

Meeting Agenda of Otago Fish & Game Council
On Thursday 16th August 2018
At Otago Fish & Game Office, Cnr Hanover and Harrow Streets, Dunedin
Starting 11.45am with Lunch

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1.0 Present and Apologies

2.0 Matters To Be Raised Not On The Agenda

3.0 Declarations Of Interest

4.0 Confirmation Of Previous Minutes

Minutes of Otago Fish and Game Council Meeting
Otago Fish and Game Council Office, Cnr Hanover & Harrow Street, Dunedin
21st June 2018, Commencing at 10.30pm

1.0 Present:

Monty Wright (Chair), Dr John Jillett, Dan Rae, Adrian McIntyre, Ian Cole (Part meeting via video link), Dr Mike Turner (Part meeting via video link), John Barlow, Rick Boyd, Alan Hammond, Richard Twining.

In attendance: Ian Hadland (CE), Niall Watson (OF&GC) Robert Sowman (NZC Planning and Policy Manager) John Roberts (DOC, part meeting)

Apologies were received from

Dave Witherow, Vicky Whyte, Murray Neilson and Colin Weatherall

(Jillett/Barlow)

That apologies be accepted.

Ian Hadland, the Councils new Chief Executive began by thanking councillors for appointing him to the role. He said he was coming to grips with the role quickly and had enjoyed very good support from the employment committee and the outgoing CE Niall Watson over the first month in the position.

The CE said that this meeting would be the first where new technology would be used to allow out of town members of the Council to join the meeting via video link. This was provided for in the Councils Standing Orders. He then sought the Councils permission to record audio of the meeting to assist with clarification of the meeting minutes.

Resolved (Rae/Boyd)

That audio recording of meetings be permitted to assist with the minutes and that any recorded audio be destroyed when the Minutes were confirmed at the following meeting.

2.0 Declarations of Interest

Nil

3.0 Minutes

Resolved (Rae/Jillett)

That the Minutes of the meetings on the 19th April 2018 be confirmed as a true and correct record.

Resolved (Boyd/Barlow)

That the Minutes of the teleconference held 28th May 2018 to discuss the licence fee recommendation be confirmed as true and correct and that the decisions be ratified.

4.0 Matters Arising from Minutes

Cr Boyd enquired as to whether staff had looked into the conflict between trollers and other users of Roys Bay. He noted that the area is very busy during the summer and likely to get worse with population growth. The CE replied that it hadn't been specifically addressed in the Anglers Notice review or elsewhere but could be monitored and reported on after a summer season of monitoring.

It was **agreed** that a report should come back to the April 2019 meeting to allow input into the Anglers Notice for 2019/20 season.

5.0 Communications New Zealand Council

5.1 NZC to Otago Correspondence

5.1.1 Licence Fee Recommendation 2018/19 – Previously circulated

5.1.2 NZC Audit of Remuneration - The CE advised that he had substantially replied but there were privacy limitations on some data requested.

5.2 Correspondence from Otago to NZC

5.2.1 Otago feedback on draft captive reared mallard policy development

-Noted

5.2.2 Licence Fee Recommendation 2018/19 - Noted

6.0 Health and Safety

Cr Boyd commented that he had tripped and fallen from the steps at the Diamond Creek Hut. The CE said the item would be noted but not recorded as an accident internally as it was a private visit rather than a staff incident and it wasn't a workplace. However, staff would inspect the steps for general safety and make any repairs necessary.

7.0 Chief Executive's Report

7.1 Administration

Finance reports to the end of May 2018 were discussed with expenditure running at 80% at a point 75% through the financial year. The CE noted this was not unusual after the busy Autumn period coupled with additional costs associated with staffing changes. Fish licence sales were slightly ahead of the same date last year and gamebird licence sales slightly down on the 2017 season.

Wanaka Hatchery

The CE advised that the hatchery house for removal has sold by tender for \$10,000 and would be removed in the next few months.

Matters related to Alpha Series subdivision and Bullock Creek sedimentation were deferred to later in the meeting.

Delegations to Chief Executive

The current list of delegations provided for by section 1.9 of the Standing Orders to the Chief Executive were presented to the meeting. It was noted that the purchase delegation was limiting for budgeted and routine purchase and disposal of vehicles.

Resolved (Rae/Jillett)

That Council reaffirm the existing delegations to the Chief Executive and add the following delegation related to replacement Vehicles with the Governance Policy amended accordingly;

- **The CE may, within budget, purchase and dispose of vehicles on the Councils behalf up to the value of \$40,000 excluding GST, with all purchases and sales to be reported in bi monthly agendas.**

Resolved (Boyd/Barlow)

That Finance and Licence sales reports to the end of May 2018 be approved

7.2 Species

Hatchery Operations

The CE advised that MPI have concluded their investigation into a potential disease outbreak at Macraes Hatchery where some stock presented with 'popeye' symptoms. MPI concluded it was most likely a Vitamin E deficiency and the situation has been resolved.

7.3 Habitat

Niall Watson addressed the meeting with an update on the various Plan changes and mining right renewals.

Kye Burn

Negotiations over residual flows were nearing completion. The delay was caused by other parties requiring input.

Three catchment plan change – Cardrona, Manuherikia and Arrow river

Mr Watson explained that the ORC had grouped three catchments minimum flow processes together into one plan change and this also incorporated the proposed 1D plan change (for how residual flows and other matters are dealt with). This move is aimed at expediting the process and making flow setting easier for renewal of individual deemed permits. The Councils Environment officer Nigel Paragreen had had early input into that process and Mr Watson thought the omnibus approach could be more efficient than having to submit on individual catchment minimum flow plan changes.

He said the key issue in the Cardrona was surface water/groundwater interactions and there was a lack of information on this. The Arrow was less of a concern but the Manuherikia was worrying in that most of the hydrological data gathered was based on flows which were held up artificially by Falls dam discharges. The Plan change was proposed to be notified in August and staff were preparing information now.

Lindis

Mr Watson said that the Lindis Catchment Group and the ORC have now submitted their joint case for consents and a minimum flow and have requested that it be heard directly in the Environment Court. Staff were presently digesting the large volume of material. The list of witnesses for the applicants and ORC is substantial. Staff are currently writing evidence, but the court hasn't set a hearing date as yet.

John Roberts from DOC addressed the meeting. He wanted to express his thanks for the significant contribution Niall Watson had made to conservation and in particular water issues in central Otago that DoC was also involved in. He remarked that DoC had not always agreed with Fish & Game but there had been a lot of alignment on issues and that Niall had been pivotal in maintaining a good relationship with the department and educating its staff, including himself. He wished Niall well for his retirement.

7.4 User Participation

Access

Cr McIntyre commented that the Mycoplasma Bovis outbreak could change the face of farming and in particular the open access generally enjoyed by anglers and hunters. He asked that staff engage with Fonterra directors on the issue.

Guides Licence

Robert Sowman (NZC) updated the Council on the Guides Licence proposal which he said is presently sitting with DoC officials. The Chair expressed disappointment that the NZC chief executive offered no comment when the issue was covered by a recent TV news segment.

7.5 Public Interface

No discussion

7.6 Compliance

The CE reported that one gamebird hunting offender from the Maniototo is presently being prosecuted for possession of lead shot and shooting protected species.

7.7 Licencing

No discussion

7.8 Council

An updated meeting schedule was presented, and the following meeting dates and venues confirmed.

August 16th – Dunedin
 October 25th – Cromwell
 November 29th – Dunedin – AGM
 9/10 February 2019 – Dunedin – Planning meeting

A joint meeting with Southland Councillors at Tapanui on the 4th August was also endorsed. The primary focus of the meeting would be pressure sensitive fisheries and their management. Cr McIntyre requested that a discussion on M.Bovis should be included to scope out the various issues and the potential impact on angler and hunter access.

Resolved (Boyd/Barlow)

That the meeting schedule be approved

7.9 Planning and Reporting

Annual Plan and Budget

The CE advised that the final draft of the annual plan and budget will be presented to the August meeting.

8 Committee Reports

8.1 Clutha Fisheries Trust – Mr Cole advised that recent Trust activity included:

- Further monitoring of conductivity in the Manuherikia and of river flows Lindis including some drone footage.

- The Kane Road issue is still to be signed off. DoC and landowner have had onsite meetings to resolve issues with roading alignment. CFT chair meeting with Kidd Road property owner postponed until spring. It is seen as an important access which will require some time and monetary resources. A series of styles are proposed to cross boundary fences Rough Ridge giving access to the river.
- Some discussion at trustee level about potential role of the CFT in the establishment of a proposed hatchery below the Roxburgh Dam.

8.2 New Zealand Council

Dr Jillett reported on the joint NZC and managers meeting in Wellington and a recent teleconference. Matters included:

- Discussion about the replacement of reparation with a diversion scheme for offenders.
- Contestable funding bids were heard and rated including a new staff member for West Coast. The Contestable funding bid by North Canterbury Region to fund a hatchery overrun was rejected.
- Research funding bids were assessed, and he was disappointed that the large lakes acoustics survey didn't rate high enough for funding.
- Licence fees were agreed with a \$3 increase in the Adult fish licence and \$2 increase in the game licence to be recommended to the minister.
- The changes to categories proposed were rejected with the exception of the introduction of 4 new fish licence categories for overseas anglers.

9.0 Technical Reports

9.1 Habitat Enhancement Fund - Review

Morgan Trotters report was discussed and there was agreement that the Councils wish to revisit some of the funded sites was very enlightening. The Chair asked that Mr Trotter be commended for his report.

Resolved (Wright/Rae)

That the report be received

9.2 Anglers Notice Review

Cr Boyd began by presenting a statutory overview for Anglers Notice regulation setting and included references to the Otago Sportsfish and Game Management Plan. He also commented on the extensive consultation undertaken to this point.

Cr Wright expressed misgivings that decisions today would be left for the new Council to implement so some caution should be shown. Cr Turner and other Councillors responded by saying that the alternative is to do nothing and that would amount to mismanagement of the resource. Cr Barlow remarked that this was in fact the democratic process at work.

9.2.1 – Southern Lakes and Dunstan Bag limits

Cr Boyd offered an alternative motion to the preferred option 1.3 presented by staff

All bag limits for waters above the Clyde dam (on the Clutha River) should be not more than two trout and four salmon with all other waters with smaller bag limits to remain the same. The motion was seconded by Cr Rae.

Cr Jillett spoke to the motion. He expressed concern that such low levels could create resentment among licence holders and impact on participation. Cr McIntyre noted that four salmon from the likes of Lake Hawea is entirely possible but also appropriate. Cr Cole agreed, noting that the Council needed to do more to build knowledge of the salmon fishery of the southern lakes.

It was eventually resolved (Boyd/Rae)

All bag limits for waters including rivers and lakes above the Clyde dam (on the Clutha River) should be not more than two trout and four salmon with all other waters with smaller bag limits to remain the same.

Cr Wright voted against the motion. Carried

9.2.2 - Lowland rivers bag limits

Cr Boyd proposed an alternative to 2.3 that all waters should be reduced to two trout and two salmon per day with the exception of some lower reaches of major rivers, the demarcation points to be established by staff.

Cr Hammond spoke against the motion noting that there was no evidence to support such a change and so cautioned against changes. There was extensive discussion on whether four trout or two trout was a suitable outcome to satisfy submissions.

Cr Boyds motion was lost but it was eventually agreed that 2.2 largely covered the matter with a more specific definition of lowland rivers.

It was resolved (McIntyre/Wright)

That all lowland river and stream fisheries in Otago below the Clyde dam, or running to the sea independently, have a daily bag limit of not more than four trout and two salmon.

And;

- **All three trout bag limit waters to be reduced to two trout per day**
- **The Waiwera stream be reduced from six trout per day to two trout per day**
- **All waters with daily bag limits of two trout per day remain the same**

Cr Cole voted against the motion

9.2.2.1 - Still waters not covered by either motion

Cr Boyd noted that a number of still waters had not been considered in the previous motions or recommendations. It was generally agreed that for consistency they should fall into line with the others. Cr Boyd proposed an additional motion which was agreed.

Resolved (Boyd/Rae)

That daily bag limits in all other still waters, (with the exception of those covered under the motion above for waters above the Clyde dam) be reduced as follows;

- **Daily bag limits of six trout be reduced to four trout per day**
- **Daily bag limits of 3 trout be reduced to two trout per day**
- **All one trout daily bag limits, and the current bag limits for Lake Onslow (10 trout per day) and Lake Sylvan (six trout per day) to remain unchanged**

Cr Cole voted against the motion

9.2.3 - Lake Mahinerangi season length

The impact of having a winter season for angling at Lake Mahinerangi was discussed and the feedback from the Taieri Anglers acknowledged. As there were no strong views either way, it was agreed that the winter season should remain open for angling. Cr Boyd noted that the daily bag limit would be reduced to 4 trout per day by the previous motion and that would support the precautionary approach requested for in submissions.

Resolved (McIntyre/Rae)

That Lake Mahinerangi remain open for winter angling with a daily bag limit set at four trout.

9.2.4 - Pomahaka River

The Council largely agreed with the staff recommendation of 4.2 in the report.

Resolved (McIntyre/Boyd)

To introduce a Backcountry fishery designation to the river upstream of Park Hill Bridge (Switzers Road) with season length 1 October to 30 April, permitted methods Fly and Spin only and a 1 fish daily bag limit, and reduce the daily bag limit in line with the lowland waters motion above for the river downstream of Park Hill Bridge, (Switzers Road) with the demarcation points, season lengths and methods to remain as they currently read.

9.2.5 -9.2.6 - Upper Clutha River regulations simplification

It was noted that a number of submitters wanted the status quo for the Upper Clutha and 'Deans Bank' regulations. Cr Boyd considered one option might be to allow all methods all year round in the entire river with the exception of Deans Bank. Cr Wright agreed that would simplify matters.

It was eventually agreed that option 5.1 be adopted and it was noted that the adjustment in bag limits from six trout to 2 trout per day would apply but all other regulations remain unchanged.

Resolved (Barlow/Rae)

That with the exception of bag limits covered above, that all other regulations for the upper Clutha River remain unchanged.

9.2.7 - Formatting Issues and use of boats

Various formatting issues including definitions and the complicated wording of the use of boats section were discussed. It was agreed that staff were best placed to make adjustments for clarification.

Resolved Rae/Boyd

That various formatting issues discussed in section 6 and 7 of the report be referred to staff to clarify

9.2.8 - Multiple hooks

The use of treble hooks and their potential for harm of fish to be released was considered. Cr Cole requested that an outright ban of treble hooks should be signalled and planned for. Cr Cole also said that some North Island regions were also looking at restrictions on treble hooks and the science around it.

Cr Boyd noted that further information should be sought on the matter for next years notice review but in the interim all designated back country fisheries where spin fishing was permitted (such as the Hunter River) should have treble hooks prohibited immediately. There was general agreement between Councillors about this.

Resolved (Boyd/Cole)

That the discussion on making treble hooks prohibited in the region be deferred until more information is available, with the exception to this being the designated backcountry fisheries where treble hooks will be prohibited immediately.

Cr Cole and Cr Turner asked that Cr Boyds tremendous effort be acknowledged in the minutes. Cr Boyd responded by saying that Officer Halfords report on the matter should also be commended.

9.3 Otago Mallard Monitoring

FGO van Klinks report was discussed and while there were some misgivings about the variable data which was most likely due to wet weather conditions, it was agreed the monitoring should continue.

Cr McIntyre asked for the report to be shared to major gamebird hunting social media pages for their members interest.

Report Received

9.4 Greenstone controlled fishery satisfaction survey

Cr Boyd agreed that the controlled fishery period was plagued by bad weather and this had had an impact on participation.

Report received and commended

9.5 2018 Game Season Opening Report

Report received

9.6 Storm Water Pipe Connection - Wanaka

The proposal for a pipe connection from the Alpha Series to the QLDC storm water reticulation system in Stone Street, through the hatchery property was discussed and Council raised a number of issues, namely:

- Impact on the value of hatchery land as residential property of a 3 metre QLDC easement and a buried pipe 1 metre from the boundary
- Adequacy of pipe capacity and its performance in storm events
- All alternative connection options to the storm water system being fully assessed
- Fish and Game to have a right and opportunity (in terms of pipe capacity) to connect to the storm water pipe in future for any development on the hatchery property.
- All costs of establishment to be borne by other parties.
- Establishment of a second storm water pipe connection from the subdivision to Meadowstone Drive.

- Further consideration of support for the hatchery property springs restoration project.

Cr Hammond spoke against the motion noting

It was Agreed

That Council agree in principle to allowing a storm water pipe connection through the hatchery property subject to satisfactory resolution of related issues including those outlined above.

10.0 Correspondence

10.1 Martin Carter Dept of Conservation – Decline of permit application to release captive reared mallards in Otago - received and noted

11.0 General Business

No general business

The meeting closed at 5.05pm

5.0 Matters Arising from the Minutes

6.0 Health and Safety Report

Nothing to report.

7.0 Items Requiring Decisions

7.1 2018/19 Budget and Annual Operational Workplan Adoption

The Annual Operational Workplan and budget is being circulated with the agenda documents. A few printed copies will be available for the meeting.

Budget

The licence fees have now been approved by the minister and budgets have now been confirmed by NZC for the 2018/19 year.

