

**Agenda for the Meeting of the  
Otago Fish & Game Council to be held on  
Thursday 18<sup>th</sup> June 2015 at  
Otago Fish & Game Council Office  
Corner of Hanover and Harrow Streets, Dunedin  
Commencing at 11.30 am**

*Please note: A Lunch will be provided at 12.30*

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## **1 Present and Apologies**

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## **2 Declaration of Interest**

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### **3 Confirmation of Previous Meeting Minutes**

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#### **Minutes of Otago Fish and Game Council Meeting St Johns Rooms, Roxburgh 14 April 2015, Commencing at 12.30pm**

##### **1.0 Present:**

Monty Wright (Chair), Dr John Jillett, Dan Rae, Vicky Whyte, John Barlow, Adrian McIntyre, Ian Cole, Dave Witherow, Dr Mike Turner, and Murray Neilson,.

**In attendance:** Niall Watson (CE) Ian Hadland (OM), Peter Wilson (EO), Bryce Johnson (NZC), Don Rood (NZC), and Ken Telford (Public Forum only)

**Apologies** were received from

Alan Hammond, Dr Colin Aldridge, Ray Grubb and Francie Diver (OCB) who has resigned from the OCB liaison position with regret for personal reasons.

The Chair welcomed Messrs Johnson and Rood to the meeting and invited their input.

(Whyte/Jillett)

**That apologies be accepted**

It was **agreed** that leave of absence be granted to Messrs Grubb (April to August inclusive), Cole (June) and Dr Turner (June).

##### **2.0 Declarations of Interest and Health and Safety**

Nil.

##### **3.0 Minutes**

It was noted that he had been omitted from the attendance list for the February meeting and that the leave of absence should have referred to Mr Rae not Dr Turner

Resolved (Whyte/Rae)

**That the Minutes of the meetings on the 14<sup>th</sup> February 2015 be confirmed as a true and correct record subject the amendments above.**

## **4.0 Matters Arising from Minutes**

### **4.1 Audit and Risk Committee**

It was noted that Dr Aldridge had requested that his notice of motion (below) be held over until the June meeting.

*Notice of Motion:*

*That the Council establish a standing committee to be called the Audit and Risk Committee to monitor a range of risk areas including:*

- *health and safety,*
- *legislative compliance,*
- *gifts and benefits,*
- *a schedule of delegations and audit of their exercise,*
- *travel register,*
- *credit card register and audit of exercise,*
- *liabilities schedule*

*The committee, which be composed of two or three councillors, will be independent of other committees and responsible for auditing internal processes relating to the above areas and any other areas requiring oversight and for engaging with the external auditor in advance of the annual audit. The committee shall report on its activities at each Council meeting."*

## **5 Communications New Zealand Council**

### **5.1 NZC Correspondence to Otago**

#### **5.1.1 Governor's Workshop Evaluation**

The letter was received and discussed noting the NZC's interest in development of SOPs for common operation tasks amongst all 13 councils within Fish and Game, with a priority on health and safety.

Councillors were requested to put forward their views on priorities for co-ordination to the CE and for the CE to report further to the June meeting.

#### **5.1.2 Angler and Hunter changes in Ethnicity**

The letter was received and discussed

#### **5.1.3 Non Resident Licence.**

The letter was received and the need for the Council to identify backcountry fishery areas in Otago deserving of additional expenditure was noted. CE was requested to report back by August.

#### **5.1.4 Health and Safety Manual**

The letter was received. The CE noted that Otago had an updated H&S manual in preparation based on the Eastern model, that a health and safety register was in place and that each Council meeting received a report on H&S issues.

Concern was expressed about contract farm health and safety consultants and their advice to farmers on H&S requirements which were leaving farmers apprehensive about their responsibilities and which could lead to unnecessary access closures.

Mr Hadland advised that some of the contract advice was at odds with the law and he was working with Federated Farmers on clarifying issues.

It was **agreed** that the Council seek clarification from the legal authority with ultimate responsibility in the health and safety area.

#### **5.1.5 Guides Licence**

Response on progress with guides licence received.

#### **5.1.6 Palmer Opinion**

Response on Palmer Opinion received

#### **5.1.7 Functions under 26Q that lend themselves to SOPs**

The NZC CE's request for feedback on Conservation Act functions under 26Q that lend themselves to SOPs was received and discussed. The CE noted that SOP development undertaken sparingly was most likely to be effective.

#### **5.1.8 Consistency of Annual Financial Audits**

Request for information on annual report and audit formats – received.

### **5.2 Correspondence from Otago to NZC**

Nil

## **6 Chief Executive's Report**

### **6.1 Administration**

Finance reports to the end of March 2015 were discussed. The finance report showed the Council had spent 46% of budget at a point half way through the year. The CE explained that the report was compiled before all March accounts had been received including the planning meeting account. The result had been helped by cost savings through the delay in replacing the second Cromwell staff position.

The CE advised that a decision was pending on the appointment of a new Fish and Game Officer to the Cromwell office following the completion of interviews

Resolved (Whyte/Barlow)

**That Finance and Licence sales reports to the end of March 2015 be approved**

### **6.2 Species**

#### **Hatchery**

Oceania Gold's decision to extend the life of the Macraes Mine meant that the Council's hatchery operation was secure in the short term (3 to 5 years).

#### **Lower Clutha Salmon**

Catches in the lower Clutha were very low with only 5 salmon being reported taken this season. The CE advised he had had an acknowledgement of this letter to Contact Energy (previously circulated) but no detailed reply so far.

## **6.2 Habitat**

### **Affected Part Status**

The CE reported that a positive meeting had been held with ORC on the issue with agreement that ORC would :

- provide Fish and Game with a weekly list of consent applications that affect waterways.
- treat Fish and Game as affected over applications to replace mining privileges with RMA consents because of cumulative effects and environmental sensitivity in over-allocated catchments.
- communicate as issues arise and will meet from time to time to compare notes.

Fish and Game and ORC agreed to communicate as issues arose and to meet from time to time so enabling Fish and Game to provide feedback on affected party status.

### **Minimum and Residual Flows**

**Lindis River:** Council representatives (John Barlow, Dan Rae, Murray Neilson, Morgan Trotter, Peter Wilson and the CE) have variously attended two meetings with Lindis irrigators, a catchment field trip, ORC's public meeting in Tarras on 1<sup>st</sup> April and a meeting with senior ORC staff and Lindis irrigators.

The Council has committed to working with Lindis irrigators as far as possible to share information on the river's hydrology and natural values and to look for solutions to water management issues.

At a public meeting in Tarras on 1<sup>st</sup> April 2015 ORC reported a change in its position on the minimum flow required for the river. ORC is now considering a summer flow of 750 litres/second which is an increase on the 450 litres/second announced 12 months earlier in the Consultation Draft Plan Change. The CE said this was a gratifying change in direction which moved towards Fish and Game's recommendation for 1000 l/s minimum flow. The 750 l/s has still to be adopted by ORC for public notification but a science report by NIWA confirms the need for increased flows at least to that level.

Fish and Game has supported a request by Lindis irrigators for a two month delay in notification of the minimum flow plan change to allow for consideration of complementary policy development. However complementary policy development on water management was not seen as something that could be traded off against adequate instream flows.

### **Manuherikia Catchment Water Strategy Group:**

The CE updated the Council on the MCWSG's progress. Feasibility reports for the scheme were still being finalised with some uncertainty still over construction costs for a new Falls Dam. Community interests including Fish and Game were pressing strongly for explicit coverage of environmental outcomes in final feasibility reports including detail of mechanisms for achieving those outcomes (eg consent conditions, farm plans, plan changes) .

### **Waikouaiti**

The CE advised the Waikouaiti minimum flow setting plan change had been delayed to allow a study of estuary health to be completed.

### **Cardrona**

The CE reported that minimum flow setting on the Cardrona was expected to crank up later in the year.

### **Waiwera Minimum Flow Plan Change**

Mr Ken Telford addressed the meeting expressing concern about non-notified water allocation from the river, a lack of residual flow setting, limited hydrological information, high summer water temperatures, and deteriorating water quality. He had submitted to ORC seeking a minimum flow above the proposed 83% MALF on the basis of the above and community support.

The CE said that the Council position was similar to that adopted on the Pomahaka but that if there was community support for a higher minimum and an issue over water temperatures Fish and Game should be able to support a higher minimum.

## **6.4 User Participation**

### **Mt Burke**

The on-site agreement over road stopping and public access between Mt Burke Station, DOC, QLDC, Trails Trust, CFT and Fish and Game was discussed.

It was **agreed** that conditions of support included:

- ‘like for like’ swap of roads (a road taken for a road stopped)
- road alignment from Maungawera Road to Dublin Bay boundary must be capable of formation.
- location of lakeshore marginal strip to be defined by survey
- end of Maungawera road extended to connect with margin of Quartz Creek across Flax Paddock (connects to marginal strip and then parallel along to the north to creek margin).

The CE advised that the issue of the road to the north from Maungawera Road was not part of the agreement and will be addressed separately and that marginal strips will be laid off on Quartz Creek in 2020 on lease renewal.

Noted that WAC funding may be available to cover survey costs. The CE was asked to investigate

## **6.5 Public Interface**

The CE advised that the regional MOU with DOC was close to completion and was presently the subject of consultation with Ngai Tahu.

## **6.6 Compliance**

Councillors requested an up to date list of rangers for their information

## **6.8 Council**

The Fish and Game election timetable (agenda page 38) was noted. Key dates were:

- 8<sup>th</sup> August – public notification of election, call for candidates and voter enrolments.
- 27<sup>th</sup> August - candidate nominations close
- 9<sup>th</sup> September – voter enrolment closes
- 17<sup>th</sup> September – voting forms distributed by mail
- 9<sup>th</sup> October – voting closes at 5.00pm (Election Day)
- 13<sup>th</sup> October –postal voting closes

Noted that voting can be done either online or by return post.

Mr Johnson noted that some Fish and Game Councils were considering setting numbers of council position at less than 12 to cause elections and that Otago was one of the only Councils to have had contested elections at each triennium.

## **7.0 Committee Reports**

### **7.1 Clutha Fisheries Trust**

Mr Rae outlined Trust activity including:

- Clearance of vegetation from islands in Lake Dunstan for nesting birds
- Agreement over fencing at Kane Road alternative alignment Kane Road access alternative.
- Development of riverside access track at Black Bag subdivision

### **7.2 New Zealand Council**

Mr Witherow outlined NZC business at a recent 3 day meeting including:

- Consideration of access issues and concern about breached agreements and lack of action over illegal road obstructions
- Discussion of the Southland cycleway case which conflicted with maintenance of the Oreti's wilderness values
- Discussion of water management in Canterbury and Ecan following recent legal action
- Ruitaniwha decision
- Proposals to reactivate Ngarouroro water conservation order application.
- Attendance by DOC DG Lou Sanson who is not opposed to advancing the guides licence.
- Workshop on papers from the Governors Forum with debate about need for SOPs to cover Fish and Game operations. Mr Witherow noted the value of divergent approaches leading to discovery of improved performance
- Discussion on recruitment and North Canterbury Youth programme including Fish in Schools noting need to know what activity is currently being undertaken across the country.
- Reaffirmation of commitment to introduce new licence categories next season.
- Restricted scope of the completed National Office review instead of the original structural review contemplated.



## **8.0 Technical Reports**

### **8.1 Strategic Planning Workshop Report**

The report outlining project responses to Council priorities was discussed along with the budget spreadsheet showing a proposed budget of \$960,836, an increase of \$27,383 or 2.9% on last year's figure. The increases were composed of salaries and a budget for PA support (\$10,000)

Resolved (Rae/Jillett)

**That the Annual Plan projects and budget for 2015/16 be approved**

### **Kye Burn Contract**

Council **agreed** to the proposed expenditure of \$7,100 on a fish habitat assessment of the Kye Burn to support low flow negotiations. The CE said cost savings on staff changes meant that this work should fit within budget

### **8.2 Fish and Game Wetlands Workshop - Keeling**

The report was discussed and received.

### **8.3 Lindis Research - Trotter**

**Agreed** that the report be received

### **8.4 Regional Trends in Fish and Game Sources of Income – Dr Jillett**

The report was discussed and Council noted the changing pattern of revenue generation with declines in the North Island in Eastern, Auckland/Waikato and increases in the South Island bigger regions. Only two smaller regions were receiving grants while NZC's expenditure budget continued to increase.

**Agreed** that the report be received and circulated to other Fish and Game Councils.

### **8.5 Anglers Notice 2015/16 - Halford**

The report was discussed and it was **agreed** that no major review be undertaken until the Fish and Game Plan was approved. The CE advised there were no recommended changes to the 2015/16 Anglers Notice.

**Agreed** that the report be received.

### **8.6 Communications Strategy for 2015/16 Game Season – Hadland**

The report, requested by Council last year, was discussed and it was **agreed** it be received.

### **8.7 Waipahi River – Keeling**

**Agreed** the report be received

### **8.8 Greenstone Controlled Fishery – Keeling**

The report was discussed and it was **agreed** the report be received

### **8.9 Tuapeka Values Assessment – Keeling**

**Agreed** the report be received. A further assessment of the effect of the Tuapeka dam on fish passage was requested

## **9.0 Correspondence**

**Agreed** correspondence items 9.1 to 9.4 be received. Staff were asked to look further into Mr Cunningham's letter concerning changes to the flows in Lauder and Doctors Creeks.

## **10. General Business**

**10.1 Messrs Johnson and Rood** addressed the meeting on NZ Council activities. Mr Johnson noted that:

- There were still threats to Part II of the Resource Management Act which could reduce the protection the Act provided and the case law benefits from Fish and Game (and other) litigation over the years .
- The Walking Access Act provided for a review after three years which was due shortly so it was a case of use it or lose it.
- NZC had changed its status within the Land and Water Forum to one of 'active observer' to avoid both being captured by consensus outcomes and being publicly muzzled.
- There was growing concern about Government Ministers interest in what has been called a 'shared governance model' whereby local agencies such as Ecan have some elected and some Government appointed councilors.
- There was a growing interest in a transition to sustainable agriculture.

Mr Rood stressed the importance of public awareness and explained the move to engage with anglers and hunters and stakeholders through a range of media channels.

**The meeting closed at 5.45pm**

#### **4 Matters arising from the minutes**

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## 5 Communications New Zealand Council

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### 5.1 Correspondence from NZC to Otago

#### 5.1.1 Licence Fee Recommendation (previously circulated)



TO: Regional Councils

#### 2015/16 LICENCE FEE RECOMMENDATION

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At its meeting on 22 May, the NZ Council (NZC) resolved:

**That for the purpose of consultation with regional Fish and Game Councils, the NZ Council recommend a 2015/16 adult whole season sports fish licence of \$124 and the adult whole season game licence of \$92 (inclusive of a \$2 fee for the Game Bird Habitat Stamp) inclusive of GST.**

#### 1. Background

National policy defines that all expenditure needs to be approved as part of the budget round including expenditure to be funded from the bulk fund for the year, capital expenditure and expenditure from dedicated reserves.

Under the bulk funding regime funding levels are set for the 12 regional councils, the New Zealand Council, and the National budgets which make up the Fish & Game New Zealand budget. The method of increasing the funding level of any individual budget is through an application to the Contestable Fund, for either a one-off funding allocation for a specific project, or for ongoing additional funding. The latter in effect raises the bulk funding level for that council.

#### 2. Reserves

National policy sets regional reserve levels equal to between 30-50% of licence income, or of total budget for those regions which receive a grant. This level of general reserve is considered adequate to provide security against fluctuations in income and to ensure adequate operational cash flow.

Where a region's general reserve exceeds the 50% level, approved contestable funding for that region is allocated from its excess reserve, until such time as that region's general reserve is drawn down to sit within the recommended range. Where a region's reserve is below the 30% level, a contestable fund application can be made to restore the region's general reserve back up to that level.

