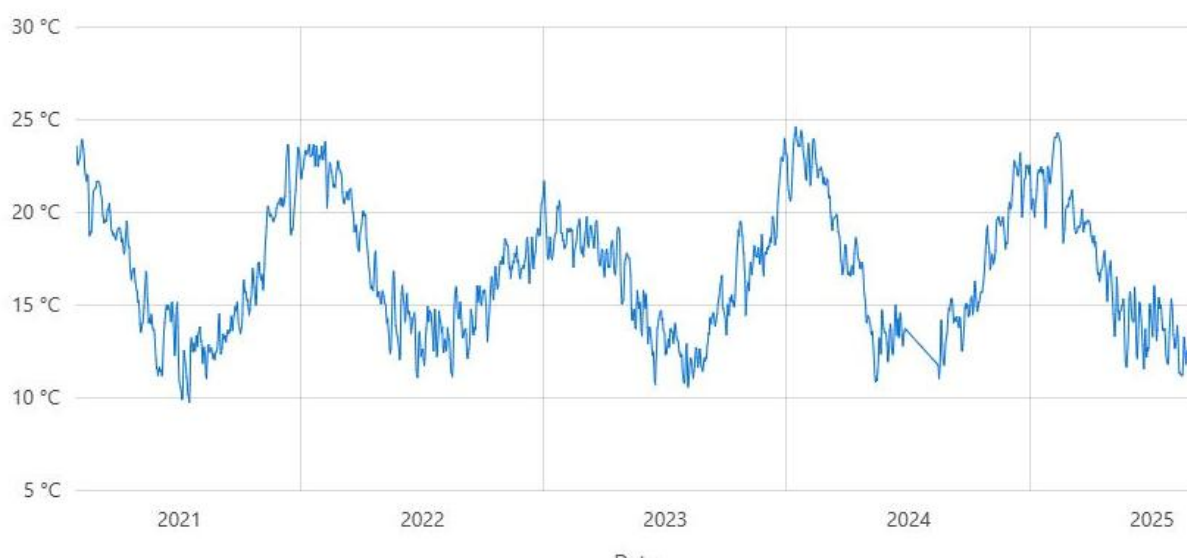


Figure 7.2. Water temperature in the Ohinemuri River from 2021-2025. Data from the [Waikato Regional Council](#).

7.2. Waitawheta River study area

The drift dive survey occurs in the upper reaches of the Waitawheta River on the boundary of the State Forest at the end of Franklin Road. Here the river consists of a series of long deep pools separated by short turbulent runs/rapids. Although the river was modified for logging and mining the upper catchment is nearly pristine aside from the DOC tracks.

7.3. Waitawheta River methods

The drift dive was 1.2 km and the dive reach and GPS positions for the start and end points are displayed in Figure 7.1 A and B in addition to Appendix A. Unlike the Whakapapa most runs and rapids are safe to survey allowing for the opportunity to count age-0 if present.

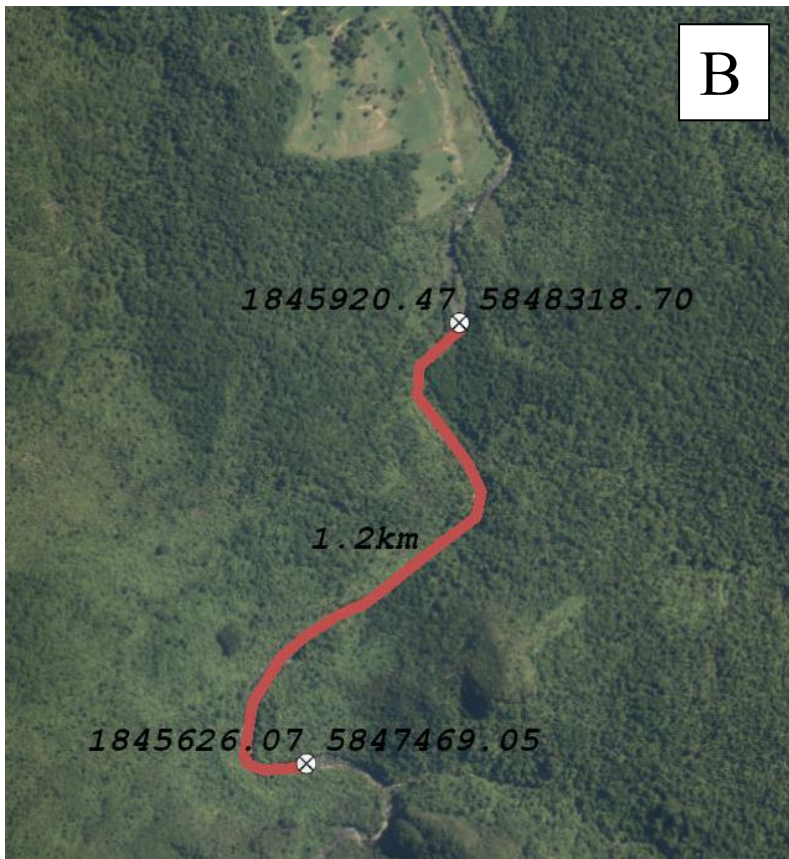
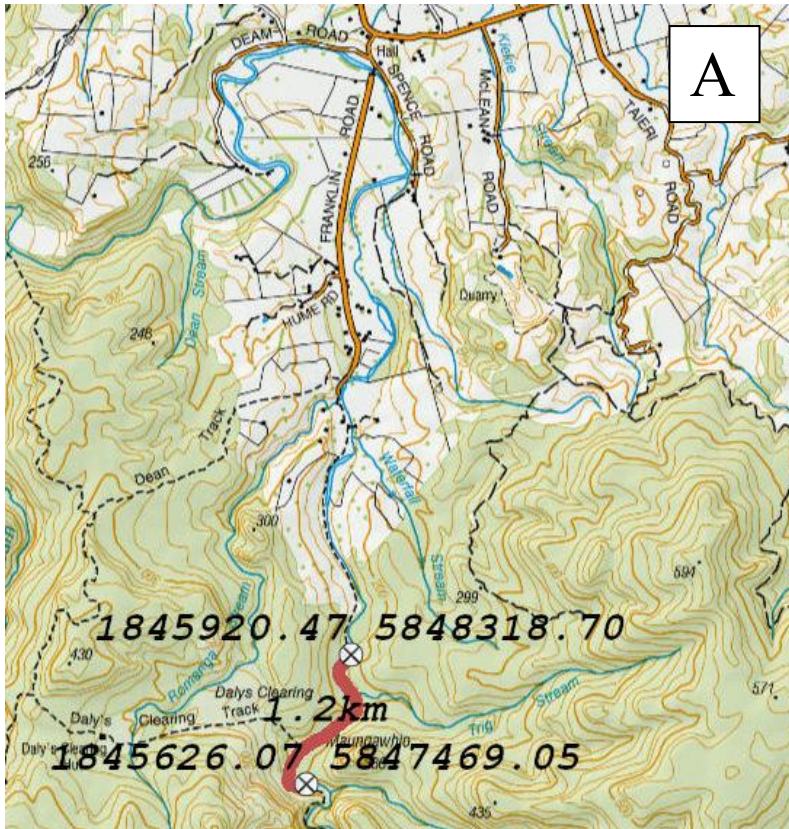


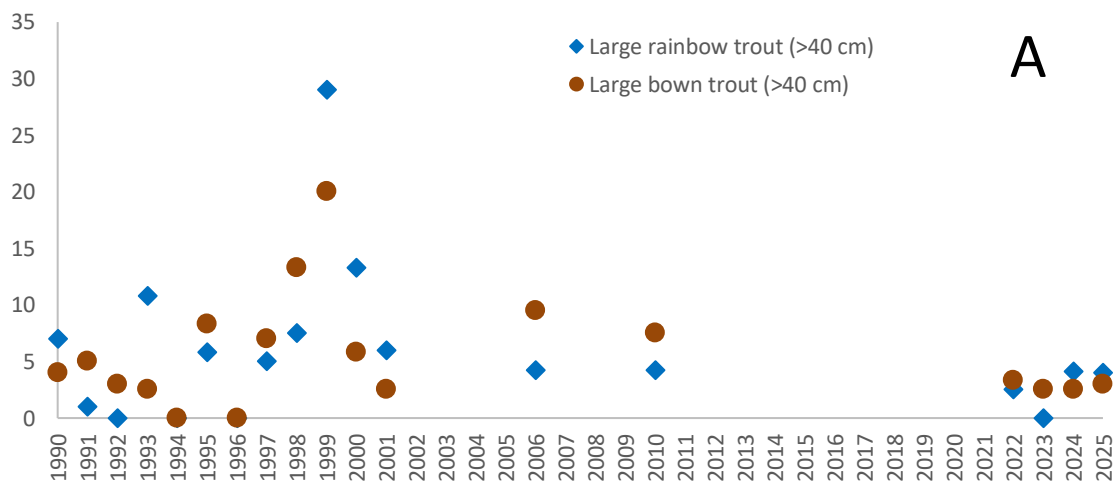
Figure 7.2. (A) 7.3. Waitawheta River drift dive location showing Franklin Road (B) photo of the drift dive area with GPS points for the start and stop locations.

7.4. Waitawheta River results

The Waitawheta drift dive was conducted 3 January 2025 at 10:00am. The Waitawheta River does not have a river gauge, but the river was at base flow during the dive. Water temperature was 15.2°C with water clarity at 4.0 m due to heavy periphyton and low water. Two divers conducted the dive searching all accessible water. Several shallow runs were skipped due to low water and the heavy algal growth. The largest number of <20cm fish ever recorded were seen on the dive indicating successful recruitment during the winter of 2025 (Table 7.1 & Figure 7.2). However low numbers of adult trout were detected (Table 7.1 & Figure 7.2).

Table 7.1. Trout per kilometre for the last three drift dives in the Waitawheta River.

Year	<10 cm	10-20 cm	20-30 cm	30-40 cm	40+ cm
2023	7	12	5	0	0 3 B
2024	36	118	7	4	4 3B
2025	13	148	4	3	4 3B