Two contestable funding bids were approved. CPI adjustment on the staff salaries budget and a further \$5000 was approved for prosecutions costs. The contestable funding bid for \$10,000 for wetland management was not seen high enough priority for funding. In summary:

Approved Budget	\$1,001,526
Forecast licence income	\$2,090,848
Annual levies to NZC	\$1,004,798

Annual Operational Workplan

This has been pre-circulated for your review. By way of background though;

- I have now converted the workplan into an excel spreadsheet to assist with planning and end of year reporting. Please let me know if you need more detail on either the outcomes or the projects themselves.
- Given the staff changes, I think it prudent not increase the breadth of work in the operational workplan beyond our resources, especially given that a primary focus of key staff will be around RMA planning processes which are already underway (such as the Lindis and Manuherikia etc.) As such this is a fairly ambitious workplan.
- The projects and issues raised at the February Strategic Planning Session have been incorporated, namely;
 - Reaching agreement with Contact Energy over hatchery construction for salmon enhancement on the Clutha (1211)
 - Review of long term monitoring programmes and additional long term monitoring sites (1113)
 - Participation on the NZ Searun Salmon committee
 - Remain, as a priority, involved in RMA planning processes for water quantity and quality
 - Develop larger scale opportunities for wetland enhancement or development
 - Contribute to National R3 (Recruit, retain and reactivate) initiatives and develop a local R3 activities (1355)
 - Retaining a position on the national Licence Working Party (1842)
 - Continue to rationalise landholdings at Wanaka and protect the wetland springs. (1721)

Recommendation

That the Operational Workplan and budget for 2018/19 be adopted.

Ian Hadland

Chief Executive August 2018

7.2 Back Country Fisheries Management in Otago

Background and Summary of the Current Management Regime

The backcountry licencing regime has been in place for almost 15 years and now operates in 5 regions across a total of 17 rivers (including Otago). Currently in Otago there are 8 designated backcountry fisheries which require anglers to purchase a Whole Season Licence and obtain a Backcountry Licence Endorsement (BCLE). A ninth river is proposed for the 2018-19 season (Pomahaka River). The BCLE is issued at no extra cost and can be obtained any time following the purchase of a qualifying licence type. The angler is issued with an updated licence receipt showing a backcountry endorsement stamp.

In addition, a Controlled Period operates on the Greenstone River between February and March. During the Controlled Period anglers must obtain a Controlled Period Licence by booking a beat to access an exclusive section of river for the period of their booking (typically 2-3 days). This system is very effective in capping total allowed angling effort, ensuring preferred encounter rates for anglers (0) and preventing conflict between walk-in and fly-in anglers.

The introduction of the Non-Resident Licence (NRL) in 2014 created a fund dedicated to backcountry fisheries management following the decision to ring-fence the ~30% licence premium for this purpose. Since 2014 between 1000 and 1300 NRL have been sold in Otago each year. To date the fund has been used for seasonal ranging contracts, a review of angler surveys conducted on the Hunter River, reporting on the status of the Pomahaka fishery and a trail-camera monitoring trial. As the fund has now accumulated over several seasons it is now possible and necessary to consider more significant, longer-term programmes and to review the scope of the existing regime to improve backcountry fisheries management in Otago.

The licence endorsement has enable an accurate database of users to be established allowing annual monitoring surveys to be undertaken (typically via email). These surveys have investigated seasonal patterns and distribution of use, use of guides, encounter rates, perceptions of fishery quality, angler experience and angler opinion on management approaches. In recent years a response rates of at least 50 % for both resident and non-resident anglers have been achieved for most surveys.

Other management efforts have included backcountry ranging and compliance work and liaison and education of guides and commercial operators. Fisheries monitoring work such as drift dives have been conducted in the past but have not been undertaken in recent years.

In summary the backcountry management regime has:

- Established a database of users for monitoring purposes (activity, satisfaction, harvest/success)
- Captured a contribution to management costs from users (requirement for whole season licence) recognising the high value, limited nature and enabling more in the field monitoring and assessment of these often remote and difficult to access locations

- Addressed (through Controlled Period mechanism) conflict between walk-in and fly-in anglers and managed total use within angler encounter preferences
- Highlighted the value of designated rivers (e.g. Nevis) as providing a unique and high-quality angling experience

Issues and Risks for the Backcountry Management Regime

Licensing

It is acknowledged that some anglers dislike the current format of the licence endorsement preferring the previous system where a backcountry licence number was issued. Some anglers would then write this on their plastic licence card. However, following the transition of the system to Eyede Ltd it was determined that there was no value in storing an additional number which had no actual purpose in terms of data. There were also concerns about compliance monitoring in the field with rangers having no way of determining whether the number written by the angler on the card was genuine.

Introduction of additional management mechanisms (e.g. including designating new rivers, implementing new controlled periods, limiting total use) may change how anglers participate. For instance, designating a river a backcountry fishery (requiring a BCLE) may draw attention to it and result in increased use. Similarly, additional licensing requirements might deter anglers from fishing a river or even displace them to other locations. While overall use levels have been monitored on backcountry fisheries there has been little detailed assessment of whether these effects or other unintended consequences are occurring. Better understanding the behaviour of anglers (both resident and non-resident) in response to management actions will be important as additional measures, potentially including more restrictive or complex regulations, are considered and implemented in the future.

Regime expansion, classification and terminology

As additional regions adopt the backcountry licensing system and more rivers are designated backcountry fisheries there is a risk that the licence endorsement will become less useful in identifying users. As more regions/rivers are included anglers may be more likely to 'select all'. This could compromise data collection and monitoring efforts.

Furthermore, addition of significantly more rivers might compromise the status of designated backcountry rivers and undermine the classification if rivers of lesser 'quality' or significantly different characteristics are added to the system. The requirement for a BCLE could also be seen as opportunity to capture additional revenue but if it is not applied objectively it could risk the validity of the licensing requirement and the widespread support the system currently enjoys.

In July 2014 the New Zealand Council resolved *“that for the purposes of fisheries management a backcountry fishery is taken to mean any New Zealand freshwater (river and or lake) that provide some truly spectacular angling experiences, are popular with non-resident anglers and are inherently sensitive and need careful management”*.

In September 2015 the NZ Council further resolved *“that each region maintain a dedicated fund based on the extra revenue from non-resident licence sales for specific management to improve back country fisheries in regions”*.

This definition is broad enough to allow Councils flexibility and adequate scope to apply NRL funds in a regionally appropriate manner, particularly where backcountry fisheries may not be present (the term backcountry is not interpreted literally here). While this loose interpretation may be pragmatic to direct the use of regional NRL funds it is not appropriate and potentially problematic to have such subjectivity in applying the term backcountry in classifying or designating fisheries for other fisheries management purposes (BLE requirements or additional management mechanisms). The overlap of the NRL licence revenue fund and the backcountry management regime is a risk as not all regions have backcountry fisheries but Councils are somewhat forced to apply the term in order to meet the requirements of their NRL fund.

As each Council consider what is 'worthy' to be deemed a backcountry fishery in their region there is a need to maintain some equity and comparability so that the term and the existing designation system remains valid, meaningful and relevant with respect to fisheries management and for anglers. It is likely that what might constitute a 'backcountry' fishery in one region may not necessarily measure up to or align what a backcountry fishery would be regarded to be in another. This could be misleading when communicating with licence holders and other stakeholders. It could cause challenges if additional charges are introduced for BCLE's (as discussed later) in instances where fisheries of lesser quality or status are included, and anglers feel the charges for these locations are not justified or good value.

Eastern Fish and Game Council have established a framework for assessing and ranking fisheries which would be deemed as 'backcountry' fisheries and where NRL would be applied. The three key parameters of the assessment are:

- rivers or lakes that are popular with non-resident anglers;
- rivers or lakes that provide spectacular angler experiences; and
- fisheries that could be protected or enhanced

While this approach is regionally appropriate a potential issue is that under fisheries enhancement the potential for stocking is considered. Such activities would typically be considered inconsistent with backcountry fisheries in Otago. For many anglers, particularly those from overseas where hatchery influences are widespread the fact that our backcountry rivers hold wild, self-sustaining fisheries is an important component of their appeal. Risk of undermining Otago backcountry fisheries elsewhere reducing the value of the 'backcountry' brand.

With respect to Otago, the Recreational Opportunity Spectrum (ROS) in the SFG BMP 2015-2025¹ clearly outlines in the criteria for a backcountry fishery (see Appendix). Again, there is an issue in other regions (and some instances in Otago) where a fishery may meet one or more of these criteria or they are experiencing management issues similar to backcountry fisheries (use levels impacting experience etc) but their setting is not considered to be backcountry. In such cases the term backcountry is limiting as it may not fit fisheries which are good candidates for inclusion in a specialised management regime.

It is also important that activity patterns of non-resident anglers are considered as it is the NRL which generates additional funds for management. On this basis it has been proposed that any waters valued by

¹ Otago Sports Fish and Game Bird Management Plan 2015-2025

non-resident should be considered for application of these monies (and the limitations of terminology in the ringfencing of funds for 'backcountry' fisheries have again been raised here).

The National Angling Survey results show that non-resident anglers fish a wide range of waters in Otago (50 waters identified in the 2014/15 survey compared to 125 for resident anglers) including rivers, lakes and reservoirs. Due to limitations with the survey methodology these data are not considered sufficiently robust to be used to rank the importance of fisheries for non-residents but are informative in considering the distribution of non-resident angling, particularly beyond backcountry rivers.

Other issues

Fisheries Monitoring

Management focus in the past 10 years or so has very much been on angler experience and satisfaction. There has been little fisheries monitoring work undertaken in the Otago backcountry. This direction was based on the fact that backcountry fisheries are generally found in unmodified locations where natural processes are the key drivers of population dynamics and that most anglers practice catch and release meaning low harvest levels. However, angler surveys suggest that fish numbers and condition are an important component of overall satisfaction and some anglers have reported concerns about declines fish populations over their experience fishing backcountry. Some fisheries monitoring data would be required to assess these reports and would also be useful in considering total capacity for limit setting. It would also be useful to investigate how these fisheries might change in response to climate change and the effects of freshwater pests such as didymo.

Biosecurity

New incursions of freshwater pest species present a significant risk to backcountry fisheries and may be spread easily as anglers may use helicopters to access rivers; perhaps visiting more than one catchment within a day or over a few days. It is essential that biosecurity awareness is maintained. Any changes to rules regarding felt soled waders (as previously proposed on the West Coast) should be considered carefully.

Access

Access issues occur where access is over private land or on a public road over private land. In these circumstances exclusive capture of fisheries is an ongoing risk to the rights of anglers to access high value fisheries. Recent examples from Otago include the Hunter Valley Station and Hukarere Station. To date Fish and Game has had limited success in effectively addressing exclusive capture as angler access often remains at the discretion of the landowner.

Potential Improvements to the Backcountry Fisheries Management

Licensing

Development of a Fish and Game App could improve the backcountry system by providing anglers a more user-friendly way to manage and carry their BCLE (resolving issues around the paper receipt). Printing BCLE data on a licence card is not seen as a cost effective response as it would require changes to licence purchasing, processing and production systems and would unlikely resolve the issue completely as anglers often add endorsements throughout the season.

Further benefits of an App could be the inclusion of data collection functionality (in a licencing App or in a separate App) allowing anglers to provide accurate in-season information on activity, harvest, encounter rates other measures of interest.

Development of functionality for users to manage bookings (make cancellations and changes) under the Controlled Period system is a further area for improvement where NRL revenue could be applied. This would reduce the need for anglers to contact the Fish and Game to request changes and would provide more freedom to adjust bookings as required.

The introduction of a nominal fee for a BCLE could be an effective way to deter anglers from 'selecting all' and registering for BCLE in regions they have no intention of fishing. Further consideration of legal and practical aspects of how such a measure would be implemented is required, including whether fees would be charged on a river or region basis, whether the same charge would be required for all rivers/rivers and determination of the fee level. It is recommended that additional fees for BLE's are set conservatively as backcountry anglers are already required to purchase a whole-season licence. The Department of Conservation have indicated support in principle for this approach.

In North America fees for additional licences or 'stamps' are common and typically involve a differential fee for non-residents. For example, in British Columbia around 40 highly productive trout streams are classified as either Class 1 or Class 2 Waters. Residents require a ~\$15 annual Classified Waters Licence in addition to their standard fishing licence; non-residents however must purchase a Classified Waters licence on per diem basis and is date and water specific (\$42 per day for Class 1 and \$21 per day for Class 2); each licence may not exceed 8 consecutive days. An exception is the Dean River where just a single licence (up to eight consecutive days) is allowed per season².

Responses from angler surveys of non-residents and comparison of resident and non-resident licence fee differentials overseas (Table 1) suggest there is certainly scope to consider increased charges for non-resident anglers, whether this is through a BCLE charge or by increasing the NRL fee.

Table 1: Comparison of resident and non-resident licence charges in NZ and North America (based on 2016-2017 fees)

Angling Destination	Licence Cost (\$NZ)		Percent difference
	Resident	Non Resident	
NZ	125	161	29 %
British Columbia <i>Classified Waters</i>	37 16	83 Class 1: 42/day Class 2: 21/day	122 %
Alaska	40	199	400 %
Washington	40	116	190 %
Oregon	52	134	158 %
Montana	29	118	310 %

² For further discussion see Huitt, A. (2006) A review of methods used to control angler density throughout the world. Report to the Otago Fish and Game Council. OFGC Agenda November 2006.

Management of guided angling will be largely influenced on the current proposal for a Guides' Licence. Specific mechanisms for management of guided activity will be discussed separately once a determination on the proposal is made.

Scope of backcountry management regime

Identification and classification of priority waters

Based on the ROS (see Appendix) there are currently 24 rivers classified as backcountry in Otago (SFGBMP 2015-2025):

Blue River	Hunter River*	Rees River
Caples River*	Lochy River*	Route Burn
Dart River	Makarora River	Timaru Creek
Diamond Creek	Manuherikia River (upper reaches)	Pomahaka River (above Glenken)*
Dingle Burn*	Matukituki River	Upper Taieri River
Dunstan Creek	Minaret Burn	Von River
Fraser River (upper reaches)	Nevis River *	Wilkin River*
Greenstone River*		Young River*

The majority of monitoring and management efforts are focussed on the 9 designated backcountry fisheries (*). While overall Otago is well placed to identify backcountry rivers using the ROS criteria prioritising rivers (particularly those classified as backcountry but not designated backcountry fisheries) for more intensive management remains a challenge. There may also be other non-backcountry fisheries where more intensive management might be justified and some which are not listed in the SFGBMP or National Angling Survey (e.g. upper reaches of the Shotover River, Albert Burn).

It may therefore be useful to consider the following factors in addition to the ROS:

- Conflicts between different user groups (e.g. guided/unguided)
- Use levels/encounter rates are impacting angler satisfaction, causing displacement of some users
- High levels of guided or commercial activity (including exclusive capture)
- Particular need for intensive management including research and/or monitoring or to highlight the special value of the fishery

A River Values Assessment (RiVAS) exercise also is proposed as an objective and robust method to assess the relative values of Otago fisheries and identify priority waters for consideration of future designation. This tool developed at Lincoln University is used for ranking rivers in a region for a given use or value based on key attributes. It has been previously applied for salmonid angling in Tasman, Marlborough, Hawkes Bay and Gisborne. This approach would not only provide

information to identify priorities for backcountry management but could assess all fisheries in Otago and could therefore have a wide range of additional uses.

While the backcountry management regime was developed and is most advanced in Otago is now a nationally used system. It is therefore critical that Otago maintains a high level of involvement in how the system evolves and is used in other regions to ensure that its integrity is maintained and the role for which it was established is not undermined as it is adapted to suit the needs of other Councils.

Classification and terminology

Limitations to the scope of the backcountry regime currently present due to the term backcountry could be addressed through the introduction of new or additional terms. Together with other regions agreed terminology and criteria must be developed which will be relevant and consistent applied, for both anglers and to meet management objectives. This will require all interested regions to assess the range of fisheries types the terminology might need to describe. This could include:

- Replacing the term backcountry with a new term/classification type to encompass all fisheries where NRL revenue and specialised management mechanisms will apply:

e.g. Designated, Classified, Tier, Class, Group, Pressure-Sensitive Fishery

- Replace backcountry with a new term/classification type but have several sub-classes of fisheries one of which might be backcountry:

e.g. Designated Fishery
 Backcountry fishery
 Pressure-Sensitive fishery
 Special interest fishery
 Class A, B, C...fishery
 Group 1,2,3...fishery

- Add additional term(s) to classify non-backcountry fisheries where NRL revenue and specialised management mechanism will apply:

e.g. Backcountry fishery
 Pressure-sensitive fishery
 Special interest fishery

It is suggested it would be better to use less descriptive terminology (class, tier, group etc) to avoid limitations of specific terms as presently faced and avoid over-promoting certain fisheries with used of terms such as 'blue ribbon' etc. Policy advice will be required on the legislative and regulatory processes involved with the introduction of any new or additional terms or definitions.

Standard criteria will need to be set for any additional or new classifications. It will also need to be determined whether all waters need to be categorised or a non-classified status included and

whether limits are required on the number of designated fisheries (requiring an endorsement) a region can have.

For Otago's purposes the backcountry term is for the most part adequate however ensuring the appropriate use terminology in other regions will protect the integrity of the existing management regime as previously discussed and will future proof the system to include additional fishery types as required.

Additional Management Mechanisms

'Soft' Management Mechanisms

Soft or non-regulatory management approaches may improve backcountry management by assisting anglers to cope with increased demand for certain fisheries. Possible approaches may include;

Education and Angler Support

- Voluntary beat systems
- Upstream/downstream cards
- Voluntary daily limit on catch and release
- Code of Practice / angling etiquette

Creating and Promoting Alternative Opportunities

- Actively promoting fisheries with capacity for more use
- Actively promoting regions where higher participation may be desirable
- Promoting a wider range of fisheries in publications and media releases

These measures will less direct in addressing management issues and their effect may be difficult to measure but they would generally be easily implemented (would not require regulation changes and would be low risk in terms of potential controversy or back-lash from anglers) and would be low cost. They may assist with managing angling expectations and so may positively contribute to maintaining angler satisfaction. For such measures to be most effective they would need to be applied at a broad scale, requiring an inter-regional strategy and implementation.