#### 3. 2014/15 Fish & Game NZ Budget Round

##### 3.1 Variance Review

Preparation of the budgets begins with all instances of more or less than 10% variance between budget and audited year-end financial results being identified at the schedule B level, and explanation for those variances being reviewed at the February managers meeting. This becomes a reference towards considering and prioritising contestable fund applications submitted into the 2015/16 Fish & Game NZ (F&G NZ) Budget.

## 4. 2015/16 Fish & Game NZ Budget

### 4.1 Contestable Funding

A total of 41 applications were received, seeking additional funding of \$789,019 exclusive of additional legal/WCO funding, which is funded by the surplus in the contestable fund pool after adoption of licence fees.

Hawkes Bay, Southland and NZC councils did not require increases to their base funding levels as they did not submit applications for contestable funds.

After rating all contestable funding applications with the following rankings:

- 1 Rejected
- 2 Not recommended
- 3 Good to do but not funded 2015/16
- 4 Recommended but not essential for 2015/16
- 5 Essential for 2015/16

It was agreed that only those applications which were rated as (5) *essential for 2015/16* and (4) *recommended but not essential for 2015/16* be funded (totalling \$406,233)

#### Recommended Funding from the licence fee pool:

The successful applications include:

- Salary CPI totalling \$22,960.
- Staff performance increases in two regions, totalling \$17,000.
- Restoration of Reserves for Eastern & Nelson/Marlborough Budget \$113,007.
- "Ferret" Document management software for all regions -as a National project-totalling initially \$30,000

#### Recommended Funding from two Regional council's reserves:

The successful applicants include:

- Salary CPI totalling \$6,400
- Staff performance increases totalling \$4,000
- Building maintenance –roof replacement totalling \$11,500
- New staff member-\$60,000
- 3 x bay garage totalling \$35, 000

#### Unfunded applications:

10 applications were not recommended for funding this year. Unsuccessful applications included:

- Funding for additional staff - Taranaki & Otago
- CPI & staff salary adjustments as all-ready included in Budget submitted-North Canterbury
- Reserve restoration - Auckland/Waikato
- RMA nutrient setting work;& ; Displays/Promotions - Auckland/Waikato
- National fishing programme
- 2 applications for Ferret software, as approved by the Managers as a National project

### 4.2 NZC Recommendation:

NZC accepted the recommendation of Managers, approving total contestable funding applications of \$406,233.

Total contestable funds of \$406,233 to be funded by License fee pool & regional reserves \$289,333 would be fundable from the licence fee and \$116,900 would be provided from regional reserves for 2015/16.

Funding of \$108,426 was recommended on an ongoing basis, thereby increasing the bulk funding of the regions concerned and \$791,107 (\$208,907 excluding legal fund) was recommended for the 2015/16 year only, and would therefore be returned to the contestable pool for next F&G NZ budget.

#### 4.3 Research Fund Allocation

After considering the managers' recommendation, approval was given to the projects totalling \$138,469 for 2015/16 financial year. The budget remains at \$134,000 including \$34,000 for Mallard Research.

#### 4.4 RMA & WCO Legal Fund Allocation

The recommended licence fee would provide legal funding of \$582,200 in addition to the \$140,000 existing allocation within NZC budget for this purpose, giving a total 2015/16 budget allocation of \$722,200.

### 5. Conclusion

The 2015/16 licence fee recommendation would result in a \$1 increase to the Adult Whole Season Fish licence fee (from \$123 to \$124) which equates to a .81% increase, and a \$1 increase to the Adult Whole Season Game licence fee (from \$91 to \$92 -inclusive of the \$2 Game Bird Habitat Stamp) which equates to a 1.1% increase

Regional council responses on the proposed 2015/16 licence fees need to be received **no later than Monday 15th June 2015** so that they can be circulated to NZ Council and considered prior to a telephone conference on Wednesday 17 June 2015.

The NZC will then recommend to the Minister the new schedule of licence fees.



Alison Lyall  
Finance and Administration Manager

27 May 2015

## 5.1.2 National Policy On Reparation

### **REPARATION POLICY FOR CONSULTATION AS NATIONAL POLICY**

May 2015

**Prepared by:** Robert Sowman, Policy & Planning Manager, NZ Fish and Game Council

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#### **Proposal**

1. A reparation policy for those that wish to use it be adopted as national policy and applied as transparently and consistently across regions as possible.

#### **Background**

2. The use of reparation is a choice which needs to be made by each regional Fish and Game council. Some regions prefer to prosecute all their compliance matters which is their prerogative. Where regions are using reparation there is a need for a national policy which clearly prescribes:
  - a. What matters qualify for reparation; and
  - b. How the reparation amount should be determined.
3. In addition, here is a need for a national consistent policy around the terms for payment of reparation.
4. The scheme originally came about from comments by court judges in the Eastern Region who suggested that a scheme such as this be used to avoid having to clog up the court's time when the cases were relatively straight forward with the offender pleading guilty. Since then many regions operate a scheme but other don't or won't because they believe it is not legal.
5. For many years Fish and Game has been negotiating with Department of Conservation to establish an infringement fines system that would negate the need for a reparations scheme. However this has become side-lined and unlikely to be introduced any time soon.
6. Fish & Game have had two legal opinions on the legitimacy of its reparation scheme in the past, one from Chen and Palmer and one from Anderson Lloyd. Aspects of this advice have been combined and used in preparing the attached draft policy on reparation along with a proposed offer letter and acceptance form.
7. At its May 2015 meeting, the NZ Council resolved to circulate the material to regional Fish and Game Councils for consideration and ultimate adoption as national policy for those that wish to apply reparation.
8. Feedback from regional Fish and Game Councils is invited for NZ Council consideration in time for its September 2015 meeting.

#### **Recommendation**

**That regional Fish and Game Councils consider and provide feedback on the draft reparation policy to the NZ Council in the understanding that it would be adopted as Fish and Game New Zealand's national policy to standardise the practice by those Councils who recognise and utilise reparation.**

## **REPARATION POLICY FOR OFFENCES AGAINST THE CONSERVATION AND WILDLIFE ACTS**

### Background

Fish and Game New Zealand has adopted a National Policy on Prosecutions. As part of this policy "*...resolution for any alleged offences may include:*

- *No action*
- *Warning letter*
- *Youth warning with parental follow-up*
- *Prosecution*
- *Reparation -- as applicable in those regions which operate a reparation scheme – but must be to the same standard as if the matter were to proceed to a Court Prosecution"*

A reparation scheme provides for a person who is caught fishing or hunting without a licence, or committing a minor offence relating to the anglers notice or game gazette to avoid court proceedings by paying a fee to the Fish and Game Council, the amount of which is generally based on court outcomes for similar offences.

A number of regions currently operate a reparation policy and there have been legal opinions on the legitimacy of the scheme. Central to these opinions is that the scheme needs to be as transparent as possible, and that the monies received be dedicated to habitat enhancement or other projects separate from our main activity.

It is also fundamentally important that the application of reparation is consistent between regions, and that currently it is not leaves all of the respective reparation schemes vulnerable to challenge. There have been moves to establish a National reparation policy; however this is clearly quite some way off, if at all.

Ultimately the establishment of an infringement notice scheme would alleviate the need for a reparation policy. Work is in progress with regard to an infringement notice system however this may still be quite some way off.

### Calculating Reparation Fees

Under the Conservation Act 1987 offences against the Anglers Notice conditions and also the need to have a fishing licence (CA 26 Z1 (1)) may be penalised by a fine not exceeding \$5,000. Similarly hunting without a licence and offences against the Game Season conditions are also subject to a maximum fine of \$5,000 under the Wildlife Act 1953.

For reasons of transparency any fee for reparation needs to be consistent with likely court fines for the same offence, not including court and prosecution costs which are not incurred when straightforward reparation is followed.



The reparation level at the present time for example in the Eastern Region is a fee of \$300 for offences of no fishing or hunting licence, and \$150 for breach of an anglers notice or game bird notice condition.

Over the last 6 to 7 years court outcomes for these types of offences have varied hugely. In the last 2 to 3 years average fines for fishing or hunting without licence offences have been around \$350, with typically fines between \$300 to \$500. Similar penalties have been imposed for anglers notice/game notice breaches, but with some outcomes lesser or greater.

As the licence fees have increased over time, it is appropriate to review both the operational aspects of the policy itself, and also the level of reparation to ensure it remains a deterrent and that it is not an economic proposition to fish or hunt without a licence, or to breach the anglers notice or game bird hunting notice.

A number of Fish and Game regions operate reparation polices and at present there is little consistency nationally in how fees are set, some use a multiplication factor of the costs of licences, and some simply use averages of courts fines imposed in their regions.

Clearly, from time to time a number of matters where reparation is offered are not resolved in this manner, and therefore court action results. It is also clear that many of the people dealt with in this way are of low socio economic status, and many struggle to pay even \$300. Nevertheless at the current adult whole season fishing licence cost of \$123 it is essential to keep the reparation fee at a level where it is an effective deterrent, and that it is not worth taking the risk of offending.

Rather than using formulas taking into account licence cost, which will change from year to year, it is recommended that Reparation levels are increased to \$350 per offence (a sum generally consistent with court outcomes), regardless of whether it is an unlicensed fish or game licence offence or a breach of the anglers or game bird notice. This also deals more effectively for example with offences such as possession or use of lead shot ammunition where a breach of the game notice is not always at a level to provide an effective deterrent across the board .

Reparation has generally been offered for a maximum of 2 offences, and it is recommended this practice continues. If there are 3 or more offences then the matter will generally proceed to court. That said, there should be discretion where a third offence may be of a minor or technical nature and reparation may still be considered an option.

In court sentencing, the courts take into account what is called the 'totality principle'. This means where there are multiple offences the ability of the offender to pay a fine is taken into account, and the total penalty imposed reflects this, and the cumulative aspects of imposing penalty, and that penalty imposed overall is not excessive.

Recommendation – fees- adults 18 years and over

- For a first offence of any type a fee is set of \$350.
- Where two offences have been committed, for the second offence – if there is one- the fee is set at a lesser amount of \$150.
- There should also be the ability to deal with the second offence by way of a warning if in the circumstances this is deemed appropriate.

- In addition, to recognise that offences can be committed with differing levels of seriousness, the Regional Manager should have the discretion, where a single offence has been committed, it is at a less serious level, but does not qualify for a warning, and the fee of \$350 is considered excessive, the manager can impose a lower fee for this offence, at the level of \$150.

Factors to take into account in making the decision whether to impose a lower level fee for a first single offence, or to warn for a second offence, should be but not limited to:

- Age of the offender
- Seriousness of the offence
- Remorse and attitude of the offender
- Any efforts made by the offender to rectify the offending – e.g. licence since purchased etc
- Assessment of the means of an offender to pay reparation – student/employed etc
- Numbers of fish/game taken in the course of the offending
- Time, place, and circumstances of the offending.

This is consistent with diversion schemes operated by NZ Police and Department of Conservation, whereby individual circumstances are taken into account in setting the punitive action. Note diversion is similar to reparation but involves charges being laid in court and then withdrawn when the required action is completed.

#### Fees for juniors

One situation where the fee of \$350 would be inappropriate is with regard to a person who is only 17 years old and eligible to hold a junior licence. Reparation is not used with persons under the age of 17 who are instead dealt with by warning or parental interview (consistent with the requirements of the Children, Young Persons and their Families Act 1989). However a 17 year old also only requires a Junior Licence – currently \$20 (Game) and \$25 (fishing) - and to receive a reparation offer based on the cost of an adult season licence would seem unreasonable.

In this relatively uncommon situation it is suggested that the reparation fee is calculated instead on a pro rata basis, with some rounding, and it is recommended that for this group, the fee of \$100 is set per offence (which is something we have been doing in any event for some time with this age group). In relation to juniors, the Regional Manager would also have the discretion to warn for any second or subsequent offence.

#### Reparation for non-licensed anglers who also commit offences against the Anglers Notice

Under 26R (4) of the Conservation Act 1987 “An Anglers Notice shall set out the conditions under which a current licence holder may fish for sports fish ...” and the regulations themselves invariably contain specific references such as “No licence holder shall ...”. This has been interpreted by some Fish and Game regions to mean that the Anglers Notice provisions therefore do not apply to an unlicensed angler, and as such an unlicensed angler cannot be prosecuted for any additional offences against the Notice. The current reparation policy has this interpretation.

This does not apply to the Game Season conditions which refer to “any person”.

However 26R (6) of the Conservation Act requires "Every person commits an offence and is liable for a fine not exceeding \$5,000 who takes any sports fish from any waters at any time or place, or with any device or in any manner, if such taking is not permitted by any Anglers Notice in force in respect of those waters".

Note 26R (6) applies to every person (consistent with the Game Season conditions and also how the Taupo Fishing Regulations are written) and informal legal advice obtained by Eastern Region is that this causes the Anglers Notice provisions to also apply to unlicensed anglers.

Reparation via non – financial resolution.

There should be the ability, to consider the means of offenders, and where appropriate consider reparation via non financial resolution. This may involve, for example, carrying out work for Fish & Game. However it is unlikely that this would be often used, as it involves difficulties with supervision of the offender, having suitable work or other tasks they could be assigned to, and only a few offenders would in any event be suitable for this type of resolution. Nevertheless, it should be an option available, at the discretion of the Regional Manager.

Return of Gear/forfeiture of gear.

Where reparation is completed, in usual circumstances any gear seized from an offender will be returned to them. Gear can only be retained by Fish & Game where there is one of the following situations applying:

1. A Court order for forfeiture following a Court prosecution.
2. The offender/owner voluntarily surrenders the gear.
3. The items seized have been found unlawfully in the offenders possession, e.g. fish or game taken unlawfully, or stolen equipment.

It is proposed that a condition of reparation for offences involving possession or use of lead shot includes that as a condition of accepting reparation for this type of offence, the offender agrees to forfeit the lead shot ammunition to Fish & Game for the purposes of destruction. Similarly the ability should be retained to include a forfeiture provision as a condition of accepting reparation for other offending at the regional manager's discretion. For example, fishing gear seized from an offender using bait or roe, in a situation where it is considered highly likely if the gear was to be returned that the gear would simply end up back in circulation and be used again for similar offending.

## **5.2 Correspondence from Otago to NZC**

**5.2.1 Nil**

## 6 Chief Executives Report

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### CHIEF EXECUTIVE'S REPORT JUNE 2015

#### 6.1 ADMINISTRATION

##### **Finance and Administration**

###### *Financial Reports to 31 May 2015*

A financial report for the financial year to 31 May 2015 is attached for your information. The summary spreadsheet has been structured so that it can be more easily compared with the approved budget of \$933,451.

Expenditure to date is \$1,490,160 (including levies \$670,525 and commission \$83,817) but excluding depreciation (\$58,734) compared with the annual budget of \$2,007,222 composed of Otago's expenditure budget (\$933,451), depreciation (nil), and levies (\$894,033) and excluding commission (\$96,183).

Overall expenditure is 70% of budget at a point 2/3 (66%) of the way through the year. This is satisfactory given that the busier summer period and game season opening are now out of the way.

Total income to date is \$1,829,443 compared with budget of \$2,007,222. It is difficult to compare seasons because income is coming in more quickly with the move to agency on line but fish sales appear buoyant with the long hot summer just past.

Fishing licence sales revenue received for the year to date is \$1,548,656 (including commission). The fish budget figures for the full year is \$1,593,438 (\$1,266,959 plus commission \$79,672).

Game licence sales revenue received for the year to date is \$201,101 (including commission). The year's budget for game licence sales is \$330,229 (\$313,712 plus commission of \$16,511).

###### *Licence Sales to 31 May 2015*

Sales recorded to 8 June 2015 are outlined for fish and game in the attached table from Eyede. The comparison figure is for the whole of the previous year. Figures are inclusive of GST. While fishing licence sales are closing in on the budget LEQ figure (whole season adult licence equivalents) of 14898 there is a bit more of a gap between game sales and the budget LEQ figure of 4267. This may indicate game sales are continuing to plateau.

