

**Agenda for the Meeting of the  
Otago Fish & Game Council to be held on 11<sup>th</sup> February 2017  
At The Kingsgate Hotel, 10 Smith Street, Dunedin**

**Commencing at 11.30am**

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

<b>1 Present and Apologies</b>	<b>2</b>
<b>2 Declaration of Interest</b>	<b>2</b>
<b>3 Confirmation of Previous Meeting Minutes</b>	<b>3</b>
<b>4 Matters arising from the Minutes</b>	<b>10</b>
<b>4.1 Ian Michelson to address the meeting on Non-resident anglers</b>	<b>10</b>
<b>5 Election of Officers</b>	<b>10</b>
<b>6 Communications New Zealand Council</b>	<b>11</b>
<b>6.1 Correspondence from NZC to Otago</b>	<b>11</b>
<b>6.2 Correspondence from Otago to NZC</b>	<b>11</b>
<b>7 Health and Safety Report</b>	<b>12</b>
<b>8 Chief Executives Report</b>	<b>13</b>
<b>9 Committee Reports</b>	<b>28</b>
<b>9.1 Clutha Fisheries Trust</b>	<b>28</b>
<b>9.2 NZC Meeting</b>	<b>28</b>
<b>10 Staff and Technical Reports</b>	<b>29</b>
<b>10.1 Southern Reservoir TAKF 2016 - S Dixon</b>	<b>29</b>
<b>10.2 Otago Pukeko Monitoring 2016 - S Dixon</b>	<b>36</b>
<b>10.3 CONFIDENTIAL Habitat Enhancement Fund – P van Klink</b>	<b>40</b>
<b>10.4 CONFIDENTIAL Habitat Enhancement Fund – M Trotter</b>	<b>40</b>
<b>10.5 2017 Game Bird Season Regulations - C Halford</b>	<b>41</b>
<b>10.6 Cardrona River Fishery Monitoring - C Halford</b>	<b>45</b>
<b>10.7 Proposed Template for Anglers Notice Review - R Boyd</b>	<b>59</b>
<b>10.8 Aerial Trend Counts 2017 - M Trotter</b>	<b>64</b>
<b>11 Correspondence</b>	<b>74</b>
<b>11.1 Salmon Anglers Association – Otago Branch Letter of thanks.</b>	<b>74</b>
<b>11.2 DLA Piper –cover letter for Dairy Farms partnership covenant. Refer CE report</b>	<b>75</b>
<b>11.3 Gant Holmes –Letter concerning access to the Pomahaka and willow growth.</b>	<b>76</b>
<b>11.4 Dan Rae – Letter advising of resignation from CFT</b>	<b>77</b>
<b>12 General Business</b>	<b>78</b>

## **1 Present and Apologies**

---

## **2 Declaration of Interest**

---

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

---

**Minutes of Otago Fish and Game Council Meeting  
Presbyterian Church, 10 Elspeth Street, Cromwell  
29<sup>th</sup> November 2016  
Commencing at 12.15 pm**

#### **1.0 Present**

Monty Wright (Chair), Adrian McIntyre, John Jillett, John Barlow, Rick Boyd, Dan Rae, Vicky Whyte, Colin Weatherall, Mike Turner, and Murray Neilson

**In attendance:** Niall Watson (CE) Ian Hadland (OM), John Roberts (DOC – part meeting), Lynda Van Kempen (ODT)

**Apologies** were received from David Witherow, Ian Cole, Alan Hammond and Bruce Jeffries (Otago Conservation Board)

Resolved (Jillett/McIntyre)

**That the apologies be received.**

Mr Wright welcomed everyone to the meeting.

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

- **Declarations of Interest** – Cr McIntyre noted he was back to being a sheep farmer.
- **Health and Safety** – Mr Watson reported a minor trip injury to one staff member

#### **3.0 Minutes**

Resolved (Weatherall/Rae)

**That the Minutes of the meeting on the 20<sup>th</sup> October 2016 be confirmed as a true and correct record.**

#### **4.0 Matters Arising from Minutes.**

No discussions

#### **5.0 Communications New Zealand Council**

**5.1 NZC Correspondence to Otago**  
Nil

**5.2 Correspondence from Otago to NZC**

**5.2.1 Response on request for feedback on angler ethics** – received

## **6.0 Chief Executive's Report**

### **6.1 Administration**

Finance and licence sales reports to the end of October 2016 were discussed and Mr Hadland made a presentation on licence sales for the season to date by comparison with the last three years for Otago and for other regions

#### **Licence Sales**

It was noted that sales were well ahead of last year at the same time

Cr Jillett noted that the four southern regions accounted for 64% of the sales to date nationally and that the South Island accounted for 74% of the national sales total.

The outlook for the North Island was negative with declines in sales.