Voluntary beat systems for Otago

Conflict between anglers can often arise where water is limited, and angling demand is high resulting in crowding. Due to the nature of these fisheries this 'crowding' may occur at relatively low angler densities. Defined beats may assist anglers in sharing the available water. Where defined access points exist these may also be used to indicate to anglers whether are already fishing by using marked carparks or special signage which can display when an angler is present. This could help to manage expectations and improve angler experience by signalling to anglers that there is high demand for the fishery and they may be required to share and alter their expectations.

The Nevis and Hunters are proposed as suitable fisheries for voluntary beat system. This would require review of maps and access points to determine suitable reaches for beats which could then be marked on electronic maps and as well as markers on the river.

'Hard' management mechanisms

Additional Licencing Requirements

- Additional designated fisheries
- Limit the number Licence Endorsement available
- Establish charge for the Licence Endorsement
- Charge non-residents by day or by river to access designated fisheries

Limits on total use and access

- Additional Controlled Fisheries using a booking or ballot/lottery system
- Limit total use and encounter rates
- Resident-only days or weekends or periods (opening/holidays)
- Requirement for non-resident to hire a guide for certain fisheries
- Limit guided/commercial use

Controlled Period or a booking system may be an effective mechanism to limited total use, reduce conflict between access modes and limit encounter rates and ensure a consistently high-quality experience is maintained. Depending on the objectives sought for a fishery the design and rules of the Controlled Period could be adjusted and could be based on a booking system or ballot.

Limits on use may be implemented on a wholesale first-come, first served basis (as currently for the Greenstone Controlled Period) or could incorporate objectives regarding specific user groups. For example, to meet target percentage of resident use, a maximum number of guides or proportion of guided versus unguided activity.

In all cases the number of total anglers allowed, and the number of days covered by the permit will need to be determined. This might be based on anglers per km or a target encounter rate. For Controlled Periods or other limit setting mechanisms to be most effectively applied good information on angling effort, including peak use times will be required.

Controlled Periods for Otago

The Dingle Burn is recommended as the first priority for consideration of a Controlled Period trial. Similar to the Greenstone there is also significant potential for conflict between fly-in and walk-in anglers. Between December and March commercial (guided) activity may exceed 50 % of all fishing effort. This level of commercial use is higher than for any other backcountry fishery and there is concern this is unsustainable. Anecdotal reports suggest displacement of resident walk-in anglers is occurring as a result of the high likelihood of encountering other parties or having issues with helicopters. A controlled fishery mechanism could be implemented including target for guided and unguided use or allocating some days to residents only, to address these issues and ensure opportunities for use is balanced between commercial and recreational users.

Addressing data gaps

More intensive management responses will require good information on which to base decisions and justify regulation changes. A key need will be identifying target angler effort/use levels for various fisheries and for

different users groups (guided/unguided etc). Management Plans for individual rivers, catchments or regions could then be developed to set out the rationale and objectives of limiting use and to set specific use targets.

A joint research project with the Southland Fish and Game Council is currently being developed by University of Otago Tourism Department (led by PhD candidate Stu Hayes and Associate Professor Brent Lovelock). The primary objectives of the study are to describe and characterise angler displacement in response to crowding. A further objective may be to assess the displacement risk (positive or negative) of various management mechanisms.

Recommendations

1. That the following matters are raised as priority items for the staff Backcountry and pressure-sensitive fisheries workshop to be held in September 2018:
 - Establish a national agreed classification system (with criteria) to appropriately categorise fisheries for the purposes of direction NRL revenue and fisheries management, and address issues with the current use of the term backcountry.
 - Determine system for charging a nominal fee for Licence Endorsements.
 - Develop an inter-regional strategy for 'soft' management mechanisms.
2. Undertake preliminary feasibility and design work for a trial Controlled Period for the Dingle Burn.

Helen Trotter
Fish and Game Officer
July 2018

Appendix

OTAGO ROS BACKCOUNTRY CRITERIA

Backcountry Setting is largely unmodified natural landscape and human intrusion is limited

Duration of activity is usually longer and commonly over 4 hours Access is by gravel road, walking track, boat or aircraft and travel distance is relatively long

Location is usually distant from centres of population

Use is commonly associated with camping, swimming, and the use of huts or holiday houses

User encounter rates are low

Water is little modified and catch rates/size of fish are average or better and can include trophy trout

Fishable water area is limited

Game-bird hunting opportunity is very limited

Experience is characterised by scenic beauty and feelings of solitude and is commonly associated with activities such as tramping and camping

Access methods can impact on the experience of others

7.3 Offence Guidelines for Otago

Background

Earlier this year the NZC insisted that regions discontinue with Reparation which had been a common way for this Council to deal with common minor offences, and fast moving tourist offenders.

The move away from Reparation as an option instantly put the current (last endorsed in April 2017) out of date so this has been adjusted and brought back to Council for endorsement.

Changes

The major change is to substitute Diversion for Reparation. The main difference between the two is that with diversion, a charging document and court date has to be established before an out of court settlement negotiation can begin. This step is fundamental to its proper and legal implementation.

Penalty Payments

It is proposed that the previous payments into the Habitat enhancement and research Fund be rolled over into the new Diversion scheme. That schedule of payments, scaled by seriousness, is attached as Appendix 1.

Recommendation

That Council endorse the *Offence Guidelines for Otago – August 2018* and agree to the schedule of penalty payments in Appendix 1

Ian Hadland
Chief Executive
30 July 2018

Offence Guidelines for Otago – August 2018

The purpose of these guidelines is to guide staff and rangers on the relative seriousness of fish and game offences as the Council sees them. In establishing the guidelines it is important to stress that each case will be considered on its individual merits. The Council has delegated decisions on enforcement action to the Chief Executive.

Offending By Minors

Offences relating to children are very difficult to deal with. In the field, rangers are instructed to be very cautious in their approach to them when investigating any offending. An explanation of what they are doing wrong and asking them to stop is ordinarily all that is required.

For more serious offences, rangers and staff are asked to request their name, address and telephone number so that the Council can follow the matter up with a parent or guardian. The Children, Young Persons and their Families Act 1989 requires that persons under 17 years of age must have their rights explained including not having to make a statement and having a legal guardian or lawyer present when they do.

OF&GC has never taken prosecutions against minors since establishment in 1990.

Offending By Adults

Offences by adults can be dealt with in three ways:

a) Prosecution Through The Courts

This is appropriate for more serious offences and for ones where significant non co-operation is encountered. Court action is expensive and fines, court costs and legal fees rarely do more than cover lawyers costs and staff time. There is also a degree of uncertainty over the outcome. A judge may accept an offenders excuses; perceive fish and game offences as relatively trivial, and/or find against the Council. In going to Court we have to weigh up the chances of success and risks from failure.

All Court prosecutions must meet the provisions of the 'Solicitor- Generals Prosecution Guidelines - July 2013.'³

b) Diversion Through The Courts

This may be appropriate for single offences or for offences where there are no aggravating circumstances such as obstruction. The prosecution prepares charging documents and submits these to the registrar. A hearing date is fixed. In the time ahead of the fixture date a diversion arrangement is agreed to and completed and then the prosecution is withdrawn. If diversion is not completed, the matter carries right through to full court prosecution.

c) Warnings

Warnings can be given where there are clear mitigating circumstances or for less serious offences. While not encouraged, rangers have the ability to give an on the spot warning. If they have any doubts they should complete an offence notice. In those cases a more formal written warning may be given or alternative action taken.

³ <http://www.crownlaw.govt.nz/assets/Uploads/Prosecution-Guidelines/prosecution-guidelines-2013.pdf>

Diversion

For practical reasons, a simple financial contribution to the Councils Habitat Enhancement and Research Fund (HERF) is requested. (see schedule below) If the diversion offer is accepted and the contribution is made, the matter is resolved quickly saving considerable Fish & Game and Court time. It also saves the offender from having a conviction recorded against their name. However, their details are recorded on our national compliance database so they are not given the same opportunity to resolve offending by diversion at some future point or in another Region.

Diversion is appropriate for offenders who:

- Are first time offenders against Conservation or Wildlife Act
- Fully cooperated with Ranger at time of apprehension
- Were not involved in any aggravating circumstances eg. obstruction, false details or misleading information
- Have not committed 3 or more regulation offences or, in the case of fishing/hunting without a licence, any additional offences.

Diversion may be also be offered to other offenders under special circumstances on a case by case basis. Examples might include:

- Young adult offenders (university students for instance)
- Overseas tourists
- Offenders intending heading overseas before a potential court date

Diversion Amount

The size of the diversion payment is graduated according to the seriousness of the offence and where possible is largely based on the average fines handed down by the court for the same or similar offences. Appendix 1 contains a scale of payments for various offences. These figures have been set after discussion with compliance staff in other regions and will be reviewed and adjusted periodically.

Use of Diversion Payment Funds

Any diversion payments made are receipted and will be banked into a dedicated Habitat Enhancement and Research Fund and not used for general operational expenses. The fund will be distributed by grants or used for projects in three areas:

- *Sportsfish Habitat Enhancement* e.g. streamside restoration projects, subsidised plantings, fencing of spawning areas.
- *Gamebird Habitat Enhancement* e.g. wetland creation projects, grants to private landowners, wetland fencing and plant subsidies
- *Sportsfish or gamebird research* eg Seed funding for MSc or PHd students dedicated to research of sportsfish or gamebirds or their habitats.

Grants are to be made from the fund in accordance with the Councils HERF application and approval process. A document containing 'preferred criteria' has been established to help guide applicants.

Failure to complete Diversion

Failure or refusal to complete Diversion will result in court prosecution. As such, in all cases where diversion is offered a prima facia case must first be established.

Action guidelines table for common offences

Sports Fisheries Offences

Offence	Act/Regulations	Course of Action
Fishing without a sportsfish licence	Conservation Act s26Zl	Diversion
Fishing without a backcountry licence	Conservation Act s26Zl	Diversion
Fishing outside of nominated region	Conservation Act s26Zl	Diversion
Non-compliance with Anglers Notice (eg Using more than one rod)	Conservation Act s26 R (6)	Diversion
Failure to produce licence	Fresh.Fish. Regs s20	Warning
Disturbing spawning fish/grounds	Conservation Act s26ZJ(1)	Court Prosecution
Obstruction	Conservation Act s41	Court Prosecution
Fishing out of season	Conservation Act s26ZP	Diversion
Failure to give name & address	Fresh.Fish. Regs. s20	Court Prosecution
FWL when coupled with other offences (Obstruction etc) three or more regulations offences	Conservation Act	Court Prosecution

Gamebird Offences

Offence	Act/Regulations	Course of Action
Hunting without a licence	Wildlife Act s19(1)	Diversion
Breach of Game Gazette conditions (eg. Over bag limit, lead shot)	Wildlife Act s6(3)	Diversion
Failure to produce licence	Wildlife Act s61(2)	Warning
Using more than one shotgun	Wildlife Act s18	Diversion
Obstruction	Wildlife Act s40	Court Prosecution
Hunting out of season	Wildlife Act s67	Court Prosecution
Taking absolutely protected wildlife	Wildlife Act s63	Court Prosecution
Taking (<2) partially protected wildlife (eg Grey Teal)	Wildlife Act s63	Diversion
Failure to give name & address	Wildlife Act s66 (2)	Court Prosecution
HWL when coupled with other offences (obstruction etc) or three or more regulations offences	Wildlife Act	Court Prosecution

Appendix 1**Diversion levels for common categories of offences –**

Offence	Section	Diversion Fee	Average Fine	Range
Fishing without a licence	Conservation Act s26Z1	\$500*	\$513	\$200 - \$700
Fishing without a backcountry licence	Conservation Act s26Z1	\$200*	No cases	No cases
Fishing outside of area named on Local Area licence	Conservation Act s26Z1	\$200*	No cases	No cases
Non-compliance with Anglers Notice (eg Using more than one rod etc)	Conservation Act s26 R (6)	\$200*	No cases	No cases
Fishing out of season	Conservation Act s26ZP	\$200*	No cases	No cases
Hunting without a licence	Wildlife Act s19(1)	\$600*	\$510	\$300-\$700
Breach of Game Gazette conditions (eg. Over bag limit, lead shot)	Wildlife Act s6(3)	\$500*	\$487	\$250 -\$700

- Plus summons service fee of \$150 (if summons served)

Notes:

- Diversion levels are in line with Southland and Central South Island Region levels.
- Average fines do not include court costs (generally \$130) or solicitors fees (range between \$75 and \$250) or the forfeiture of shotguns or fishing equipment
- Information based on last 5 years of prosecutions in Otago and Southland Region.
- Last review April 2017

7.4 Salmon Committee Report



7 August 2018

Fish and Game Regional Chairs:

Owen Baigent:	Nelson/Marlborough
Trevor Isitt:	North Canterbury
Andy Harris:	West Coast
Gary Rooney:	Central South Island
Monty Wright:	Otago

Dear Chairmen,

Re: National Sea Run Salmon Committee

Following the Salmon Symposium in late 2017, the New Zealand Council (NZC) resolved to establish the National Sea Run Salmon Committee (NSRSC).

Both the Symposium and the NSRSC are in response to the wild sea run salmon fishery crisis. To date, the NSRSC has met three times. Our Terms of Reference and Strategic Outcomes are attached. We seek your feedback on these documents.

You will note that the Strategic Outcomes begins with a statement that we believe we can affect the sea run salmon fishery. This statement is important as we believe our actions as salmon anglers and governors have a material impact on the future of the fishery.

In brief we believe there are five outcomes we need to achieve to restore the sea run salmon fishery:

1. Stop the decline (i.e, stop that decline in the number of salmon making it to the spawning grounds).
2. Improve the habitat.
3. Restore to acceptable levels self-sustaining wild fish spawning numbers.
4. Establish an acceptable level of hatchery fish harvest.
5. Restore the numbers of juvenile salmon reaching the sea.

We accept that some of these outcomes overlap. However, we believe each needs to be focused on in its own right.

Statutory managers of freshwater sports fish, game birds and their habitats

New Zealand Council

Level 2, The Dominion Building, 78 Victoria Street, Wellington 6011. P.O. Box 25-055, Wellington 6146, New Zealand.
Telephone (04) 499 4767 Email nzcouncil@fishandgame.org.nz www.fishandgame.org.nz

To assist the NSRSC, we request that your council undertakes the following actions:

1. Fill in the attached tables on wild salmon numbers and hatchery salmon numbers.

To be successful, we believe it is important to (1) establish baseline spawning and harvest numbers for wild salmon, (2) set targets for put and take hatchery releases and harvest rate, and (3) set targets over a nine-year timeframe. This is very important if we are to have any chance of success.

The wild salmon table seeks to establish a baseline on how many fish spawned in 2018, by river, and then seeks your councils' view on how many you wish to see spawn in coming years, assuming what catch rate you believe will restore the fishery.

You will note that there is a column headed 'Harvest'. The purpose of this measure is to agree the reduction in wild salmon harvest you are willing to commit to. For example, if you assumed 600 salmon were going to return to one river, and you wanted 450 to spawn you would have a catch rate of 150.

The hatchery table seeks to set some goals around establishing a put and take fishery in the six rivers the committee is focusing on. We understand this is quite a speculative exercise but we believe establishing viable put and take salmon fisheries at the mouths of rivers is vital to ensuring we have salmon for anglers to catch and to take the pressure off wild salmon.

2. We also ask your council to agree that the decline in spawning numbers has to stop as a matter of priority and we ask you to support the action below.

"It was agreed by the NSRSC that if the spawning (escapement) returns for the 2018/19 season are equal to or less than the average of the last two seasons (2016/17 and 2017/18) then the wild salmon fishery will be closed."

This resolution reflects the level of crisis the fishery is in. We would be negligent as governors not to close the fishery in this circumstance. The alternative is to watch it dwindle away over the next few years.

3. We would like councils to adopt some or all of the following options when they next set angling regulations.

The actions are:

- Close middle and upper rivers (leave councils to decide start point on river)
- Reduce Salmon season
- Have open and closed stages in the salmon season
- Stop night fishing

- Single barbless hook
 - 1 fish per day
 - Maximum 4 fish per year
 - No/stop hand retrieve
 - No jet boat fishing.
4. Support for amending the 2018/19 anglers' notice to reduce salmon catch rates to halt the decline in spawning numbers.

The regulations for the 2018/19 year are already approved. However, if there was support from your council an amendment could be made to the recently approved anglers notice if the appropriate consultation process was followed.

Could you please indicate if you wish to amend the 2018/19 anglers notice for your council in relation to salmon. Any discussion on this action would start with your councils view on the 2018 spawning returns i.e., are the numbers so low that immediate action needs to take place before the season opens in October?

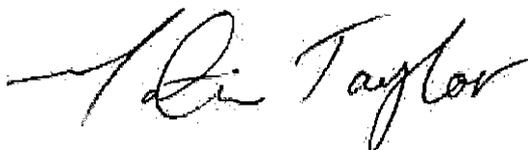
Conclusion

It has been clear from the committee's deliberations there are many views on the best way forward. We acknowledge there are also many divergent views across councils and salmon anglers. However, we firmly believe the salmon fishery is in crisis and if urgent action is not taken, the fishery will cease altogether.

If that occurs the blame will sit fairly and squarely on our shoulders as governors and salmon anglers. This means we have an obligation to save the fishery for future generations, which also means we must be more effective in the next decade than we have been in the last decade.

It would be helpful if we could have your response to the four actions above by 31 August.