###### *Funds Position at 31 May 2015*

ANZ 00 account	\$195572.75
ANZ 70 account	\$345,426.48

### *Reparation Trust Account*

Account balance to 31 August 2014	\$ 52,614
Revenue for current year to 31 May 2014	\$ 7,254
Less Grants	<u>\$ 4,500</u>
Total	\$ 55,368

### *Term investments as at 31 May 2015:*

ASB 0079	\$296,145 @ 4.5% maturing 11 <sup>th</sup> July 2015
<del>ANZ 1006</del>	<del>\$433,571.33 @ 4.65% maturing 18<sup>th</sup> May 2015 (closed)</del>
SBS 44624	\$450,000 @ 4.55% maturing 23 <sup>rd</sup> November 2015

The sum of \$71,102 is held by Anderson Lloyd in trust for wetland management via DOC.

### *Agents and Debts*

No liabilities or potential liabilities at the present time

### *Capital Expenditure*

Two computers have been replaced in the Cromwell office at a cost of \$1600 approximately.  
Two vehicles have been ordered replacing existing vehicles in Dunedin and Cromwell

### *Staff*

Paul van Klink commenced duties on 18<sup>th</sup> May 2015 and will be attending the June meeting in order to meet councillors in person.

### *Land and Buildings*

The double glazing of the 1st floor at the Dunedin office has been completed

### **Recommendation**

**That the Finance and Licence Sales Report for the period ending 31 May 2015 be received.**

## **6.2 SPECIES**

### **Waterfowl Monitoring (1111)**

A mallard monitoring survey was completed around mid April before the Game Season opening. (See separate report)

### **Spawning Surveys (1112)**

Spawning surveys are underway for the season

### **Population Monitoring: (1113)**

Lindis and Cardrona field work is being written up and field observations over this summer's drought have been compiled into a report which has been forwarded to Otago Regional Council. This included as a separate report which because of its size has been circulated in full in the digital agenda only. The paper agenda only includes the report's summary and conclusions (See separate report)

**Success & Satisfaction (1122)**

Nothing to report

**Fish Salvage (1131)**

Nothing to report

**Hatchery Operations**

Consideration is being given to growing more fish at the hatchery for our TAKF events by reducing the size of the fish reared from 1kg to around 700g. This is being trialed by feeding the fish in one outside tank every 2<sup>nd</sup> day instead of every day. Fish weights are being monitored.

Oceana Gold are in the process of replacing a pump shed housing the backup diesel water pump and installing a solar panel to keep the battery charged. The shed was damaged last year by strong wind. In addition the company are looking at modifying the water intake system to stop wild fish being sucked into the pipes. This has happened twice since the start of the hatchery.

Loan Pine Reservoir is back to its normal level after the drought

**Releases (1161)**

50x2yr fish were released in Southern Reservoir.

4000 young of the year (excess stock) were provided to Southland F&G to grow on for their TAKF events

**Game Notice (1171)**

Nothing to Report

**Anglers Notice (1172)**

See separate report

**Game Bird Control (1181)**

Nothing to report.

**6.3 HABITAT****Resource Management (1211)****Resource Management Complaints 2014/15**

<b>Date/Agency</b>	<b>Issue</b>	<b>Response</b>
April 2015	F&G has received complaints and expressions of concern over Lake Tuakitoto water levels and cattle grazing within the wetland. These issues have been passed on to ORC and F&G staff plan to inspect the lake at the next opportunity	
May 2015	A complaint was lodged with ORC about channel works in a Central Otago spawning stream in late May. ORC are investigating.	

## Resource Consents

The Contact consent issue has been taken up with ORC.

## Planning (1212)

### Manuherikia Catchment Water Strategy Group

Staff continue to be involved in the Manuherikia Catchment Water Strategy Group which is developing a catchment wide strategy for enhancement of irrigation water storage and use in the Manuherikia Catchment. Economic viability of water storage options at Falls Dam (increasing dam height) and on the Upper Ida Burn are still being assessed. Consultants are in the process of finalising feasibility reports and the current focus of Fish and Game's interest is the incorporation of identified environmental outcomes into final feasibility reports

## Minimum and Residual Flow Setting

<b>Minimum and Residual Flows and Transition from Mining Privileges (TMP)</b>		
<b>River</b>	<b>Activity and status</b>	<b>Status</b>
Lindis	Minimum flow & transition from mining privileges (TMP).  Overallocated  MALF 1860 l/s	Lindis fisheries research has been completed and is currently being written up.  Economic analysis has been undertaken by OPUS and BERL, and now released by ORC. The study states that climate factors, not the level of minimum flows, is the limiting factor on agriculture in the catchment, and that the level set for a minimum flow will have a small extra impact in comparison to climate.  ORC reported a changed summer minimum flow proposal of 750 l/s, instead of the 450 l/s previously recommended. The change is still be formally adopted by ORC  Proposals to notify the plan change have been extended by two months to allow further discussions to happen between irrigators and environmental interests (including DOC and Iwi) on complementary policy areas.  Informal meetings are continuing between F&G, CFT, Lindis irrigators, DOC, Ngai Tahu and ORC.
Cardrona	Minimum Flow & TMP  Overallocated	Mainstem fisheries and flow surveys undertaken over the summer period. A minimum flow proposal is expected in October or November.
Waikouaiti	Resource consent application	Consent appeal resolved by mediation



Waikouaiti	Minimum Flow Fully allocated  MALF 258 l/s	F&G have supported minimum flow of 220 l/s. Further action on the minimum flow has been deferred pending more research on estuary health which is planned this coming summer
Pomahaka	Minimum flow  MALF 4300 l/s	The plan change has been completed 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	Minimum flow  MALF 310 l/s	F&G supported submissions for a minimum flows higher than that notified by ORC 260 l/s (summer) 400 l/s (winter) and sought a primary allocation limit of 500 l/s. An ORC hearing was held on 21 <sup>st</sup> April but a decision has yet to be released
Manuherikia	Minimum flow Irrigation scheme investigation.  MALF lower river 2126 l/s  Overallocated	Collaborative process underway involving F&G Irrigation scheme at feasibility study stage. There are some concerns about  F&G's target 'Camp Ground' minimum flow has been 1500 l/s but the existing Ophir minimum flow (820 l/s) is a problem.
Benger Burn	Minimum flow &TMP.  Overallocated	Further action by ORC deferred pending more research on water resources and aquifer/surface water interaction.
Sow Burn	TMP  Overallocated	The Sowburn all-of-catchment consent application remains with the Otago Regional Council. There have been two variations to the consent, to handle supplementary allocation. There is a remaining issue with affected party approval being required from a minority shareholder in a deemed permit which is preventing the consent from being granted. The ORC has also commissioned NIWA to undertake an investigation into the hydrological connection and transport time between Sowburn residual flows and the Taieri main-stem at Waipiata. This may affect the residual flow requirement on the Sowburn consents, which was negotiated to be 70 l/s. F&G staff are liaising with ORC staff to bring this long-standing project to a conclusion.
Kye Burn	TMP Overallocated  MALF 500 l/s	Further response has been made to Kye Burn irrigators and request for meeting. F&G position is that a mainstem minimum between 200-300 l/s is required.

		Further work has been commissioned by F&G on habitat values and flows and a report is in preparation
Low Burn	Minimum flow TMP Overallocated	No action
Bannock Burn	Minimum flow TMP Overallocated	No action
Quartz Creek	TMP Overallocated	Report on fishery values and issues in preparation
Tuapeka River	ORC Management Flow Report  MALF 314 l/s	No action
12 Mile Creek (Wakatipu)	ORC Management Flow Report	No action

### **CE to Report**

#### **Transition from Mining Privileges (MPs) to RMA Consents**

There is a continuing risk that processing of individual consent applications replacing mining privileges in overallocated Central Otago catchments will undermine environmental flows but recent agreement on affected party status improves the situation.

The basis for one recent individual RMA consent application to replace a mining privilege on Donald Stuart Creek has been agreed with the applicant after prolonged negotiations and sets a benchmark for future applications in overallocated catchments.

#### **Reserves Management (1221)**

ORC has recently agreed to mitigation works within the DOC managed Triangle Wildlife Management Reserves in response to drain clearance to provide relief to an upstream landholder. The agreement will enable open water development where it is practical in a Regionally Important Wetland that does not have a lot of habitat diversity.

#### **Wetland Protection (1232)**

Nothing to report

#### **Assisted Habitat (1230)**

See confidential report on Habitat Enhancement Fund grants

#### **River Management (1233)**

Nothing to report

## **6.4 USER PARTICIPATION**

#### **Access (1311)**

Silver Fern Farms (SFF) have approached Fish and Game about stopping a public road behind their Finedgand facility. The road is vested in Clutha District Council and they have rightly insisted SFF contact affected parties ahead of lodging a request. The road is formed

and there is evidence of occasional use for angling including a substantial style over a fence where its alignment nears the Clutha River. Ian Hadland has met with SFF and explained Fish and Game's interest in securing additional access to and along the river and our interest in a 'like for like' swap in return for agreement.

### **Operations Manager (OM) to report**

#### **Signage (1312)**

Nothing to report.

#### **Backcountry Fisheries (1321)**

See separate report

#### **Magazine Supplements and Newsletters (1331)**

Fishing Season supplement in preparation

#### **Reel Life/Both Barrels**

Monthly contributions to online newsletters Reel Life and Both Barrels have continued.

#### **Newspaper Supplements (1332)**

(See Game Season report)

#### **River Reports (1333)**

Nothing to report

#### **Publications (1342)**

Nothing to report

#### **Web Site (1343)**

Nothing to report

#### **Fishing and Hunting Events (1351)**

Nothing to report

#### **Take-a-kid-fishing (1352)**

Nothing to report

#### **Club Liaison (1361)**

Nothing to report

#### **Commercial Use (1362)**

Nothing to report

## **6.5 PUBLIC INTERFACE**

#### **Liaison (1411)**

A draft MOU between DOC and Fish and Game has been completed with DOC and submitted to Te Ropu Kaitiaki I Araituru for feedback

**Media (1431)**

See Game Season report. In addition there has been coverage of the Pomahaka minimum flow result.

**Advocacy (1432)**

Nothing to Report

**Tenure Reviews (1433)**

After a quiet period, there is movement on tenure review proposals. Fish and Game staff visited Mt Hope Station (at the headwaters of the Pomahaka River) and a fish and game resources report is in preparation for this property to assist with the tenure review process.

Fish and Game staff have visited Longlands Station and Morven Hills Station as part of the NGO inspection team. These proposals appear acceptable from a Fish and Game perspective. The Morven Hills proposal will result in the headwaters of Dunstan Creek being returned to the Crown.

Staff have met with the new DOC tenure review manager, Jeremy Severinson, who is on secondment from LINZ, to discuss concerns with the process. It appears that the process will be improved to benefit Fish and Game and other stakeholders.

Staff will make a similar approach to LINZ

**6.6 COMPLIANCE****Ranging (1511)**

Nothing to report

**Ranger Support**

Nothing to report

**Prosecutions**

All game season offences have now been resolved

**OM to report**

**6.7 LICENCING****Licensing System (1611)**

Work is continuing on arrangements for the introduction of new licence categories

**Agents (1612)**

Staff are liaising with agents over a number of issues including on-line licensing, phase out of paper licences and new licence categories. Ian Hadland has been working closely with NZC staff over a communications and marketing planning. The scale of the changes involved mean there is a fair chance of hitting bumps in the road during implementation.

**OM to report**

## 6.8 COUNCIL

### Elections (1710)

The date of the triennial Fish and Game Council Elections is 9th October 2015. I have made initial contact with *electionz.com* who again have the contract for Fish and Game Council elections. An election timetable was included in the April agenda but key dates are:

- 17<sup>th</sup> July** - Candidate nomination forms available online
- 8<sup>th</sup> August** – Public notification of election, call for candidate nominations and voter enrolments
- 27<sup>th</sup> August** – Candidate nominations close
- 9<sup>th</sup> September** – Voter enrolments close
- 17<sup>th</sup> September** – distribution of voter packs to enrolled voters (votes can be cast by return post or online)
- 9<sup>th</sup> October** – Election day – voting closes at 5.00pm
- 13<sup>th</sup> October** – last day for receipt of postal votes.

Results will be published on Saturday 17<sup>th</sup> October and the council members elected officially take office 10 working days after the electoral certificate is signed (13<sup>th</sup> October) or 29<sup>th</sup> October.

The first meeting of the new Council is to be held three weeks after that date (18 or 19 November) and at that meeting a decision on an NZ Council appointment needs to be made. This causes some issues because our final meeting for 2015 is scheduled for 26<sup>th</sup> November. That is tied in to the audit/annual report timetable.

### CE to report

### Council (1720)

#### Risk and Audit Function – Notice of Motion

Colin Aldridge's Notice of Motion on the need for an Audit and Risk Committee follows:

*That the Council establish a standing committee to be called the Audit and Risk Committee to monitor a range of risk areas including:*

- *health and safety,*
- *legislative compliance,*
- *gifts and benefits,*
- *a schedule of delegations and audit of their exercise,*
- *travel register,*
- *credit card register and audit of exercise,*
- *liabilities schedule*

*The committee, which be composed of two or three councillors, will be independent of other committees and responsible for auditing internal processes relating to the above areas and any other areas requiring oversight and for engaging with the external auditor in advance of the annual audit.*

*The committee shall report on its activities at each Council meeting.*

**CE’s Comments on the motion**

While I consider there is a need to consolidate the Council’s audit and risk function I am reluctant to recommend going to a stand-alone committee to achieve that. The matters to be monitored through an audit and risk function were identified at the February meeting and are included in the table below but there may be others:

<b>Risk area</b>	<b>Current approach</b>
Health and safety procedures	Incident reporting to each staff meeting and now to each council meeting. Hazard ID at each staff meeting. H&S Manual upgrade underway based on Eastern FGC revisions. Incident reporting to ACC where required (injury accident)
Delegations and audit of exercise	Delegations currently listed in governance policy. No reporting on exercise
Gifts and benefits	Gifts register
Legislative compliance	Legislative compliance schedule complete but still overly complex
Travel register	No travel register for recording of significant travel
Credit card register	No Council credit cards. Expenses refunded through impress claims approved with other accounts (two approved signatories)
Liabilities	Reported to Council bi monthly
Capital purchases and disposals within budget	Reported to Council bi monthly

It is not possible to eliminate risk of fraud or process failure through the establishment of a committee or any other mechanism for that matter but an increase in oversight and control helps reduce risks. The difficulty faced by a small organisation is the increasing burden of compliance activities required of us by changing accounting and other standards.

My understanding is that the audit part of the exercise involves sighting the various formal records (eg gifts register, health and safety records, personal claims payments) to make sure there is compliance, that processes are operating and that registers are up to date. In addition there would be some contact with the auditor in advance of the Auditor General’s annual audit to address any matters the Council wanted covered

As an alternative to a committee I would like to suggest a biannual report to the full Council on audit and risk matters. In effect the Council carries the responsibility for monitoring audit and risk issues but this would formalise it.

**For discussion**

## **6.9 PLANNING AND REPORTING**

### **Strategic Planning (1811)**

As previously advised Sports Fish and Game Plan for Otago has been approved by the Minister of Conservation and is now operative. Copies have been sent to all relevant agencies and a media release has been made

### **Annual Plan (1821)**

The draft annual plan will come back to the August meeting once licence fees have been approved by the Minister.

The 2015/2016 Licence Fee recommendations are included under New Zealand Council correspondence and recommend a licence fee increase of \$1 for the Fish Adult Whole Season (81% increase) and \$1 for the Game AWS licence (1.1%). Fees increase from \$123 to \$124 for Fish and from \$91 to \$92 for Game.