It was **agreed** that more research and marketing was required in response.

There was a discussion about the potential risk to licence sales from lake snow in the major lakes. The issue and the Minister's reply on Government help were discussed and it was **agreed** that the Council should reply requesting a more concrete contribution.

#### **Staffing**

Interviews (4) for the Environmental Officer position were scheduled for the first two weeks in December.

#### **Capital purchases**

Resolved (Weatherall/Boyd)

**That the replacement of ceiling tiles and batts in the Dunedin Office be approved at an approximate cost of \$4100 +GST.**

#### **Land and buildings**

Mr Watson advised there would be a report on land and buildings to the February meeting.

The donation of funds towards wetland rehabilitation at Bullock Creek was noted and it was resolved (Weatherall/Rae)

**That Council establish a dedicated fund for holding donations towards rehabilitation of the Bullock Creek Springs Wetland**

Resolved (Whyte/Jillett)

**That Finance report for the period ending 31 October 2016 and Licence sales report to 15 November 2016 be approved.**

## **6.2 Species**

### **Hatchery Operations**

No discussion

## **6.3 Habitat**

### **Complaints**

There was a discussion on storm-water discharges from Alpha Series subdivision into Bullock Creek and the potential impact of bare land adjacent to Mill Creek (item 10.2). The CE advised that both matters were under investigation by QLDC. The potential to take action under the Conservation Act for disturbance of spawning grounds was noted.

### **Consents**

Councillors expressed concern about the lack of tangible progress by Contact with Lower Clutha salmon run restoration.

It was resolved (Boyd/Barlow)

**That the CE make contact with ORC about the Council's concerns over the lack of progress with salmon run restoration**

### **Minimum and Residual Flows**

Progress with minimum and residual flow setting was noted including:

- An Environment Court mediation hearing on the Lindis minimum flow (Plan Change 5A) scheduled for early December in Cromwell.
- A proposed meeting between Kye Burn Irrigation Company and DOC, Fish and Game and Ngai Tahu to discuss a joint consent application for the Kye Burn water takes and residual flow conditions.
- ORC movement on Manuherikia River minimum flows (Plan Change 5C) having completed initial consultation in August 2016

### **Minimum Flows/Community Group Meetings**

The CE advised the Council was still involved in the Manuherikia Catchment Water Strategy Group which was currently seeking expressions of interest from irrigators in an enlargement of Falls Dam. The two key issues for the Council were minimum and residual flows in the mainstem river and catchment tributaries and the ability of landholders to meet rural water quality limits for the catchment with increased irrigation area or intensified irrigation.

### **Water Quality**

Staff had attended an ORC stakeholder group meeting involved in Plan Change 6A (Rural Water Quality) implementation.

## **6.4 User Participation**

### **Take a Kid Fishing**

The CE advised a TAKF event at Roxburgh on 20<sup>th</sup> November had been well attended and there was a plan to hold another event to utilise remaining fish stocks

## **6.5 Public Interface**

### **Liaison**

The CE advised there had been considerable liaison since the October meeting including attendance at meetings of the Friends of Lake Hayes', attendance at an Otago Conservation Board (OCB) workshop on tourism crowding issues, a presentation to an OCB meeting on minimum and residual flows and the transition from mining privileges, and meetings with Tekakano Trust over wetland restoration on Bullock Creek

## **6.6 Compliance**

A successful ranger training course was held in Cromwell in November

## **6.7 Licencing**

No discussion

## **6.8 Council**

No discussion

## **6.9 Planning and Reporting**

### **Annual Report**

The report which had been circulated by email was discussed. It was noted that those Councillors elected during the year should be identified in the attendance table.

It was resolved (Wright/Rae)

**That the Chairman's report be approved**

**That the end of year position, being a surplus of \$81,578, be noted**

The CE advised the audit had run smoothly and the Annual Report had been signed-off by the auditor without qualification.

Resolved (Weatherall/Boyd)

**That the annual accounts be accepted**

## **7.0 Committee Reports**

### **7.1 Clutha Fisheries Trust**

No meeting

### **7.2 New Zealand Council**

Cr Jillett reported on the recent NZC meeting in Whangarei and noted:

- The NZPFGA and NZC have reached agreement over the guides licence. The next step is a joint meeting with the Minister but she is not available until February or March 2017. It is expected that guides licence implementation is to be completed by regulation approved by the Minister of Conservation
- The NZC has purchased 'Fish and Game Magazine' from Fairfax media and was planning to continue with the current production regime in the short term.
- NZC has agreed to extend the Eyede contract for two years

- The Finance Review Committee has reported back noting the financial system is functioning satisfactorily. Dr Jillett said the proposal to centralise financial reserves got no traction in the review and would have required a law change anyway. The tax status of Fish and Game Councils remains unresolved.
- There was a workshop on RMA activity on the Sunday as well as a field trip around Northland.
- NZC staff see the need for extra assistance with national advocacy

The meeting adjourned from 3.30pm and reconvened at 4.00pm for the Council's AGM

## **8.0 Technical Reports**

### **8.1 Hunter River Survey Report – James Smith**

The report was discussed along with the need to repeat the survey. The matter was referred to the February Planning Meeting.