Yours Sincerely



Martin Taylor
CEO Fish and Game NZ
Chair National Sea Run Salmon Committee

WILD and HATCHERY FISH BASELINE AND GOALS

WILD			
River	Wild Fish Spawn	Wild F Harvest	Harvest Chance From 2018 %
Waimakariri			
2018	385	200	0
2021	500	100	-50%
2024	700	200	0
2027	900	300	50%
Rakaia		100	
2018			
2021			
2024			
2027			
Rangitata			
2018			
2021			
2024			
2027			
Waitaki			
2018			
2021			
2024			
2027			
Clutha			
2018			
2021			
2024			
2027			

HATCHERY			
River	Hatchery Fish (released)	Hatchery F Harvest	Percentage Chance From 2018 To 2021
Waimakariri			
2018	0	0	0%
2021	100,000	100	
2024	200,000	200	
2027	400,000	1000	
Rakaia			
2018			
2021			
2024			
2027			
Rangitata			
2018			
2021			
2024			
2027			
Waitaki			
2018			
2021			
2024			
2027			
Clutha			
2018			
2021			
2024			
2027			

Terms of Reference for a National Sea Run Salmon Committee (Confirmed 25 July 2018)

1. The name of the committee shall be the National Sea Run Salmon Committee.
2. The purpose of the committee is to develop and promote a co-ordinated approach within Fish and Game and key stakeholders to ways that will restore and enhance the sea run salmon fisheries in the interest of anglers.
3. The terms of reference for the committee are a living document and can be changed as agreed by the NZ Fish and Game Council.
4. The committee shall be a sub-committee of the New Zealand Fish and Game Council.
5. The committee has the ability to appoint any person required for advice, assistance and support.
6. The committee shall choose its' own Chairperson to be approved by the NZ Fish and Game Council.
7. The committee shall report to the New Zealand Fish and Game Council and shall be bound by the Governance Policies established of the Council.
8. The committee shall be funded from the National Budget as agreed by the NZ Fish and Game Council.
9. The committee shall for membership, draw on the voluntary contribution of governors within Fish and Game who have a special interest in the salmon and staff with expertise in matters relating to the salmon fishery.
10. The committee will advocate in the interests of the sea run salmon resource.
11. The committee recognises the Regional Fish and Game Councils have their statutory function to manage salmon.
12. The committee will seek the support of local and central government and other statutory entities in the ways they can support the welfare of sea run salmon resource.
13. The committee will prioritise the recommendations from the Salmon Symposium.
14. The committee will look at any gaps in the science relating to salmon and on a needs basis recommend the studies required.
15. The committee will Investigate ways to fund the work on the salmon fishery.
16. The Committee accepts that there are other stakeholders who financially and in some cases voluntarily contribute towards the welfare of the sea run salmon fishery. The National Sea Run Salmon Committee will support the work of these stakeholders where appropriate.
17. The committee will report on activities to the New Zealand Fish and Game Council and other stakeholders.

National Sea Run Salmon Committee
Strategic Outcomes Updated on July 25 2018

1. Committee: We believe we can affect the sea run salmon fishery.

2. Problem Definition:

The sea run salmon resource has declined and no longer supports a great fishery.

- No fish
- Declining numbers of juvenile salmon reaching the sea
- Rapid decline since 2000, gradual decline since 1980
- Decline of spawning stream productivity
- Poorly screened abstraction in stream
- Unacceptable decline of fish returning to rivers

3. Timeframe

The committee has set a goal of achieving its strategic outcomes in three cycles of three years.

4. Strategic Outcomes.

- a. Stop the decline.
- b. Improve Habitat.
- c. Restore to acceptable levels self-sustaining wild fish spawning numbers.
- d. Establish an acceptable level of hatchery fish harvest.
- e. Restoring numbers of juvenile salmon reaching the sea.

Strategic Outcome A - Stop the Decline

Decisions to date:

- Agree to focus on six rivers. Added Wairau to Waimakariri, Rakaia, Rangitata, Waitaki, Clutha.
- Agree the methodology of setting targets be shared with Councils who may wish to adopt for other rivers.
- Agree that the baseline measurement be 2018 season returns and harvest on the six rivers.
- Agree that we have two focuses: Wild Fish and Hatchery Fish
- Agree develop tables in consultation with regions on wild fish spawning and harvest and hatchery fish released and harvest.
- Agree the tables to have three x three years cycles on the goals for spawning returns, and harvest.
- Agree the harvest of wild fish needs to be reduced.

Actions to stop decline

If the spawning returns (escapement) are equal to or less than the average of the last two seasons, then the wild fishery shall be closed.

Agreed all or some of the following actions need to be instigated by Councils to halt the decline in wild fish spawning returns:

1. Close middle and upper river (leave councils to decide start point on river)
2. Reduce Salmon season
3. Have stages in the salmon season
4. Stop night fishing
5. Single barbless hook
6. 1 fish per day
7. Maximum 4 fish per year
8. Stop hand retrieve
9. No jet boat fishing.

It was agreed to write to Councils setting out the actions above saying that the goal is to:

1. Have more wild fish return to spawn
2. Get fish numbers back up
3. Ask councils to make recommendations on numbers of fish they have spawning and wish to see spawning, and what regulations they support.

Strategic Outcome B – Improve Habitat

Have a national advocacy strategy on Canterbury water quality and its impacts on the fishery.

Agreed the following options

1. Protect Flows
2. Improve water quality
3. River enhancement
4. Predation

Agreed the following Options

5. Fight to stop any more abstraction
6. Fight to increase flows
7. National level policy which regions must adhere to on abstraction, flows, fish screens.
8. Secure spawning streams by advocating for them not buying them.

Outcome C - Restore to acceptable levels of self-sustaining wild fish spawning numbers.

Agreed the following options

1. Hatchery reared wild stock must be an option subject to science
2. Doing nothing is not an option
3. Must have access to wild stocks if want to rear in hatchery

Outcome D - Establish an acceptable level of hatchery fish harvest.

Agreed the following options

1. Increase hatchery supported put and take
2. Put and take on all six South Island east coast rivers
3. Must develop a put and take fishery to take pressure of wild fish

Outcome E – Restoring numbers of juvenile salmon reaching the sea

1. Address failed Fish Screens
2. Enforce minimum flows
3. Enforce fish passage standards

8.0 Public Excluded Items

8.1 Nil

9.0 Chief Executives Report

9.1 ADMINISTRATION

Finance and Licence sales

Financial Reports to 31 July 2018

The finance report for the period from 1 September 2017 to 31 July 2018 is attached.

Key budget figures are included in the front of the Annual Work Plan

Expenditure to date is \$2,109,862 (including levies \$918,122 and commission \$82,980 but excluding depreciation (\$71,786) compared with the annual budget of \$1,955,764 (operational expenditure: \$984,399, depreciation: nil, and levies: \$918,122 and excluding commission: \$99,630). As present the budget is 105% spent at a point 92% through the financial year. Summer and autumn see a peak in expenditure, so this is not unusual.

Budget and expenditure figures are exclusive of GST.

BDO Invercargill has begun the 2018 financial audit.

Licence Sales 2017/18 Season

Fishing licence sales revenue received for the year to 31 July 2018 is \$1,685,075 (including commission). The fish budget figures for the full year is \$1,670,050 including commission.

Fishing licence sales for the season so far in whole season licence equivalents (LEQs) are 15,259 LEQs compare with 15,225 for the same period last year.

Game licence sales revenue received for the year to 31 July 2018 is \$327,237 (including commission). The year's budget for game licence sales is \$322,536 including commission. The Habitat Trust Fund of \$3 per licence, has not yet been deducted.

Game licence sales for the season so far in whole season licence equivalents (LEQs) are 4135 LEQs compare with 4251 for the same period last year.

Licence sales recorded to 31st July 2018 are outlined for fish and gamebird licences in the attached table from Eyede and compared with last year on the same date. Figures are inclusive of GST.

Funds Position at 31 July 2018

ANZ 00 account \$82,491.99

ANZ 70 account \$703,301.14 (4th F&G Levy about to be paid)

Reparation Trust Account

Account balance to 31 March 2017	\$ 44,333
Revenue for year to 31 July 2018	\$ 8,300
Less grants to 31 July 2018	<u>\$ 9,644</u>
Total	\$ 42,989

There is presently a commitment in grants approved but not spent of approximately \$11,750

Backcountry Management

Account balance to 31 August 2017 \$70,468

Term investments as at 31 July 2018:

ASB 0079 \$337,031.86 @ 3.50% maturing January 2019
 SBS 44624 \$505,278.44 @ 3.55% maturing April 2019

The sum of \$77,745 is held by Anderson Lloyd in trust for wetland management via DOC. A small proportion is committed to a weed assessment at Waihola/Waipori wetland.

Recommendation

That the Finance and Licence Sales Report for the period ending 31 July 2018 be received.

Agents and Debts

No liabilities or potential liabilities at the present time.

Capital Expenditure*Vehicles*

One truck (value \$37,143.91 excluding GST) has been replaced and an one is presently for sale via the Trade Me auction site.

Equipment

Nil

Council Delegations to Chief Executive

Council may delegate functions in accordance with its Standing Orders section 1.9. The approved delegations have now been edited in the Councils Governance Policies (3.8.3). Updated copies will be provided to all elected members of the new Council in October.

Staffing

Applications for the Dunedin Fish & Game Officer role close in the 13 August. There has been reasonable interest in the position.

CE to report**Credit Card**

A credit card has been obtained for the CE and a discussion held with the auditor about appropriate signoff procedures for its use.

Dunedin Tenancy

The current tenants have indicated that they wish to stay but are requesting an upgrade of the area leased. Staff are looking into the costs. The space is rather dated and could be substantially improved before getting it revalued for a long term tenancy.

Summary of Draft Profit and Loss Statement Expenses 31st July 2018
As At 07/08/18

Expense	Total Budget	Actual Expenditure		Ytd %	Comment
		Ytd			
Projects					
Species	\$ 25,000.00	\$ 17,119.00		68%	
Habitat	\$ 8,000.00	\$ 38,642.00		483%	This less RMA legal reimbursed and donations to Bullock Creek and surplus 2016/17 reserve funding
Participation	\$ 16,500.00	\$ 20,563.00		125%	This less \$2000 donation for TAKF, extra signage , extra in news letters
Public Interface	\$ 1,000.00	\$ 333.00		33%	
Compliance	\$ 12,000.00	\$ 12,767.00		106%	
Licences	\$ 500.00	\$ 246.00		49%	
NZC Levies	\$ 918,122.00	\$ 918,122.00		100%	
Agent Commission		\$ 82,980.00			
Council	\$ 15,000.00	\$ 17,556.00		117%	Had extra meetings + CE change
Planning	\$ 13,000.00	\$ 15,466.00		119%	Audit costs finished
Projects Total	\$ 1,009,122.00	\$ 1,123,794.00		111%	
Administration					
Salaries	\$ 757,913.00	\$ 723,892.00		95%	
Staff Expenses	\$ 15,564.00	\$ 26,818.00		172%	Excess CE job interview etc
Office Premises	\$ 82,504.00	\$ 74,041.00		90%	
Office Equipment	\$ 2,500.00	\$ 1,528.00		61%	
Communication	\$ 25,100.00	\$ 19,741.00		79%	
General	\$ 6,561.00	\$ 8,356.00		127%	Radio advertising extra
General Equipment	\$ 3,500.00	\$ 2,588.00		74%	
Depreciation		\$ 71,786.00			To be adjusted
Vehicles	\$ 49,500.00	\$ 57,318.00		116%	Maintenance and fuel up
Administration Total	\$ 943,142.00	\$ 986,068.00		105%	
Total	\$ 1,952,264.00	\$ 2,109,862.00		108%	

Summary of Position 31st July 2018

Total Expenditure		\$ 2,109,862.00
Less Depreciation		71786.00
Less Levies	\$ 918,122.00	\$ 918,122.00
Less Commission		\$ 82,980.00
Less RMA Reimbursed		\$ -
Net Expenditure		\$ 1,036,974.00
Budget		\$ 984,399.00
% Spent		105%

All ready taken out above

Summary of Profit and Loss Statement Income 31st July 2018**As At 07/08/18**

Income	Total Budget	YTD		Comment
Fish	\$ 1,670,050.00	\$ 1,659,153.00	99%	July + Aug to come
Game	\$ 322,536.00	\$ 338,145.00	105%	July + Aug to come
Prosecutions	\$ 5,000.00	\$ 1,429.00	29%	
Rent	\$ 43,100.00	\$ 31,433.00	73%	Wanka rental finished
Interest	\$ 33,601.00	\$ 32,988.00	98%	Term interest comes in July
	\$ -			
	\$ 2,074,287.00	\$ 2,063,148.00	99%	

Otago Fish & Game Council

Balance Sheet

As at 31 July 2018

CAPITAL	This Year	Last Year End
Anderson Lloyd Investment	(77,745.39)	(77,745.39)
Opening Equity	1,039,201.00	1,039,201.00
Retained Earnings Brght Fwd	<u>1,671,288.48</u>	<u>1,519,497.04</u>
	2,632,744.09	2,480,952.65
Plus Current Year Operating Surplus/(Deficit)	(43,515.32)	151,791.44
TOTAL CAPITAL FUNDS	<u><u>2,589,228.77</u></u>	<u><u>2,632,744.09</u></u>
REPRESENTED BY		
CURRENT ASSETS		
Cash on Hand	200.00	200.00
Stock on Hand	18,111.00	18,111.00
Accrued Interest	5,957.15	5,957.15
Prepayments	25,078.97	25,078.97
ASB Investments	337,031.86	325,456.46
SBS Investments	505,278.44	486,209.07
GST Paid	42,474.40	0.00
GST Payments/Refunds IRD	92.88	0.00
Trade Debtors	19,030.25	163,031.90
ASB 00 Account	10.98	10.98
National/ANZ 00 Account	82,491.99	120,842.51
National/ANZ 70 Account	703,301.14	397,122.48
SBS Account	<u>24.66</u>	<u>24.66</u>
	1,739,083.72	1,542,045.18
LESS CURRENT LIABILITIES		
Sundry Creditors	22,688.31	22,688.31
Holiday Pay Accrued	43,091.12	43,091.12
PAYE Control	1,689.27	3,418.25
GST Received	4,193.75	61.04
Funds received in Advance	191,877.47	191,877.47
Trade Creditors	<u>321,285.07</u>	<u>92,066.33</u>
	584,824.99	353,202.52
NET WORKING CAPITAL	1,154,258.73	1,188,842.66
FIXED ASSETS		
Vehicles Purchases	340,824.89	281,931.54
M/V Accum Deprn	(172,495.71)	(130,695.71)
Boat Purchases	100,497.93	100,497.93
Boat Accum Deprn	(86,659.81)	(82,479.81)
Plant Purchases	83,394.39	72,806.18
Plant Accum Deprn	(69,113.07)	(61,699.07)
Furniture & Fittings	34,347.94	34,347.94
Furniture Accum Deprn	(30,542.45)	(29,222.45)
Field Equipment Purchases	36,331.83	34,610.96
Field Eq Accum Deprn	(27,341.82)	(26,901.82)
Land Purchases	414,410.77	414,410.77
Buildings Purchases	634,544.67	642,892.49
Buildings Accum Deprn	(352,576.24)	(339,574.24)
Land @ Fair Value	426,260.00	426,260.00
Building @ Fair Value	162,085.11	162,085.11
Buildings @ FV - Accum Deprn	<u>(58,998.39)</u>	<u>(55,368.39)</u>
	1,434,970.04	1,443,901.43
NET ASSETS	<u><u>2,589,228.77</u></u>	<u><u>2,632,744.09</u></u>

**Otago Fish & Game Council
Profit and Loss - Summary
for Period Ended Jul:2017/18**

	Month to Date			Year to Date			Annual Budget	YTD Actual Budget	Last YTD	
	Actual	Budget	% of Budget	Actual	Budget	Variance				
INCOME										
FISH AND GAME LICENCE SA...										
1000	Fishing Licences Dn Agency	0	0	0%	(1,604)	0	(1,604)	0	0%	179,873
1002	Fishing Licences Income	4,117	139,170	3%	1,660,757	1,530,880	129,877	1,670,050	99%	1,638,193
1006	Game Licences Income	1,276	26,878	5%	338,145	295,658	42,487	322,536	105%	344,643
		5,393	166,048	3%	1,997,298	1,826,538	170,760	1,992,586	100%	2,162,708
OTHER INCOME										
1010	Interest received	14,315	2,800	511%	32,988	30,801	2,187	33,601	98%	25,171
1020	Fines - Fishing & Game Offences	159	416	38%	1,429	4,584	(3,155)	5,000	29%	6,345
1022	Reparations Trust Fund	0	0	0%	(1,344)	0	(1,344)	0	0%	(18,115)
1025	Rent Received	584	3,591	16%	34,433	39,509	(9,076)	43,100	73%	37,829
1065	Fishing Competitions	0	0	0%	1,332	0	1,332	0	0%	1,046
1075	Commissions Income	0	0	0%	263	0	263	0	0%	620
1090	Sundry Income	148	0	0%	1,224	0	1,224	0	0%	1,666
1092	Merchandise Sales/Other	43	0	0%	724	0	724	0	0%	(6,047)
1094	Donations and Grants Received	1,800	0	0%	89,981	0	89,981	0	0%	31,512
1096	RMA Costs Reimbursed	2,853	0	0%	62,399	0	62,399	0	0%	62,751
		19,912	6,807	293%	220,427	74,894	145,533	81,701	270%	162,878
	TOTAL INCOME	25,305	172,855		2,217,726	1,901,432	316,294	2,074,287		2,325,586
EXPENDITURE										
SPECIES MANAGEMENT										
	POPULATION MONITOR / MMT	0	1,000	0%	8,335	11,000	(2,665)	12,000	69%	9,348
	HARVEST ASSESSMENT	0	250	0%	0	2,750	(2,750)	3,000	0%	0
	FISH SALVAGE	0	0	0%	0	0	0	0	0%	0
	HATCHERY OPERATIONS	385	833	46%	8,754	9,167	(413)	10,000	88%	8,874
	RELEASES	0	0	0%	0	0	0	0	0%	25
	REGULATIONS	0	0	0%	0	0	0	0	0%	0
	CONTROL	0	0	0%	29	0	29	0	0%	0
	SPECIES MANAGEMENT-...	385	2,083	18%	17,119	22,917	(5,798)	25,000	66%	18,247
HABITAT PROTECTION										
	RESOURCE MANAGEMENT A...	20,858	374	5,577%	87,280	4,126	83,154	4,500	1,940%	104,360
	WORKS & MMT COUNCIL LAND	2,152	291	739%	100,739	3,209	97,530	3,500	2,878%	14,463
	ASSISTED HABITAT	0	0	0%	0	0	0	0	0%	809
	HABITAT PROTECTION-T...	23,010	665	3,460%	188,019	7,335	180,684	8,000	2,350%	119,632
PARTICIPATION										
	ACCESS	585	250	234%	4,416	2,750	1,666	3,000	147%	1,315
	SATISFACTION SURVEYS	449	0	0%	8,355	0	8,355	0	0%	10,150
	NEWSLETTERS	0	375	0%	3,349	4,125	(776)	4,500	74%	20,889
	OTHER PUBLICATIONS	0	83	0%	60	917	(857)	1,000	6%	2,901
	TRAINING	0	333	0%	3,038	3,667	(629)	4,000	76%	1,480
	CLUB RELATIONS	0	333	0%	3,022	3,667	(645)	4,000	76%	1,509
	HUTS	44	0	0%	322	0	322	0	0%	81
	PARTICIPATION-TOTAL	1,079	1,374	78%	22,563	15,126	7,437	16,500	137%	38,325