### **Annual Report (1821)**

Nothing to report

### **National Liaison (1841)**

Staff continue to be involved in the Licencing Working Party (NW) and the Licence Category Review (IH). Peter Wilson has been assisting with planning advice in other regions.

Niall Watson  
Chief Executive  
June 2015

**Summary of Draft Profit and Loss Statement Expenses 31st May 2015**

**8/06/2015**

<b>Expense</b>	<b>Total Budget</b>	<b>Actual Expenditure</b>	<b>YtD %</b>	<b>Comment</b>
		<b>Ytd</b>		
<b><u>Projects</u></b>				
<b>Species</b>	\$ 24,600.00	\$ 27,614.00	112%	
<b>Habitat</b>	\$ 8,000.00	\$ 10,307.00	129%	
<b>Participation</b>	\$ 37,500.00	\$ 24,507.00	65%	
<b>Public Interface</b>	\$ 9,000.00	\$ 539.00	6%	
<b>Compliance</b>	\$ 13,000.00	\$ 2,911.00	22%	
<b>Licences</b>	\$ 500.00	\$ 650.00	130%	
<b>Council</b>	\$ 10,000.00	\$ 8,288.00	83%	
<b>Planning</b>	\$ 10,000.00	\$ 14,139.00	141%	
<b>Projects Total</b>	<b>\$ 112,600.00</b>	<b>\$ 88,955.00</b>	<b>79%</b>	
<b><u>Administration</u></b>				
<b>Salaries</b>	\$ 650,623.00	\$ 500,704.00	77%	
<b>Staff Expenses</b>	\$ 23,200.00	\$ 8,761.00	38%	Helen Brazil flights and Morgan Masters reimbursements so low
<b>Office Premises</b>	\$ 83,450.00	\$ 54,107.00	65%	
<b>Office Equipment</b>	\$ 18,374.00	\$ 1,966.00	11%	
<b>Communication</b>	\$ 28,666.00	\$ 24,140.00	84%	
<b>General</b>	\$ 18,000.00	\$ 7,002.00	39%	
<b>General Equipment</b>	\$ 13,944.00	\$ 5,352.00	38%	
<b>Vehicles</b>	\$ 68,149.00	\$ 44,830.00	66%	
<b>Administration Total</b>	<b>\$ 904,406.00</b>	<b>\$ 646,862.00</b>	<b>72%</b>	
<b>Total</b>	<b>\$ 1,017,006.00</b>	<b>\$ 735,817.00</b>	<b>72%</b>	



<b>Depreciation</b>		\$ 58,734.00		
<b>Commission Expense</b>	\$ 96,183.00	\$ 83,817.00	87%	
<b>RMA Expenses reimbursed</b>		\$		
<b>Levies</b>	\$ 894,033.00	\$ 670,525.00	75%	

### **Summary of Profit and Loss Statement Income 31st May 2015**

**As At 08/06/15**

<b>Income</b>	<b>Total Budget</b>	<b>Actual Income</b>	<b>YtD %</b>	<b>Comment</b>
		<b>Ytd</b>		
-				
<b>Fish</b>	\$ 1,593,438.00	\$ 1,548,656.00	97%	
<b>Game</b>	\$ 330,229.00	\$ 201,101.00	61%	
<b>Prosecutions</b>	\$ 6,000.00	\$ 891.00	15%	
<b>Rent</b>	\$ 37,000.00	\$ 30,935.00	84%	
<b>Interest</b>	\$ 40,555.00	\$ 29,824.00	74%	
	<b>\$ 2,007,222.00</b>	<b>\$ 1,811,407.00</b>	<b>90%</b>	

	<b>Budget</b>			
<b>Total Expenditure</b>	\$ 1,017,006.00	\$ 735,817.00	72%	
<b>Less "Other Income"</b>	\$ 83,555.00	\$ 79,687.00	95%	
<b>Approved Budget</b>	\$ 933,457.00	\$ 656,130.00	70%	

Balance Sheet  
**Otago Fish & Game Council**  
 Balance Sheet  
 As at 31 May 2015

<b>CAPITAL</b>		This Year	Last Year End
7500	Opening Equity	1,039,201.00	1,039,201.00
9015	Retained Earnings Brqht Fwd	<u>1,593,865.83</u>	<u>1,568,076.20</u>
		2,633,066.83	2,607,277.20
	Plus Current Year Operating Surplus/(Deficit)	280,549.18	25,789.63
	<b>TOTAL CAPITAL FUNDS</b>	<u><u>2,913,616.01</u></u>	<u><u>2,633,066.83</u></u>
<b>REPRESENTED BY</b>			
<b>CURRENT ASSETS</b>			
5005	Cash on Hand	200.00	200.00
5022	Stock on Hand	7,354.00	7,354.00
5030	Accrued Interest	12,396.75	2,571.66
5040	Prepayments	625.69	11,078.69
5050	Investments - ANZ National Bank	0.00	423,746.24
5060	ASB Investments	292,932.55	289,684.20
5080	SBS Investments	450,000.00	0.00
5800	GST Paid	39,245.86	0.00
6040	PAYE Control	4,379.07	0.00
6805	GST Payments/Refunds IRD	1,763.04	1,763.04
ACCREC	Trade Debtors	189,043.29	125,053.35
ASB_00	ASB 00 Account	1.15	1.15
NB00	National/ANZ 00 Account	190,615.56	78,617.04
NB70	National/ANZ 70 Account	345,426.48	290,133.50
UNBANK	Unbanked	<u>1,051.68</u>	<u>314.00</u>
		1,535,035.12	1,230,516.87
<b>LESS CURRENT LIABILITIES</b>			
5050	Investments - ANZ National Bank	9,825.09	0.00
6000	Sundry Creditors	37,328.12	37,328.12
6010	Holiday Pay Accrued	35,325.00	35,325.00
6800	GST Received	28,880.81	0.00
ACCSPAY	Trade Creditors	<u>34,185.94</u>	<u>67,477.48</u>
		145,544.96	140,130.60
	<b>NET WORKING CAPITAL</b>	1,389,490.16	1,090,386.27
<b>TERM ASSETS</b>			
5070	Anderson Lloyd Investment	<u>71,102.06</u>	<u>71,102.06</u>
		71,102.06	71,102.06
<b>FIXED ASSETS</b>			
7000	Vehicles Purchases	235,177.60	235,177.60
7001	M/V Accum Deprn	(113,189.00)	(78,989.00)
7020	Boat Purchases	90,722.06	90,722.06
7021	Boat Accum Deprn	(70,763.00)	(67,343.00)
7200	Plant Purchases	58,274.10	53,894.10
7201	Plant Accum Deprn	(48,096.00)	(42,030.00)
7300	Furniture & Fittings	30,847.94	28,255.00
7301	Furniture Accum Deprn	(27,934.74)	(26,854.74)
7400	Field Equipment Purchases	34,610.96	34,610.96
7401	Field Eq Accum Deprn	(19,914.00)	(19,554.00)
7440	Land Purchases	414,410.77	414,410.77
7450	Buildings Purchases	629,287.49	596,081.14
7451	Buildings Accum Deprn	(302,573.50)	(291,935.50)
7460	Land @ Fair Value	426,260.00	426,260.00
7462	Building @ Fair Value	162,085.11	162,085.11
7463	Buildings @ FV - Accum Deprn	<u>(46,182.00)</u>	<u>(43,212.00)</u>
		1,453,023.79	1,471,578.50
	<b>NET ASSETS</b>	<u><u>2,913,616.01</u></u>	<u><u>2,633,066.83</u></u>

**Otago Fish & Game Council  
Profit and Loss - Summary  
for Period Ended May:2014/15**

	Month to Date			Year to Date			Annual Budget	YTD Actual Budget	Last YTD	
	Actual	Budget	% of Budget	Actual	Budget	Variance				
<b>INCOME</b>										
<b>FISH AND GAME LICENCE SA...</b>										
1000	Fishing Licences Income	30,452	132,796	23%	1,548,656	1,195,080	353,576	1,593,438	97%	1,423,543
1006	Game Licences Income	155,628	27,519	566%	201,101	247,672	(46,571)	330,229	61%	157,033
		186,080	160,305	116%	1,749,756	1,442,752	307,004	1,923,667	91%	1,580,576
<b>OTHER INCOME</b>										
1010	Interest received	6,088	3,379	180%	29,824	30,418	(594)	40,555	74%	24,416
1020	Fines - Fishing & Game Offences	40	500	8%	891	4,500	(3,609)	6,000	15%	6,373
1022	Reparations Trust Fund	2,300	0	0%	2,754	0	2,754	0	0%	6,760
1025	Rent Received	3,558	3,083	115%	30,935	27,751	3,184	37,000	84%	29,024
1065	Fishing Competitions	0	0	0%	742	0	742	0	0%	1,089
1075	Commissions Income	551	0	0%	1,954	0	1,954	0	0%	1,568
1090	Sundry Income	46	0	0%	9,153	0	9,153	0	0%	2,222
1092	Merchandise Sales/Other	(51)	0	0%	472	0	472	0	0%	(1,621)
1094	Donations Received	0	0	0%	2,963	0	2,963	0	0%	3,000
1096	RMA Costs Reimbursed	0	0	0%	0	0	0	0	0%	15,087
		12,534	6,962	180%	79,687	62,669	17,018	83,555	95%	87,919
	<b>TOTAL INCOME</b>	<b>198,614</b>	<b>167,267</b>		<b>1,829,443</b>	<b>1,505,421</b>	<b>324,022</b>	<b>2,007,222</b>		<b>1,668,494</b>
<b>EXPENDITURE</b>										
<b>SPECIES MANAGEMENT</b>										
	POPULATION MONITOR / MMT	431	966	45%	17,039	8,702	8,337	11,600	147%	5,197
	HARVEST ASSESSMENT	0	250	0%	0	2,250	(2,250)	3,000	0%	0
	FISH SALVAGE	0	0	0%	0	0	0	0	0%	0
	HATCHERY OPERATIONS	117	833	14%	10,575	7,501	3,074	10,000	106%	6,488
	RELEASES	0	0	0%	0	0	0	0	0%	0
	REGULATIONS	0	0	0%	0	0	0	0	0%	0
	CONTROL	0	0	0%	0	0	0	0	0%	0
	<b>SPECIES MANAGEMENT-TOTAL</b>	<b>548</b>	<b>2,049</b>	<b>27%</b>	<b>27,614</b>	<b>18,453</b>	<b>9,161</b>	<b>24,600</b>	<b>112%</b>	<b>11,685</b>
<b>HABITAT PROTECTION</b>										
	RESOURCE MANAGEMENT A...	3,480	291	1,196%	11,768	2,627	9,141	3,500	336%	32,109
	WORKS & MMT COUNCIL LAND	(612)	291	(210)%	(1,461)	2,627	(4,088)	3,500	(42)%	952
	ASSISTED HABITAT	0	83	0%	0	751	(751)	1,000	0%	3,907
	<b>HABITAT PROTECTION-TOTAL</b>	<b>2,868</b>	<b>665</b>	<b>431%</b>	<b>10,307</b>	<b>6,005</b>	<b>4,302</b>	<b>8,000</b>	<b>129%</b>	<b>36,968</b>
<b>PARTICIPATION</b>										
	ACCESS	104	291	36%	2,554	2,627	(73)	3,500	73%	782
	SATISFACTION SURVEYS	0	416	0%	2,102	3,752	(1,650)	5,000	42%	1,595
	NEWSLETTERS	(465)	1,291	(36)%	14,762	11,627	3,135	15,500	95%	14,486
	OTHER PUBLICATIONS	0	583	0%	0	5,251	(5,251)	7,000	0%	0
	TRAINING	0	375	0%	4,300	3,375	925	4,500	96%	2,727
	CLUB RELATIONS	0	166	0%	694	1,502	(808)	2,000	35%	343
	HUTS	0	0	0%	95	0	95	0	0%	161
	<b>PARTICIPATION-TOTAL</b>	<b>(361)</b>	<b>3,122</b>	<b>(12)%</b>	<b>24,507</b>	<b>28,134</b>	<b>(3,627)</b>	<b>37,500</b>	<b>65%</b>	<b>20,094</b>

**Otago Fish & Game Council  
Profit and Loss - Summary  
for Period Ended May:2014/15**

	Month to Date			Year to Date			Annual Budget	% of Budget	
	Actual	Budget	Variance	Actual	Budget	Variance			
<b>PUBLIC INTERFACE</b>									
LIAISON	0	83	0%	0	751	(751)	1,000	0%	0
COMMUNICATIONS	0	0	0%	539	0	539	0	0%	0
ADVOCACY	0	666	0%	0	6,002	(6,002)	8,000	0%	83
<b>PUBLIC INTERFACE-TOTAL</b>	<b>0</b>	<b>749</b>	<b>0%</b>	<b>539</b>	<b>6,753</b>	<b>(6,214)</b>	<b>9,000</b>	<b>6%</b>	<b>83</b>
<b>COMPLIANCE</b>									
RANGER ADMIN	252	208	121%	609	1,876	(1,267)	2,500	24%	1,388
RANGER TRAINING	0	375	0%	2,266	3,375	(1,109)	4,500	50%	1,054
COMPLIANCE	0	500	0%	36	4,500	(4,464)	6,000	1%	6,555
<b>COMPLIANCE-TOTAL</b>	<b>252</b>	<b>1,083</b>	<b>23%</b>	<b>2,911</b>	<b>9,751</b>	<b>(6,840)</b>	<b>13,000</b>	<b>22%</b>	<b>8,996</b>
<b>LICENCES</b>									
LICENCE PRODUCT/DISTN	0	0	0%	0	0	0	0	0%	0
AGENT SERVICING	(2,193)	41	(5,348)%	650	377	273	500	130%	8,973
COMMISSION	11,142	8,015	139%	83,817	72,138	11,679	96,183	87%	61,803
NZFG LEVIES	223,508	74,503	300%	670,525	670,527	(2)	894,033	75%	633,878
<b>LICENSES-TOTAL</b>	<b>232,458</b>	<b>82,559</b>	<b>282%</b>	<b>754,992</b>	<b>743,042</b>	<b>11,950</b>	<b>990,716</b>	<b>76%</b>	<b>704,654</b>
<b>COUNCIL</b>									
COUNCIL ELECTIONS	0	0	0%	0	0	0	0	0%	0
COUNCIL MEETINGS	319	833	38%	8,288	7,501	787	10,000	83%	16,530
<b>COUNCIL-TOTAL</b>	<b>319</b>	<b>833</b>	<b>38%</b>	<b>8,288</b>	<b>7,501</b>	<b>787</b>	<b>10,000</b>	<b>83%</b>	<b>16,530</b>
<b>PLANNING / REPORTING</b>									
MMT/STRATEGIC PLANNING	0	0	0%	1,270	0	1,270	0	0%	1,229
1821 ANNUAL OWP/BUDGET	0	0	0%	0	0	0	0	0%	247
REPORTING/AUDIT	0	833	0%	12,835	7,501	5,334	10,000	128%	4,008
NATIONAL LIAISON	0	0	0%	34	0	34	0	0%	0
<b>PLAN/REPORT-TOTAL</b>	<b>0</b>	<b>833</b>	<b>0%</b>	<b>14,139</b>	<b>7,501</b>	<b>6,638</b>	<b>10,000</b>	<b>141%</b>	<b>5,484</b>
<b>ADMINISTRATION</b>									
SALARIES	48,372	54,218	89%	500,704	487,969	12,735	650,623	77%	410,293
STAFF EXPENSES	7,708	1,933	399%	8,761	17,401	(8,640)	23,200	38%	10,068
STAFF HOUSES	0	0	0%	0	0	0	0	0%	0
OFFICE PREMISES	4,408	6,954	63%	54,107	62,588	(8,481)	83,450	65%	52,888
OFFICE EQUIPMENT	56	1,531	4%	1,966	13,781	(11,815)	18,374	11%	5,749
COMMUNICATIONS	2,217	2,389	93%	24,140	21,501	2,639	28,666	84%	21,334
GENERAL	116	1,500	8%	7,002	13,500	(6,498)	18,000	39%	14,115
GENERAL EQUIPMENT	0	1,162	0%	5,352	10,458	(5,106)	13,944	38%	4,754
VEHICLES	2,078	5,679	37%	44,830	51,112	(6,282)	68,149	66%	44,251
<b>ADMINISTRATION - TOTAL</b>	<b>64,955</b>	<b>75,366</b>	<b>86%</b>	<b>646,863</b>	<b>678,310</b>	<b>(31,447)</b>	<b>904,406</b>	<b>72%</b>	<b>563,452</b>
DEPRECIATION	6,526	0	0%	58,734	0	58,734	0	0%	58,734
<b>TOTAL EXPENDITURE</b>	<b>307,564</b>	<b>167,259</b>	<b>184%</b>	<b>1,548,894</b>	<b>1,605,450</b>	<b>43,444</b>	<b>2,007,222</b>	<b>77%</b>	<b>1,426,681</b>
<b>Profit (Loss)</b>	<b>(108,951)</b>	<b>8</b>		<b>280,549</b>	<b>(29)</b>	<b>280,678</b>	<b>0</b>		<b>241,814</b>