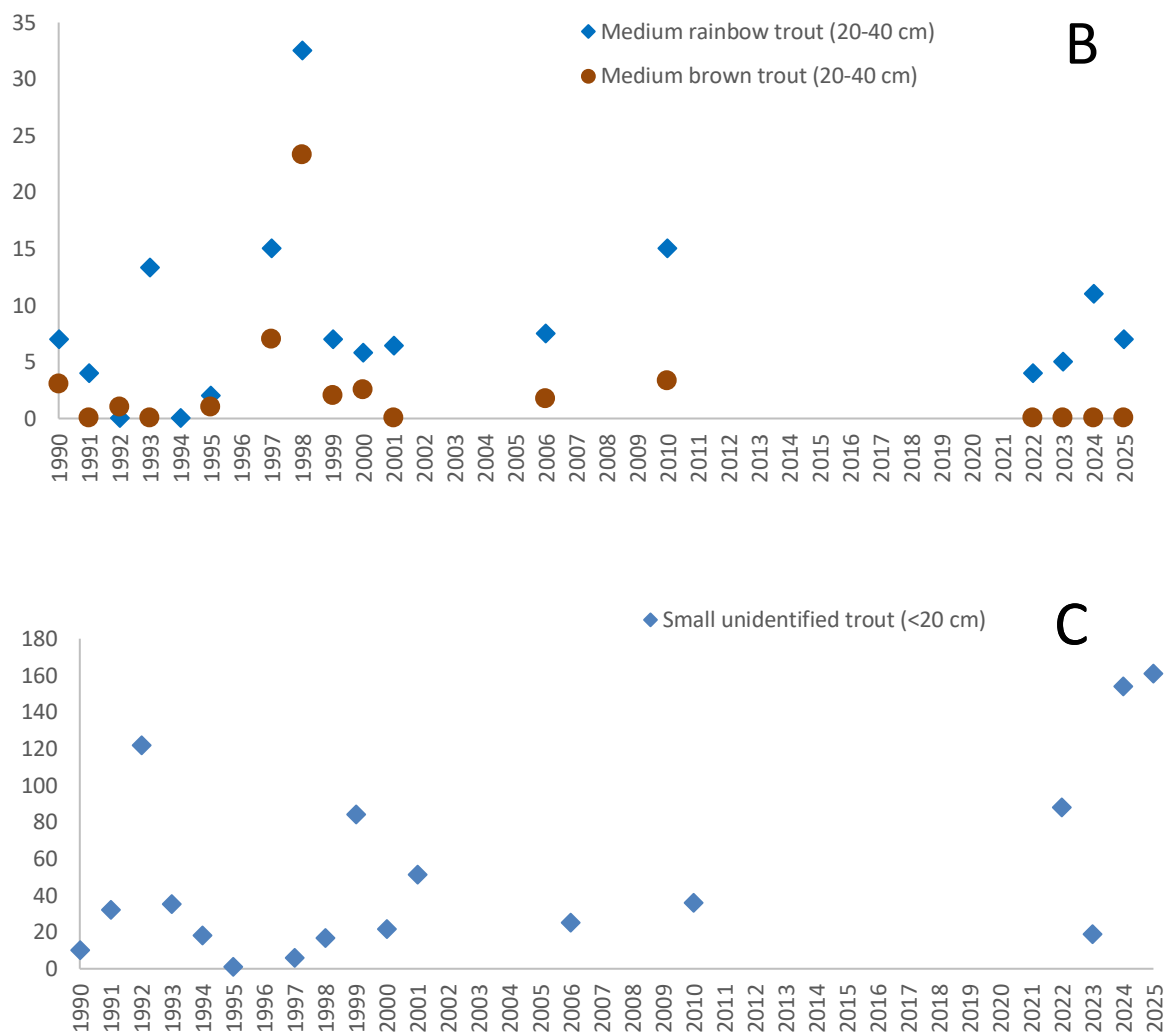


Figure 7.2. Number of large (≥ 40 cm; A), medium (20-40cm; B) and small < 20 cm; C) trout per km of the Waitawheta River 1990-2025. Brown circles represent brown trout, and blue diamonds represent rainbow trout counted during drift dive surveys.

7.5. Waitawheta River discussion

A summary of drift diving results for the Waitawheta River since 1990 (Figure 7.2 A-C) indicates the reach monitored only occasionally holds high numbers of large trout. The consistent cool weather and large cohort of small fish in 2024 did not translate into increased numbers of large fish during the 2025 survey likely due to high summer water temperatures. The Ohinemuri River exceeded 20°C from mid-December to early March so it is likely that fish were also stressed in the Waitawheta River. Fishing reports from the Waitawheta River in late 2025 were positive, indicating that even with low numbers of fish the fishery is still valued by anglers.

8. Kauaeranga River

8.1. Kauaeranga River intro

Fish & Game management objective for the Kauaeranga River is to maintain a wild trout population intended as a secondary activity that is done in conjunction with camping at the multiple DOC sites along the river (Ben Wilson 2021b). The Kauaeranga is a stream where campers in the area can catch fish rather than a location where anglers travel to

go fishing. Large storms have removed the tree canopy from the riparian zone in much of the upper catchment further exacerbating the impact of warm dry summers. The remnant trout population survives in thermal refuges created by groundwater inflows and small shaded tributaries.

8.2. *Kauaeranga River study area*

The Kauaeranga River rises in the Coromandel Range and flows in a southwesterly direction for about 32 km before entering the Thames estuary at Thames. The catchment area of about 121 km² is generally steep with regenerating native bush and scrub in the upper reaches, and exotic pine plantation, native scrub and pastoral land in the middle and lower reaches.

For much of the year, the Kauaeranga River can be described as a stream flowing over the bed of a large river. The wide riverbed does not allow for shading, increasing the daily peak water temperature. Although base flows in the Kauaeranga are low (mean annual 7-day low flow of 0.62 m³/s), massive floods are not uncommon as the Coromandel Range is subjected to torrential rain from northerly storms and the remnants of tropical cyclones. These massive floods have gorged out long deep pools and created broad shallow runs. Bed materials in the upper/middle reaches consist of boulders, cobbles, and hard gravel. Further downstream below the Coromandel Forest Park there are increasing quantities of mud and silt.

A large part of the Kauaeranga catchment is in the Coromandel Forest Park, and here the river is visited by many people, especially in the summer. A metal road with numerous DOC camping areas follows the river valley for some 25 km.

8.3. *Kauaeranga River methods*

Two divers surveyed 1.2 km of the upper Kauaeranga near Booms Flat Camp. The dive reach and GPS positions for the start and end points are displayed in Figure 8.1 A and B in addition to Appendix A. The drift dive involved two divers floating downstream using snorkeling equipment and counting trout as they became visible. The wide riverbed and low water created thousands of pools making it very difficult to cover all of the available water. If there was an impact on data collection it would likely result in the undercounting of fish making the estimate a minimum.

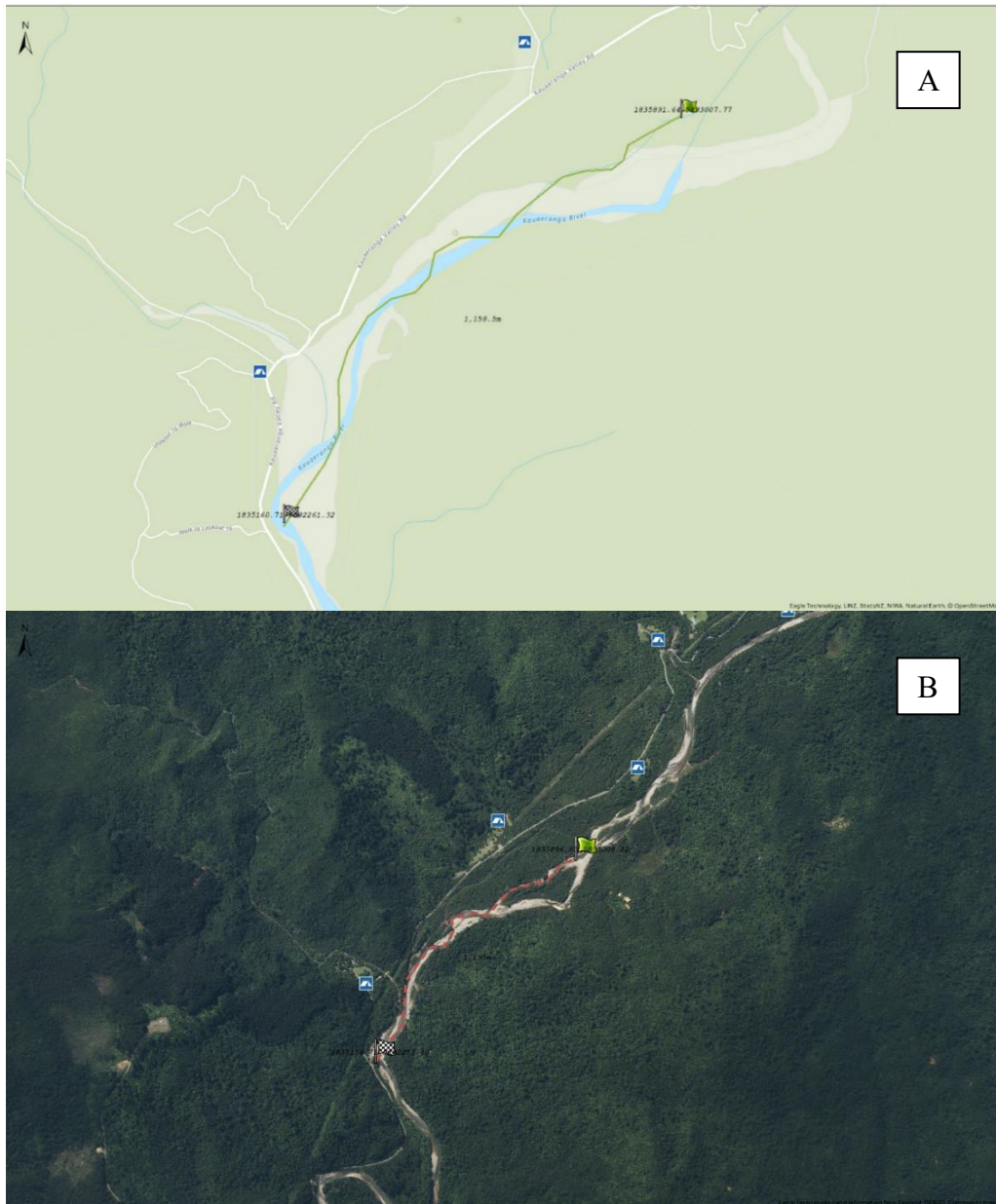


Figure 8.1. (A) Drift dive location showing the put in (green flag) and take out (checkered flag). (B) Photo of the drift dive area with GPS points in NZTM for the start (green flag) and stop location (checkered flag).

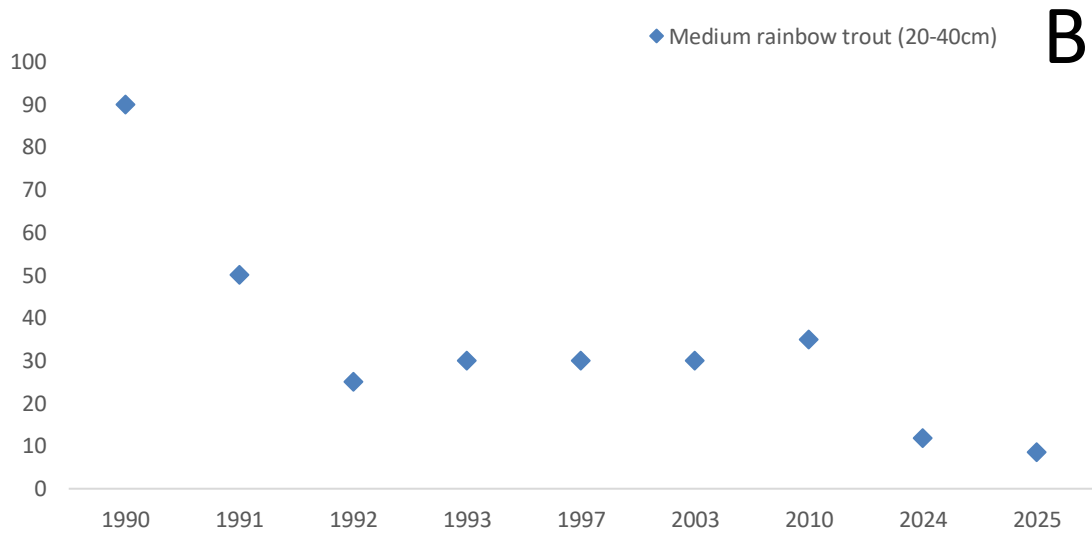
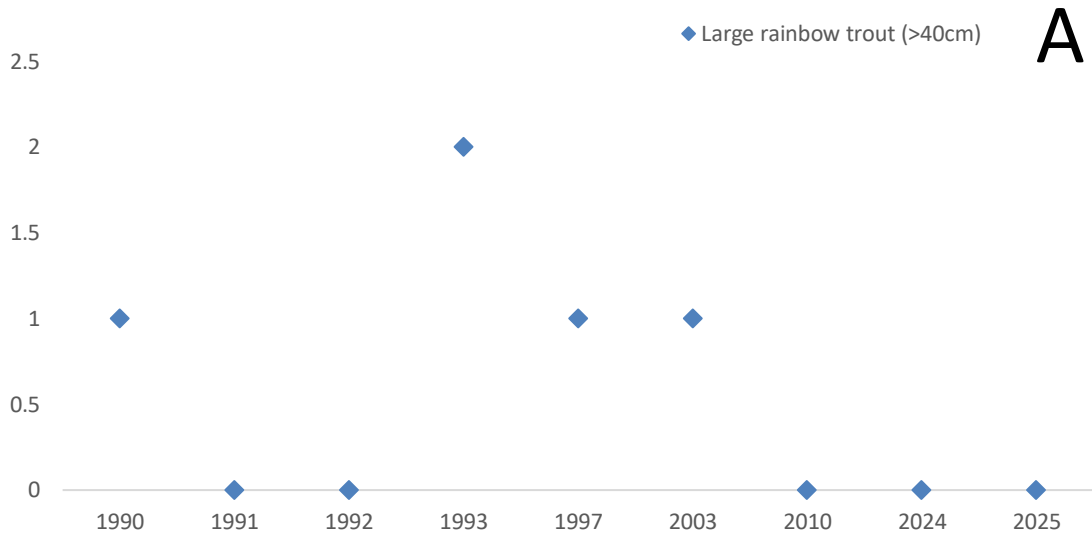
8.4. Kauaeranga River results

The Kauaeranga River drift dive started at the top end of the Boom Flat Island at 11:00pm on February 5th, 2025, with 8.0 m visibility and water temperature of 19.8 C°. Although the water temperature was high there was a noticeable influence of groundwater in many pools creating thermal refuges far below the surface temperature. Due to the exceptional water clarity and proximity to the sea (<20 km) the number of native fish was remarkable with hundreds of smelt in some pools. Although trout numbers were low there were positive signs for the population with relatively high numbers of small fish (Table 8.1; Figure 8.2).