**Otago Fish & Game Council
Profit and Loss - Summary
for Period Ended Jul:2017/18**

	Month to Date			Year to Date			Annual Budget	% of Budget	
	Actual	Budget	Variance	Actual	Budget	Variance			
PUBLIC INTERFACE									
LIAISON	0	0	0%	7	0	7	0	0%	9
COMMUNICATIONS	0	0	0%	0	0	0	0	0%	0
ADVOCACY	0	82	0%	326	918	(592)	1,000	33%	2,466
PUBLIC INTERFACE-TOTAL	0	82	0%	333	918	(585)	1,000	33%	2,475
COMPLIANCE									
RANGER ADMIN	0	208	0%	1,129	2,292	(1,163)	2,500	45%	1,728
RANGER TRAINING	0	375	0%	4,804	4,125	679	4,500	107%	3,862
COMPLIANCE	3,658	416	879%	6,834	4,584	2,250	5,000	137%	18,093
COMPLIANCE-TOTAL	3,658	999	366%	12,767	11,001	1,766	12,000	106%	23,683
LICENCES									
LICENCE PRODUCT/DISTN	0	0	0%	0	0	0	0	0%	0
AGENT SERVICING	0	41	0%	246	459	(213)	500	49%	513
COMMISSION	270	0	0%	82,980	0	82,980	0	0%	82,480
NZFG LEVIES	229,531	76,510	300%	918,122	841,612	76,510	918,122	100%	629,802
LICENSES-TOTAL	229,800	76,551	300%	1,001,349	842,071	159,278	918,622	109%	712,795
COUNCIL									
COUNCIL ELECTIONS	0	0	0%	0	0	0	0	0%	0
COUNCIL MEETINGS	0	1,250	0%	17,556	13,750	3,806	15,000	117%	11,654
COUNCIL-TOTAL	0	1,250	0%	17,556	13,750	3,806	15,000	117%	11,654
PLANNING / REPORTING									
MMT/STRATEGIC PLANNING	501	0	0%	2,037	0	2,037	0	0%	2,028
REPORTING/AUDIT	0	1,083	0%	13,408	11,917	1,491	13,000	103%	4,146
NATIONAL LIAISON	0	0	0%	21	0	21	0	0%	86
PLAN/REPORT-TOTAL	501	1,083	46%	15,466	11,917	3,549	13,000	119%	6,260
ADMINISTRATION									
SALARIES	98,149	63,450	155%	723,892	697,963	25,929	761,413	95%	609,417
STAFF EXPENSES	3,205	1,295	248%	26,818	14,269	12,549	15,564	172%	18,279
STAFF HOUSES	0	0	0%	0	0	0	0	0%	0
OFFICE PREMISES	10,444	6,873	152%	74,041	75,631	(1,590)	82,504	90%	62,527
OFFICE EQUIPMENT	(3,435)	208	(1,652)%	1,528	2,292	(764)	2,500	61%	4,116
COMMUNICATIONS	849	2,090	41%	19,741	23,010	(3,269)	25,100	79%	15,275
GENERAL	516	546	95%	8,356	6,015	2,341	6,561	127%	9,755
GENERAL EQUIPMENT	52	208	25%	2,588	3,292	(704)	3,500	74%	1,051
VEHICLES	2,836	4,124	69%	57,318	45,376	11,942	49,500	116%	55,124
ADMINISTRATION - TOTAL	112,616	78,794	143%	914,283	867,848	46,435	946,642	97%	775,545
DEPRECIATION	6,526	0	0%	71,786	0	71,786	0	0%	71,786
TOTAL EXPENDITURE	377,575	162,881	232%	2,261,241	1,792,883	468,358	1,955,764	116%	1,780,402
Profit (Loss)	(352,270)	9,974		(43,615)	108,549	(152,064)	118,523		645,184

9.2 SPECIES

Waterfowl Monitoring (1111)

Annual Shoveler counts at Otago monitoring sites have now been completed and will be reported on at the next meeting.

Spawning Surveys (1112)

Nothing to report

Monitor Fisheries 1113)

See status report on Upper Clutha Fishery. Item 12.4

See Manuherikia Flow Assessment report. Item 12.5

Review Standard Operating Procedures (1115)

See separate report item 12.3

Success & Satisfaction (1122)

Nothing to report

Fish Salvage (1131)

Nothing to report

Hatchery Operations (1141)

For several years NZ King Salmon has been supplying fish food for our 0 – 1yr old fish but are unable to continue the service. There is enough for the 2018/19 season, but a new supplier for smaller grade food will be required. The hatchery backup pump is being replaced by Oceanagold and a set of steps has been built to improve access to the pontoon. Stripping of eggs from hatchery stock will begin mid-September.

Releases (1161)

Scheduled releases have been completed for the financial year

Game Notice (1171)

Nothing to report

Anglers Notice (1172)

The Anglers Notice review is now complete and aside from a small issue related to salmon bags, all changes were approved by the Minister and transitioned into regulations. Attention now turns to promotion of the changes, in particular the adjustments to bag limits and the establishment of a backcountry fishery for the upper Pomahaka River.

Game Bird Control (1181)

Nothing to report

9.3 HABITAT

Resource Management (1211)

Resource Management Complaints 2014/15

Date/Agency	Issue	Response
January 2018	Complaint lodged over significant unauthorised channel works in the Shag River	Under investigation by ORC
May 2018	Bullock Creek Sediment and stormwater runoff from subdivision reported to ORC and QLDC	Under discussion

Bullock Creek Complaint

Staff recently met with QLDC mayor and Chief Executive to gain an update on progress towards resolving ongoing stormwater issues. The land development phase nears completion so it is expected that the potential for major discharges of sediment to the creek should diminish over time. The same cannot be said for stormwater in our view.

The QLDC are seeking a further report on the adequacy or otherwise of the current stormwater system for the Alpha series subdivision. They explained that the current system had been peer reviewed by an external consultant and by its own engineers and approved. A specialist stormwater engineer has since been hired at QLDC and he is proposing to report on the system in place in the near future. Despite being pressed for a timeframe for that to happen, they could not say how soon F&G would be able to see the report.

Resource Consents

Contact Energy Consents

Contact Energy and F&G staff visited a salmon hatchery operation near Twizel to gain a further understanding of modern raising techniques. Pressure needs to be applied to Contact Energy to establish a timeframe for hatchery development as the situation is not substantially advancing.

Waterfall Park

As highlighted at the last meeting, a large development is proposed to be built on Mill Creek, downstream from the waterfall, and affected party approval is requested for ORC and QLDC consents. Staff have worked closely with the developers to identify and avoid or mitigate adverse effects including sediment discharges during construction; deepening and widening of the stream in parts; the construction of rock weirs in the stream and the discharge of storm water. A draft set of conditions has been negotiated and agreed and signoff now provided.

Minimum and Residual Flow Setting

Kye Burn Residual Flows

Agreement has now been reached on consent conditions and on an MOU with Kye Burn Catchment Limited. This matter should be formally concluded in the near future.

Lindis Minimum Flow Plan Change

Evidence in support of the joint ORC/LGC case has been lodged with the Court and released to Fish and Game. ORC's agreement with LGC over the minimum flow and the catchment consents has resulted in them significantly resourcing the combined ORC/LGC case. ORC have engaged 10 expert witnesses across a range of disciplines – economics, social science, landscape, hydrology, ecology and planning.

Our evidence preparation is underway in earnest along with other RMA section 274 parties (CFT, Central Otago Environmental Society, Upper Clutha Anglers, NZ Professional Fishing Guides and individuals with interests within the catchment). The deadline for lodging our evidence is 14 September

An Environment Court has set a start date for the joint hearing of the catchment consents and minimum flow (5 November 2018) and the hearing is expected to take two weeks.

The Ombudsman has still not made a decision on the Fish and Game complaint over ORC's refusal to provide information under the Official Information Act relating to the Lindis River minimum flow process.

Minimum Flows On Arrow, Cardrona and Manuherikia

ORC's proposed omnibus plan change for minimum flows on the Arrow, Upper Cardrona (down to Mount Barker) and the Manuherikia Rivers was to have been publicly notified at the end of August but has now been delayed until May 2019. The background to this decision has yet to be released. A key concern with a delay is that the elements within the plan change that seek to clarify existing water policy and plan rules especially around the linkages between minimum and residual flows will remain unclarified in the meantime.

Niall Watson to report

Minimum and Residual Flows and Transition from Mining Privileges (TMP)		
River	Activity and status	Status
Lindis	Minimum flow & transition from mining privileges (TMP). Overallocated MALF 1750 l/s	<p>ORC decision on Water Plan Change 5A set a summer minimum of 900 l/s. Decision appealed and went to mediation which was concluded in early July 2017 without resolution.</p> <p>ORC and LGC agreed on a reduced minimum flow of 550 l/s with gallery intakes replacing large race takes leaving Fish and Game to defend their hearing decision</p> <p>Evidence for ORC/Lindis Catchment Group case lodged with the Court and Fish and Game evidence in preparation.</p> <p>Environment Court hearing scheduled for 5th November 2018.</p>
Cardrona	Minimum Flow & TMP Overallocated	Cardrona above branches to be included in a plan change covering Arrow, Manuherikia and upper Cardrona and now to be notified in May 2019.

Waikouaiti	Minimum Flow Fully allocated MALF 258 l/s	F&G supported a minimum flow of 220 l/s proposed through community consultation in 2016. Further action on the minimum flow deferred pending more research by ORC on matters including estuary health. Very much on the back burner.
Pomahaka (Concluded)	Minimum flow MALF 4300 l/s Min Flow 3600l/s (84% MALF)	Plan change complete, setting minimum flows of 3600 l/s (summer) 7000 l/s (winter), primary allocation limit of 1000 l/s, and a supplementary allocation minimum flow of 13,0000 l/s.
Waiwera (Concluded)	Minimum flow MALF 310 l/s Min Flow 280 l/s (90% MALF)	Plan change complete, setting minimum flows of 280 l/s (summer)..
Manuherikia	Minimum flow Irrigation scheme investigation. MALF Ophir 3,200 l/s (± 800) MALF Campground 3,900 l/s (± 600) Overallocated	<p>The Manuherikia Catchment Water Strategy Group process completed. New water company established looking at irrigation proposals focussed on raising the level of Falls Dam with a focus on a low-raise dam options.</p> <p>The Manuherikia catchment has over 220 mining privileges (or deemed permits) in place.</p> <p>The present minimum flow at Ophir at 820 l/s is considered inadequate and ORC are planning to set a minimum flow for the lower river at the Alexandra Campground and possibly elsewhere in the catchment.</p> <p>A minimum flow for the Manuherikia River is to be included in a plan change covering Arrow, Manuherikia and upper Cardrona and is now to be notified in May 2019.</p>
Benger Burn	Minimum flow &TMP. Overallocated	Further action by ORC deferred pending more research on water resources and aquifer/surface water interaction.
Sow Burn (Concluded)	TMP Overallocated Residual flow of 70 l/s + off-site mitigation	<p>The Sowburn all-of-catchment consent has been granted by ORC.</p> <p>The residual flow requirement is 70 l/s on a stream that is considered to be ephemeral in nature in the middle reaches.</p> <p>Off-site mitigation conditions include a protective covenant over a large area of the Maniototo wetlands</p>

Kye Burn	TMP Overallocated MALF 490 l/s	A consent application was heard in June 2017 and an ORC decision setting a mainstem residual flows of 180 l/s reducing to 160 l/s at the lowest take point on the river was appealed to the Environment Court. The matter went to mediation on 20 th October. Agreement has been reached with Kyeburn Irrigation Company for a residual flow below the last mainstem take of 200 l/s after 5 year period. That agreement still has to be formalised
Low Burn	Minimum flow TMP Overallocated	Catchment group meeting held early 2017
Bannock Burn	Minimum flow TMP Overallocated	Catchment group meeting held late 2016
Arrow River	TMP Over-allocated	Arrow River to be included in a plan change covering Arrow, Manuherikia and upper Cardrona and now to be notified in May 2019.
Quartz Creek	TMP Overallocated	Internal reports on fishery values have been completed. Discussion continuing with landholder
Tuapeka River	ORC Management Flow Report MALF 314 l/s	No action
Clutha		ORC called for submissions on the Clutha River seeking feedback on the river's attributes as a first step towards setting a minimum flow
12 Mile Creek (Wakatipu)	ORC Management Flow Report	Stream survey work is being undertaken
Fern Burn	Overallocated	Status of flows and takes needs to be investigated. Spawning surveys have been undertaken by Upper Clutha Anglers.
Coal Creek	TMP	Catchment group meeting held May 2017
Long Gully Creek	TMP Overallocated MALF 30 l/s	This Lake Dunstan tributary which provides for trout spawning and rearing has an intermittent flow in its lower reaches. Discussions on an agreement with Long Gully Race Society over an environmental flow regime for the creek are continuing.

Transition from Mining Privileges (MPs) to RMA Consents.

Smaller applications to transition from mining privileges to RMA consents are still coming through and ORC has held a recent meeting for applicants and stakeholders with the aim of clarify generic issues arising for all parties

Niall Watson to report**Reserves Management (1221)**

Additional planting has been undertaken with volunteers at Takitakitoa wetland and a planting day is proposed for late September. This will again be part funded by Ricoh and their staff will be onsite to assist with planting.

With the likely wind down of the Wanaka Residents Association, the emphasis on clearing and planting at Bullock Creek Wetland could diminish. There is a discussions about the potential to establish a new trust for the protection and enhancement of the wider Bullock Creek catchment and we will obviously want to be involved in that.

CE to report**Wetland Protection (1232)**

Nothing further to report.

Assisted Habitat (1230)

Nothing to report

9.4 USER PARTICIPATION**Access (1311)**

An easement (in favour of Walking Access Commission) to facilitate access along the new boardwalk at the Hatchery Springs Wetland nears final completion. The legal costs associated with the easement will be part funded by the WAC with the remainder being met by Fish and Game – unless another sponsor can be found. The Hunter River access issue was well canvassed in the media with the lead role being taken up by Department of Conservation and Walking Access Commission. There was a considerable degree of public sympathy for the lessees position in denying access at certain times for practical and farming reasons. Very few, (if any) cases of access being unreasonably denied came to the surface despite plenty of suggestions it was commonplace. F&G were also asked by the Deputy Commissioner of Crown Lands to comment on the occasions when staff were refused access to work in the valley and the reasons for that.

CE to report**Signage (1312)**

Updates to signage following regionwide changes to bag limits has begun. Pomahaka signage for the new designated back country fishery have been constructed and will be installed at 4 road access points shortly.

Backcountry Fisheries (1321)

See separate report on Back Country Fisheries Management. Item 7.3

Magazine Supplements and Newsletters (1331)

The licence holder edition of the Fish & Game magazine is due out mid-August. It contains a two-page supplements on Otago Council work activities.

There has been some negative feedback to the closing down of the subscriber issues of the F&G magazine. The NZC agreed to winding up the additional issues for financial reasons sighting a lack of subscribers and advertisers. There was no consultation with Regional Councils on the issue.

Reel Life/Both Barrels

Monthly contributions to online newsletters are continuing.

Newspaper Supplements (1332)

Nothing to report.

Publications (1342)

Nothing to report.

Website (1343)

The national website continues to be hard to navigate and staff have expressed frustration that the site is too complex and holds considerable extraneous material.

Fishing and Hunting Events (1351)

Nothing to report

Take-a-kid-fishing (1352)

Early preparations are underway for the Councils TAKF events in Dunedin. Promotion will be by way of the website, social media and school newsletters.

Club Liaison (1361)

Nothing to report

Commercial Use (1362)**Guides Licence**

NZ Council has been working with DOC officials (Peter Brunt, Director Policy & Michael Gee) on the way forward to secure a Fishing Guide License. Agreement on next steps and a further proposal (to the one already submitted to the Minister of Conservation by Fish & Game) is required but it is still expected to pass Cabinet before the end of the year.

Planning and Policy manager Robert Sowman reports that meetings have also been held with the Professional Fishing Guides Association (both with NZ Council alone, meeting again 16 August and PFGA with DOC) and with Ministry of Tourism. The intention is to hold a workshop or wider set of meetings with other interested departments – MBIE, Treasury, etc – before the Cabinet paper is submitted.

Competitions

See separate report 12.2. FGO Helen Trotter will be doing a short presentation at the meeting on competition data

9.5 PUBLIC INTERFACE

Liaison (1411)

The CE has met with the Mayor and CE of Queenstown Lakes District Council over Bullock Creek matters and with CFT chair Ian Cole.

Media (1431)

There has been quite a lot of coverage on the Hunter River Access issue and on minimum flow plan changes in Central Otago. Our media response has been minimal on these and other issues due to staffing changes.