Resolved (Turner/Jillett)

**That the report be received**

### **8.2 Lower Clutha Salmon Harvest – H Trotter**

The report was discussed and it was **agreed** it be received and that the Council support the concept of following a path of improved science to achieve run enhancement.

## **Confidential Minutes – 29 November 2016**

Resolved (Barlow/Jillett)

**The meeting go into public excluded session**

**(See Confidential Minutes)**

Resolved (McIntyre/Weatherall)

**The meeting come out of public excluded session**

## **9.0 Correspondence**

**9.1 Minister of Conservation** – reply on lake snow. - received

**9.2 Robert Dumarchand-** copy of complaint to ORC on damage to Mill Creek and Lakes Hayes fro vegetation clearance

## **10.0 General Business**

### **10.1 Backcountry Pressure and the Concerned Anglers Group**

Pressure in the backcountry was discussed along with Scott Little's email with Council noting the need to take a conservative approach to management where there was little information. The need to decide whether to manage pressure or harvest or both was discussed. Harvest could be managed by requiring angling to cease after taking a fish or requiring the use of method restrictions (such as barbless hooks)

### **10.2 Takitōa Wetland**

Councillors expressed their satisfaction with the completion of the Takitakitoa wetland development project

### **10.3 Mt Burke Access**

The CE was asked to reactivate discussions on foreshore access at Mt Burke Station with WAC and QLDC

The Chair thanked Councillors for their attendance and input

**The meeting closed at 5.30 pm**



**Report of Otago Fish and Game Council Annual General Meeting held at  
The Presbyterian Church, Cromwell  
29<sup>th</sup> November 2016, Commencing at 3.30pm**

**Present:**

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

**In attendance:** Niall Watson (CE) Ian Hadland (OM) ODT Reporter

**Apologies** were received from Ian Cole, Dave Witherow and Alan Hammond.

**Presentation of Annual Report**

The Chair Mr Wright declared the meeting open and presented the Council's audited annual report for the year ended on 31 August 2016 to the meeting. He noted the report was approved by the auditors without qualification.

There were no questions from the floor.

The meeting closed at 4.00 pm

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

---

### **4.1 Ian Michelson to address the meeting on Non-resident anglers**

## **5 Election of Officers**

---

## **6 Communications New Zealand Council**

---

### **6.1 Correspondence from NZC to Otago**

**6.1.1 Nil**

### **6.2 Correspondence from Otago to NZC**

**6.2.1 Nil**

**7 Health and Safety Report**

---

## 8 Chief Executives Report

---

### CHIEF EXECUTIVE'S REPORT FEBRARY 2017

#### 8.1 ADMINISTRATION

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

###### *Financial Reports to 31 January 2017*

The finance report for the period from 1 September 2016 to 31 January 2017 is attached for your information.

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

Expenditure to date is \$708,255 (including levies \$209,934 and commission \$52,939 but excluding depreciation (\$32,630) compared with the annual budget of \$1,866,562 (operational expenditure: \$993,826, depreciation: nil, and levies: \$839,736 and excluding commission: \$95,504).

Total income to date is \$1,339,738 compared with budget of \$1,986,629.

Fishing licence sales revenue received for the year to 31 January 2017 is \$1,278,555 (including commission). The fish budget figures for the full year is \$1,596,522 including commission.

Game licence sales revenue received for the year to 31 January 2016 is \$nil (including commission). The year's budget for game licence sales is \$313,552 including commission.

Budget and expenditure figures are exclusive of GST

###### *Licence Sales to 31 January 2017*

Sales recorded to 31 January are outlined for fish and game licences in the attached table from Eyede and compared with last year on the same date. Figures are inclusive of GST. Fishing licence sales to date in whole season licence equivalents (LEQs) at 12,933 LEQs are ahead of last year at the same time (12,671 LEQs). This remains encouraging given the major change in licence categories. The budget LEQ figure for the year (whole season adult licence equivalents) is 14,688.

Game sales have not commenced. The budget Game LEQ figure is 4,007.

Ian Hadland will report to the meeting on fish licence sales to date for the new financial year

###### *Funds Position at 31 January 2017*

ANZ 00 account	\$103,284.60
ANZ 70 account	\$808,354.67

### *Reparation Trust Account*

Account balance to 31 August 2016	\$62,448
Revenue for year to 31 January 2017	\$ 750
Less grants to January 2017	<u>\$ 9635</u>
Total	\$ 67587

An approved wetland development project near Taieri Mouth is now not proceeding and the related Habitat Enhancement Fund grant for \$5000 is no longer required.