## Comparison of 2013/14 Fish Season with the 2014/15 Fish Season licence Sales Up To 8<sup>th</sup> June 2015

Channel	FWF	FWA	FWNA	FWJ	FWNJ	FWIA	FWIJ	F24A	F24J	Total	Fish LEQ
Agency	2594	3734	409	434	6	112	15	776	51	8132	
Retail Book	574	1037	0	190	0	37	3	3107	266	5214	
Public Online	1325	1553	559	148	19	64	5	1693	86	5461	
Eyede Call Centre	1	2	1	0	0	1	0	5	0	10	
Mail Order	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>4494</b>	<b>6326</b>	<b>969</b>	<b>772</b>	<b>25</b>	<b>214</b>	<b>23</b>	<b>5581</b>	<b>403</b>	<b>18817</b>	<b>14576</b>
<b>Total Value</b>											
<b>\$1,830,650</b>											

Channel	FWF	FWA	FWNA	FWJ	FWNJ	FWIA	FWIJ	F24A	F24J	Total	Fish LEQ
Agency	2147	3037	0	323	0	113	14	744	39	6417	
Retail Book	1197	2195	0	294	0	340	40	4549	390	9005	
Public Online	1284	1699	0	141	0	92	10	1530	106	4862	
Eyede Call Centre	1	5	0	0	0	3	0	3	0	12	
Mail Order	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>4629</b>	<b>6936</b>	<b>0</b>	<b>758</b>	<b>0</b>	<b>548</b>	<b>64</b>	<b>6826</b>	<b>535</b>	<b>20296</b>	<b>14759</b>
<b>Total Value</b>											
<b>\$1,785,908</b>											

Report Name: Regional Sales Multi Dates

Report Parameters: Regions: Otago

Seasons 1: Fishing 2014/15 ; From: 1/07/2014 To: 8/06/2015

Seasons 2: Fishing 2013/14 ; From: 1/07/2013 To: 8/06/2015

Run on 6/8/2015 1:02:48 PM

\*24 Hour licence count is based on number of days that the licence is valid for. Books are counted from the day they were Processed.

Comparison of 2013/14 Game Season with the 2014/15 Game Season licence Sales Up To 8<sup>th</sup> June 2015

Channel	2014-2015										Total	Game LEQ	Game \$	Total Value
	GWA	GWJ	GWC	GDA	GDJ	GWA	GWJ	GWC	GDA	GDJ				
Agency	2457	209	80	38	3						2787			
Retail Book	863	60	23	0	0						946			
Public Online	554	50	23	15	0						642			
Eyede Call Centre	4	0	0	0	0						4			
Mail Order	0	0	0	0	0						0			
<b>Total</b>	<b>3878</b>	<b>319</b>	<b>126</b>	<b>53</b>	<b>3</b>						<b>4379</b>	<b>3953</b>	<b>\$360,608</b>	

Channel	2013-2014										Total	Game LEQ	Game \$	Total Value
	GWA	GWJ	GWC	GDA	GDJ	GWA	GWJ	GWC	GDA	GDJ				
Agency	2259	212	76	24	1						2572			
Retail Book	1246	126	43	21	3						1439			
Public Online	481	47	26	64	5						623			
Eyede Call Centre	3	0	0	0	0						3			
Mail Order	0	0	0	0	0						0			
<b>Total</b>	<b>3989</b>	<b>385</b>	<b>145</b>	<b>109</b>	<b>9</b>						<b>4637</b>	<b>4089</b>	<b>\$373,223</b>	

Report Name: Regional Sales Multi Dates  
 Report Parameters: Regions: Otago  
 Seasons 1: Game 2015 ; From: 1/07/2014 To: 8/06/2015  
 Seasons 2: Game 2014 ; From: 1/07/2013 To: 8/06/2015  
 Run on 6/8/2015 1:01:05 PM  
 \*24 Hour licence count is based on number of days that the licence is valid for. Books are counted from the day they were Processed.

## **7 Committee Reports**

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**7.1 Clutha Fisheries Trust**

**7.2 NZC Meeting**

## **8 Staff and Technical Reports**

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### **8.1 Mallard Monitoring Pilot Study - M Trotter**

#### **COUNCIL REPORT JUNE 2015**

##### ***Mallard Monitoring Pilot Study***

###### ***Introduction***

Mallards were first released in Otago from English stock in 1867. In 1915 hunting began and by 1919 they were considered to be established in some areas. Releases of migratory North America stock began in 1939 and Otago Acclimatisation Society records indicate these birds were more successful. Extensive propagation continued for several decades. Mallards have since interbred with the native grey duck to the extent that pure grey ducks are considered rare and mallard/grey ducks are seen as one population. Mallards are now considered to be Otago (and New Zealand's) premier gamebird.

In recent years concern regarding mallard duck populations in some parts of the country has resulted in increased efforts to understand their biology and population dynamics by various Fish and Game Councils throughout New Zealand.

In Otago the mallard hunting season starts on the first weekend of May and runs for three months, the daily bag limit is 25 birds. Hunter harvest is estimated by phone interviews with a randomly selected sample of 120 hunters immediately after opening weekend, and then every two weeks thereafter. Hunters are asked how many birds they shot and the location of their hunting. Average opening weekend bags in Otago since 1992 have varied between from 7-13 birds, and the overall average is 10. In 2014 and 2015 opening weekend the average was 7. Since 2000, the estimated total season mallard harvest in Otago has varied between 41,882 and 81,466 birds and averaged 55,689 birds.

There are many factors affecting mallard population dynamics such as weather patterns, breeding habitat, predation and hunting. Fish and Game Officer Matt McDougall estimated mortality from hunting mallards in the Eastern region of New Zealand at between 0.05 and 0.10 for adults, and 0.15 and 0.20 for young adults depending on the season length. Season length in Eastern is typically around 70 days, whereas season length has been around 90 days in Southland and Otago during the same period.

Accurate information on population trends allows managers of game resources to make informed decisions when setting harvest regulations. However accurately assessing population dynamics of such a highly mobile species such as mallard ducks is inherently difficult. To gather baseline data to inform future management decisions various Fish and Game regions have begun aerial monitoring. Whilst many regions employ light planes, Otago staff decided to trial an R22 helicopter (as used in Southland) in an attempt to improve counting accuracy.



## ***Methods***

The pilot study employed in Otago was largely based on methodology used by Southland Fish and Game, which has been refined over the last three years. The flight was conducted on April 16.

The initial flight plan (Figure 1) comprised of 46 ponds, seven 10 km river transects and ten 10 km cross country transects. These sites were chosen at random from a database showing all visible ponds on Google earth throughout South Otago. This area was chosen as it is considered to be a stronghold of mallard ducks in Otago.

Sites with more than approximately 50 birds were photographed and later counted on a computer. The use of the helicopter (as opposed to a plane) enables improved species distinction, visibility and ease of photography, as well as observation of birds that would otherwise remain under cover. When birds are detected under willow cover on a river or pond, the helicopter can hover until the birds swim out into view.

Mallards sometimes flew off the water body before they could be counted. If this occurred an estimate of the total present was made. Generally however they stayed on the water and the helicopter was positioned to get a good view but at a height that did not put the birds off the water. This was usually around 50 – 80 m.

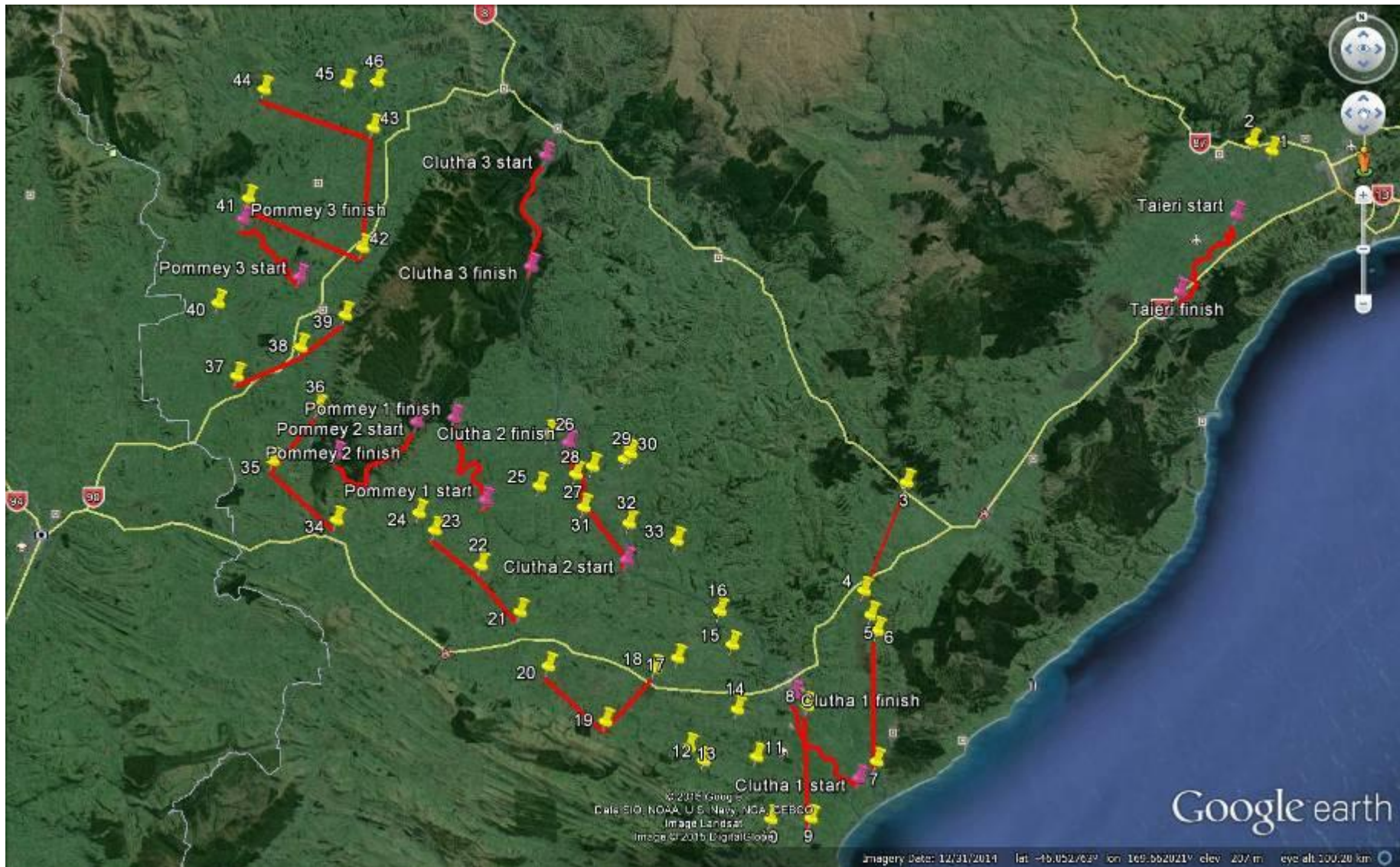


Figure 1: Otago 2015 mallard monitoring flight plan

**Results**

*Table 1: 2015 Otago mallard counts (NC = no count)*

<b>Site</b>	<b>Mallard</b>	<b>Site</b>	<b>Mallard</b>
1	2	27	0
2	0	28	77
Taieri start	1560	29	0
Taieri finish		30	9
3	32	31	0
Transect 1	101	32	0
4	0	33	26
5	0	Clutha 2 start	225
6	0	Clutha 2 finish	
Transect 2	182	Pomahaka 1 start	683
7	0	Pomahaka 1 finish	
Clutha 1 start	610	Pomahaka 2 start	39
Clutha 1 finish		Pomahaka 2 finish	
8	44	34	2
Transect 3	58	Transect 6	27
9	71	35	0
10	17	36	16
11	0	37	3
12	13	Transect 7	6
13	3	38	6
14	56	39	40
15	22	40	NC
16	16	Pomahaka 3 start	NC
17	0	Pomahaka 3 finish	NC
18	13	41	NC
Transect 4	3	Transect 8	NC
19	35	42	61
20	2	Transect 9	25
21	0	43	0
Transect 5	595	Transect 10	NC
22	430	44	NC
23	2	45	NC
24	12	46	21
25	62	Clutha 3 start	47
26	11	Clutha 3 finish	

### ***Discussion***

As this is the first year of data gathering no inference about population trends can be made.

Large concentrations of mallards were noted on reaches of the lower Taieri and Clutha rivers and select ponds throughout South Otago. Staff suspected that these birds were loafing on these waters during daylight hours before flying to nearby crops to feed at night.

The R22 helicopter proved to be a stable platform upon which to count and photograph birds. Motion sickness which can be result in observer fatigue during prolonged duck trend count flights when using light planes was avoided.

Approximately 90% of the original flight plan was completed successfully within budget before we had to return to due to refuel. The total flight time was 4.8 hours.

A wire strung across the gorge on the second Pomahaka River transect was of some concern and it is recommended that this transect is omitted from future studies.

### ***Recommendation***

That this methodology is repeated annually to gather population information and better inform the regulation setting process.

### ***Acknowledgements***

I would like to thank Southland staff for their assistance.

**Morgan Trotter**  
**Fish and Game Officer**

### ***References***

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Soulsby, R. 1982. Duck Harvest and the 1982 Duck shooting Season in Otago. Masters Thesis. Otago University.

## 8.2 Lake Hayes Brown Trout Monitoring - P van Klink

### COUNCIL REPORT JUNE 2015

#### LAKE HAYES BROWN TROUT MONITORING May 2015

##### Background

Public concern was raised in 2012 regarding declining numbers of spawning trout in Mill Creek; the predominant spawning stream for the Lake Hayes fishery. The brown trout observed in March 2012 were noted to be in poor condition. This appears to be a re-occurring issue as trout in Lake Hayes observed in 2007 were also in very poor condition. This was following an algal bloom event during the preceding summer (Trotter, 2007).

As a result of the 2012 observations, a monitoring programme was established in 2013 with an aim of monitoring the health of the brown trout during their spawning run over a 3 year period. This report is the third year of the monitoring.

##### 2015 Field Work

A total of 6 fyke nets were set in Mill Creek over night on 27 May 2015 to sample, monitor and return brown trout to the Lake Hayes spawning run. A series of 3 fyke nets were set in the upper reach of Mill Creek, below the water fall pool. A second series of 3 fyke nets were set in Mill Creek adjacent to private land adjoining Waterfall Park.

The nets were checked the following morning (28<sup>th</sup> May) and only 1 of the 6 nets caught brown trout (n= 2) overnight. A further 3 trout were caught in hand nets in the morning. All fish were weighed, measured and released in the same location. Conditioning factors were calculated from the data collected. The average conditioning factor is considered as a fair representation of the general condition of fish in the spawning run.