9.6 COMPLIANCE

Ranging (1511)

No further gamebird hunting offending has been detected.
See separate report on Compliance. Item 12.1

Ranger Support (1521)

Ranger warrants are in the process of being reviewed including up to date vetting for convictions. At this stage, 23 honorary rangers will have warrants renewed and seven staff.

Prosecutions (1531)

The prosecution guidelines have been updated in light of the changes to reparation and are ready for endorsement by Council. See item 7.4

A gamebird hunting offender has now been served his summons to appear in the Queenstown district court.

9.7 LICENCING

Licencing System (1611)

The Request for Proposal document for the renewal of the national licence provider has been completed and the process of tendering for a provider will be known shortly. In the meantime, Eyede licencing system is running smoothly and they are presently in the process of incorporating the new non-resident licence categories into the system.

Agents (1612)

An update on licencing and category changes has been distributed to licence agents along with details on the regulation changes for the current season.

9.8 COUNCIL

Elections (1710)

Much of the election material, including the timetable and Otago candidacy papers, is now hosted on the ElectionsNZ website. Councillors are encouraged to review that and circulate to any other potential candidates that have expressed an interest.

<http://www.electionz.com/FGNZ2018/>

Council (1720)

A joint meeting was held with Southland Council representatives in Tapanui on the 4th August. A major part of the discussion centered around pressure sensitive fishery management but there was also useful discussion on the impact of M.Bovis on access and also the best mechanism to align angling and hunting regulations where possible.

For discussion

The next meeting of the Otago Council (October 25th, Cromwell) is proposed to comprise members from both the current Council and the newly elected members.

Wanaka Site (1721)

Clearance of buildings and unwanted vegetation on the site are continuing. It is proposed to get the hatchery managers house site into an easily maintainable (lawn) state before January. There may be some unbudgeted expenditure for roadside fencing (for security) and clearing of residual rubble from foundations after the house is removed.

9.9 PLANNING AND REPORTING

Strategic Planning (1811)

Nothing to report

Annual Planning (1821)

The Annual Operational Workplan and budget will be circulated to Councillors by email. Please indicate to staff if you would like a paper copy of either.

See item 7.1.

Annual Report (1831)

Early preparations for annual reporting are being made and there is a new reporting standard being proposed for the Statement of Service Performance. Discussion at the next managers meeting should help clarify what is required.

The Auditor has been at the office for two days and run some of the more basic financial checks and will return in October for a final audit of the operation.

National Liaison (1841)

Staff have made contributions to nationally lead initiatives such as the Guides Licence, Licence category implementation and national marketing strategy development.

Ian Hadland
Chief Executive
August 2018

Otago Fish Licence Sales YTD to 31 July 2018															
Channel	FWF	FWA	FWNA	FSLA	FLAA	FWJ	FWNJ	FWIA	FLBA	FSBA	FDA	FDJ	Total	Fish	Fish \$
2016/17														LEQ	
Agency Online	2,636	3,542	514	511	263	486	28	180	60	321	4,697	329	13,567		
Retail Book	0	0	0	0	0	0	0	0	0	0	7	1	8		
Public Online	1,582	1,752	803	229	263	227	26	118	47	262	3,957	205	9,471		
Eyede Call Centre	10	6	7	11	0	5	1	3	0	2	14	0	59		
Total	4228	5300	1324	751	526	718	55	301	107	585	8675	535	23,105	15,225	\$1,654,944
2017/18															
Agency Online	2,568	3,579	498	549	232	547	23	114	36	265	3,871	236	12,518		
Retail Book	0	0	0	0	0	0	0	0	0	0	2	0	2		
Public Online	1,694	1,834	809	223	268	284	23	91	42	220	4,707	251	10,446		
Eyede Call Centre	12	5	13	8	1	2	0	2	0	4	19	0	66		
Total	4274	5418	1320	780	501	833	46	207	78	489	8599	487	23,032	15,259	\$1,685,075

Variance between years +0.20%

FWF (Family), FWA (Adult), FWNZ (Non Resident), FSLA (Senior Loyal), FLAA (Local Area),

FWJ (Junior), FWNJ (Junior Non resident), FLBA (Long Break), FSBA (Short Break), FDA (Adult Day), FDJ (Junior Day)

Otago Game Sales YTD to 31 July 2018								
Channel	GWA	GWJ	GWC	GDA	GDJ	Total	Game	Game \$
2016/17							LEQ	
Agency Online	3,524	283	98	52	0	3,957		
Retail Book	0	0	0	0	0	0		
Public Online	634	59	25	60	3	781		
Eyede Call Centre	2	0	0	0	0	2		
Total	4160	342	123	112	3	4,740	4,251	\$332,682
2017/18								
Agency Online	3,490	254	94	35	0	3,873		
Retail Book	0	0	0	0	0	0		
Public Online	567	52	12	40	1	672		
Eyede Call Centre	3	0	0	0	0	3		
Total	4060	306	106	75	1	4,548	4,135	\$327,237

Variance between years -2.7%

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

10.0 Committee & Delegate Reports

10.1 Clutha Fisheries Trust

10.2 New Zealand Council

11.0 Correspondence

11.1 NZC to Otago

11.1.1 NZC Audit Policy

*New Zealand Fish and Game Council
As at July 19 2018*

New Zealand Fish and Game Council Audit Policy

Policy Statement

1. Section 23C(1)(j) of the Conservation Act 1987 authorises the New Zealand Council “to audit the activities of Fish and Game Councils”.
2. The New Zealand Council (NZC) is committed to a policy of undertaking regular and ad hoc audits to ensure every Fish and Game council is robust and the overall organisation is performing well.

Objectives

3. The objectives of this policy are to:
 - a. Establish an independent, professional audit function to monitor the performance, processes and procedures of Fish and Game councils;
 - b. Discharge the New Zealand Council’s statutory role to audit Fish and Game councils.
 - c. Provide assurance to Fish and Game councils that all councils are discharging their statutory functions in an appropriate manner; and
 - d. Provide assurance that all councils are complying with their statutory obligations.

Definitions

4. Fish and Game Councils means the 12 councils established through the Conservation Act 1987.
5. NZC is the entity established through the Conservation Act 1987.
6. Planned audits refer to audits planned in advance.
7. Ad Hoc audits refer to audits agreed to by the NZC in relation to issue(s).
8. Independent means engaging auditors who will render impartial and unbiased judgements in the conduct of their audit engagement.
9. Objectivity means the auditors should have no personal or professional involvement with the area being audited and they maintain an unbiased and impartial mindset.

Scope of the Policy

10. The Audit policy covers all Fish and Game councils established under the Conservation Act 1987.
11. The policy covers areas such as:
 - a. how effectively and efficiently a council is working;
 - b. whether a council is complying with NZC policy;
 - c. whether a council is complying with its statutory obligations;
 - d. any act or omission that might waste organisational resources; and
 - e. any act or omission that might show (or appear to show) a lack of probity or financial prudence by a public entity or one or more of its members, office holders, and employees.
 - f. Any act or omission which the NZC believes is or may bring the Fish and Game movement into disrepute.
 - g. And any other matter the NZC agrees to.

Types of Audit

Planned

12. Regular audits will be planned to look at compliance with NZC policy. This may happen at one Council or all Councils.
13. Regular audits will be well signalled in advance.
14. Regular audits can look at one specific area or a number of areas.

Ad Hoc

15. In addition to planned audits, the NZC will also perform unplanned ad hoc audits which may arise from requests by Councils themselves, complaints from the general public, complaints from councillors or staff, or from a request by the Minister of Conservation.

Frequency of Audits

16. Regular audits will be planned from time to time as agreed by the NZC.
17. Ad Hoc audits will be agreed on by the NZC, or a delegated sub group of the NZC taking into account time pressures and urgency.

NZC Process on Agreeing to an Audit

18. The NZC must agree in a formal meeting, by email or teleconference to undertake an audit.
19. The NZC must agree on the areas the audit will cover.
20. Once that decision is made the NZC will contact the council(s) as soon as practicable.

Appointment of Auditors

21. The CEO will be delegated the responsibility to engage a suitable independent audit agency.

Planning

22. In this stage, the audit plan is developed and recorded, including its scope object and timing. The planning phase will include:
- a. Obtaining an adequate understanding of the area(s) to be audited.
 - b. NZC agreeing on the audit's parameters.
 - c. Writing to the council making it aware of the upcoming audit and its scope.
 - d. Select audit team
 - e. Meeting with council to discuss audit's areas of focus, objectives and obtain any information that may assist with the audit.
 - f. If required, write to the council with updated or amended audit scope.

Performing the Audit

23. The auditors should identify, analyse, evaluate and record sufficient information to achieve the engagement's objective. The information obtained during the audit filed work should be:
- a. Sufficient by being factual, adequate and convincing so that a prudent, informed person would reach similar conclusions to those of the auditor;
 - b. Reliable by using appropriate auditing techniques; and
 - c. Relevant by supporting the engagement observations and recommendations and being consistent with the objectives of the engagement.

Communicating the Results

24. The following procedures will be followed to communicate the audit results:
- a. A draft report will be prepared for the auditor;
 - b. The draft report will be reviewed by the NZC;
 - c. On agreement of the NZC, the draft report will be sent to the council for response;
 - d. The council will have up to one month to respond to the factual accuracy of the draft report;
 - e. After one month of the draft report being with the council, the NZC will finalise the report, taking into consideration any matters of factual accuracy raised by the council.
 - f. The final report may contain suggestions, or conclusions by the NZC.
 - g. The final report and any suggestions or conclusions will then be sent to the council, the Auditor-General's Office, and the Minister of Conservation.

11.1.2 IRD Letter – Previously circulated

11.1.3 Cawthron Hatchery Report – Previously circulated

11.2 Otago to NZC

Nil

11.3 General Correspondence

11.3.1 QLDC Bullock Creek



5 July 2018

Jim Boulton
Mayor
Queenstown Lakes District Council
PO BOX
QUEENSTOWN

Dear Sir

Storm Water Pipe Connection Alpha Series Subdivision, Wanaka

Fish and Game staff attended a meeting with representatives of Meadowstone Alpha Series Subdivision and QLDC on Friday 15th June 2018 to discuss storm water discharges and future management of storm water. My understanding is that QLDC are in the process of reviewing the subdivision's 'Site Management Plan' (SMP) because of concerns that it may not have adequate storm water retention capacity on site.

As you know our concerns relate to both the development phase discharges of silt laden water over the boundary from the subdivision into our Wanaka Hatchery property and Bullock Creek and the long term (post development) discharge of storm water flooding over the boundary. Based on the experience of staff based on at the hatchery since the 1970s we have a sound knowledge of historic storm flows. We do not accept that the current storm water discharge from the subdivision's catchment is the same as that occurring historically.

At the meeting there were proposals put forward for two pipe connections from the Alpha Series to the QLDC storm water reticulation system. One was a direct connection from the subdivision to Meadowstone Drive and the other was a connection through the hatchery property to Stone Street. It was noted that these storm water pipe connections would reduce the problem but would not eliminate it.

The matter was discussed at some length at our June Council meeting and Council reluctantly resolved to agree in principle to a pipe connection through the hatchery property subject to satisfactory resolution of related issues including the following:

a) Impact on the value of hatchery land

The proposed pipeline alignment is 1 metre from the boundary, buried but to a shallow depth and requires a 3 metre easement in favour of QLDC across land earmarked for eventual sale as residential land to realise funds for fish and game management activities. This is likely to impact on land value and/or saleability. The Council does not consider it should carry that cost.

Statutory managers of freshwater sports fish, game birds and their habitats

Otago Fish and Game Council

Cnr Hanover & Harrow Sts, PO Box 76, Dunedin 9054, New Zealand. Telephone (03) 477 9076

b) Adequacy of pipe capacity

The proposed pipe diameter at 225mm is considered limiting and may preclude the suggested benefit to Fish and Game of providing a storm water connection option for future residential sections on hatchery land. A diameter of 350mm or greater is considered necessary.

e) Performance in storm event

Performance of the pipe connection in a storm event is a concern. Could pipe failure cause localised flooding?

d) Alternative connection options

Alternative storm water reticulation connections should be fully assessed. A pipe alignment on the true right of Bullock Creek right through to Stone Street may provide a viable alternative for a larger capacity pipe and would reduce easement issues because the alignment would be in the riparian area. There may be other options.

e) Storm Water Connection for Hatchery Land

Fish and Game to have a right and opportunity to connect to the storm water pipe in future for any development on the hatchery property.

f) Pipe Connection Establishment Costs

All costs of establishment to be borne by other parties.

g) Second Pipe Connection

Agreement to a connection through the hatchery property is subject linked to a commitment to complete the connection to Meadowstone Drive or elsewhere.

h) Hatchery Springs Restoration Project

There should be further consideration of support for the hatchery springs area restoration project from other parties

Fish and Game awaits with interest the outcome of QLDC's review of the SMP and looks forward to adjustments so that current problems can be resolved. We are reluctantly prepared to consider allowing pipeline access through the hatchery property as part of that solution subject to the above matters being addressed.

Yours sincerely

Ian Hadland
Chief Executive

11.3.2 ORC Memorandum of Understanding



27 June 2018

Otago Regional Council
Private Bag 1954
Dunedin, 9054

RE: Affected Party Status Decisions

Attention: Tanya Winter

Dear Tanya,

In recent weeks I have become aware of a number of consent application processes where Fish and Game appears to have not been considered an affected party. In these cases, it isn't clear to me why this is the case and I believe the affected party decision by ORC staff may have been premature. These applications are:

<i>Applicant</i>	<i>Waterbody</i>	<i>Reference numbers</i>
9 Mile Pastoral Limited	8 & 9 Mile Creeks	Replacement of deemed permits 95928 & 3916 and transfer of water permit 2009.300.V1
G P R Booth Limited	Watkins Creek	Replacement of RM15.043.01
J & R Noone	Pool Burn	Replacement of water permit 96597

I understand that the 9 Mile Pastoral Ltd. and G P R Booth Ltd. applications are lodged with the ORC currently, and that the J & R Noone application has been already issued.

Affected party approval status and the methods or criteria used to make those decisions has been an ongoing issue between Fish and Game and the ORC for a number of years. These disputes consume resources; distract staff from undertaking our organisations' respective statutory functions; and create uncertainty or division between stakeholders and applicants. Because of this, I think there's benefit in seeking long term solutions to this issue. I believe the development of a memorandum of understanding between Otago Fish and Game and the ORC on affected party status could serve to achieve that outcome.

Would it be possible to organise a meeting to discuss the affected party decision on the above three cases, as well as opportunities for a memorandum of understanding between our two organisations? Following from that, we'd be very appreciative if the Booth and 9 Mile applications were not issued before we were able to discuss them with you.

Yours faithfully,

Nigel Paragreen
Environmental Officer

Statutory managers of freshwater sports fish, game birds and their habitat

Otago Fish & Game Council

Cnr Harrow & Hanover Sts, PO Box 76, Dunedin, New Zealand. P: (03) 477 9076 E: otago@fish-game.org.nz

12.0 Items to be Received or Noted

12.1 Compliance Summary Report 2017/18 Season – I Hadland

Purpose

This report provides a brief summary of the compliance activity for the 2017/18 fishing and hunting seasons.

It also reports on achievement of internal regional compliance guidelines of:

- Checking 10% of fish or game adult full season licence holders annually
- Maintaining 95% compliance with laws and regulations.

Fishing Season Compliance

Documented fish licence holder contacts	932
Total whole season adult and family licence holders	12290
% Checked (target: >10% Adult licence holders)	7.5%
Number of offenders (excluding Failure to Produce or "FTP's")	44
% Compliant (target: >95%)	95.3%

There were 932 recorded interviews with anglers – around 100 more than last season.

The above table shows that the compliance team was well beneath its target of 10% licenceholder contacts. Poor angling weather over the summer lowered angler activity and also limited lake creel survey work and this has had an impact on the overall number of interviews undertaken.

The 44 fishing offenders dealt with was up on last year where 31 were apprehended. That is still well beneath the 2015/16 season where 61 were caught offending. Over the last 5 years compliance has ranged between 95% and 98% and this season's result fits within the range. In addition to the offences, a further 22 anglers failed to produce a licence on demand (FTP's) and had offence notices issued. All of these were given verbal or written warnings.

Types of fishing offences

Fishing without a licence is still the most common offence. A notable increase in anglers using two fishing rods was recorded with seven offenders caught. A further four offenders were caught fishing closed waters. One offender was caught without valid Backcountry licence and another was caught in Deans Bank Fly fishing only area with a spinning rod.

Fishing Prosecution Summary

22 of 44 offenders accepted Councils reparation option and were dealt with out of court.

15 written warnings were given for minor offences with the remainder either still to be dealt with, facing court or untraceable.

Fishing Prosecutions

Only one case for unlicensed angling was taken during the year.

Valentine – This offender was caught fishing without a licence for a second time at Southern reservoir and gave false information to avoid apprehension. He was prosecuted in the Dunedin District Court. On a guilty plea, he was convicted and fined \$400 for fishing without a licence plus court costs of \$130, and on the false information charge he was convicted and fined \$300 plus \$130 court costs and was made to pay \$300 solicitors fees.

Game Season Compliance

Game season compliance activity has been briefly reported on but below is a short summary

Total documented Game licence holder contacts	101
Total whole season adult and family licence holders	4060
% Checked (target: >10% Adult licence holders)	2.5%
Number of offenders (excluding FTP's)	3
% Compliant (target: > 95%)	97%

The target of 10% of gamebird licence holders was not achieved again this year. This contact rate is an almost unattainable target, especially when much of our compliance work is focused on opening weekend and on individual farm ponds with a small but fit group rangers.

The compliance target was met and in general hunters were well behaved. There were three unlicensed hunters caught and four using lead shot. One further offender was caught taking protected species.