Table 8.1. The size and frequency of rainbow trout seen in the Kauaeranga River on the last three drift dive surveys (2003, 2010 and 2025).

Year	< 10 cm	10-20 cm	20-30 cm	30-40 cm	40+ cm
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2010	3	0	30	5	0
2024	9	31	8	3	0
2025	31	24	6	3	0



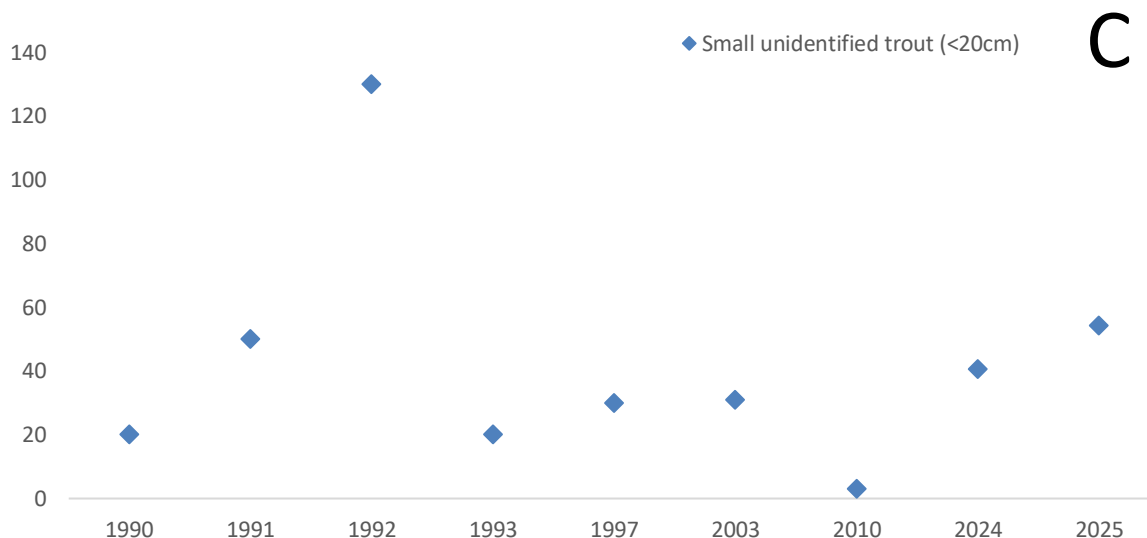


Figure 8.2. Number of large (>40 cm; A), medium (20-40 cm; B) and small (<20cm; C) rainbow trout per km of the Kauaeranga River (1990-2024). Only years surveys were conducted are displayed.

8.5. *Kauaeranga River discussion*

Although the Kauaeranga River has low trout numbers it is an exceptionally scenic location with popular DOC campgrounds. The river has a wide stream bed with limited shading in the main channel due to frequent high intensity floods. High summer temperatures limit recruitment during hot summers making the Kauaeranga River an intermittent fishery. There are no practical management interventions that could improve conditions as the upper catchment is already a forest park. However, the river is worth monitoring to inform anglers when fish are present and to document the impact of heat related stressors on trout.

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10. Appendix A Dive locations

River	Reach	X NZTM	Y NZTM	X NZTM	Y NZTM	Distance (km)
Waihou	Blue springs	1847743.05	5787062.24	1847056.91	5787904.84	1.7
Waitawheta	Park boundary	1845627.86	5847471.51	1845904.95	5848404.28	1.2
Mangatutu	Gravel pit	1816389.34	5768493.01	1815645.77	5769408.62	2
Awakino	Upper Gribbon	1757293.16	5734676.96	1757491.12	5734050.83	0.75
Kauaeranga	booms flat camp	1835891.64	5893007.77	1835163.54	5892258.55	1.18
Awakino	lower	1759111.69	5731201.71	1760056.4	5730186.53	1.6
Whakapapa	Owhango	1807547.03	5680065.1	1807721.4	5680880.23	1
Whakapapa	Oio Farm	1808861.12	5670461.79	1808861.12	5670461.79	1.94

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Arapuni Reservoir 2025 Spawning Report



Author: Dr Adam Daniel

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Auckland/Waikato Fish and Game

Council Hamilton New Zealand

Executive summary/management implications

The proportion of wild rainbow trout (*Oncorhynchus mykiss*) returned in the Lake Arapuni fishing competition has averaged 53% over the last four years (2022-2025) and was 55% in 2025. Using the 2025 Lake Arapuni Fishing Competition wild to hatchery fish ratio and considering half of the hatchery rainbow trout released in the lake are sterile approximately 29% of fish counted during the 2025 spawning surveys were expected hatchery tagged fish. Five spawning surveys were conducted at Lake Arapuni between 3 May and 3 September, 46% of the rainbow trout observed were tagged hatchery fish. Similar to the 2024 surveys rainbow trout were only found in Tributary C and the only brown trout spawning in the reservoir was detected in the Makomako Stream.

The high proportion of hatchery spawning fish observed in 2024 and 2025 is a strong indication that hatchery stocking could be disrupting the productivity of naturally spawning trout. Multiple peer-reviewed studies have documented reduced fitness and genetic risks associated with hatchery supplementation. Hatchery fish are known to pass on traits selected for in the hatchery environment that are detrimental to wild populations, significantly reducing the survival of offspring for several generations. Due to concerns about the impact of high numbers of hatchery trout spawning in Lake Arapuni, the Auckland/Waikato Fish & Game council voted to pause hatchery releases into Lake Arapuni for a period of five years.

The suspension of hatchery releases is not without risks, including a likely reduction of the Lake Arapuni trout population during the period hatchery fish are still disrupting recruitment. However, the two-fish limit should help protect the remaining population. It will be important to continue monitoring angler success and satisfaction during the Arapuni Fishing Competition in addition to spawning surveys. The sterile trout program will continue until late 2026 but is not expected to add additional solutions for cost-effectively stocking trout without disrupting natural spawning.

Staff recommendations include:

1. Suspend trout stocking as per council resolution
2. Continue monitoring:
 - a. Fish condition
 - b. Angler satisfaction
 - c. Catch rates
 - d. Spawning

Background

Lake Arapuni is the single largest fishery in the Auckland Waikato region, with angler use comparable to the Whakapapa River at approximately 3800 angler days according to the 2021 National Angler Survey (Stoffels and Unwin 2023). Since angler use data were first collected, fishing pressure at Lake Arapuni has halved from 7298 angler days in 1994 to a low of 3371 in 2014, reflecting similar trends observed across other Waikato fisheries (Figure 1).

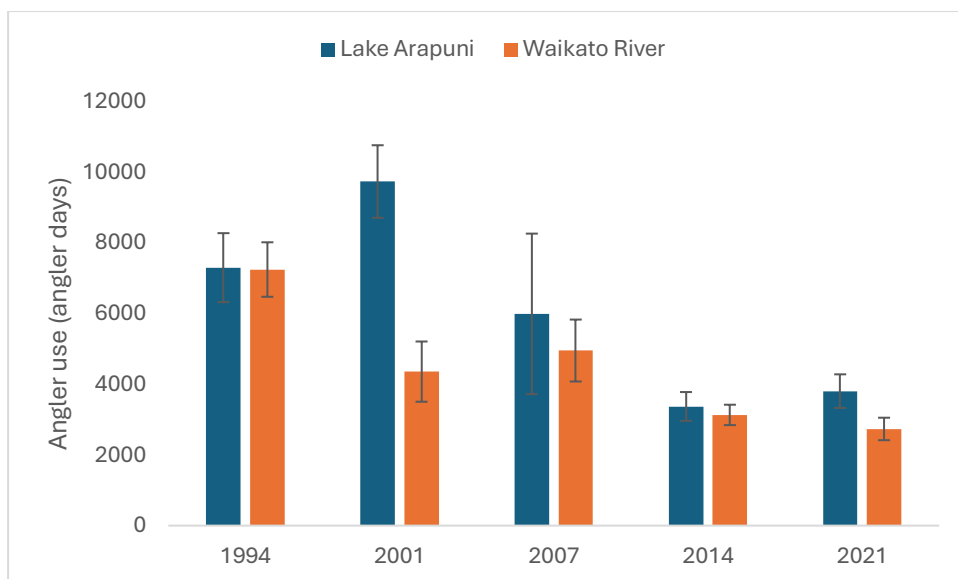


Figure 1. Angler use of Lake Arapuni and the Waikato River (below Karapiro Dam).

Lake Arapuni was originally identified as having limited spawning success in the 1980's (Strickland 1980, Ward 1983). In addition, it was suggested that spawning could be improved by fencing and planting Tributary C or adding spawning gravel (Strickland, 1980). The fencing and planting were completed in the 1990's resulting in a full canopy cover over and riparian margin along Tributary C. Subsequent spawning surveys observed large numbers of fly in Tributary C (Moore, 1987), so additional spawning gravel was not tested as it was unnecessary.

During the 2024 Lake Arapuni spawning surveys, continuous temperature monitoring was conducted to determine why Tributary C was the preferred spawning stream despite other suitable sites being available (Daniel, 2024). The results revealed that water temperatures in other tributaries were very similar to air temperature and Tributary C had a far more stable temperature indicating it is heavily influenced by groundwater (i.e., spring-fed). Trout are known to have highly successful spawning in spring-fed streams (Sowden & Power, 1985) and will actively select spring-fed systems (Lusardi et al., 2021) over surface water. Spring-fed systems are also far more resilient to the effects of climate change due to stable flows and cool water temperatures (Lusardi et al., 2021). The discovery of groundwater in Tributary C significantly changes the management of Lake Arapuni because fish are not using other tributaries due to a lack of habitat that could be improved. Rather, they are selecting groundwater (stable flows, cool water), and enhancements to other tributaries would be unlikely to persuade fish to spawn elsewhere.

The annual Lake Arapuni fishing competition held on the second weekend in May has produced a significant long-term dataset that can be used to track the wild and hatchery population from 1998 to present. The proportion of wild rainbow trout (*Oncorhynchus mykiss*) returned in the Lake Arapuni fishing competition fell from an average of 51% from 2006 to 2012 to below 10% in 2016 and 2017 (Figure 2). The reduction in wild fish prompted complaints from anglers that lead to the sterile trout project and subsequent spawning surveys.

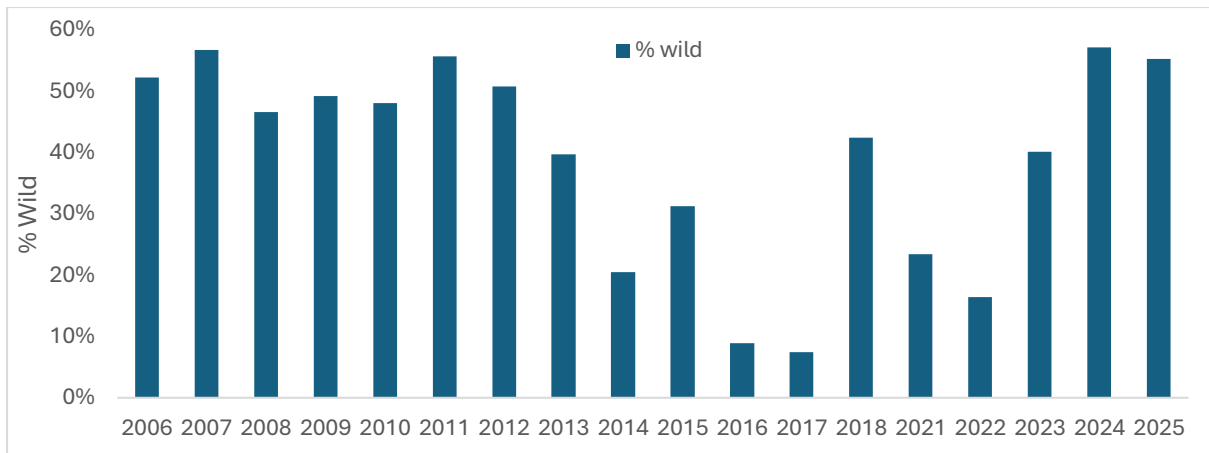


Figure 2. Percentage of wild rainbow trout returned in the annual Lake Arapuni Fishing Competition 2006-2025.