The flow in Mill Creek was high, clarity was average, and a significant amount of in-stream debris and leaf material was noted during sampling.

##### Results

The total sample of 5 trout captured was made up of 4 jacks and 1 hens (plus 2 small juvenile -unsexed). The chart below compares the sample sizes, average fork length, weight, condition factor and maximum weight of brown trout sampled from Mill Creek, over the past 3 seasons.

A conditioning factor of 1.0 is considered to represent a fish in mean/average condition, with 1.4 representing optimal condition. At the point of capture the majority of this sample was measured during peak physical condition (just prior to spawning).

Table 1. Average length and weight, maximum weight and average condition factor of brown trout in Mill Creek 2013 – 2015.

Sample Year	No. of fyke nets	No. nights set	Sample Size	Average Length	Average Weight	Maximum Weight (g)	Average Condition Factor
2013	10	2	41	455.3 mm	1229 g	2280 g	1.15
2014	7	1	55	508.6 mm	1651 g	2640 g	1.23
2015	6	1	5	515.0 mm	1606 g	2200 g	1.16



*Photo 1: One of 6 Fyke nets set in Mill Creek 27 May 2015*



*Photo 2: Queenstown based honorary ranger Brent Duncan assisting with fishery monitoring in Mill Creek*

## Discussion

The number of brown trout observed in Mill Creek and caught in fyke nets in 2015 in was down substantially by comparison with previous years. Although a number of fish were observed in the stream the fyke nets did not catch as well as previous years. It was considered that the high flow combined with a large amount of in-stream debris (which lodged on the nets) caused a reduction in the effectiveness of the fyke nets. There was also very little sign of spawning activity and it appeared that the main spawning run was yet to arrive. Despite the lack of brown trout caught and measured in the 2015 sample, the fish that were caught and handled were considered to be healthy and in above average condition.

The periodic Lake Hayes water quality issue continues to be of concern to Fish and Game. The continued recurrent algal blooms are considered to pose a significant and ongoing threat

to the health of the brown trout fishery and lake ecosystem. Otago Fish and Game Officer Helen Keeling together with University of Otago Research Fellow Dr Marc Schallenberg will commence a study of Lake Hayes in August 2015 to investigate the lake food web and potential restoration options.

### **Conclusion**

The annual monitoring of the Lake Hayes brown trout spawning run in Mill Creek has collected data over 3 consecutive years. The data is consistent between years and it suggests that the fish are healthy. Further monitoring should not be undertaken unless circumstances change and it is deemed necessary to check on the condition of the fish.

### **Recommendations**

**That the report be received**

**That Otago Fish and Game staff continue to liaise, collaborate and consult with interested parties concerning the restoration of the Lake Hayes ecosystem.**

Paul van Klink  
Fish and Game Officer  
28/05/15

### **References**

Trotter; M. 2007. COUNCIL REPORT, APRIL 2007. LAKE HAYES WATER QUALITY. Internal Report, Otago Fish & Game Council, Cromwell.

### 8.3 2015 Game Season Opening - C Halford

## COUNCIL REPORT JUNE 2015

### PROJECT 1511: 2015 GAME SEASON OPENING

#### **Seasons Predictions**

The Otago Region experienced moderate rainfall over spring and good brood numbers were reported. A very dry summer followed and developed into drought conditions which significantly lowered water levels throughout the region particularly in Central and North Otago areas. Rain eventually arrived in April with steady falls throughout the month improving river flows and improving ponds levels. Aerial counts undertaken by Fish and Game Officer Morgan Trotter on April 16 as part of a national mallard monitoring exercise revealed healthy numbers of mallard ducks on sections of the lower Taieri and Clutha rivers and larger ponds in South Otago. While there were good numbers of ducks in these areas an average opening weekend across the region was expected.

#### **Pre Season Promotions**

Two pages were provided for the national magazine, an eight page newsletter mail out was sent to licence holders, information was posted on the Fish and Game website including material for 'Both Barrels', and a range of articles with advertising featured in regional newspapers.

Otago staff interacted with shooters and spoke at pre-season gun club promotional shoots in Dunedin (2) Wanaka (1) and local agents were visited. Shotgun patterning sheets were widely distributed.

A complete promotions and media schedule has been provided as an appendix to this report.

#### **Ranging Programme**

Four staff-managed ranging teams were organized for the Omakau, Owaka, Clinton, and Lower Clutha areas and two honorary ranger support teams had planned ranging for Lake Waipori and around Waikoikoi.

All staff and rangers were briefed on safety and procedural guidelines, and reporting requirements under the Search and Surveillance Act 2012.

#### **Results and Summary of Offences**

Rangers interviewed 145 hunters reporting generally good behavior but five hunters were issued notices for lead shot offences and there was one 'no licence' offence near Waikoikoi. A further six hunters were issued notices for failing to produce (FTP) licences which have since been cleared.



This provides overall compliance of 92% inclusive of (FTP's) and 96% exclusive of (FTP's). While the illegal use of lead shot by a minority continues to occur, negative feedback from hunters about the performance and quality of steel shot ammunition is tapering off.

### **Success and Satisfaction**

Clear calm conditions throughout most of the region and some early morning fog made hunting difficult for the majority of hunters but as usual those that prepared well on the larger waters or on well fed ponds obtained some good tallies. Many hunters interviewed by rangers on the opening day were reasonably happy with the numbers of birds seen in their respective areas but dragging them into decoys in the calm conditions was not easy. Motion decoys were a big advantage particularly on the larger public waters. In all it was a slow start to the season for most hunters.

### **Recommendation**

**That this report be received**

Cliff Halford  
Fish and Game Officer  
June 2014

## 8.4 Low Flow Observations 2014/15 - H Keeling

### COUNCIL REPORT JUNE 2015

#### *Environmental observations from the 2014/2015 summer low flow period*

Drought conditions during the 2014/2015 irrigation season resulted in widespread low flows and complete drying of river reaches across the Otago Region. For rivers and streams without appropriate minimum or residual flows the effects of the drought conditions were significant, and small tributaries in particular were often worst affected. The impacts were most severe in catchments where water abstraction is currently over-allocated as a result of historical mining privileges.

The range of observed drought effects documented by Fish & Game staff in the Otago region included:

- Decreased area of available habitat
- Reduced habitat diversity
- Loss of flow variability and 'flat-lining' of rivers
- Drying reaches and very shallow water
- High temperatures
- Low dissolved oxygen
- Periphyton proliferations
- Stressed fish, stranded fish and fish kills
- Impacts on fish passage, loss of connectivity
- Reduced fish cover (very shallow water, loss of turbulence and retraction from banks/overhanging vegetation)
- Increased predation pressure

In general it was observed that the drought conditions experienced this season affected the quantity and quality of aquatic habitat for trout and other fish species, as well as their invertebrate food sources. Direct impacts on survival were documented; however research in the Lindis River has found that stranded fish are heavily predated by wading birds, and trout which perish are quickly removed by a range of scavenger species. Therefore although fish mortalities will have occurred wherever streams or rivers ran dry, these have only been documented when a site was being closely monitored. Furthermore sub-lethal deleterious effects associated with extended low flows were likely common as the conditions observed would have been stressful for aquatic life. Low flows also impacted recreational and amenity values, as reported to staff by recreational anglers and other river users.

The drier than normal conditions of the 2014/2015 summer saw many rivers reach lower than normal levels and remain at their lowest levels for a longer period of time than in an average season. Where appropriate minimum flows exist such as for the Taieri River, downstream reaches were protected but upstream tributaries like the Kye Burn were still severely affected. However in the case of the Manuherikia River an existing minimum flow failed to protect

downstream reaches; the actual, very low minimum flow at Ophir was masked by water transport, while the lower river below Galloway was badly affected. It is also noted that for some Otago rivers and tributaries without appropriate minimum or residual flows in place, water abstraction can result in drought like conditions on an annual basis.

It is Fish & Game's position that no river should run dry as a result of water abstraction and that ecosystem health and amenity values must be provided for. Fish & Game have concerns about ORC's determination of 'natural drying' particularly where there is lack of long term flow data, uncertainty regarding hydrology (surface and ground water interactions), or unmetered takes within the catchment. While streams may experience natural low flows and drying, the exacerbating effect of water abstraction in extending the extent and period of such conditions should not be discounted.

The information presented here is based on observations made by Fish & Game staff over the summer low flow period of 2014/2015. Also listed are relevant observations from Fish & Game associates reported to staff. A selection of photos have been included, however in some instances additional photos may be available if there is further interest. Some observations were made during the course of routine summer field work, while others were the result of specific site visits to investigate drought effects and extent of low flows and dewatering, at selected sites across Otago. The observations presented therefore should not be considered an exhaustive account of drought impacts in the region but a broad overview detailing the range and severity of conditions experienced, including examples of less impacted sites.

## Cardrona River

<b>Location</b>	70 m upstream from State Highway 6 Bridge
<b>Date</b>	11 January 2015
<b>Time</b>	1:30 pm
<b>Purpose of visit</b>	Low flow site inspection
<b>Staff present</b>	Cliff Halford

### Observations

- Water temperature of 15oC recorded in the shallow pool shown in the photo below (cool because of subsurface flows upwelling)
- No fish seen
- River bed was dry at the time of inspection from this point upstream to the Ballantyne Road Bridge
- Flows started disconnecting downstream from the Ballantyne Road Bridge at the end of December 2014
- Dry bed persisted until late April when a minor connection was observed



*Through gravel flows resurface at this point and steadily increase downstream,  
11 January 2015*

**Location** Cardrona at Maxwell Road  
**Date** 11 and 16 January 2015  
**Time** Afternoon  
**Purpose of visit** Low flow site inspection  
**Staff present** Cliff Halford

**Observations**

*11 January*

- Water Temperature 22°C
- The river previously flowed in two main channels but flows were now disconnected
- Filamentous algae growth was prolific and choking the remaining flow
- A small number of bullies were observed at this point, no trout seen

*16 January*

- Water temperature 24°C
- A number of pied oystercatchers observed feeding in the remaining flow
- The true right channel was disconnected and a remaining pool was choked with filamentous algae
- Several yearling trout and bullies were seen trapped in the pool; a white faced heron actively feeding - pools in the vicinity eventually dried
- Around E1294755 N5039229 upstream between Maxwell Road and Mt Barker Road, six adult trout and several 1+ trout seen in separate isolated pools
- A minor flow increase near 20 January prompted fish to migrate further downstream but these were eventually trapped as flows receded again



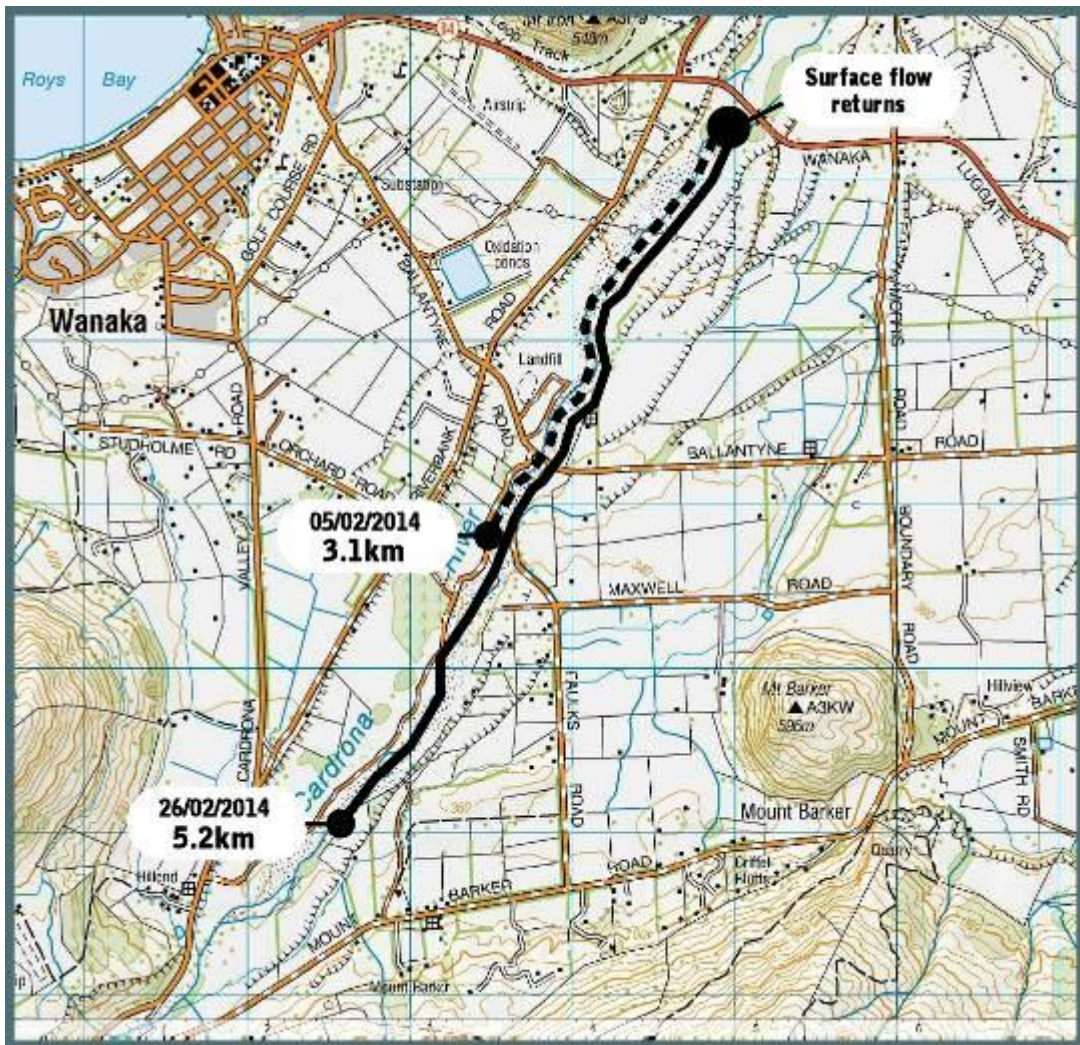
*True left channel disconnected with prolific algae growth*



*Isolated and stagnant pools which held trapped juvenile trout*



*Pied oystercatchers feeding in the disconnected, receding flow*



*The extent of the drying reach in 2014 (which was similar in 2015)*

## Kye Burn

**Location** Lower Kye Burn and Scott Lane

**Date** 22 January 2015

**Time** 12 pm

**Purpose of visit** Low flow observation

**Staff present** Steve Dixon

### Observations



*Scott Lane Bridge upstream (left) and downstream (right), 22 January 2015*



*Water take ~ 900 m downstream from Scott Lane, 22 January 2015*

- The river was completely diverted into the water take approximately 900 m downstream from the Scott Lane Bridge.
- Dozens of 0+ (young of the year) brown trout were observed stranded in several isolated pools in the main stem river just below the take.





*State Highway 85 Bridge upstream (left) and downstream (right), 22 January 2015*



*Lower Kye Burn ~4 km downstream from the State Highway 85 Bridge, 22 January 2015*

- Flow was very low and the water was very shallow at this point. Some brown trout (around 2 lbs) were observed in residual pools where deeper water was present.