### *Backcountry Management*

Account balance to 31 August 2016	\$38,585
-----------------------------------	----------

### *Term investments as at 31 January 2017:*

ASB 0079	\$319,514.80 @ 3.75% maturing July 2017
SBS 44624	\$477,099.78 @ 3.75% maturing June 2017

The sum of \$76,110 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 trucks have been ordered as part of our routine vehicle replacement programme.

By agreement Fish and Game Councils hold dedicated reserves in place for replacement of capital assets including vehicles, boats, outboard motors and other plant and equipment (but not buildings) and budget contributions to those reserves each year.

Otago's asset replacement fund (ARF) reserve has not been separated from other general reserves until recently and the ARF has been historically low. This was not really an issue until adoption of the new annual reporting format which shows incoming and outgoing funds to reserves separately. In last financial year expenses exceeded the reserve and the auditor recommended a transfer of general reserves to bring it from negative to nil on the basis that dedicated reserves should not have a negative balance. Under the circumstances I recommend a further formal transfer of general reserves to top up the ARF. Larger Councils commonly have reserves of \$80,000 - \$120,000 held for asset replacement.

General reserves are still within the required range for emergencies and cash flow purposes.

### **Recommendation:**

**That Council approve the transfer \$100,000 from general reserves to the Asset Replacement Fund**

### *Staff and Health and Safety*

No incidents or injuries.

The new generation health and safety manual template prepared by Eastern Fish and Game has been the subject of a staff workshop and a draft health and safety policy and manual for Otago is in preparation.

*Land and Buildings*

For discussion in the strategy meeting

**Recommendation**

**That the Finance and Licence Sales Report for the period ending 31 January 2017 be received.**

**8.2 SPECIES**

**Waterfowl Monitoring (1111)**

See separate report

**Spawning Surveys (1112)**

Nothing to report

**Population Monitoring:**

Nothing to report

**Success & Satisfaction (1122)**

See Staff and Technical Reports

**Fish Salvage (1131)**

Nothing to report

**Hatchery Operations**

The Macraes hatchery operation is running smoothly.

**Releases (1161)**

Fish releases are almost complete for the year. A detailed report will be provided for the February meeting.

**Game Notice (1171)**

Nothing to report

**Anglers Notice (1172)**

Refer report prepared by Rick Boyd

**Game Bird Control (1181)**

Nothing to report.

## 8.3 HABITAT

### Resource Management (1211)

#### Resource Management Complaints 2014/15

Date/Agency	Issue	Response
October/November 2016	A complaint was lodged with ORC about silt contamination in both Mill Creek (Lake Hayes) and Bullock creek (Wanaka)	Under investigation by QLDC
January 2017	A complaint was lodged with ORC by a third party about stream channel works in Camerons Creek outside Wanaka	The matter has been the subject of a site inspection by ORC

#### Resource Consents

A meeting has been held with Contact Energy's Neil Gillespie to organise a stakeholder meeting on lower Clutha sports fisheries mitigation options. The stakeholder meeting is proposed for the second half of February.

#### CE to Report

#### Planning (1212)

#### Manuherikia Catchment Water Strategy Group

The MCWSG is proposing a workshop on environmental flows once they have determined what height increase they are considering for Falls Dam in response to their landholder survey.

#### Minimum and Residual Flow Setting

ORC priorities for minimum flows remain the Manuherikia and Cardrona catchments but a bioenergetics fisheries research project is also being undertaken on the Upper Clutha.

Minimum and Residual Flows and Transition from Mining Privileges (TMP)		
River	Activity and status	Status
Lindis	Minimum flow & transition from mining privileges (TMP).  Overallocated  MALF 18601750 l/s	ORC decision on Water Plan Change 5A set a summer minimum of 900 l/s. The decision was appealed and went to mediation on 8/9 December in Cromwell. The mediation resulted in agreement to undertake various studies on how the river behaves at different flows with a report back in April 2017 when mediation will continue.
Cardrona	Minimum Flow & TMP  Overallocated	ORC are actively working on drawing together known information on the Cardrona but it is unlikely a minimum flow will be notified before next year. Fish and Game staff are continuing to monitor fisheries, flows and temperatures.