The sterile fish project was started in 2020 with the hope of proving that trout could be stocked without disruption to natural spawning. In addition, it was hoped that fish would grow larger if they did not spend energy on spawning. Preliminary results have shown that sterile fish are caught at a lower rate than normally spawning fish, and there is no difference between the size of sterile and normal fish (Daniel, 2024).

Current hatchery releases

Auckland/Waikato Fish & Game Council voted to pause hatchery releases in Lake Arapuni in 2025. A recommendation for future stocking will be presented to the council in 2029 based on spawning surveys, catch rates and angler satisfaction data. There will likely be a reduction in the Lake Arapuni trout population immediately after stocking is suspended. Hatchery fish will still be in the lake for at least two years, and the negative impact of hatchery fish can be present for multiple generations (McMillan et al., 2023).

Methods

Study area

The 2025 surveys were focused on streams where spawning was confirmed in 2024 or where spawning was reported to have occurred previously (Table 2 & Figure 5). The 2024 Lake Arapuni Spawning Survey only found spawning in the Makomako Stream and Tributary C (Daniel, 2024).

Table 2. Known and suspected spawning tributaries of Lake Arapuni trout population. “**Map**” indicates the label for each site in Figure 5. “**Max**” is the maximum observed spawning trout (“**R**” rainbow & “**B**” brown trout).

Map	Stream name	Max	X	Y
1	Makomako Stream	6B	175°40'28.39"E	38°13'8.85"S
2	Mangarewa	11R	175°40'48.67"E	38°13'17.62"S
3	Te Rimu	17R	175°40'39.95"E	38°14'41.67"S
4	Tributary C	95R	175°40'38.38"E	38°15'43.11"S

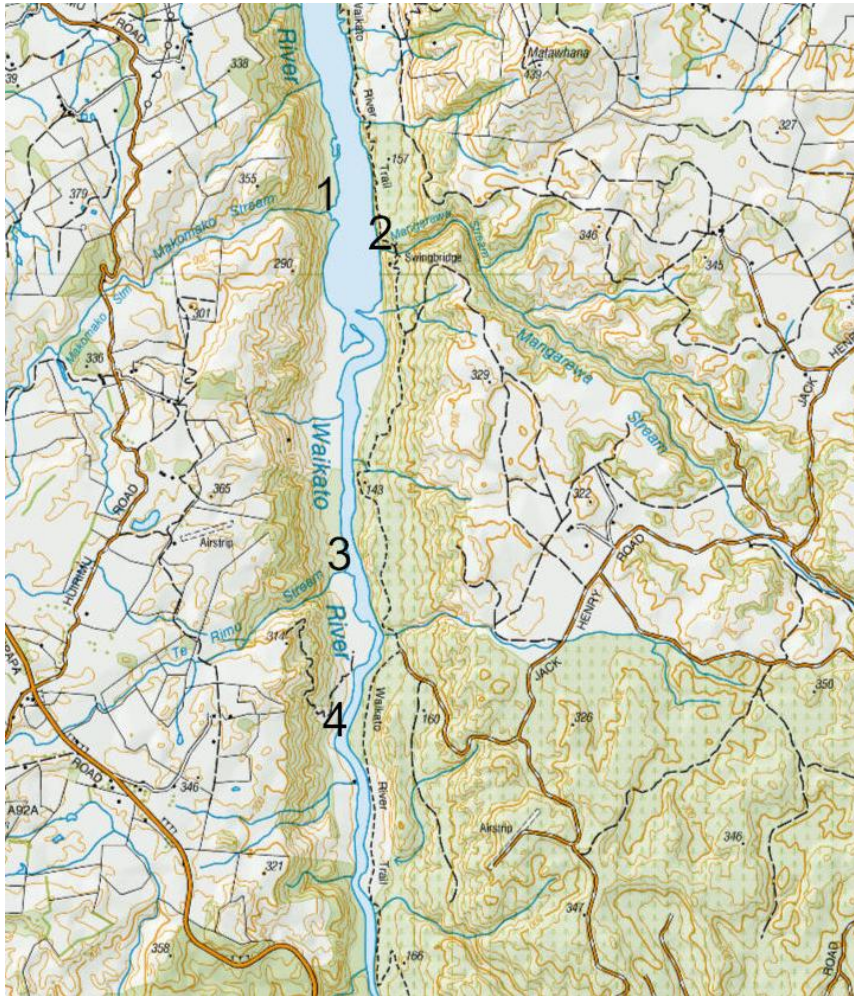


Figure 5. Known trout spawning tributaries (1-4) of Lake Arapuni. Stream names and coordinates are listed in Table 2.

Makomako Stream

Makomako Stream (38°13'8.85"S 175°40'28.39"E) was surveyed for approximately 70m from the confluence of Lake Arapuni to the first impassable waterfall (Figure 6). Although there was limited habitat available, fresh gravel from a slip had replenished the stream with 30-60 mm stones (Figure 7).



Figure 6. Makomako Stream survey area (red dotted line) with start and end points marked with red dots.



Figure 7. Makomako Stream with spawning brown trout, fine sediment (bottom of photo) and fresh gravel.

Mangarewa Stream

The Mangarewa was surveyed from the confluence ($38^{\circ}13'17.64''\text{S}$, $175^{\circ}40'48.64''\text{E}$) for approximately 100m upstream ($38^{\circ}13'18.01''\text{S}$, $175^{\circ}40'50.87''\text{E}$; Figure 8 and 9). The area had some spawning substrate but was of steep gradient with logs and boulders. The area upstream of the bike swing bridge was observed from the bridge in 2025 and was of an extremely steep gradient that was unlikely to have spawning habitat.

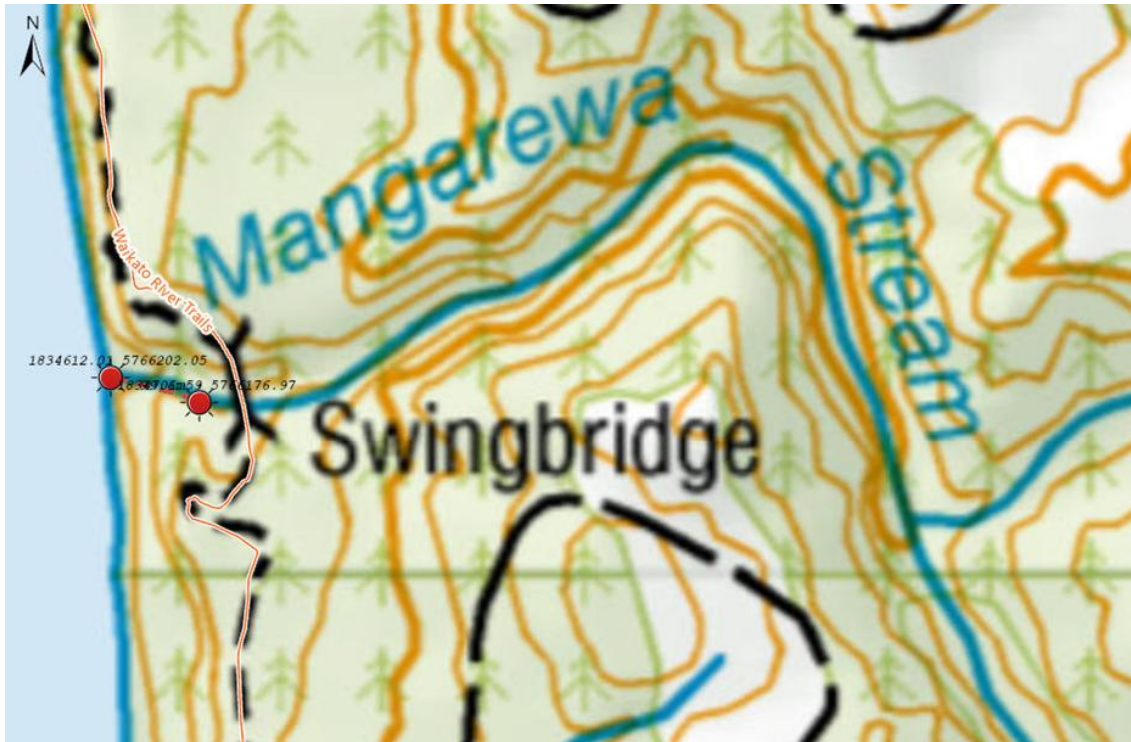


Figure 8. Mangarewa Stream survey area (red dotted line) with start and end points marked with red dots.

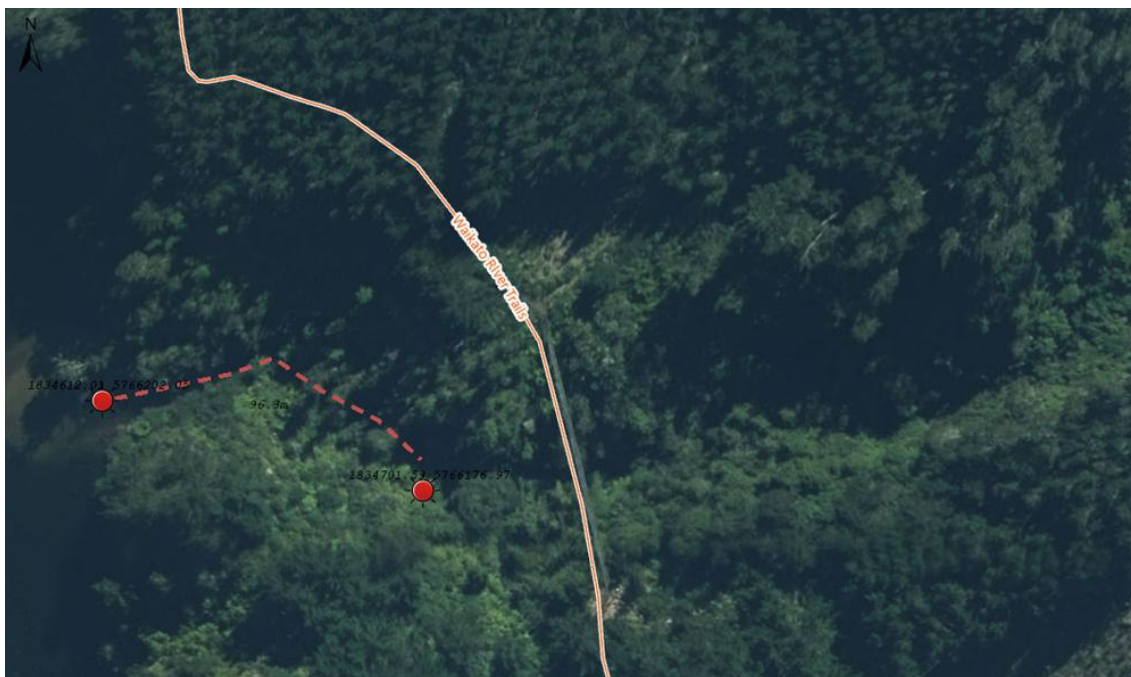


Figure 9. Mangarewa Stream survey area (red dotted line) with start and end points marked with red dots.

Te Rimu Stream

The Te Rimu Stream was surveyed from 136 m below the waterfall to the base of the falls (38°14'45.11"S, 175°40'35.26"E; Figure 10 and 11). The substrate was predominantly sand and

fine sediment, but areas of suitable spawning gravel were present.