Gamebird Season Prosecution Summary

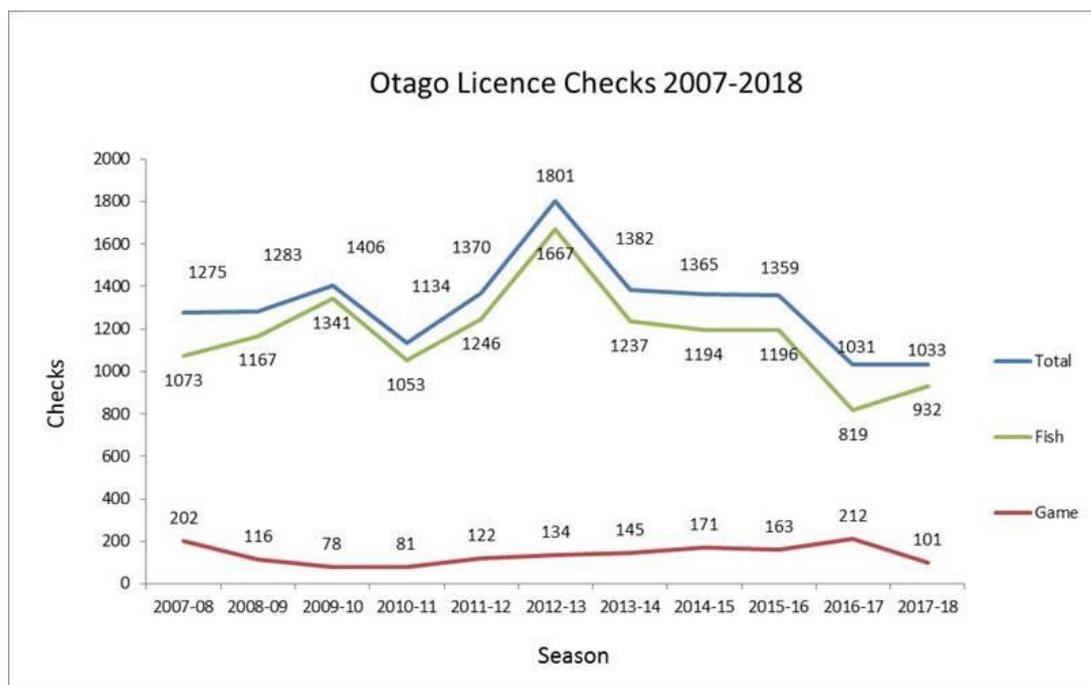
Two of the offenders were given written warnings, One for possession of lead shot and another for shooting partially protected species.

The remaining offender has been served a summons for shooting protected species and possession of lead shot and will appear in the Alexandra District Court in mid September.

2 warning letters were issued.

3 hunters that failed to produce their licences on the day did so within 7 days.

Trends In Ranging Activity



Changes In Honorary Rangers

All ranger warrants expire this August and are in the process of being reissued. The final numbers reappointed will be confirmed to Council at the October meeting but at this stage it looks like around 23 warrants will be issued to volunteer rangers for a term of three years and seven warrants to staff which are not time bound. That should mean the Council remains well serviced by rangers with a good geographical spread.

While the number of licence checks this season is well down, our rangers have still done an excellent job. They have detected and professionally reported over a third of the total offences encountered in Otago. Their attendance at other events such as TAKF days and assisting with other field work is also greatly appreciated.

Diversion Donation Levels

Direction on matters of prosecution, including penalty payments, are guided by the Council's adopted "Offence Guidelines". These were last approved in April 2017 but Council was recently advised by NZC that regions should cease their use of reparation and replace it with 'Diversion'. Accordingly, the Council's Offence Guidelines have been amended (with diversion included) and will be ready for adoption at the August 2018 Council meeting.

Recommendations

Council receive this report.

Ian Hadland
Chief Executive
9/08/2018

12.2 Summary Of Fishing Competitions In Otago: Project 1362

Fishing competitions are approved, and levies charged⁴ in accordance with the Otago Fish and Game Council Sports Fish and Game Bird Management Plan 2015-2025 (SFG BMP) and the Freshwater Fisheries Regulations 1983. There are currently five major competitions which are held annually in the Otago Region (Table 1).

Table 1: Summary of major annual fishing competitions held in Otago Fish and Game Region

Competition / Organisers	Date	Location & Weigh-in Venue	Fees (as of 2017-18 season)	Competition Rules	Data Received	Length of dataset
Glenorchy Fishing Competition Various community groups (different each year, 2017 Glenorchy Playgroup Inc)	1 st Saturday in October 6 am–4pm	Lake Wakatipu (Black Gorge/Bennetts Bluff to head of the lake) Glenorchy Hall	Family \$40 Adult \$20 Junior \$10 Under 12 Free	1 fish per person Fish weighed in whole, ungutted	Participants Length Weight Condition	1987 – present (mostly complete)
Waipahi Gold Medal Otago Anglers' Association	1 st Saturday in November 8.30 am – 5.30 pm	Waipahi River (excluding tributaries and inflowing waters) Local farmer's woolshed	\$30 entry fee	4 fish weigh-in, gutted and gilled Fish must exceed 350 mm Fly only	Participants Length Weight Effort	Detailed data from 2012-present Incomplete data from 1970s
Lake Hawea Hotel Fishing Competition	2 nd Friday-Saturday in November	Lake Hawea (excluding inflowing tributaries)	Adult \$20 per day /\$35	1 fish per species, per person	Participants Length Weight Condition	2011-present

⁴ Freshwater Fisheries Regulations 1983 Section 57F Rental

Where a Fish and Game Council approves a fishing competition under this Part and an entrance fee is charged by the holder, the holder shall be liable to pay to the Council a rental of \$40, plus \$5 for each participant aged 16 years or over and \$2 for each participant aged under 16 years.

Lake Hawea Hotel	7 am –5 pm	Lake Hawea Hotel	for 2 days Junior \$6 Under 12 Free	Fish weighed in whole, ungutted.		
Lake Dunstan Fishing Classic The Rotary Club of Cromwell	3 rd Sunday in November 6am–4pm	Lake Dunstan Lowburn Hall	Adult \$20 Junior \$6 Under 12 Free	Fish weighed in whole, ungutted	Participants Length Weight	Incomplete dataset 1994, 2003-2012, 2017
Lake Hawea Family Fishing Classic Geoff Hewson/ Net proceeds to local community groups	2 nd Saturday in February 7 am – 4.30 pm	Lake Hawea Lake Hawea Boat Ramp	Family \$50 Adult \$25 Junior \$15 Under 12 \$10	1 fish per species per person Must be presented chilled	Participants Length Weight Condition	2000-2018

Liaison with competition organisers is undertaken to ensure compliance with fishing regulations and other relevant rules, and to encourage appropriate competition rules and handling of fish. Staff often attend competition weigh-ins to assist with data collection. With some competitions attracting over 100 entrants this is also a valuable opportunity to interact with licence holders.

Data collection and analysis

Provision of data is a standard condition of competition approvals. While staff may assist at weigh-ins, the data is usually collated separately by the competition organisers and returned to Fish and Game following the event. Standard data requirements include number participants and weigh-in data (species, length and weight measurements), and may also include effort, method, and total catch (fish released). Tissue and otolith samples are collected by staff on occasion as required. In recent years this has included samples to investigate presence of parasites, DNA samples and otolith samples for microchemical analysis. Databases for these major competitions have been established and can provide some useful information on fish size and condition, relative abundance of salmonid species and catch rates.

Issues and future opportunities

Annual competitions held at the same time each year provide a useful snapshot of a fishery, particularly where consistently high participation rates are achieved. Although differences in conditions will influence catch rates, long term datasets still provide a valuable dataset on trends.

Competitions where only total bag weights are collected provide less useful fisheries data. Effort should be made to collect as much data as possible to obtain maximum benefit from the fish harvested. Staff attendance can help ensure quality data collection however this could also be facilitated by providing organisers with datasheets and measuring equipment and requiring individual fish measurements are returned.

Improved data collection will also assist with assessing the ongoing sustainability of competitions with higher bag limits. Otago Anglers' Association have been forward thinking with regard to their competition bag limits, voluntarily reducing bag limits for the Waipahi Gold Medal from 6 to 4 fish and also introducing a catch and release competition (held on the Mataura).

The Waipahi Gold Medal is Otago's longest running competition; 2018 will mark the 135th event. Information dating back to the 1970s has been extracted from Otago Acclimatisation Society and Otago Fish and Game Council Annual Reports but is incomplete. From 1998 information on the number of fish weighed in for each Beat is available, along with the Beat of heaviest bag and fish, and from 2012 a more detailed dataset has been collected including total number of fish caught (including released), along with individual fish measurements.

A further competition of note (not included in Table 1) is the Harry G Williams Memorial Shield held on the Pomahaka River in January. This is an Otago inter-club competition organised by the Otago Anglers' Association, with teams of 4 competing for the heaviest bag (with the three best 4 fish bags from each team weighed in). Some data was collected at the competition between 2011-2018 but has included only summary data (i.e. total bag weight) for some years. Individual fish measurements, total fish caught and released, hours fished and reach fished were recorded for 2011-2015.

It is preferable that individual fish measurements are reported rather than total bag weights, as this will provide more useful data on fish condition. Data collection for all competitions could be improved by including standardised measurements of weather and lake/river conditions (and noting any significant events in the lead up to the competition) which would be informative when assessing differences in catch rates. Data on fishing effort, methods and total catch could also be useful, particularly from the lake competitions (which are limited to a single fish weigh-in) to allow more accurate estimates of catch rate.

Lake Wanaka is currently the only major lake without an established competition. Encouraging the development of a competition for Lake Wanaka during the busy holiday period could be an efficient way to gather fisheries data.

Major competitions typically receive good media coverage in local and regional publications and may encourage participation. There are also opportunities for angler education on topics such as fishing techniques and ethical practice and for reporting back of data collected at competitions. This could involve presenting posters or distributing flyers at events and could add additional value to staff attendance at weigh-ins. Competition rules like the Lake Hawea Family Fishing Classic requirement that all fish are presented are chilled, is an excellent measure to encourage anglers to handle their harvest appropriately.

There is currently little concern about the commercial aspects of these competitions with most fees charged to cover costs or to fundraise for community groups. Continued oversight is required to ensure that competitions are run in manner consistent with the SFG BMP.

There are known to be several smaller club events including multi-water competitions (some out of region), a perch competition and TAKF events. These could yield additional information but are viewed as a lesser priority for staff. Liaison with event organisers should encourage return of summary information on participation and harvest as a minimum.

Recommendation

That this report be received.

Helen Trotter
Fish and Game Officer
August 2018

12.3 Review and Update Fisheries SOPs for Fish & Game Councils: Project 1115

A meeting of regional staff was held in April 2016 to discuss monitoring activities and the development of Standard Operating Procedures (SOPs) for fisheries monitoring work undertaken by Fish and Game. The development of SOPs is considered a useful way to reduce replication of work across the regions, improve consistency and quality of data collection, analysis and storage, prevent loss of institutional knowledge, provide appropriate direction for new staff and establishing some minimum standards.

A review of approaches across FGNZ found that monitoring activities were undertaken to meet a range of different objectives and there were a range of varying key methods utilised across the regions. All regions carried out some ad hoc, reactive or issue based monitoring, often in response to resource consenting processes. Most regions also had some longer-term monitoring programmes carried out annually and some shorter term projects (1-5 years). It was noted that any SOPs developed needed to recognise the differences in resources, staffing and equipment available in different regions to ensure the procedures were broadly relevant and feasible, particularly for smaller regions. It was agreed most regions would benefit from more standardised data collection processes and databases, and improved management of historical data records.

Staff felt that the development of SOPs should be a 'bottom-up' exercise seen as a way to provide best practice documents to support staff in completing fisheries monitoring to a consistently high standard, rather than a mechanism to manage or dictate the monitoring work undertaken by the regions.

As a result of the meeting the following objectives were addressed:

1. Activities for which SOP/best practice guidelines to be developed
2. An outline the purpose and components for SOPs
3. Development a plan for the development of SOPs

Following this initial meeting a review of existing external monitoring resources found that standard protocols were available for many of the key methodologies identified. A number of key references have been compiled including:

- American Fisheries Society Field Protocols Handbook
- Department of Conservation Inventory & Monitoring Toolbox
- New Zealand Freshwater Fish Sampling Protocols - Part 1 Wadeable Rivers and Streams
- Environment Southland Fish Surveys in Non-Wadable Systems
- NZ Stream Health Monitoring and Assessment Kit Stream monitoring manual

In some cases it will not be necessary to develop completely new protocols as the existing external resources will adequately provide for Fish and Game needs. It will be important however that the reference protocols are readily available as part of the overall SOP collection and are adapted appropriately e.g. reflecting internal health and safety and training processes.

Internally there were some draft protocols available, but these were out of date or incomplete. Several additional draft protocols for particular activities have since been prepared by various staff.

Unfortunately, momentum for the SOP project has faltered at a national level due to a number of factors including limited capacity of key staff involved and perhaps a failure to consolidate support and achieve buy-in across the organisation. Due to the often reactive nature of Fish and Game work Councils are often faced with issues requiring immediate response and it can be challenging to prioritise longer term, process orientated tasks such as SOP development.

As a way forward it has been recommended to NZC that a national fisheries committee be re-established (similar to the Game Bird Research Committee), with the continued development of the SOP project to be among its key tasks. It is expected formalisation of a sub-committee would assist in focussing support for this work and ensuring it remained a priority across the organisation.

Fisheries Monitoring in Otago

Alongside the national project, in Otago work has been ongoing to implement more standardised approaches to monitoring and data reporting to improve the overall quality and consistency of fisheries information. All electrofishing data is now collected in a format consistent with New Zealand Freshwater Fisheries Database (NZFFD), and more detailed information on effort (shock time, electrofisher settings) is recorded so that catch per unit effort can be calculated. Direct access to the database is now available allowing staff to immediately upload records to the database on return from the field. Standard databases with guidelines have been established for spawning surveys data in a GIS compatible format. Transfer of older spawning records to these databases has been ongoing. Creel survey databases have been established for Manor Burn and Pool Burn opening day creel surveys. Competition data collection has also been reviewed, standardised datasheets have been developed where required and databases have been updated.

Future priorities for SOPs and further improvements to fisheries monitoring in Otago include:

- Lake monitoring – fish populations (hydroacoustics and netting); creel surveys – consideration of expanding effort beyond peak use to include random stratified approach for fisheries of interest
- Field testing and development of standardised procedures for the use of drones for spawning surveys
- Development of long term monitoring strategy for Otago fisheries – this may involve the establishment of long term monitoring reference sites similar to regional council state of the environment monitoring sites.
- OFGC generate support for the reestablishment of a Fisheries Research Committee.

Recommendation

That this report be received.

Helen Trotter
Fish and Game Officer
July 2018

12.4 Assessment of The Upper Clutha River Fishery: Project 1113

This report is a status update on the Upper Clutha Fishery Assessment project 1113 of the 2018/19 work plan. It is expected to be completed by August 2019.

Introduction

The Sports Fish and Game Management Plan (SFGMP) for the Otago Region classifies the Upper Clutha River between Lakes Wanaka and Dunstan as Nationally Significant.

National Anglers Survey (NAS) shows angling use peaking around 20,900 ± 3,220 angler days in the 2007/08 fishing season. In 2005 *Didymosphenia geminata* (didymo) was discovered which quickly colonised and has had a significant impact on the fishery, and angler satisfaction.

In recent years the river has shown signs of recovery with anglers reporting good fishing again particularly during the Lake Dunstan rainbow spawning run and in the evening with the return of the caddis hatch.

Contact Energy was indicating development of the upper river for power generation purposes, but this has not proceeded. It however could be considered in the future. The river is now subject to a minimum flow with the Otago Regional Council presently consulting the public and stakeholders over the process.

This interim report provides a summary of information we and other agencies have on the river, information gaps for addressing the minimum flow and a lead in to the development of a full report to finalise Key Action 11.1.1.4 of the SFGMP.

11.1.1 Key actions to be completed by the end of the second year....

11.1.1.4 The Health of the Upper Clutha fishery reviewed and subject to a report.

Information Gaps

Additional workloads in the 2018/19 work plan could include current angler use, satisfaction and catch information. Long term anglers should be interviewed on their past and present experience with the fishery and aerial spawning surveys could be considered to provide up to date spawning and fish distribution information.

Table 1 (attached below) details fisheries reports and information we have for the Upper Clutha River and includes information other agencies have compiled which will require some literature search.

Table 1. Upper Clutha River Fisheries and Management Information.

Reports and Fisheries Information	Content	Comments
National Anglers Survey Results	Angler use on selected waters over four seasons 1994/05, 2001/02, 2007/08, 2014/15	Undertaken by NIWA this work details angler days on waters within the region providing estimated angling use and long-term trends
Alpine Fishing Guides	Catch data from 2006 – 2016 including angler information, hours fished, methods and fish caught.	Greg Dougherty is a local fishing guide from Wanaka who operates a drift fishing business. He has extensive knowledge of the Upper Clutha River estimating approximately 800 trips on the river.
Clutha Fisheries Trust	Spawning information from 1997 to 2009 obtained from aerial flights	This work jointly undertaken with Otago Fish and Game staff provides a good overview of spawning and key spawning sites from the Lake Wanaka Outlet to Lake Dunstan.
Drift Dive Surveys Ministry of Fisheries and OFGC	1985 Ministry of Fisheries Lake Wanaka Outlet to Cardrona confluence. OFGC surveys in 2001, 2006 and 2012	Drift dive surveys provide an assessment of fish abundance from the Lake Wanaka Outlet to the Cardrona Confluence.
Historical Wildlife Service Records	Files that contain a range of fisheries data such as species, lengths and weights	To the best of my knowledge this data was not collected in a creel survey format but generally from random ranging exercises
Ministry of Fisheries (1989-1992)	Juvenile trout studies in the Upper Clutha mainstem and tributaries	This work was undertaken to get an indication of juvenile fish rearing and abundance pre-Lake Dunstan fill.