**Location** Lower Kye Burn

**Date** 26 January 2015

**Time** 12 pm

**Purpose of visit** Low flow site inspection

**Staff present** Helen Keeling, Steve Dixon

### Observations

- Flows were very low in the reach below the end of Clunie Road, with water depths of just 5-10 cm.
- A few areas of slightly deeper water were present along the banks in places however the river ran dry ~2 km downstream from the ford at the end Clunie Road (see map below).
- Within the dry reach a few small residual pools remained although these were disconnected from any surface flow.
- These pools which appeared to be slowly drying up, do not offer refuge habitat for aquatic species. No fish were observed.
- A large number of gulls and a number of herons were observed in the lower river.
- Flows resurfaced approximately 500 m upstream from the confluence with the Taieri; the dry reach was approximately 1.8 km long.
- Thick dark brown/black algae was present in the reach downstream from where the flow resurfaced; suspected to be *Phormidium*



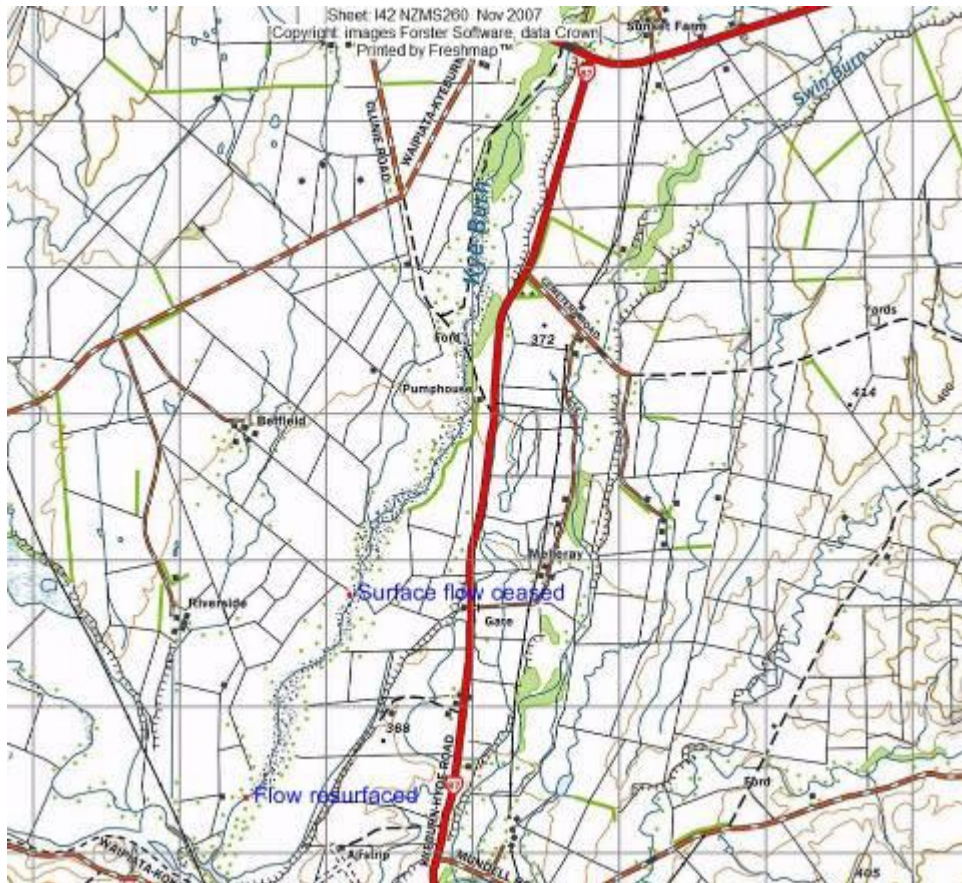
*Dry river bed in the lower Kye Burn 26 January 2015*



*Residual surface water in the lower Kye Burn, 26 January 2015*



*Recently dried up area of residual water in the lower Kye Burn, 26 January 2015*



*Location of dry reach in the lower Kye Burn, 26 January 2015*



*Resurfaced flow in Kye Burn and suspected Phormidium, 26 January 2015*

<b>Location</b>	Lower Kye Burn
<b>Date</b>	9 February 2015
<b>Time</b>	2 pm
<b>Purpose of visit</b>	Low flow site inspection
<b>Staff present</b>	Peter Wilson

#### **Observations**

- Water flow through the section of river between Clunie Road and the confluence with the Taieri was significantly reduced.
- The sections of flow over the gravels provided bare connectivity but with limited ability for fish to move. The depth of water in these reaches was around 5 cm or less.
- There were occasional channels and pools which could have provided some habitat but no fish were observed in these.
- At a point approximately 2 km below Clunie Road (identified as the same location as on 26 January) the flow disconnected.
- Flows resurfaced in the Kye Burn approximately 1 km beyond this point (at a location upstream of the location identified on 26 January).



*Shallow water below Clunie Road in the lower Kye Burn, 9 February 2015*



*Residual pool in the lower Kye Burn, 9 February 2015*

## Lindis River

**Location** Downstream of Lindis Crossing

**Date** 29 - 31 December 2014

**Time** Late morning-afternoon

**Purpose of visit** Low flow monitoring

**Observer** Cliff Halford

### Observations

*29 December*

#### *Lindis Crossing*

- Time of visit 11 am, flow recorder at Ardgour approximately 500 l/s
- Water temperature 15.5°C
- Flow dropping quickly
- Didymo visible along the stream edge
- Spot electrofishing found upland bullies were abundant, 1 rainbow trout (160mm) 3 brown trout (65mm, 75mm, 158mm)
- One white Heron seen hunting a short distance downstream

*~ 600 m below Lindis Crossing*

- Time of visit 1:20 pm
- Water Temperature 19°C
- Flow dropping quickly with algae growing rapidly
- Upland bullies were common, no trout seen
- 3 white faced herons and 2 pied stilts present in the area

*~ 850 m below Lindis Crossing*

- Time of visit 1:30 pm
- Water temperature 19°C
- Very little flow
- Upland bullies observed, no trout seen
- 2 white faced herons seen

*~ 1 km below Lindis Crossing (~ 300 m upstream from the Clutha Confluence)*

- Time of visit 1:45 pm
- Water temperature 20°C
- Very low flow, barely connected
- Very significant algal growth
- Upland bullies present
- 1 white faced heron seen

*Clutha Confluence \*

- Time of visit 1:50 pm
- Water temperature 21°C
- Very significant algal growth
- Very little flow, barely connected

*30 December*

*~ 1 km below Lindis Crossing (~ 300 m upstream from the Clutha Confluence)*

- Time of visit 3:15 pm
- Flow recorder at Ardgour approximately 470 l/s
- Water temperature 19°C
- Very little flow, loss of connection with the Clutha
- No trout seen, bullies were trapped in a residual drying pool near the confluence
- Birds had been present on the drying bed

*31 December*

*~ 600 m below Lindis Crossing*

- Time of visit 3 pm
- Flow recorder at Ardgour approximately 517 l/s
- Water temperature 22°C
- Very little flow
- Algae growth was extensive

*~ 850 m below Lindis Crossing*

- Time of visit 3:15 pm
- Water temperature 22°C
- Flow was almost disconnected at this point and fully disconnected a short distance downstream and was dry to the Clutha River confluence
- 2 pied stilts observed





*~ 1 km downstream from Lindis Crossing on 29 December (top) and 30 December (bottom) 2014*

<b>Location</b>	Lower Lindis, Lindis Crossing to Beggs Stackpole Race
<b>Date</b>	January - February
<b>Time</b>	Various (daily field work)
<b>Purpose of visit</b>	Fisheries research, juvenile trout study
<b>Staff present</b>	Morgan Trotter, Helen Keeling, Cliff Halford, Aaron Horrell (Clutha Fisheries Trust)

### **Observations**

#### *Low flows and drying*

- On 7 January 2015 the lower Lindis River was inspected and was found to run dry approximately 830 m below Lindis Crossing. In the reach directly above this point the remaining water was very shallow, periphyton growth smothered the substrate, there was little to no visible flow and no viable habitat for fish life.
- The drying reach was observed extending up to approximately 1 km above Lindis Crossing in January and February
- Drying of the reach upstream from Lindis Crossing occurred approximately 6 weeks earlier than observed in 2014.
- Some intermittent pools remained within the upper extent of the drying reach, however these were disconnected from flow and did not provide refuge for fish.
- Flows were significantly reduced over extended reaches of the lower Lindis resulting in very shallow water.
- Shallow water reduced cover for fish and as the channel retracted from the banks cover (and shading) from overhanging vegetation and undercut banks was lost.
- Mesohabitat diversity was reduced as reduced flows resulted in the loss of bubbly riffles and the river became dominated by slow runs and pools in the lower reaches.
- There was a loss of connectivity throughout the lower river; not only from the Lindis to the Clutha but between reaches in the Lindis as areas of very shallow water would have impeded fish passage particularly for sub-adult and adult trout.
- Low flow conditions and loss of connectivity extended until April 2015. A site visit to the lower river on 19 April found the river was still disconnected with the mainstem from approximately 1 km downstream of Lindis Crossing.



*Most downstream wetted area below Lindis Crossing (left) and downstream from Lindis Crossing (right), 7 January 2015*



*Reach upstream from Lindis Crossing 12 January 2015 (left, looking downstream) and 16 January 2015 (right, looking upstream; thick algae smothering the substrate is visible as it was still wet)*

#### *Periphyton Growth*

- Periphyton growth was excessive and at nuisance levels throughout much of the lower river, smothering the substrate and severely degrading habitat values for aquatic life as well as recreational and amenity values. Cover often exceeded 90% of the stream bed. Didymo growth was prolific. Green filamentous algae and *Phormidium* was also observed.
- Experienced staff members noted that algae coverage was the highest that had seen in the Lindis River before.
- An extended period of low flows or ‘flat-lining’ would have contributed to periphyton proliferation, as well as warm temperatures, long sunny days, low water velocity and nutrient levels.

- It is suspected that ground water upwelling may be inhibited periphyton proliferation in some reaches of the lower river, as some reaches had less algae cover.



*Prolific algae growth observed in the lower Lindis River, 19 January 2015*



*Algal cover observed in the lower Lindis River, 19 January 2015*



*Periphyton smothered the substrate degraded the habitat for aquatic life including trout, longfin eels and upland bullies*



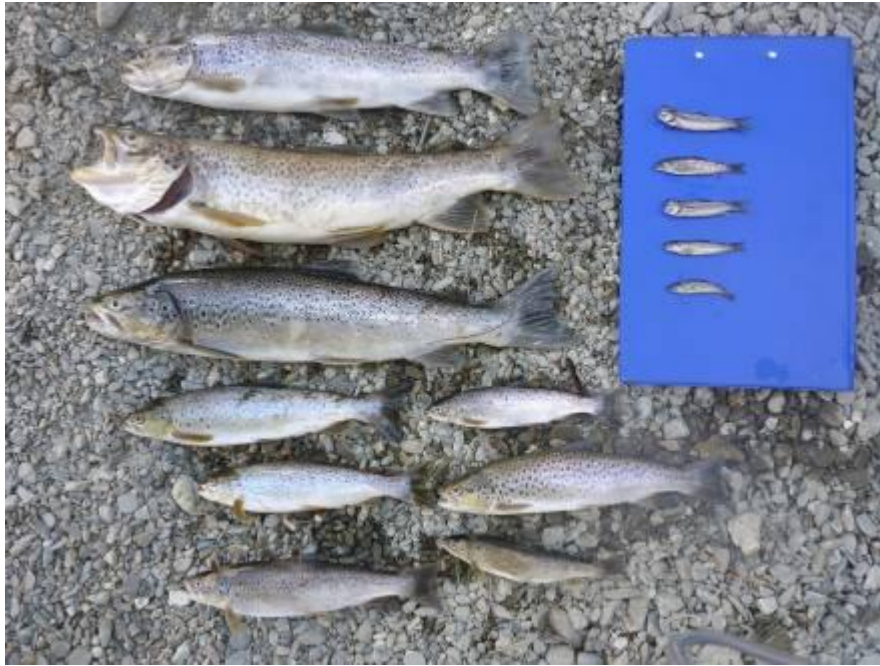
*Thick biofilm and green filamentous algae in the Lower Lindis, 26 February 2015*



*Phormidium observed in the lower Lindis River, 2015*

#### *Fish mortalities*

- Juvenile and adult brown trout, upland bullies and longfin eels were captured in the lower Lindis study reach.
- Fish kills were observed near Lindis Crossing where trout and bullies became stranded and perished. Rapidly retreating flows and very shallow reaches inhibiting fish passage (particularly for larger fish), are suspected to have prevented these fish from moving upstream to seek refuge habitat.
- Low flows reduced cover for fish making them vulnerable to increased predation pressure from wading birds



*A sample of stranded trout in recovered from residual pools at Lindis Crossing, 16 January 2015*



*Stranded trout in a residual pool at Lindis Crossing, 16 January 2015*





*Stranded bullies in dried up residual pool at Lindis Crossing, 17 January 2015*

#### *Additional Habitat Observations*

- Temperatures of up to 21°C were recorded in the lower river in early February.
- In situ dissolved oxygen monitoring was conducted on 18 and 19 February at three sites in the lower Lindis prior to dawn and in the mid afternoon to measure the daily minimum and maximum levels:

Site	Average % Saturation	
	Sunrise	Mid-afternoon
1	84.2	108.5
2	84.7	111.0
3	53.0	80.7

- Significant diurnal fluctuations and dissolved oxygen levels below the 80% saturation level recommended for aquatic life were observed.
- It is suspected that groundwater upwelling influences the temperature and dissolved oxygen levels in some reaches of the lower river.
- Observations of invertebrates on 28 January found abundance was low compared to the Upper Lindis sites near Elliots Bridge. Smooth cased caddis (*Olinga feredayi*) were observed in low numbers as well as the occasional free living (*Aoteapsyche* sp. Mayfly observations were rare.

**Location** Ardgour Road  
**Date** 13 February 2015  
**Time** 1 pm  
**Purpose of visit** Low flow site inspection  
**Staff present** Morgan Trotter  
**Observations** Low flow and drying

- There was little to no cover for fish where surface water remained especially in riffles/runs.
- There is a significant losing reach above this point where the river bed can be dry for several kilometres.



*Upstream from Ardgour Road Bridge, 13 February 2015*



*Looking downstream from Ardgour Road Bridge, 13 February 2015*

<b>Location</b>	Upper Lindis, Elliots Bridge
<b>Date</b>	29 January, 18 & 19 February, 28 February 2015
<b>Time</b>	Day
<b>Purpose of visit</b>	Habitat assessments
<b>Staff present</b>	Aaron Horrell (Clutha Fisheries Trust), Morgan Trotter

### Observations

- Habitat was assessed across three reaches near Elliots Bridge covering a range of flow/habitat types. Water clarity was excellent throughout the three reaches.
- During the assessment on 29 January water temperature (measured in the slower runs) averaged 17.7°C.
- Algae was sparse with scattered patches of brown algae forming <2-3% cover. No significant mats of didymo or green filamentous algae were observed.
- Two species of caddis larvae, free living (*Aoteapsyche sp*) and smooth cased (*Olinga feredayi*), were abundant throughout all three reaches. Mayfly (*Deletidium sp*) were also present but in lesser numbers.
- In situ dissolved oxygen (DO) monitoring on 18 and 19 February found excellent DO levels and recorded a small diurnal fluctuation; average saturation ranging from 96% prior to dawn to 104% in the mid afternoon.
- Electrofishing indicated that juvenile trout numbers were moderate to abundant



*Sustained flow of water and substrate clear of significant algae growth, Upper Lindis River at Elliots Bridge, 28 February 201*

## Manuherikia River

<b>Location</b>	Galloway (upstream from road bridge)
<b>Date</b>	27 January 2015
<b>Time</b>	11 am
<b>Purpose of visit</b>	Low flow site inspection
<b>Staff present</b>	Niall Watson

### Observations

- Algae (green filamentous) was covering 30% of gravel bed.
- Water level had obviously dropped recently, reducing wetted area and leaving algae to dry out.
- Water temperature was measured at 22° C at 11.15 am.
- No fish life was observed.
- The river looked degraded.