Waikouaiti	Minimum Flow Fully allocated  MALF 258 l/s	F&G supported a minimum flow of 220 l/s proposed through community consultation. Further action on the minimum flow has been deferred pending more research by ORC on estuary health.
<b>Pomahaka</b>	Minimum flow  MALF 4300 l/s  <b>Min Flow 3600l/s (84% MALF)</b>	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.
<b>Waiwera</b>	Minimum flow  MALF 310 l/s  <b>Min Flow 280 l/s (90% MALF)</b>	The ORC hearing panel decision set a 300 l/s summer minimum flow instead of the 260 l/s notified. That decision was appealed to the Environment Court and the matter was resolved through mediation in early December 2015 with agreement on 280 l/s.
Manuherikia	Minimum flow Irrigation scheme investigation.  MALF Ophir 3,200 l/s ( ± 800)  MALF Campground 3,900 l/s ( ± 600)  Overallocated	A collaborative process involving Fish and Game representation (Manuherikia Catchment Water Strategy Group) is looking at irrigation scheme proposals which are focussed on raising the level of Falls Dam and environmental considerations. A 20 metre raise in the height of Falls Dam is contemplated  The Manuherikia catchment has over 220 mining privileges (or deemed permits) in place. The present minimum flow at Ophir at 820 l/s is considered inadequate and ORC are planning to set a minimum flow for the lower river at the Alexandra Campground. The minimum flow plan change is at the preliminary consultation stage.
Benger Burn	Minimum flow &TMP.  Overallocated	Further action by ORC has been deferred pending more research on water resources and aquifer/surface water interaction.
<b>Sow Burn</b>	TMP  Overallocated  <b>Residual flow of 70 l/s + off-site mitigation</b>	The Sowburn all-of-catchment consent has been granted by ORC.  The residual flow requirement is 70 l/s on a stream that is considered to be ephemeral in nature in the middle reaches.  Off-site mitigation conditions include a protective covenant over a large area of the Maniototo wetlands

Kye Burn	TMP Overallocated  MALF 530 l/s	F&G position is that a mainstem environmental flow between 200-300 l/s is required and that it probably has to be in the upper half of that range (250+ l/s)  A meeting was held with irrigators in early December 2015 and December 2016. They have now formed themselves into a company (Kye Burn Irrigation Company)  Their present position is outside the above range at which flow the Kye Burn is unlikely to connect in a meaningful way to the Taieri River. Connection is a key value.
Low Burn	Minimum flow TMP Overallocated	Catchment group meeting proposed
Bannock Burn	Minimum flow TMP Overallocated	Catchment group meeting held late 2016
Quartz Creek	TMP Overallocated	Reports on fishery values have been completed along with a reports on fish salvage. There is little information on stream hydrology.
Tuapeka River	ORC Management Flow Report  MALF 314 l/s	No action
Upper Clutha		ORC is planning research on flow requirements for fish in the river to inform a minimum flow setting process
12 Mile Creek (Wakatipu)	ORC Management Flow Report	Stream survey work is being undertaken
Fern Burn	Overallocated	Status of flows and takes needs to be investigated. Spawning surveys have been undertaken by Upper Clutha Anglers.

## CE to Report

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

As previously advised ORC is organising irrigators in Central Otago into catchment groups and arranging meetings involving irrigators and stakeholders such as DOC, Ngai Tahu, and Fish and Game.

Meeting have been held on the Bannock Burn, Taieri in the Styx and Poolburn and more are planned in February and March (Gibbston, Lowburn, Amisfield/Parkburn, Arrowtown and Strath Taieri

### Reserves Management (1221)

Nothing to report

**Wetland Protection (1232)**

Nothing to report

**Assisted Habitat (1230)**

See separate reports- HEF grants (Trotter and Van Klink)

**River Management (1233)**

ORC undertake river works under a global consent. Staff have met recently with ORC about works on the Shag, Upper Taieri and Pomahaka with some concern about the approach undertaken

**8.4 USER PARTICIPATION****Access (1311)**

Nothing to report

**Signage (1312)**

Nothing to report

**Backcountry Fisheries (1321)**

Monitoring has been hampered by poor weather with little work completed so far.

**Magazine Supplements and Newsletters (1331)**

Copy for the game season Fish and Game Magazine supplement is in preparation.

**Reel Life/Both Barrels**

Monthly contributions to online newsletters are continuing

**Newspaper Supplements (1332)**

Copy has been provided for ODT's holiday supplements.

**Publications (1342)**

Nothing to report.

**Web Site (1343)**

Nothing to report

**Fishing and Hunting Events (1351)**

Nothing to report

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

A take a kid fishing event was held successfully at Roxburgh on 20<sup>th</sup> November.

**Club Liaison (1361)**

Nothing to report

**Commercial Use (1362)**

Nothing to report

## **8.5 PUBLIC INTERFACE**

### **Liaison (1411)**

ORC plan a Water Forum in late March to discuss water quantity issues particularly in Central Otago.

### **Media (1431)**

There has been good media coverage over the holiday period including supplements and coverage of staff changes and issues.

### **Advocacy (1432)**

Nothing to Report

### **Tenure Reviews (1433)**

There has been no further action on tenure reviews.