Cawthron Institute	Ecological flow regime study during 2016/17 presented to the ORC but not circulated to the public yet.	The work included both hydraulic-habitat and drift-feeding trout net energy intake modelling components.
Otago Regional Council	Water quality monitoring, flow and temperature data, hydrological information and an assessment of recreational use.	A range of data that the ORC has on hand and is collating for the minimum flow allocation process.
NZ Freshwater Fish Data Base (NZFFD)	Trout, salmon and native fish presence.	Data obtained from a range of agencies through studies and electro-fishing
University of Otago	Studies undertaken by students	This will require a literature search, but most information will likely be on the NZ Freshwater Fish Data Base.

Recommendation

That this status report be received

Cliff Halford
Fish and Game Officer
August 2018

12.5 Manuherikia Catchment Flow Assessments: Project 1113

During the 2017-18 irrigation season staff undertook a range of field monitoring work to assess a range of low flows on the Manuherikia to inform the minimum flow setting process. A preliminary summary of work undertaken and results, an update on the proposed plan change and recommendations for additional work are presented here.

Flow Assessment Summary

Photo point monitoring

Photo monitoring points were established at four sites on the mainstem Manuherikia and one site on Dunstan Creek. Sites were visited regularly over the summer and photos were taken from marked points looking both upstream and downstream. Date, time and GPS location were recorded for each photo as well as the wetted width and thalweg depth at the site. Photos were later compared to the certified flow record, an example from the Campground monitoring site is provided below.



5 Jan 2018; Daily average flow at Campground
2367 l/s

True Left: Wetted width 11 m, maximum
depth 47 cm

True Right: Wetted width 8.2, maximum
depth 24 cm



23 Nov 2017; Daily average flow at
Campground 1273 l/s

True Left: Wetted width 9.65 m, maximum
depth 34 cm

True Right: Wetted width 7.32, maximum
depth 19 cm



4 Jan 2018; Daily average flow at Campground 1013 l/s

True Left: Wetted width 9.55 m, maximum depth 34 cm

True Right: Wetted width 2.5, maximum depth <10 cm (braid disconnected upstream)



31 Jan 2018; Daily average flow at Campground 676 l/s

True Left: Wetted width 9.5 m, maximum depth 27.5 cm

True Right: Wetted width 2.25, maximum depth 9 cm (braid disconnected upstream)

Recreational user flow assessment surveys

To build on the findings of the Angler Stream Health Index work previously undertaken for the Manuherikia, a survey was developed to assess how of rivers users felt various flows provided for a range of indicators around ecosystem health and recreational values. This approach was less targeted to anglers as it was considered input from a broader range of users could be useful for the minimum flow process. However, the survey still included several indicators relevant to fishing, in addition to capturing activity specific comments from participants. Before the survey commenced the 5-point Likert scale used in the survey was explained to participants but they were not informed of the flow levels at the time of the survey.

A range of users were encountered on the river including campers, swimmers, dog walkers, tourists, local landowners, as well as anglers. Interviews were conducted in the course of undertaking other field work rather than on targeted visits. A total of 10 surveys were completed in December 2017 and January 2018 and the range of flows captured was between ~800-1000 and ~2400 l/s (at Campground). Results from these initial surveys indicate at flow ≤ 1000 l/s rivers users felts flows were dissatisfactory for swimming and some felt overall health of the river was degraded. All participants expressed they would like to see higher flows in the river than those present at the time of their visit.

Experience and use of the river varied between participants and in some cases this appears to have influenced how participants have answered questions about flows (i.e. participants have considered past experiences in assessing the conditions observed at the time of the survey). It is expected that with a greater sample size will the improve confidence in the conclusions which can be drawn about how recreational users feel about different flows.

Fish passage / critical riffle assessment pilot study

An assessment of fish passage at different flows was undertaken at two sites in the lower Manuherikia (Campground and Keddell Rd) using the Critical Riffle Assessment (CRA) standard operating procedure development by the California Department of Fish and Game⁵. Criteria for fish passage recommended in Gabrielsson and Hay (2017)⁶ were also considered.

Four assessments were made at flows between ~800 –2367 l/s. Results indicate that fish passage opportunities decreased with lower flows. Presented below are the results for the Campground site using both the criteria recommended by Gabrielsson and Hay (2017) (Figure 1) and by the CRA protocol (Figure 2).

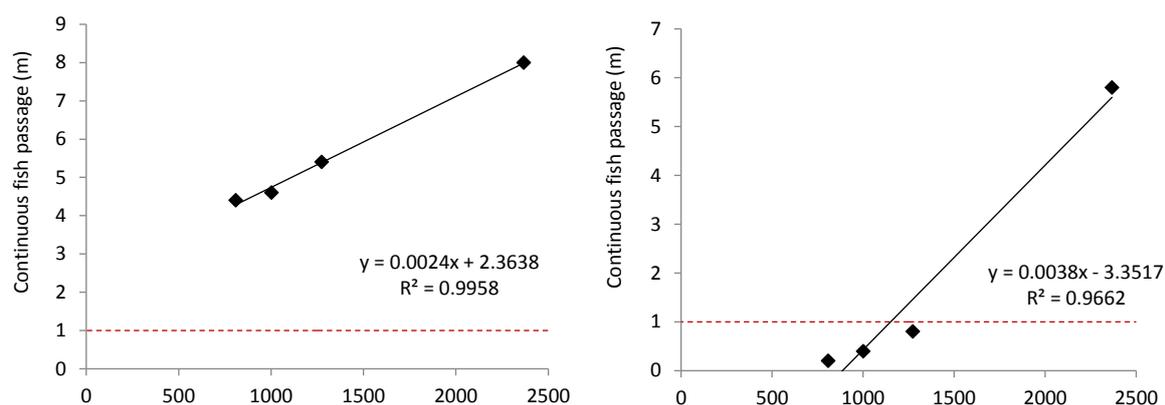


Figure 1: Length of continuous fish passage (m) at Campground at different flows for yearling/sub-adult trout (left) and adult trout (40-60 cm) (right); 1 m passage width criteria marked with red dash line.

Applying the Gabrielsson and Hay (2017) passage depth and width criteria, fish passage for yearling/subadult trout and smaller fish (including small native fish) was provided at the site at all surveyed flows. Fish passage criteria were only met for adult trout at the highest surveyed flow (2367 l/s) however was close to being met at 1273 l/s (Figure 1). For large adult trout >60 cm the fish passage criteria were only met at the highest surveyed flows, with no passage provided at the three other surveyed flows.

The passage width criteria in the CRA protocol are more conservative than those proposed by Gabrielsson and Hay (2017) requiring 25 % of the total riffle width and 10 % continuous width meet the specified depth criteria for a given species (depth criteria for small fish however are less conservative).

⁵ CDFG, 2012, Critical Riffle Analysis for Fish Passage in California. California Department of Fish and Game Instream Flow Program Standard Operating Procedure DFG-IFP-001, 24 p. Available at: http://www.dfg.ca.gov/water/instream_flow_docs.html.

⁶ Gabrielsson R, Hay J 2017. Review of fish passage criteria for assessing implications of minimum flow options. Prepared for Otago Fish & Game Council. Cawthron Report No. 3014. 14 p. plus appendix.

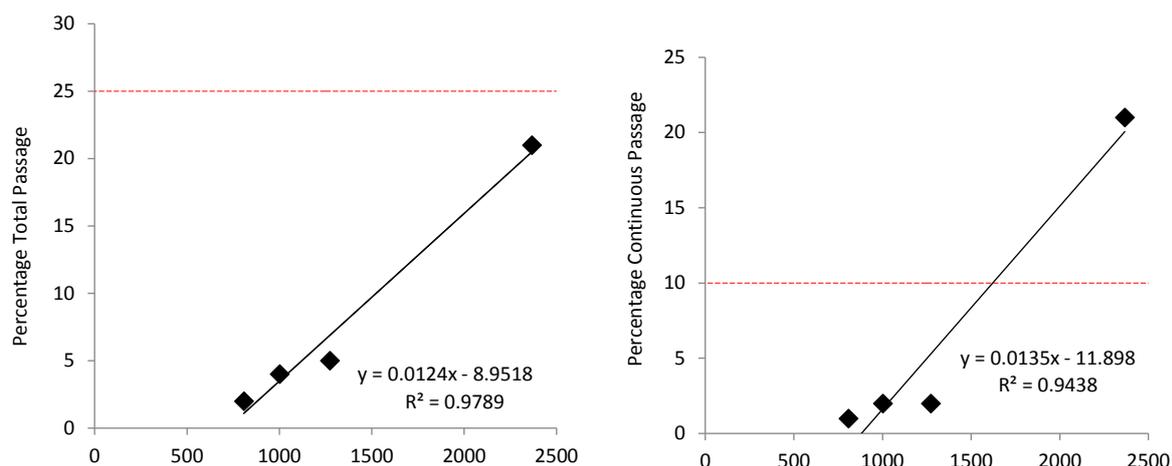


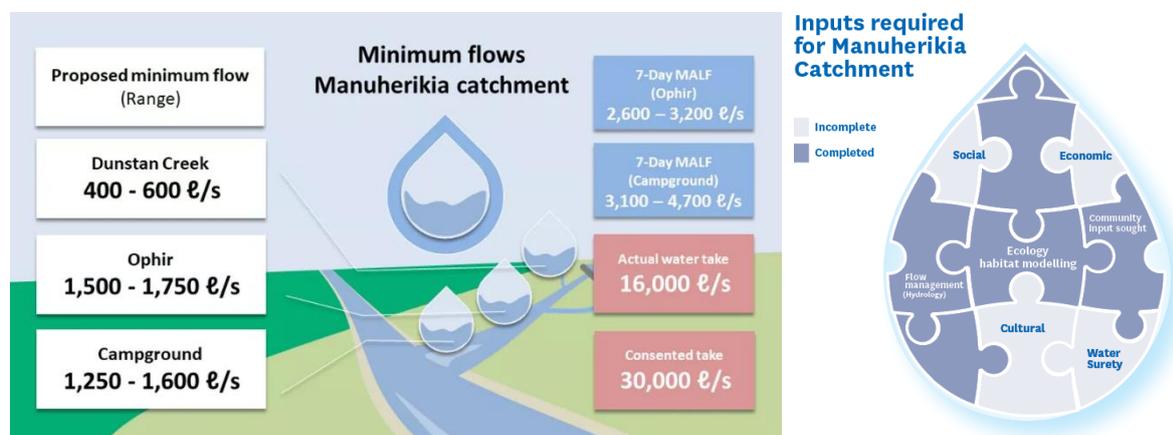
Figure 2: Percentage of total passage (25 % criteria)(left) and percentage continuous (10 % criteria) (right) for adult trout passage at Campground site at different flows. Criteria percentages marked with red dash line

Applying the CRA criteria, adult fish passage for both total and continuous criteria was not met at any of the surveyed flows however the 10 % continuous passage criteria was met at 2367 l/s and the 25 % of total width criteria was almost met (> 20 % of riffle met depth criteria) (Figure 2). Passage criteria for young of the year trout were met at all surveyed flows. For yearling/sub-adult trout criteria were met at all but the lowest flow (808 l/s) which did not meet the 25 % of total width passage criteria (although the 10 % continuous passage width criteria was met at this flow).

While these preliminary results provide some assessment of how fish passage changes with flow, results should be interpreted with some caution as it unknown if the surveyed site is the most critical site for fish passage beyond immediate survey reach. It is also thought there may have been some scouring at the site during the survey period, possibly as a result of it being used for as a crossing point or shifting of mobile substrate at higher flows. Flows were not measured at the Keddell Rd site so the Campground flow recorded was used as a reference. However influence of irrigation takes and bywashes between the site and the flow recorder have made interpretation of these data difficult. It is proposed that additional surveys include on site flow measurements and include a larger number of riffles across a greater reach of the river to address some of the limitations identified in the pilot study.

Proposed Minimum Flows

Following consultation on four minimum flow options the ORC indicated their intention to notify the following minimum flow options for the Manuherikia catchment:



<https://yoursay.orc.govt.nz/manuherikia-catchment-intergrated-water-management> Accessed 1 August 2018

ORC have stated that these proposed are based solely on ecological assessments as water surety, economic and social assessments were not yet complete. Despite this it remains unclear how the proposed flow ranges for the Manuherikia (at Ophir and Campground) were determined as they reflect a heavily compromised state representing just 32-56 % 7-Day MALF at Ophir and 27-51 % 7-Day MALF at Campground; rather than flows which have considered ecological values alone.

The 2016 ORC report Management Flows for Aquatic Ecosystems in the Manuherikia River recommended a flow of 2500 l/s for both mainstem sites. The report also presented alternative flow recommendations of 1750 l/s (Ophir) and 750 l/s (Campground) based on existing flows as a baseline, with the justification that the river already has a high degree of hydrological alteration due to the presence of Falls Dam. In addition, flows providing twice and three times the modelled habitat available for adult brown trout at the existing MALF were presented for Campground; 1500 l/s and 2000 l/s respectively. The report states:

"The results of instream habitat modelling for the lower Manuherikia vary markedly depending on the baseline flow used for calculation of habitat retention. Analysis using the existing flows suggests that 0.750 m³/s would maintain an appropriate level of habitat retention for the regionally significant brown trout fishery it supports and would maintain sufficient macroinvertebrate habitat and present a low risk of proliferation of long filamentous algae (Table 7.19). In comparison, analyses using the naturalised flows suggest that 2.5 m³/s would provide an appropriate level of habitat retention for trout fishery and would maintain sufficient macroinvertebrate habitat and present a low risk of proliferation of long filamentous algae (Table 7.19)."

Preliminary results of flow assessments made in the field indicate that a minimum flow 750 l/s would not be appropriate to maintain meet the ecological objectives described above. At these flows significant algae growth, restricted fish passage and habitat fragmentation and reduction in the quantity and quality of habitat for aquatic life are expected to occur. This raises serious doubts over the validity the 'existing flow baseline' approach devised by the ORC which proposes that despite existing low flows being heavily influenced by significant over-allocation and water abstraction

permitted without consideration of ecological requirements (as well as concerns which already exist about the state of the river in summer), only a proportion of these existing low flows are required to maintain aquatic ecosystem values.

It appears the selection of flows did not reflect solely flow required for ecological values but was in fact comprised position pre-empting the requirements of flow for out of stream users. This places the environment at a disadvantage from the onset of process as additional information associated with demand for abstractive uses is expected to put further downward pressure on the minimum flow level. Considering the ecological evidence alone a minimum flow of 2500 l/s is appropriate.

Following further public consultation, the ORC has decided that the plan change will not be notified until remaining information gaps on social, cultural and economic components are completed. This work is underway but a precise timeline for completion has not been provided.

Additional Work Proposed

Assessments undertaken in 2017-18 have provided some useful preliminary information and enabled proposed methodology to be refined. Additional work to be undertaken in summer 2018-19 will target flows of interest between 1000 and 2500 l/s with particular focus on flows in the mid-range between 1200 – 2000 l/s. The following assessments are proposed:

Photo point monitoring

Photo monitoring should continue in 2018-19 and should target flows between 1200 – 2000 l/s which were not well documented in the last season. Photos points should be marked with a fixed marker to ensure the same point is documented on each assessment visit.

Recreational user flow assessment

Surveys should continue targeting the range of flows staff in. In addition to staff and/or contractors, these surveys could also be carried out by other organisations wanting to contribute to information gathering efforts. A larger sample size will improve the usefulness of the results.

Fish passage / critical riffle assessment

The CRA approach is useful for describing how fish passage conditions will vary at different flows and further work should be undertaken to build on the findings of the pilot study. The size of the river means it will be difficult to determine 'the' critical riffle without considering the entire length of the river and surveying a number of sites. This is unlikely feasible so site selection should attempt to identify the most critical points for passage at several reaches along the river. By surveying multiple riffles comparison of results will indicate where fish passage concerns are present and how various flows are likely to impact fish passage and connectivity along the river corridor. Surveys should include flow measurement at the site and fixed markers should be installed where practical. Again it will be important to capture flows across the range of interest to ensure the relationship between flow and fish passage can be adequately described.

Habitat assessment

Broadscale trout habitat mapping and temperature monitoring is proposed to obtain additional information on habitat conditions under low flow conditions.

Invertebrate drift survey

Invertebrate drift sampling at a range of flows could be used to support use of a bioenergetic approach to habitat modelling.

Drift dive survey

Drift dive surveys may be an option to assess the status of the adult trout fishery. The last surveys were conducted between 1979-1981 across spring/summer period (Nov-Feb). Surveys should be carried out to be broadly consistent with previous dives, however some adjustments may be required according to changes in the river reaches and updated Fish and Game procedures.

Dunstan Creek

Additional work, particularly photo point monitoring and fish passage assessment is also required for Dunstan Creek targeting flows between 300-1000 l/s. Invertebrate drifting surveys may also be useful here.

Recommendation

That this report be received.

Helen Trotter
Fish and Game Officer
July 2018

12.6 Gamebird Management: Project 1180

Only two authorities to disturb gamebirds was issued over the last financial year.

One was to disturb paradise ducks causing pasture depredation near Cromwell and the other was to disturb paradise ducks causing pasture damage near Blue Skin Bay (and a gas gun loaned).

The previous year 10 permits were issued and 8 the year before.

One permit to destroy up to 15 mallards was issued to Quality Bakers in Kaikorai Valley that had been fouling an area outside the bakery.

Staff captured and relocated 22 mallards from Larnach Castle that had been fouling the grounds. The mallards were relocated to the Gardens and Kaikorai Estuary.

All complaints were responded to within time limits.

Recommendation

That this report is received.

Morgan Trotter
Otago Fish and Game Officer
August 2018

13.0 General Business