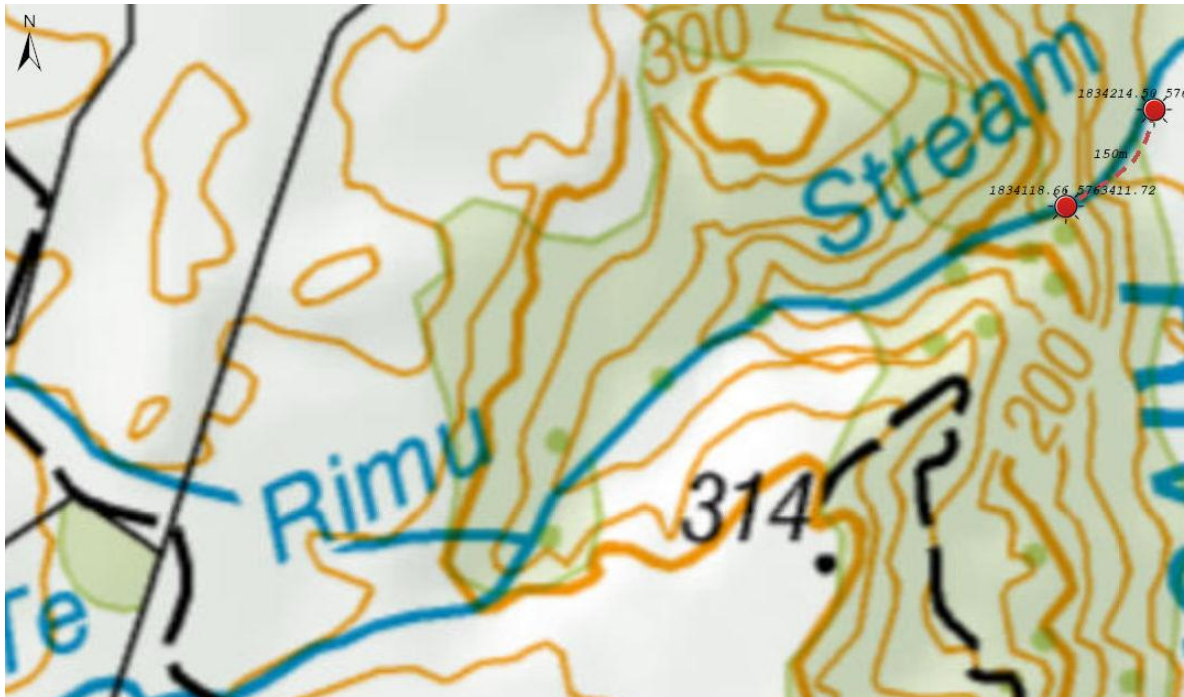


Figure 10. Te Rimu Stream survey area (red dotted line) with start and end points marked with red dots.



Figure 11. Te Rimu Stream survey area (red dotted line) with start and end points marked with red dots.

Trib C

Tributary C was surveyed from the confluence with the Waikato River to a point approximately 615m upstream (straight line distance; 38°15'43.11"S 175°40'38.38"E; Figure 12 and 13). It is possible that historic surveys continued further upstream into private land. The stream bed had sparse spawning gravel in the first 300m with a high percentage of fine gravel and sand with

large areas of scour. The upper half of the survey area had several moderately sized gravel beds (Figure 14) suitable for spawning.



Figure 12. Tributary C survey area (red dotted line) with start and end points marked with red dots.



Figure 13. Tributary C survey area (red dotted line) with start and end points marked with red dots.



Figure 14. One of several gravel beds in the upper reaches of the Tributary C (left) with gravel predominantly from 18-25mm (right).

Spawning survey

Due to the small size (<1 m wide and under 200mm average depth) and good water clarity, staff were able to slowly walk from the Arapuni Reservoir up the spawning streams to observe spawning fish. Although logs and undercut banks provided some cover, most fish were defending redds (spawning beds) prior to being disturbed and were mid-stream in gravel beds. Fish were identified by species and rainbow trout were checked for tags to identify hatchery fish. All hatchery released fish in Lake Arapuni were tagged during the 2025 survey due to the ongoing sterile fish project. Fish were categorised as tagged, wild or unknown, as some fish could not be observed long enough to rule out a tag. It is easier to determine that a fish is tagged than to rule out a tag, which could potentially lead to an overestimate of tagged hatchery fish.

The 2024 and 2025 surveys are directly comparable, but due to a lack of detail in historic spawning survey reports (prior to 2024), it is unlikely that the current surveys have been conducted in a similar way and should not be directly compared. Tributary C was likely undercounted in 2024 and 2025 due to dense blackberry and private property. The area that was covered was sufficient to determine if spawning was occurring.

Results

Spawning surveys

Four streams were surveyed in total during five survey trips from May to August of 2025 (Table 4). Only Tributary C and the Makomako stream had spawning trout during 2025. All but one of the rainbow trout observed during the 2025 spawning surveys were in Tributary C, with a maximum count of 52 fish in June (Table 4), despite other tributaries having similar habitat. The lower reaches of Tributary C are a mix of scoured bed, fine gravel and sand. The Mangarewa and the Te Rimu Streams were visited during peak spawning, June and July, respectively, and no trout were observed.

Table 3. Spawning survey data from Lake Arapuni from May to September 2025 and from June to September 2024. The total number of fish counted is listed as “R” rainbow trout and “B” brown trout. Blanks indicate no survey was conducted.

2025					
Stream	3 May 2025	16 Jun 2025	21 Jul 2025	20 Aug 2025	3 Sep 2025
Trib C	R 0 B 0	R 24 B 0	R 52 B 0	R 28 B 0	R 18 B 0
Maco	R 0 B 0	R 1 B 8	R 0 B 0	R 0 B 1	R 0 B 0
2024					
Stream	May	21 June 2024	1 Aug 2024	20 Aug 2024	13 Sep 2024
Trib C		R 22 B 2	R 13 B 0	R 11 B 0	R 21 B 0
Maco		R 0 B 6	R 0 B 2	R 0 B 0	R 0 B 0

Of the rainbow trout successfully identified during 2025 surveys 46% were tagged hatchery fish (Table 4). Accounting for tag loss and unidentified fish, it is likely that up to half of the spawning fish in Lake Arapuni during the 2025 surveys were hatchery-released fish reared from Lake Tarawera brood stock.

Year	Surveys completed	% hatchery rainbows
2025	5	46%
2024	4	23%

Only nine brown trout were spotted during the three spawning surveys. All of the brown trout spotted during 2025 surveys were in the Makomako Stream. The Makomako Stream has recently experienced a slip that left coarse gravel in the limited habitat below the waterfall.

Discussion

Spawning in Lake Arapuni tributaries

Five spawning surveys were conducted at Lake Arapuni between 3 May and 3 September and 46% of the fish identified were tagged hatchery fish indicating a significant influence of hatchery

fish on wild spawning during 2025. These findings back up the council's decision to suspend hatchery releases for a period of five years. The proportion of wild rainbow trout entered in the Lake Arapuni Fishing Competition has averaged 53% over the last four years (2022-2025) and was 55% in 2025. Using the 2025 Lake Arapuni Fishing Competition wild to hatchery fish ratio and considering that 40% of the fish caught during 2025 were sterile, approximately 33% of the fish counted during spawning surveys were expected to be hatchery-tagged fish. Although the percentage of hatchery fish could be an overestimate, it was double the proportion identified in 2024 using the same methods.

Temperature monitoring was explored during 2025, but no additional spawning sites were discovered, so loggers were not installed. Areas where trout had historically been observed spawning, such as the Te Rimu Stream, have not had spawning fish detected in the last two years, despite suitable gravel being present. Several other streams can be explored during the 2026 spawning surveys, but due to their small size, they are unlikely to have spawning.

Overall, the spawning in Lake Arapuni is likely to be sufficient to naturally restock the lake, considering fishing pressure has halved since the early 2000s. The reduced limit for Lake Arapuni is not likely to have a significant impact on the trout population but will help buffer the effect of suspending hatchery releases. However, the spawning habitat is extremely limited so monitoring Tributary C for spawning and compliance is prudent. During the last two years of spawning surveys, two old nets or traps have been found, indicating historic poaching.

Staff recommendations

1. Pause hatchery releases and review stocking in 2029 as per the 2025 Auckland/Waikato Fish & Game Council resolution.
2. Monitor catch rates, fish condition and angler satisfaction during the Arapuni fishing competition.
3. Add an additional angler satisfaction question at the end of the year angler satisfaction survey specifically for Lake Arapuni.
4. Continue monitoring spawning in tributary C.

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- Daniel, A. (2024). *Arapuni Reservoir 2024 Spawning Report and Stocking Recommendations Executive summary/management implications*.
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- McMillan, J. R., Morrison, B., Chambers, N., Ruggione, G., Bernatchez, L., Stanford, J., & Neville, H. (2023). A global synthesis of peer-reviewed research on the effects of hatchery salmonids on wild salmonids. In *Fisheries Management and Ecology* (Vol. 30, Issue 5, pp. 446–463). John Wiley and Sons Inc. <https://doi.org/10.1111/fme.12643>
- Moore, A. (1987). *Lake Arapuni Spawning Study and Recommendations*.
- Strickland, R. (1980). *Lake Arapuni box net trial*.

AUCKLAND/WAIKATO FISH & GAME
2026 MEETING SCHEDULE

AGENDA ITEM 15

SATURDAY MEETING SCHEDULE

11.00am - 1.00pm Council meeting
1.00pm - 2.00am Lunch
2.00pm - 3.00pm Council meeting

WEEKDAY MEETING SCHEDULE

5.30pm - 6.00pm Dinner
6.00pm- 9.00pm Council meeting

14 FEBRUARY COUNCIL MEETING

- Waitangi Day 6th
- Game Regulation guide content due on the 9th.
- NZ Council Meeting 27th
- Variance Report to CFO

14 MARCH COUNCIL MEETING

- Governors Forum 1st.
- Draft Operational Work Plan set for 2025/26.
- Draft budget approved.

APRIL

- Mark up day 29th of March.
- NZ Council Budget Meeting 11th – 12th.
- 16th Licence fee consultation doc distributed to Regions.

21 MAY THURSDAY EVENING COUNCIL MEETING (6pm – 9pm)

- Primary purpose of meeting to provide budget feedback.
- Opening Day 2nd May
- Regional responses to licence fees/budgets by 30 May.

JUNE

- NZ Council Meeting 17th -18th.
- 23 June, licence fee/angler notice submissions to MOC

25 JULY COUNCIL MEETING

- NZ Council Meeting 18th & 19th.
- Angler notice published in Gazette 17th July

AUGUST

- NZ Council meeting 27th -29th.

26 SEPTEMBER COUNCIL MEETING

- Following NZF&GC review of 2023/24 Budget and OWP.
- if necessary, Council reconsiders Budget/OWP approved at March meeting.
- Governance/Policy Review.
- OSH Review.

OCTOBER

- Labour Day 26th

NOVEMBER

- NZ Council Meeting 28th – 29th of November

5 DECEMBER COUNCIL MEETING & AGM

- Set next years meeting schedule.

Council meeting to incorporate Public Annual General Meeting

- **11.00am - 11.30am Annual General Meeting**
- **11.30am - 1.00pm Council Meeting**
- **1.00pm - 2.00pm Lunch**
- **2.00pm - 3.00pm Council Meeting**

Budgeting

Procedure

- Council reviews strategic objectives in 2026/27 Operational Work Plan at its February meeting.
- The council approves its draft budget at the March meeting and Information sent to National Office immediately after Council meeting.
- NZF&GC considers budgets in April and provides regions with licence fee consultation document by mid-April.
- Regional responses for licence fee and budgets must be with NZC by 30 May. This is a tight turnaround necessitating a meeting in late April or May.
- At its September meeting following NZF&GC review of OWP's Council reconsiders its OWP if necessary – dependent upon Minister approving licence fees.