## **8.6 COMPLIANCE**

### **Ranging (1511)**

Poor summer weather has dampened angler effort and there has been a corresponding drop in the number of offenders encountered by rangers so far this season.

### **Ranger Support**

A ranger training course was held in Cromwell in November. One honorary ranger has retired from the role, another has been appointed in Arrowtown and there are two further applicants being considered.

### **Prosecutions**

Several matters are before the courts.

- A summons is proposed to be served on an offender who was caught fishing without a licence and using three rods at Tomahawk lagoon.
- An offender caught near Queenstown without a licence and gave false information has elected to defend the false information charge and this is set down for a hearing by judge alone on 22 March.

The Cowlin matter has concluded with the offender being granted a discharge without conviction. The judge used his discretion and commented that he was discharged 'by the narrowest of margins' He did however have to pay \$2000 to OFGC towards costs.

## **8.7 LICENCING**

### **Licencing System (1611)**

The Eyede licencing system continues to operate well.

### **Agents (1612)**

Nothing to report

## **8.8 COUNCIL**

### **Council (1720)**

A schedule of meetings for 2017 has been circulated as follows:

2017

**11/12 February** (Saturday/Sunday) - Council and planning meetings

**20 April** (Thursday)

**15 June** (Thursday)

**17 August** (Thursday)

**19 October** (Thursday)

**30 November**(Thursday) - Council and AGM.

2018

**10/11 February 2018** (Saturday/Sunday) Council and planning meeting

## **8.9 PLANNING AND REPORTING**

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

Nothing to Report

### **Annual Planning (1821)**

Nothing to Report

### **Annual Report (1831)**

The audited annual report was presented to the AGM in November 2016

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

The NZ Council meeting in Cromwell at this time last year did not have sufficient time for a presentation on Otago issues and perspectives on fish and game matters. The NZC Chair has agreed to an agenda slot to give that presentation at their upcoming meeting in Central South Island Region (March).

Niall Watson  
Chief Executive  
February 2017

Balance Sheet  
**Otago Fish & Game Council**  
**Balance Sheet**  
**As at 31 January 2017**

<b>CAPITAL</b>		This Year	Last Year End
7500	Opening Equity	1,039,201.00	1,039,201.00
9015	Retained Earnings Brght Fwd	<u>1,519,497.04</u>	<u>1,437,918.74</u>
		2,558,698.04	2,477,119.74
	Plus Current Year Operating Surplus/(Deficit)	598,852.93	81,578.30
	<b>TOTAL CAPITAL FUNDS</b>	<u><u>3,157,550.97</u></u>	<u><u>2,558,698.04</u></u>
<b>REPRESENTED BY</b>			
<b>CURRENT ASSETS</b>			
5005	Cash on Hand	200.00	200.00
5022	Stock on Hand	11,004.00	11,004.00
5030	Accrued Interest	5,431.03	5,431.03
5040	Prepayments	7,589.77	7,589.77
5060	ASB Investments	319,514.80	314,286.45
5080	SBS Investments	477,099.78	469,149.43
5800	GST Paid	3,569.54	9.13
6040	PAYE Control	2,451.83	0.00
ACCREC	Trade Debtors	222,169.77	142,602.75
ASB_00	ASB 00 Account	10.98	10.98
NB00	National/ANZ 00 Account	103,284.60	131,754.48
NB70	National/ANZ 70 Account	808,354.67	272,619.93
SBS00	SBS Account	<u>24.66</u>	<u>24.66</u>
		1,960,705.43	1,354,682.61
<b>LESS CURRENT LIABILITIES</b>			
6000	Sundry Creditors	19,681.95	19,681.95
6010	Holiday Pay Accrued	42,701.40	42,701.40
6040	PAYE Control	0.00	2,529.70
6800	GST Received	45,576.49	0.00
6810	Funds received in Advance	178,472.13	178,472.13
ACCSPAY	Trade Creditors	<u>30,717.19</u>	<u>99,224.09</u>
		317,149.16	342,609.27
	<b>NET WORKING CAPITAL</b>	1,643,556.27	1,012,073.34
<b>TERM ASSETS</b>			
5070	Anderson Lloyd Investment	<u>76,110.10</u>	<u>76,110.10</u>
		76,110.10	76,110.10
<b>FIXED ASSETS</b>			
7000	Vehicles Purchases	280,794.82	280,794.82
7001	M/V Accum Deprn	(154,261.04)	(135,261.04)
7020	Boat Purchases	100,497.93	100,497.93
7021	Boat Accum Deprn	(79,875.30)	(77,975.30)
7200	Plant Purchases	72,806.18	72,806.18
7201	Plant Accum Deprn	(58,094.89)	(54,724.89)
7300	Furniture & Fittings	30,847.94	30,847.94
7301	Furniture Accum Deprn	(29,182.26)	(28,582.26)
7400	Field Equipment Purchases	34,610.96	34,610.96
7401	Field Eq Accum Deprn	(25,174.52)	(24,974.52)
7440	Land Purchases	414,410.77	414,410.77
7450	Buildings Purchases	642,892.49	642,892.49
7451	Buildings Accum Deprn	(327,767.33)	(321,857.33)
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>(52,966.26)</u>	<u>(51,316.26)</u>
		1,437,884.60	1,470,514.60
	<b>NET ASSETS</b>	<u><u>3,157,550.97</u></u>	<u><u>2,558,698.04</u></u>