*Manuherikia at Galloway 200 m upstream from the road bridge, 27 January 2015*



*Retreating water and recently dry river bed, Manuherikia at Galloway, 27 January 2015*



*Shallow pool, Manuherikia at Galloway, 27 January 2015*



*Weed growth in shallow pool, Manuherikia at Galloway, 27 January 2015*

## Donald Stuarts Creek

**Location** Upstream from Loop Road Bridge

**Date** 12 January 2015

**Time** 2 pm

**Purpose of visit** Low flow site inspection

**Staff present** Peter Wilson

### Observations

- The creek was observed to run dry upstream from the Loop Road Bridge.
- Electrofishing of this reach in November 2014 found brown and rainbow trout of multiple year classes as well as upland bullies.



*Point of drying just upstream from Loop Road, Donald Sturarts Creek, 12 January 2015*



## Hills Creek

<b>Location</b>	Hills Creek, Oturehua
<b>Date</b>	27 January 2015
<b>Time</b>	12 noon
<b>Purpose of visit</b>	Low flow site inspection
<b>Staff present</b>	Niall Watson

### Observations

- Flow had ceased leaving isolated pools upstream and downstream.
- Heavy weed growth was observed in remaining shallow water.
- No fish life was observed.
- A local resident reported rescuing a large trout from a pool in this reach on 26 January and moving it to a nearby pond.



*Hills Creek upstream from the Hill Creek Road bridge, 27 January 2015*



*Hills Creek downstream from the Hill Creek Road bridge, 27 January 2015*

## Quartz Creek

<b>Location</b>	Lower Quartz Creek upstream from Lake Wanaka
<b>Date</b>	2 December 2014
<b>Time</b>	Day
<b>Purpose of visit</b>	Fish salvage
<b>Staff present</b>	Cliff Halford, Helen Keeling, Morgan Trotter

### Observations

- Water levels were very low, with flow barely connecting in places, and the creek almost running dry in lower reaches. The low water levels would have been an obstacle to fish passage.
- Groups of adult trout (10-20+ fish) were observed holding in small residual pools. These fish would have eventually perished if not salvaged as fish passage up or downstream was not possible and conditions would have soon become hostile to aquatic life.
- 50 adult rainbow trout, 139 juvenile rainbow trout, 4 juvenile brown trout and 7 koaro were salvaged from approximately 500 m in the lower reaches.
- The dam and water take approximately 2.5 km upstream from Lake Wanaka was visited. The main surface flow was diverted into the race. The race intake is not screened and presents a considerable entrainment risk to fish. Both upstream and downstream fish passage is severely impacted by this structure. This is a reoccurring issue resulting in unacceptable impacts on fisheries values.



*Adult trout stranded in a residual area of deeper water*



*Koaro caught in Quartz Creek*



*Adult trout stranded in residual water in the lower creek*



*Water diversion structure in Quartz Creek*



*Stranded rainbow trout congregated below the dam structure in 2010*

## **Shag River**

<b>Location</b>	Horse Range
<b>Date</b>	January-February
<b>Time</b>	Not reported
<b>Purpose of visit</b>	Recreational fishing
<b>Staff present</b>	None (report received from Mike Rawlison)

### **Observations**

- Flow stopped at Horse Range Rd 13 January 2015
- River became disconnected in the riffles throughout the lower reaches
- Signs of reduced feeding (stress) in trout when fishing from 13 January onwards
- Observed some black trout (suspected to be blind)

<b>Location</b>	Shag River
<b>Date</b>	February
<b>Time</b>	Not reported
<b>Purpose of visit</b>	Recreational fishing
<b>Staff present</b>	None (report received from Thomas Mainella and Sam Sigal)

- Several completely blind adult trout were observed in the Shag River between Horse Range and the Asparagus farm (see photos below)



*Blind trout observed by anglers in the Shag River, February 20*

## Taieri River

<b>Location</b>	Kokonga Bridge, mainstem Taieri River
<b>Date</b>	19 February 2015
<b>Time</b>	10 – 2 pm
<b>Purpose of visit</b>	Cumulative effects programme (electrofishing survey, habitat assessment, invertebrate sampling)
<b>Staff present</b>	Helen Keeling, Morgan Trotter, Steve Dixon

### Observations

- A quantitative electrofishing survey and habitat assessment was undertaken after an extended period of the river being near or below minimum flow.
- 30 brown trout from multiple age classes were caught from a 110 m reach of river.
- Juvenile young of the year trout were most common.
- One adult trout ~400 mm was caught and appeared to be in good condition. Stomach contents sampling found only invertebrates.
- 6 longfin eel were also caught from the site ranging in size from 125 mm – 650 mm
- The flows provided a diversity of instream mesohabitat types, ranging from smooth to broken water, with good connectivity between pools, runs and riffles and a range of depths throughout the site.
- A habitat assessment found no significant algal growth at the site, although there was a high percentage of fine sediment and sand in some areas.
- The section of river was well shaded and there was good instream cover for fish including woody debris and undercut banks.



*Survey site at Taieri River at Kokonga Bridge, 19 February 2015*



<b>Location</b>	Along Mareburn Road near Hyde, mainstem Taieri River
<b>Date</b>	20 February 2015
<b>Time</b>	10 – 4 pm
<b>Purpose of visit</b>	Cumulative effects programme (electrofishing survey, habitat assessment, invertebrate sampling)
<b>Staff present</b>	Helen Keeling, Morgan Trotter, Steve Dixon

### **Observations**

- A quantitative electrofishing survey and habitat assessment was undertaken after an extended period of the river being near or below minimum flow.
- 144 brown trout from multiple age classes were caught from a 130 m reach of river. Fish ranged from 64 – 387 mm, with juvenile young of the year trout the most common.
- Stomach contents sampling of trout > 200 mm found only invertebrates.
- Both the juvenile and older trout were noted to be in good or very good condition.
- 12 longfin eels were caught from the site ranging from 145 -950 mm.
- Excellent habitat diversity was present at the site with a range of depths and instream mesohabitat types (pools, runs and riffles)
- A high percentage cover of algal growth was present throughout the site with a fine brown biofilm cover most of the substrate and filamentous green algae in places.
- The site was partly shaded along on bank and good instream cover was present including undercut banks, and large cobbles and boulders.
- Staff considered that the general stream health was holding up well considering the prolonged dry conditions.



*Electrofishing site (looking downstream) along Mareburn Road, Taieri River, 20 March 2015*



*Substrate at site along Mareburn Road, Taieri River, 20 February 2015*



*Electrofishing site (looking upstream) along Mareburn Road, Taieri River, 20 February 2015*

## Trotters Creek

<b>Location</b>	Along Horse Range Road and Trotters Gorge
<b>Date</b>	5 January 2015
<b>Time</b>	Day
<b>Purpose of visit</b>	Fisheries monitoring/research
<b>Staff present</b>	None - report received from Prof. Paul James (University of Otago)

### Observations

- At its lowest the stream was intermittent with subsurface flow.
- No fish kills were observed.
- Filamentous algae was present.
- Spotlighting observations in the middle and upper reaches indicated that fish biodiversity levels were reduced when compared to historic records, possibly indicating migratory fish passage issues.



*Algae in Trotters Creek at Horse Range Road, 5 January 2015*



*Algae in Trotters Creek at Horse Range Road, 5 January 2015*



*Trotters Creek in the Gorge, 5 January 2015*

## Waikouaiti River

<b>Location</b>	Orbells Crossing
<b>Date</b>	8 January 2015
<b>Time</b>	1 pm
<b>Purpose of visit</b>	Low flow site inspection
<b>Staff present</b>	Peter Wilson

### Observations

- It was near low tide at the time of the visit.
- The river was approximately 10-20 cm deep in reaches, and was about to disconnect into pools below the Hurst's intake (at Orbell's Bridge on McGrath Road).
- No fish were observed.



*Waikouaiti upstream from Orbells Crossing, 8 January 2015*



*Waikouaiti River downstream from Orbells Crossing, 8 January 2015*



*Waikouaiti River downstream from ORC flow recorder, 8 January 2015*

**Location** Upstream from Orbells Bridge, lower South Branch  
**Date** 27 February 2015  
**Time** Not reported  
**Purpose of visit** Recreational fishing  
**Staff present** None (report received from Michael Rawlinson)

**Observations**

Email to Morgan Trotter received 2 March 2015:

*I fished upstream of Orbells bridge last Friday including the lower South Branch. Flow 0.246 cumec. Although I saw about 20 trout from about 3lb to about 6lb below the confluence none were actively feeding and most were just sitting and showing signs of stress. I put this down to a combination of a low flat lined flow, warm water, due in part of almost every bit of shade (willows) from the true left (North bank) being removed and increased siltation making water much shallower in places. To show it wasn't anything to do with barometric pressure that was making the trout inactive I saw and caught a rising 4lb 2ozer in a heavily shaded pool in the South Branch. The Rookery pool 1 km above Orbells was very murky and looked almost stagnant. The lower South Branch for 1 km above the confluence is massively overgrown with willows and virtually unfishable. I think someone with the expertise should visit the stretch between the Rookery pool and the top of the Junction pool on a warm day with the river low and measure the water temperature and oxygen levels and evaluate where the river would most benefit from shade and bank stabilization replanting. Michael*

**Location** Bucklands Crossing  
**Date** Not reported  
**Time** Not reported  
**Purpose of visit** Recreational fishing  
**Staff present** None (report received from Barry Oates)

**Observations**

Report to Niall Watson 26 March 2015:

Barry Oates (an experience Waikouaiti angler) reported seeing numbers of fish in pools below Bucklands Crossing with little connecting flow 'stressed to the max'. He also noted prolific weed growth this season.



<b>Location</b>	~800 m upstream from Orbells Crossing
<b>Date</b>	10 March 2015 (electrofishing) 19 March 2015 (habitat assessment)
<b>Time</b>	1 pm – 5 pm (electrofishing) 9 am – 11 am (habitat assessment)
<b>Purpose of visit</b>	Cumulative effects programme (electrofishing survey, habitat assessment, invertebrate sampling)
<b>Staff present</b>	Helen Keeling, Morgan Trotter

### **Observations**

- A quantitative electrofishing survey over 90 m found 9 species of fish in the reach (inanga, bluegill, redbfin and common bullies, shortfin and longfin eel, flounder, brown trout, and torrentfish).
- Juvenile and adult brown trout were present. Two large adult brown trout were captured from the site. The condition factors for these fish indicated poor and fair condition respectively. Stomach contents sampling found that trout were largely feeding on invertebrates and some bullies.
- The eggs of one trout appeared to be reabsorbing, which can occur as a result of stress. This trout also appeared to be blind in one eye and also appeared to be losing condition.
- One apparently blind longfin eel was captured (opaque eyes, very dark colour that did not change with exposure to light).
- Water level was shallow at the site, often <15 cm in the runs and riffles reducing cover for fish.
- A high percentage of periphyton cover was recorded during the habitat survey. Periphyton proliferations degrade benthic habitat and may adversely impact trout by affecting food availability and water chemistry. Excessive periphyton growth is aesthetically unappealing and impacts general recreational amenity values as well as angling amenity value by fouling and snagging angling tackle.
- A logger was deployed at the site in December. Daily average water at the site exceeded 19°C on 40 days between 10 December and 24 February; average water temperature was above 21°C on 6 days. The maximum recorded temperature was 23.58°C, recorded on 25 and 27 January.



*Shallow water in a run at the Waikouaiti River survey site, 19 March 2015*



*Periphyton cover at the Waikouaiti River survey site, 19 March 2015*



*Blind brown trout caught in the Waikouaiti River above Orbells, 19 March 2015*

Helen Keeling

Field Officer

June 2015

## **Appendix**

### **Blind Fish in the Shag and Waikouaiti Rivers**

Reports were received regarding a number of blind brown trout observed in the Shag and Waikouaiti Rivers. In total approximately 7 fish were reported by four anglers. In several cases the adult trout were apparently totally blind and they were able to be approached and handled by the anglers.

While the cause of the blindness is unknown it is suspected that the prolonged low flow period may have caused increased stress for trout making them more susceptible to disease, or the conditions may have increase the incidence of a parasite, for example.

Experienced local angler Mike Rawlinson reported that he had previously seen blind trout in the Shag and Waikouaiti Rivers during a drought in 1959.

**8.5 Habitat Enhancement Fund Applications - M Trotter – CONFIDENTIAL**

## 9 Correspondence

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### 9.1 Minister of Conservation – Letter approving Sports Fish and Game Management Plan for Otago



Office of Honourable Maggie Barry ONZM

MP for North Shore  
Minister for Arts, Culture and Heritage  
Minister of Conservation  
Minister for Senior Citizens

12 APR 2015

- 6 MAY 2015

Monty Wright  
Chairperson  
Otago Fish and Game Council  
PO Box 76  
Dunedin 9054

Dear Monty

Thank you for your letter of 14 February 2015 enclosing the draft Sports Fish and Game Management Plan for Otago – 2015-2025.

I think it clearly sets out the council's management intentions for Otago, and gives due regard to the sustainability of sports fish and game in the region, the impact of the proposed management regime on the resources, and allows recreational anglers and hunters to maximise their opportunities.

Clearly, a great deal of work has gone into the development of the management plan and I congratulate all those who have contributed. In particular, please convey my appreciation to the Otago Fish and Game Council.

I have no comments of substance that I wish the council to consider. In accordance with section 17M(g) of the Conservation Act 1987, I hereby approve the Sports Fish and Game Management Plan for Otago.

Yours sincerely

Honourable Maggie Barry ONZM  
Minister of Conservation

9.2 **ORC – Letter advising of the approval of Plan Change 2B Pomahaka minimum flow**



Our Reference: A775460

13 May 2015

Niall Watson  
Fish and Game Otago  
PO Box 76  
Dunedin 9054

15 APR

Dear Niall

**Plan Change 3B (Pomahaka catchment minimum flow) to the Regional Plan: Water for Otago - Operative**

The Otago Regional Council has approved Plan Change 3B (Pomahaka catchment minimum flow) to the Regional Plan: Water and is making it operative on 1 June 2015.

This plan change establishes a minimum flow and water allocation regime for the Pomahaka catchment within Otago, and introduces a ribbon aquifer where groundwater is treated as surface water.

Please find enclosed a CD with a copy of the operative plan change as of 1 June 2015 and a copy of the Public Notice made in the Otago Daily Times on Saturday 16 May 2015.

An electronic version of the updated Regional Plan: Water will be available on our website [www.orc.govt.nz](http://www.orc.govt.nz).

If you have any questions about Plan Change 3B (Pomahaka catchment minimum flow) contact the Policy Team at our Dunedin office freephone 0800 474 082 or (03) 474 0827, or email [policy@orc.govt.nz](mailto:policy@orc.govt.nz).

Yours sincerely

A handwritten signature in black ink, appearing to read "R. Pettinger".

Richard Pettinger  
Senior Policy Analyst  
Encl. CD, Public Notice

15 APR 2015

Mission Statement: "To promote the sustainable development and enhancement of Otago's resources"  
70 Stafford Street, Private Bag 1954, Dunedin 9054. Telephone (03) 474-0827. Facsimile (03) 479-0015



### 9.3 Kings High School – Letter of thanks for junior angling grant

26<sup>th</sup> February

Stephen Anderson  
Kings High School  
270 Bay View Road  
Dunedin  
[an@kingshigh.school.nz](mailto:an@kingshigh.school.nz)

**Re: Fish & Game Council Grant**

Dear Sharon Milne

Thank you very much for the generous cheque of \$200 received from you last month.

I am planning to allocate \$50 towards fishing tackle for my end of year, Y10 camp (fishing the Wairaurahiri river and tramping the Hump ridge track). With the remaining \$150 going towards helping reduce camp cost for a couple of students who would be keen to go on the designated 'fishing' camp run by fellow teacher (and fly fisherman) John Ferry, who usually fishes the Wairau river.

Mr Ferry will also most likely be contacting you closer to the date with regards to hiring spare rods.

Thanking you again,

Stephen Anderson  
&  
John Ferry

A handwritten signature in black ink, appearing to read 'Stephen', followed by a long horizontal line extending to the right.

## **10 General Business**

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