2025-26 Annual Budget & Meeting Schedule

Month	Date	Meeting/Activity	Location
Dec-2025	Friday 5 & Saturday 6 Dec	NZ Council Meeting (Held over 2 days) <i>(2025/26 Strategy)</i>	Wellington
	Friday 19 Dec	Variance Reports & Reserves Schedules sent to CFO	
	Thursday 25 Dec	Christmas Day	
	Friday 26 Dec	Boxing Day	
	Wednesday 31 Dec	All Regional Council 2024 Meetings to be complete/held	
Jan-2026	Thursday 1 Jan	New Year's Day	
	Friday 2 Jan	New Year's Day Observed	
	Friday 23 Jan	Variance Reports & Reserves Updates Distributed	
	Friday 30 Jan	Licence Working Party Licence Sales Forecast	
	Friday 30 Jan	Regulation Details Due for Game Notice <i>(From all Regional Councils)</i>	
Feb-2026	Monday 2 Feb	World Wetland Day/Release of 2025 Habitat Stamp	
	Tuesday 3 Feb	Draft Game Notice Submission to DOC for comment	
	Thursday 5 Feb	Variance reports Final Circulation back to Managers	
	Friday 6 Feb	Waitangi Day	
	Week of 9 Feb	Online meeting to discuss Game bird Regulations	TBC
	Monday 9 Feb	Game Regulation Guide Content Due to NZC Office	
	Tuesday 17 Feb	Game Notice & Submission to MOC & Gazette Office	
	Friday 19 Feb/or the following week	Publish Game Notice in NZ Gazette	
	Friday 27 Feb	NZ Council Meeting (Day 1 of 2)	Wellington
Mar-2026	Saturday 28 Feb	Governors Forum - Regional Chairs & NZC (Planning)	Wellington
	Sunday 1 Mar	NZ Council Meeting (day 2 of 2)	Wellington
	Friday 13 Mar	Game Bird Hunting Licences on Sale (<i>2nd Thursday</i>)	
Mar-2026	Saturday 14 Mar	Draft Budgets Applications Due to CFO Staff Development Grant Applications Close	
	Tuesday 17 Mar	Game Magazine Released	
	Saturday 28 March	Budgets, Budget Summaries Applications Circulated back to Regions	
Apr-2026	Friday 3 April	Good Friday	
	Monday 6 Apr	Easter Monday	
	Monday 6 Apr	Mark-up/Pegging Day (<i>4 weekends before opening</i>)	
	Saturday 11 Apr	NZ Council Budget meeting	Wellington
	Sunday 12 Apr	NZ Council Meeting	Wellington
	Thursday 16 April	Licence Fee Consultaion doc distributed to Regions (3 working days after NZC meeting)	
May-2026	Saturday 25 Apr	Anzac Day	
	Sunday 3 May	Game Bird Season Opening	
	Saturday 30 May	Regional responses to Licence Fee proposals, Anglers Notice & SFLFFN DW/sea run salmon Due to NZC Office	
	Monday 1 June	King's Birthday	
	Wed 17 June &	NZ Council Meeting (6pm -8pm)	Online

Month	Date	Meeting/Activity	Location
Jun-2026	Thu 18 June	<i>(Consider Licence Fee, Anglers Notice & SFLFFN)</i>	6pm-8pm
	Tuesday 23 June	Licence fee, Anglers Notice & SFLFFN submission to MOC	
	Friday 26 June	GBHT Grant Applications Close	
Jul-2026	Thursday 9 July	GBHT Grant Applications Distributed to Board	
	Friday 10 July	Matariki	
	Friday 17 July	Anglers Notice Published in NZ Gazette	
	Tuesday 28 July	GBHT Board Meeting (11am)	Online
	Saturday 22 Aug	GBHT Field Trip	Hamilton
Aug-2026	Sunday 23 Aug	GBHT Board Meeting	Hamilton
	Tuesday 25 Aug	Fishing Magazine Released	
	Friday 28 Aug	NZ Council Meeting	Wellington
	Saturday 29 Aug		
Sept-2026	Monday 31 Aug	Fish & Game End of Financial Year	
Oct-2026	Tuesday 1 Sept	Fishing licences go on Sale	
	Thursday 1 Oct	Start of new financial year Sports Fishing Opening	
	Monday 26 Oct	Labour Day	
Nov-2026	Sunday 1 Nov	High Country Sports Fishing Opening (CSI & NC 1st Sat Nov)	
	Saturday 28 Nov & Sunday 29 Nov	NZ Council Meeting (Held over 2 days) <i>(2026/27 Strategy)</i>	Wellington
Dec-2026	Saturday 19 Dec	All Variance & Reserves Schedules to CFO	
	Thursday 31 Dec	All Regional Council 2025 Meetings to be complete/held	

KEY

	Public Holiday
	NZ Council Meeting
	GBHT Board Meeting
	Governors Forum (Regional Chairs & NZC)



AUCKLAND/WAIKATO FISH & GAME

OPERATIONAL WORK PLAN

2026/2027

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- 4.0 Determining Auckland/Waikato Strategic Priorities.**
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 - 1.2 Gamebird Management
- Functional Area 2:
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- Functional Area 3:
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 - 3.1 Access Issues
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APPENDIX

- I Budget/Project Summary**

1. INTRODUCTION

This Annual Operational Work Plan connects with Council's 2021 Sports Fish and Game Management Plan which is recommended to the reader who wishes to obtain an overview of issues within the region and the general priorities of Council.

The Management Plan backgrounds Council's evolution, its interaction with the wider community, the sustainable management of fish and game, the importance of habitat, issues, areas of conflict, future possible threats and conflict/threat/mitigation strategies.

The Auckland/Waikato Fish & Game Council region is unique in that the population it services is much larger than that of other Fish & Game Councils. The bulk of the population is centred north of the Bombay Hills with the major resource located southwards necessitating considerable travel and associated expense for the majority of gamebird hunters and freshwater anglers in the region. The composition of the population is also unique in that the bulk of such is urban, which has not had a close association with either the land or traditional field sports.

Auckland/Waikato sell 25% more game licences than any other Council which coupled with the essentially urban population, places additional pressures not experienced by other Councils on Auckland/Waikato's major income base. Moreover Auckland/Waikato is the only Council that owns a substantial area of wetland with over 1,700 hectares of endangered wetlands comprising some 15 properties.

Under its validating legislation, the Conservation Law Reform Act 1990, the Auckland/Waikato Fish & Game Council is required to:

- i. Formulate and adopt an Operational Work Plan (Section 26Q (3)).
- ii. Provide a report of its operations and financial statements audited by the Government Audit Office (Section 41 Public Finance Act 1989).
- iii. Produce a Statement of Objectives specifying the output to be produced by the Council which at the end of the financial year will be reported on via a Statement of Service Performance (Section 41 Public Finance Act 1989).

2. REPORT FORMAT

The following plan presents a series of goals grouped under nine functional areas, with each goal addressed through a series of objectives with costings attributed to them. Each costing is an imputed net cost made up of projected direct and overhead costs less income. Costs other than those specific to the functional area are indirect items of budgeted expenditure divided by the hours available in order to produce the estimated cost relative to time expended on each objective - consequently those costs are indicative only.

Appendix (I) shows Council's budget for 2026/27

Unless otherwise stated objectives are to be completed by the end of Council's financial year.

The attached Work Plan is based on Council employing a full-time Chief Executive, two field officers, a senior field officer, two Environmental Officers (2 part time positions, one being shared with Northland Fish and Game) and a part time Office Manager (0.75 FTE). Provision has not been made for the hundreds of hours and dollars donated to Council's operations by the twelve elected Councillors, 15 honorary rangers, Fish and Game Associations and other user groups who seek to put something back into their sport - all on an unpaid basis and without which the organisation would not survive. The Council is also increasingly dependent on the considerable efforts and long hours spent by researchers, often highly qualified biologists from North America, who are assisting on a voluntary basis with the council's research programme.

In preparing the plan three key aims are met namely

- (a) The need to provide useful means of predicting and reviewing activities within an operational year within the context of longer term objectives contained in a Management Plan.
- (b) The need to minimise the number of reports produced by Fish & Game Councils in meeting external and internal planning and reporting requirements.
- (c) To ensure that the Operational Work Plan and Annual Report are complimentary to extent that the latter reports clearly against the objectives established in the Operational Work Plan.

To this end the Operational Work Plan has been set out in a form that is modular and will in turn constitute a large part of the Annual Report simply by adding relevant information at year's end.

It must be pointed out that the attached work plan is in no way finite or exact. With only seven paid employees and as so much of Council's work is reactive and dependant on voluntary assistance and alternative funding, flexibility is essential to meet Council's obligations to its licence purchasers.

3. MISSION STATEMENT

“To manage and enhance sports fish and game resources on a sustainable basis in the recreational interests of anglers and hunters” (26Q (1)).

4. DETERMINING AUCKLAND/WAIKATO STRATEGIC PRIORITIES.

In February 2025, the Auckland/Waikato Fish & Game Council reviewed its OWP Strategic priorities for the following 3 years., Auckland/Waikato Fish & Game Council aims to align its strategic priorities with the recently created New Zealand Fish & Game Council’s strategic plan.

On top of fulfilling its statutory obligations, Auckland/Waikato Fish & Game’s priority for 2025-2027 is to assign staff time and financial resources towards projects that improve or increase;

- Access making it easier for anglers and hunters to locate and utilise resources.
- Revenue through increasing participation and developing alternative sources of income.
- Water quality and quantity addressing, the pressures on our free-flowing water resources and the water quality of the Waikato Lakes and Wetlands.
- Greyland populations and as a result, hunter opportunities.
- Communication with licence holders.

New Zealand Council’s priorities are:

- **Unified and Enduring Organisation**, a national and regionally cohesive organisation built on a culture of shared values, trust and engagement. Delivering on a vision and purpose for stakeholders and Mana Whenua. Maintaining the statutory mandates that enable effective service delivery.
- **Attract and Retain Licence Holders**, deliver well-valued and cost-effective experience for licence holders by understanding their needs, providing simple and effective communication, making fishing and game bird hunting more attractive to a wider group of future participants.
- **Mana Whenua Connected**, Māori values are understood and reflected within Fish and Game with aligned advocacy and a positive collaborative approach that builds upon Te Tiriti obligations defined in Conservation Act.
- **Public Perception and Legitimacy**, understanding and reshaping public perception of Fish & Game NZ, angling and game bird hunting through positive messaging of natural environment protection, wild food harvesting and well-being through outdoor recreation.
- **Healthy Species, Habitats, and Ecosystems**, Sports fish and game bird species are monitored, and sustainably managed, freshwater habitats are protected, and access to sustainable wild harvest opportunities are secured for future generations.

5. FUNCTIONAL AREA 1:

SPORTS FISH AND GAMEBIRD MANAGEMENT

Goal:

To maintain sustainable populations of harvestable species at levels to provide for angler and hunter satisfaction while mitigating adverse impacts of the species.

1.1 Sports Fish Management:

Council stocks lakes Pupuke, Parkinson's and Whatihua with trout as these waters have no natural recruitment and thus stocking is required to maintain productive trout fisheries. Trout liberations are also carried out in lakes Arapuni and Moana-nui to supplement natural recruitment which is considered to be low in both waters. Trout releases are monitored by marked or tagged fish, and assessing data from angling competitions and returns from individual anglers.

Council is currently investigating the use of sterile rainbow trout for fish releases. In 2019 rainbow trout ova were pressure tested to induce sterility, and these trout were released into Lake Arapuni from 2020 to 2023. The fish were tagged, and we encourage anglers to report the capture of any tagged trout as this data will be crucial for the success of the project.

The bulk of the region's fisheries contain resident populations with abundant natural recruitment giving rise to angling opportunities not enjoyed in the more heavily fished regions. Angler surveys show the major attraction of the region's fisheries to be their un-commercialised wilderness qualities. Careful management is required to ensure that these important aspects are not over-exploited thus destroying the fisheries attributes.

Rainbow trout are abundant throughout the region in a wide variety of habitats that provide many different opportunities for trout anglers. Brown trout are typically limited in distribution to the large river systems and hydro-lakes, albeit in recent years they have colonised many rivers in the Coromandel Peninsula where they were previously absent.

Major river fisheries in the region are monitored by the wild trout tagging programme, drift dive surveys, and annual fishing competitions.

Coarse fish (rudd, perch and tench) are widespread throughout Council's region and attract a small but dedicated following of anglers.

SPORTS FISH MANAGEMENT

Project 1.1.1 Drift Diving

Objective	Planned Result	Actual Result
To monitor the trout population in the major clear rivers and impact of management decisions.	Drift dive representative river sites. Report and recommendations to Council detailing population status and management implications.	