**Otago Fish & Game Council  
Profit and Loss - Summary  
for Period Ended Jan:2016/17**

		-----Month to Date-----			-----Year to Date-----					
		Actual	Budget	% of Budget	Actual	Budget	Variance	Annual Budget	YTD Actual Budget	Last YTD
<b>INCOME</b>										
<b>FISH AND GAME LICENCE SA...</b>										
1000	Fishing Licences Dn Agency	(229)	0	0%	279	0	279	0	0%	1,509,031
1002	Fishing Licences Income	304,679	133,044	229%	1,278,555	665,220	613,335	1,596,522	80%	0
1006	Game Licences Income	0	26,129	0%	339	130,649	(130,310)	313,552	0%	4,182
		304,450	159,173	191%	1,279,173	795,869	483,304	1,910,074	67%	1,513,213
<b>OTHER INCOME</b>										
1010	Interest received	5,483	2,630	208%	14,199	13,150	1,049	31,555	45%	17,956
1020	Fines - Fishing & Game Offences	2,416	417	579%	3,845	2,085	1,760	5,000	77%	48
1022	Reparations Trust Fund	2,250	0	0%	(3,885)	0	(3,885)	0	0%	1,980
1025	Rent Received	2,730	3,333	82%	14,841	16,669	(1,828)	40,000	37%	13,255
1065	Fishing Competitions	0	0	0%	468	0	468	0	0%	538
1075	Commissions Income	85	0	0%	489	0	489	0	0%	955
1080	Sundry Income	0	0	0%	9	0	9	0	0%	3,850
1092	Merchandise Sales/Other	256	0	0%	760	0	760	0	0%	(6,608)
1094	Donations and Grants Received	0	0	0%	4,800	0	4,800	0	0%	2,000
1096	RMA Costs Reimbursed	3,509	0	0%	25,039	0	25,039	0	0%	8,131
		16,729	6,380	262%	60,565	31,904	28,661	76,555	79%	41,905
<b>TOTAL INCOME</b>		<b>321,179</b>	<b>165,553</b>		<b>1,339,738</b>	<b>827,773</b>	<b>511,965</b>	<b>1,986,629</b>		<b>1,555,118</b>
<b>EXPENDITURE</b>										
<b>SPECIES MANAGEMENT</b>										
POPULATION MONITOR / MMT		1,983	1,000	198%	1,983	5,000	(3,017)	12,000	17%	4,654
HARVEST ASSESSMENT		0	250	0%	0	1,250	(1,250)	3,000	0%	0
FISH SALVAGE		0	0	0%	0	0	0	0	0%	0
HATCHERY OPERATIONS		2,751	833	330%	3,533	4,169	(636)	10,000	35%	3,958
RELEASES		0	0	0%	25	0	25	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-...</b>		<b>4,734</b>	<b>2,083</b>	<b>227%</b>	<b>5,540</b>	<b>10,419</b>	<b>(4,879)</b>	<b>25,000</b>	<b>22%</b>	<b>8,612</b>
<b>HABITAT PROTECTION</b>										
RESOURCE MANAGEMENT A...		0	375	0%	27,061	1,879	25,182	4,500	601%	26,905
WORKS & MMT COUNCIL LAND		2,573	292	881%	7,747	1,460	6,287	3,500	221%	3,869
ASSISTED HABITAT		0	0	0%	0	0	0	0	0%	0
<b>HABITAT PROTECTION-T...</b>		<b>2,573</b>	<b>667</b>	<b>386%</b>	<b>34,808</b>	<b>3,339</b>	<b>31,469</b>	<b>8,000</b>	<b>435%</b>	<b>30,775</b>
<b>PARTICIPATION</b>										
ACCESS		93	167	56%	421	835	(414)	2,000	21%	332
SATISFACTION SURVEYS		0	0	0%	2,203	0	2,203	0	0%	2,273
NEWSLETTERS		0	1,458	0%	14,326	7,294	7,032	17,500	82%	10,675
OTHER PUBLICATIONS		70	292	24%	2,486	1,460	1,026	3,500	71%	52
TRAINING		0	333	0%	1,299	1,669	(370)	4,000	32%	1,629
CLUB RELATIONS		0	333	0%	678	1,669	(991)	4,000	17%	491
HUTS		0	0	0%	57	0	57	0	0%	697
<b>PARTICIPATION-TOTAL</b>		<b>163</b>	<b>2,583</b>	<b>6%</b>	<b>21,471</b>	<b>12,927</b>	<b>8,544</b>	<b>31,000</b>	<b>69%</b>	<b>16,149</b>