Project 1.1.2 Fish Surveys

Objective	Planned Result	Actual Result
Sports fisheries monitored using techniques that may include netting, electric fishing, spawning, fin clipped and tagging surveys.	Report and recommendations to Council detailing population status and management implications.	

Project 1.1.3 Fish Harvest Assessment

Objective	Planned Result	Actual Result
Fish harvest assessments estimated in major fisheries.	Results analysed from fishing competitions to monitor both hatchery and wild fish catch rates and condition. Progress report to Council.	

Project 1.1.4 Fish Releases

Objective	Planned Result	Actual Result
Fish liberations undertaken where required to maintain productive trout fisheries in lakes where natural recruitment is inadequate.	Review Fish releases annually and report recommendations to council.	

Project 1.1.5 District Anglers Notice

Objective	Planned Result	Actual Result
District Anglers Notice reviewed triennially considering best available science and angler aspirations.	Monitor angler satisfaction and seek feedback prior to approving District Anglers Notice.	

Budget \$ 42,058	Actual:
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1.2 Gamebird Management

Council sells 25% more gamebird licences than any other Fish & Game Council.

Grey and Mallard populations in 2025 were estimated to be between 430,000 and 610,000 (point estimate at just over 500,000). This is similar to the previous year but considerably up from 2021 and 2020. However, estimates are still down from the late 2000s, when estimates reached as high as 900k. Similar population trends have been observed in the Eastern Region, which lends itself to the idea that the grallard population is primarily driven by environmental factors. However, we have yet to identify links between environmental factors (e.g., drought) and population size. In addition, an SMS survey was piloted with the aim of improving our estimates of band non-reporting. These estimates contributed to improving our population estimates (i.e., less uncertainty).

Paradise shelduck are present in good numbers throughout the region. The grazing by shelduck on emerging grass may require the holding of special seasons in February and March in specific areas within the region where shelduck numbers are considered to be too high. In February 2024 Special Shelduck Seasons were held in north Auckland (north of the harbour bridge) but numbers did not reach thresholds stipulated in council's policies to hold a special season in the King Country.

Prior to the commencement of the 2012 season considerable numbers of gamebirds were lost to botulism to the extent that such may have had a marked influence upon the population. Fish & Game staff have been successful in getting avian botulism plans inserted into conditions of consent for wastewater treatment plant applications, but compliance by plant operators is inconsistent. Mortality due to botulism can occasionally be high in some years, especially on the Hauraki Plains and the lower Waikato. The potential risk of High Pathogenic Avian Influenza reaching NZ is escalating. Mortalities associated with such an event are unpredictable but could be high. There is a risk that an uncontained outbreak could lead to a population crash in several game bird species, necessitating highly restrictive season conditions.

Swan numbers remain stable in most of the region, with a proportionally high percentage of the total Waikato population found on the Taharoa Lakes, Aotea and Kawhia Harbours. It's possible that these birds have shifted due to changes in eel grass abundance, their primary food source in estuarine environments. Swan in the Nth Auckland counts have fluctuated markedly in recent years. Swan numbers in the Manukau Harbour occasionally reach numbers where culls are carried out by the Auckland Airport Authority.

Californian quail a popular gamebird to a number of hunters thrive in pine forests, however with changing forestry practices, the planned biological control of broom, along with the same threats posed to pheasant suggest an overall decline in the population.

GAMEBIRD MANAGEMENT

Project 1.2.1 Banding

Objective	Planned Result	Actual Result
To estimate the mallard and grey duck population by banding and other appropriate techniques.	Population estimate derived from mallard & grey duck banded at five sites. Report to Council.	

Project 1.2.2 Trend Counts

Objective	Planned Result	Actual Result
To monitor the swan, shoveler and paradise shelduck populations.	Monitor black swan, shoveler and paradise shelduck populations within the Auckland/Waikato Region using aerial trend counts. Participate in the national shoveler survey.	

Project 1.2.3 Gamebird Research

Objective	Planned Result	Actual Result
To monitor non-reporting rates of bands to improve population estimates.	Survey licence holders via SMS. Estimate verified and non-verified rates. Report to Council.	

Project 1.2.4 Gamebird Harvest Assessment

Objective	Planned Result	Actual Result
Monitor the harvest of mallard/grey ducks to produce a measure of hunter success and contribute to population estimates.	Estimate harvest of mallards/greys derived by implementation of the 2026 hunter survey.	

Project 1.2.5 Gamebird releases

Objective	Planned Result	Actual Result
Gamebird releases by private individuals are encouraged and subject to appropriate statutory approvals.	New applications for properties with special conditions are vetted. Annual reports received from existing properties.	

Project 1.2.6 Game Gazette

Objective	Planned Result	Actual Result
Game regulations gazetted based on best available science & hunter aspirations with the objective of maximising substantial yield to hunters while maintaining gamebird population.	Game Gazette approved	

Project 1.2.7 Gamebird Control

Objective	Planned Result	Actual Result
The dispersal of congregations of gamebirds where they are causing unacceptable damage to farm crops.	Respond to crop and pasture predation reports within two working days.	

Project 1.2.8 Botulism and HPAI

Objective	Planned Result	Actual Result
Control of Botulism outbreaks	Respond to botulism outbreaks to minimise impacts on gamebird populations. Help prepare final HPAI response plan. Submit to council.	

Budget: \$ 116,965	Actual:
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FUNCTIONAL AREA 2:

SPORTS FISH AND GAMEBIRD HABITAT PROTECTION AND MAINTENANCE

Goal:

To protect and increase suitable habitat for sports fish and gamebirds to the extent necessary to provide for the recreational interests of hunters and anglers.

2.1 Habitat Works

2.1.1 Council lands

Council owns some 1,700 hectares of endangered wetlands comprising some 39 properties which are managed for waterfowl production and hunter opportunity. Responsibility for day to day property management has been vested in the local Fish and Game Associations and wetland user groups, with Council budgeting funds to maintain and enhance these properties. Council properties have some 125 constructed ponds on them providing hunting for approximately 500 hunters on any one day. Access for itinerant hunters is an important issue in the region. Each year additional to those hunters who drew a ballot on the ponds some 400 permits are issued to hunt on Council land. The bulk of permits are taken up by hunters from urban areas. Council lands provide an excellent opportunity to get started in waterfowl hunting. Council has recently acquired several additional comprehensive consents that facilitate the maintenance of council owned wetland habitat. These consents have timing restrictions, planning and reporting requirements.

Project 2.1.1 Council Lands

Objective	Planned Result	Actual Result
Overview and report to Council on property maintenance. Undertake works necessary to maintain and enhance Council's properties. Continue to oversee restoration projects on Councils properties.	Council properties maintained to an appropriate standard and compliant with Resource consent requirements.	

Budget: \$78,468	Actual:
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2.1.2 Other lands

Habitat work that enhances waterfowl productivity, and in particular greylards, is an ongoing focus for the Council, and involves a combination of directly enhancing wetland habitats including farm ponds, and supplying information and support to landowners and other groups.

Council provides direct assistance to landowners by way of advice on wetland development and riparian plantings and through securing contestable funds. Increasingly more time is spent on helping with a more complex consenting processes. In many instances the councils staff actively manage and implement projects on private land to maximise outcomes. Council also distributes some 5,000 trees per annum for habitat protection and enhancement, however national budgetary restraints have significantly reduced the number of trees distributed in recent years.

Council works closely with other agencies, including the Waikato Regional Council, DOC and Waikato RiverCare to create and maintain substantial areas of wetland habitat and to restore riparian margins on both public and private land.

Fish & Game clubs/associations throughout the region have habitat projects on non-council land and require advice/assistance from Fish & Game.

Project 2.1.2 Other Lands

Objective	Planned Result	Actual Result
Provide habitat assistance to land owners and assess habitat grant applications for presentation to Council and external habitat trusts. Utilise opportunities as they arise for habitat enhancement, creation and restoration in conjunction with Fish & Game Assoc's and other agencies.	Report to Council on opportunities for habitat enhancement, creation and restoration in conjunction with Fish & Game Assoc's and other agencies.	

Project 2.1.3 Trees

Objective	Planned Result	Actual Result
Annual tree order made up, received and delivered.	Trees delivered to Clubs and Projects.	

Budget: \$73,604	Actual:
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2.2 Resource Management Act

Advocacy for habitat using the provisions of the Resource Management Act is a significant aspect of Council's operations. Today development activities continue to reduce the quality and quantity of available habitat. Council vets several hundred resource consent applications per year making appropriate submissions/objections as required. Council is also actively involved in the planning process with the preparation of submissions on many of the plans produced by district and regional councils where they affect freshwater habitats, water quality and quantity, and ecosystem health.

Botulism outbreaks are becoming more prevalent with longer drier summers and can severely impact local game bird population levels. Council will advocate that all wastewater treatment plants that have oxidation ponds and come up for re consenting have botulism management plans in place.

Land development primarily in the form of agricultural intensification and urban expansion continues to have an impact on the loss of wetlands and game bird and hunting opportunities and is a serious issue affecting water and habitat quality in the region.

Project: 2.2.1 Resource Management Act

Objective	Planned Result	Actual Result
<ul style="list-style-type: none"> To advocate for the interest of Fish & Game in response to resource consent applications & planning processes. To advocate for the protection and increase of sports fish and game habitats through statutory and non-statutory processes. To advocate that all wastewater treatment plants that have oxidation ponds and come up for re consenting have botulism management plans in place. 	<p>Fish & Game interests are protected using the RMA. Report to Council on issues and Fish & Game response.</p> <p>Habitat for sports fish and game bird species is protected and increased.</p>	

Budget: \$229,832	Actual:
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FUNCTIONAL AREA 3:

ANGLER AND HUNTER PARTICIPATION AND SATISFACTION

Goal:

To encourage maximum angler and hunter participation while maintaining quality of angler/hunter experience and satisfaction with Fish and Game management.

3.1 Access issues

Council administers balloted hunting on its own wetlands and via its association with Fish & Game Clubs and the Kopuatai and Whangamarino Wetland Associations is involved in management control of Lakes Okowhao, D, Cameron, Rotokauri, Kainui, Rangiriri Islands, Rayonier and Hancock forests, and the Kopuatai and Whangamarino Wetlands.

Council maintains a close liaison with local authorities and DoC to establish management plans and committees for crown lands to protect fish and game interests.

Council continues to monitor the situation regarding public land (reserve strips etc) over which hunters and anglers have legal access and as and where appropriate advocates on their behalf, now liaising with the newly established Walking Access Commission.

Habitat and Access are acknowledged as National Priorities that all Fish & Game Councils should be addressing. Auckland/Waikato having long been to the forefront of habitat issues.

Project 3.1.1 Access Negotiations

Objective	Planned Result	Actual Result
Angler and hunter access to the sport fish & gamebird resource is maintained and enhanced.	<ol style="list-style-type: none">1 Permits are issued for balloted ponds before commencement of season.2 As-of-Right access for licence holders & negotiated access where As-of-Right access not present.3 Maintain Fish & Game presence on Wetland Management Associations.5 Reported angler/hunter access problems reported to Walking Access Commission6 One new permanent access point is established annually.	
Access Fund	Maintain Access Fund as a	

	restricted reserve for the purchase of land or easements to secure access in perpetuity for licence holders.	
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Project 3.1.2 Signs/tracks

Objective	Planned Result	Actual Result
Brand standard access signage progressively provided at appropriate hunter & anglers access points subject to landowner approval where required.	Brand standard access signage replaced where required and new signage installed where appropriate.	
Conduct stocktake of current signage at access points and determine need for updates. Use updated access maps and ground truth.	Database created indicating where new signage is required and old signage needs to be replaced.	

Budget: \$27,552	Actual:
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3.2 Promotion

Regular contact with hunters and anglers plays an important part in retaining their interest. Councillors and staff regularly attend and address ward association and allied recreation group meetings. Production of Fish & Game magazines sent direct to all Auckland/Waikato licence holders prior to the game and fish seasons are considered an essential activity which is very well received by licence holders. Council also produces a monthly internet newsletter for anglers (*Reel Life*) and during the game season a monthly internet newsletter for hunters (*Both Barrels*). A 2023 survey of A/W licence holders indicated a rapid transition away from print media in favour of digital content.

Project 3.2.1 Magazine & Newsletters

Objective	Planned Result	Actual Result
The production and distribution of game and fishing magazine supplements to previous years licence purchasers before commencement of season.	Preseason magazine supplements produced and distributed.	

Project 3.2.1 Magazine & Newsletters

Objective	Planned Result	Actual Result
The production of online content including videos to better reach new and existing customers.	<ol style="list-style-type: none"> 1. Film content, edit and post online. 2. invest staff time to establish and online audience and promote content across online platforms 	

Project 3.2.2 Other Publications

Objective	Planned Result	Actual Result
1 To Contribute to "Reel Life" & "Both Barrels" e-zines & hunting/fishing magazines.	1 Contributions made to "Reel Life" & "Both Barrels" & hunting/fishing magazines.	
2 Undertake pre-season publicity for hunting and fishing.	2 Pre-season publicity undertaken.	

Project 3.2.3 User Groups

Objective	Planned Result	Actual Result
Represent Council interests at fish and game associations/clubs in the Auckland/Waikato Region	Council represented at local fish and game associations/clubs.	

Budget: \$48,573	Actual:
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FUNCTIONAL AREA 4:

PUBLIC INTERFACE

Goal:

Acceptance of the recreation of sports fishing and gamebird hunting and community support for Fish & Game Council management.

Given that within its region approximately 40% of New Zealand's population is encompassed, which comprises the largest urban population in the country, Council well recognises the importance in its region of community support for its activities.

The importance of Auckland to Fish & Game interests has been identified by NZF&GC, who deem the raising of Public Awareness in Auckland an issue of national significance.

Council and staff are founding Trustees in the National Wetland Habitat Trust, Waikato RiverCare, Waikato Ecological Enhancement Trust, Waipa Peat Lakes and Wetlands Accord, Waikato District Lakes and Freshwater Wetlands Accord, South Waikato Rural Access Committee, Lower Waikato Enhancement Society, South Waikato Environmental Initiative Group, Lakes Rotokauri, D & Cameron Management Groups, and regularly attend Wetland Forums, Biodiversity Forums, Landcare and Rivercare meetings, Regional and local council sector liaison meetings and other like group meetings; organisations that not only provide benefits for fish and game habitat but also an important link in promoting acceptability of hunting and fishing.

Project 4.1.1 Liaison & Advocacy

Objective	Planned Result	Actual Result
Promotion of the interests of hunters and anglers with the public through the media. Liaison with appropriate organisations/ agencies in the interests of hunters and anglers.	1 Respond to inquiries for information and to issues affecting interests of anglers and hunters through provision of suitable information to public media and sector interest groups. 2 Maintain liaison as required with appropriate organisations/agencies.	
Engage with iwi and Mana Whenua. Develop/maintain formal relationships with key iwi groups within the region and participate in Treaty Settlement processes that affect anglers and hunters. Continue to explore possibilities for collaborative	Submit on Treaty Settlements affecting angler/hunter access and develop relationships with key iwi groups and report to Council.	

projects, e.g. kids fishing and access projects		
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Project 4.1.2 Displays/promotions

Objective	Planned Result	Actual Result
Promotion of the interests of hunters and anglers by displays and promotions.	Assist local fish & game associations with displays and promotions and attend national coordinated promotional events where applicable.	
Support Clubs and organisations in promoting kids fishing events.	Staff attend and seek sponsorship for kids fishing events. Establish kids fishing area local lake or reservoir with interpretive signs and methodologies to catch fish working with Hamilton Anglers Club.	

Budget: \$33,296	Actual:
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FUNCTIONAL AREA 5:

COMPLIANCE

Goal:

To ensure compliance with hunting and fishing regulations, to protect the resource and Council's financial base.

Council administers some 15 warranted officers. Planned and coordinated law enforcement work is carried out by as many rangers as can be mustered at the time.

Active gamebird ranging on opening day is limited to staff and a small number of honorary rangers. Given the longer period that fishing activities are undertaken a better coverage of fishing activities is achieved.

New national policy documents are being developed including H&S requirements which will significantly impact the role of honorary rangers in our region. Council is continuing to provide feedback to National office to ensure practical options are identified and implemented.

Project 5.1.1 Ranging

Objective	Planned Result	Actual Result
The protection and enhancement of the region's fish and game resource through an effective enforcement programme.	Liaise with honorary rangers to undertake ranging coverage as required. Compliance checks by rangers throughout the year.	

Project 5.1.2 Ranger training

Objective	Planned Result	Actual Result
Rangers are properly trained including OSH requirements.	Organise professionally run training sessions so OSH requirements are met for all rangers.	

Project 5.1.3 Compliance legal

Objective	Planned Result	Actual Result
Offenders for fish and game offences are successfully prosecuted or go through formal diversion process.	Arrange prosecutions, present evidence and follow-up fine monies outstanding as necessary.	

Budget: \$89,110	Actual:
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FUNCTIONAL AREA 6:

LICENSING

Goal:

To produce and distribute legally correct licence forms by due date.

The sale of licences is Council's primary source of income. The administrative function of licensing has been contracted out however Council still maintains control over licences distributed and debt collection

Project 6.1.1 Licence Distribution

Objective	Planned Result	Actual Result
To issue fishing and hunting licences	<ol style="list-style-type: none">1 Game and fish licences and supporting material prepared and dispatched one month prior to opening of seasons.2 Legally binding contracts with personal guarantees maintained with all agents.3 Database of licences sold maintained and reconciled against income received. Game and fish licences and supporting material prepared and dispatched one month prior to opening of seasons.	

Budget: \$8119	Actual:
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FUNCTIONAL AREA 7:

COUNCIL/COMMITTEE/CLUB SERVICING

Goal:

To service Council, committees and clubs, to provide for the democratic management of the Fish & Game system.

Given the informal and personal level upon which Council functions Council is able to maintain good levels of communication within the organisation. Council has always maintained an efficient monitoring administrative system via its detailed budgeting and accounting system along with its Chief Executive's Report .

Project 7.1.1 Council Meetings

Objective	Planned Result	Actual Result
To provide effective management and operation of the Council.	<ol style="list-style-type: none">1 Conduct at least six meetings of the Council that comply with all legal requirements.2 Compile and distribute agendas and supporting papers at least seven days prior to meetings.3 Distribute minutes and Newsbrief within ten days after Council meetings.	

Budget: \$62,214	Actual:
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FUNCTIONAL AREA 8:

PLANNING/REPORTING

Goal:

To ensure cost efficient and appropriate management of fish and game resources.

Council's Sports Fish and Game Management Plan was approved by the Minister of Conservation on 21 December 2021 and will be subject to review in 2031.

Project 8.1.1 Management Plan/OWP/Budget fee setting

Objective	Planned Result	Actual Result
Produce Annual Operational Work Plan in approved format to NZF&GC deadlines.	Adoption of a proposed Operational Work Plan for 2026/27 by August 2026.	

Project 8.1.2 Annual report/Audit

Objective	Planned Result	Actual Result
Produce Annual Report for the 2026/27 year and obtain Annual Audit within statutory time frame & present to Annual Public Meeting within required timeframe.	Annual Report produced and Annual Audit obtained within statutory time frame & present to Annual Public Meeting.	

Project 8.1.3 National Liaison

Objective	Planned Result	Actual Result
Maintenance of effective liaison with NZF&GC. Contribute to national programmes.	<ol style="list-style-type: none">1 Process submissions and information to NZF&GC within requested deadlines.2 Undertake national & inter- regional liaison as required.	

Budget: \$55,359	Actual:
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OSH Report for February 2026 Council Meeting

We have received the consolidated Health and Safety audit report prepared by NZC. All staff have been asked to read the report and provide feedback on how the identified learnings can be applied to further strengthen our regional Health and Safety systems.

The region has already made significant progress in improving its Health and Safety framework. This includes the continued development of standard operating procedures for all equipment, regular updating of the Risk Register, and improved record keeping to ensure a clear paper trail for all Health and Safety activities. Dani and I are also using the audit findings to inform updates to the regional Health and Safety Plan, with input being actively sought from all staff as part of that process.

The Get Home Safe system has now been established with the provider and staff have begun trialling its use. An inReach Mini 2 has been ordered to enable use of the system when staff are operating outside of mobile phone coverage. Further work is required to refine the risk assessment components of the system so they are appropriately tailored to Fish and Game activities. To support this, a webinar has been scheduled with David Tait to walk staff through the system, address any questions, and resolve issues that have arisen during the trial phase.

Minutes of a Staff Meeting

on Monday 10th November 2025 commencing at 9:30am.

PRESENT:

Staff: D. Klee, J. D. Lelievre, R. Simmonds, A. Daniel, C. Robertson

Accidents or near misses

Nil

Accident forms filled in:

N/A

New hazard identified and added to register:

N/A

Previous Actions:

Item	Date due	Name	Outcome
Health & Safety documentation to be filled in	Before Xmas	All	Continue
Fire extinguisher – check to see if it needs to be bolted in in a vehicle.	ASAP	Adam	Spot under back seat is legal to store there. All vehicles have current extinguishers.
Boat to be taken for service – still leaking	6 Oct	Adam	Serviced. Logged into seaflux.
Emergency drill to be done	Before Xmas	All	Defred to new year
Foghorn for front desk needed	Before Xmas	Adam	Completed

Review of H&S calendar for coming month.

Upcoming Actions:

Item	Date due	Name
TrackMe – A single enterprise account to be created this week. One inreach will be available with the use of phones, a second one may be obtained after a period. The old inreach will be removed.	This week	David
Health and Safety plan – update documentation. Templates have been created by Steve McKnight which will be shared. The development JSA we will use and update to suit our region. National Health & Safety will be the ideal section to help develop these templates with someone having to go through and checking once created. As updating will meet with Steve to go through the changes we have done.	Before the end of the year	Dani/David
Zon guns – Each zon gun need to have a yearly maintenance check. This will be done with hearing protection and SOP completed.	July	Adam/Dani/Beau
All items/equipment will need to have a SOP.	Ongoing	All
Tailgate forms are needed to be filled in for the group that maintain the bee hives.	This month	Dani

Minutes of a Staff Meeting

on Monday 1st December 2025 commencing at 9:30am.

PRESENT:

Staff: D. Klee, J, D. Lelievre, R. Simmonds, A. Daniel, C. Robertson

Accidents or near misses

Petrol was spilled in the boat. The connection seemed to have come undone. This was reconnected and cleaned – Beau/Dani

Adam will double check the connection.

Accident forms filled in:

N/A

New hazard identified and added to register:

N/A

Previous Actions:

Item	Date due	Name	Outcome
TrackMe – A single enterprise account to be created this week. One inreach will be available with the use of phones, a second one may be obtained after a period. The old inreach will be removed.	In the New Year	David	Will be up and running in the New year Tailgate forms will be a work in progress and once audit reports from other regions are done any updates will apply with these.
Health and Safety plan – update documentation. Templates have been created by Steve McKnight which will be shared. The development JSA we will use and update to suit our region. National Health & Safety will be the ideal section to help develop these templates with someone having to go through and checking once created. As updating will meet with Steve to go through the changes we have done.	Ongoing	Dani/David	These will be placed in a folder and placed downstairs for all staff to have access. Dani and David working on the H&S plan and processes and awaiting report on National H&S audits before finalising.

Zon guns – Each zon gun need to have a yearly maintenance check. This will be done with hearing protection and SOP completed.	In July every year	Adam/Dani/Beau	Booked in for annual checks in July for full assessment.
All items/equipment will need to have a SOP.	Ongoing	All	
Tailgate forms are needed to be filled in for the group that maintain the bee hives.	This month	Dani	Completed

Review of H&S calendar for coming month.

Upcoming Actions:

Item	Date due	Name
Fire extinguishers need to be install upstairs and in the garage.	Asap	Beau
Annual first aid kit check on boat.	Asap	Adam

Days missed work due to illness or injury since previous agenda: 9

Completed tailgate forms since Previous Agenda to end of Dec.

Date	Activity
7 November	Adam, perch netting Karapiro
6 November	Dani YSI data collection Whangamarino
15 December	Adam Dani, drift dive Awakino

David Klee
Chief Executive
27/01/2026