**Otago Fish & Game Council  
Profit and Loss - Summary  
for Period Ended Jan:2016/17**

	-----Month to Date-----			-----Year to Date-----			Annual Budget	% of Budget	
	Actual	Budget	Variance	Actual	Budget	Variance			
<b>PUBLIC INTERFACE</b>									
LIAISON	9	42	22%	9	210	(201)	500	2%	0
COMMUNICATIONS	0	0	0%	0	0	0	0	0%	0
ADVOCACY	0	333	0%	0	1,669	(1,669)	4,000	0%	0
<b>PUBLIC INTERFACE-TOTAL</b>	<b>9</b>	<b>375</b>	<b>2%</b>	<b>9</b>	<b>1,879</b>	<b>(1,870)</b>	<b>4,500</b>	<b>0%</b>	<b>0</b>
<b>COMPLIANCE</b>									
RANGER ADMIN	0	208	0%	50	1,044	(994)	2,500	2%	2,010
RANGER TRAINING	0	375	0%	3,764	1,875	1,889	4,500	84%	290
COMPLIANCE	0	250	0%	7,161	1,250	5,911	3,000	239%	0
<b>COMPLIANCE-TOTAL</b>	<b>0</b>	<b>833</b>	<b>0%</b>	<b>10,975</b>	<b>4,169</b>	<b>6,806</b>	<b>10,000</b>	<b>110%</b>	<b>2,300</b>
<b>LICENCES</b>									
LICENCE PRODUCT/DISTN	0	1,000	0%	0	5,000	(5,000)	12,000	0%	0
AGENT SERVICING	0	42	0%	190	210	(20)	500	38%	264
COMMISSION	12,287	0	0%	52,939	0	52,939	0	0%	54,278
<b>NZFG LEVIES</b>	<b>0</b>	<b>69,978</b>	<b>0%</b>	<b>209,934</b>	<b>349,890</b>	<b>(139,956)</b>	<b>839,736</b>	<b>25%</b>	<b>425,478</b>
<b>LICENSES-TOTAL</b>	<b>12,287</b>	<b>71,020</b>	<b>17%</b>	<b>263,063</b>	<b>355,100</b>	<b>(92,037)</b>	<b>852,236</b>	<b>31%</b>	<b>480,021</b>
<b>COUNCIL</b>									
COUNCIL ELECTIONS	0	0	0%	0	0	0	0	0%	0
COUNCIL MEETINGS	0	1,000	0%	5,064	5,000	64	12,000	42%	5,574
<b>COUNCIL-TOTAL</b>	<b>0</b>	<b>1,000</b>	<b>0%</b>	<b>5,064</b>	<b>5,000</b>	<b>64</b>	<b>12,000</b>	<b>42%</b>	<b>5,574</b>
<b>PLANNING / REPORTING</b>									
MMT/STRATEGIC PLANNING	498	0	0%	1,039	0	1,039	0	0%	899
REPORTING/AUDIT	0	1,083	0%	13,146	5,419	7,727	13,000	101%	5,884
NATIONAL LIAISON	0	0	0%	280	0	280	0	0%	0
<b>PLAN/REPORT-TOTAL</b>	<b>498</b>	<b>1,083</b>	<b>46%</b>	<b>14,466</b>	<b>5,419</b>	<b>9,047</b>	<b>13,000</b>	<b>111%</b>	<b>6,782</b>
<b>ADMINISTRATION</b>									
SALARIES	75,950	59,872	127%	284,597	299,362	(14,765)	718,462	40%	220,995
STAFF EXPENSES	1,450	1,547	94%	7,304	7,743	(439)	18,564	39%	3,366
STAFF HOUSES	0	0	0%	0	0	0	0	0%	0
OFFICE PREMISES	7,659	6,767	113%	31,258	33,847	(2,589)	81,200	38%	36,081
OFFICE EQUIPMENT	222	625	36%	2,144	3,129	(985)	7,500	29%	1,105
COMMUNICATIONS	696	2,092	33%	7,655	10,464	(2,809)	25,100	30%	10,290
GENERAL	47	500	9%	1,506	2,504	(998)	6,000	25%	4,496
GENERAL EQUIPMENT	303	291	104%	594	1,463	(869)	3,500	17%	2,417
VEHICLES	300	4,208	7%	17,801	21,048	(3,247)	50,500	35%	25,342
<b>ADMINISTRATION - TOTAL</b>	<b>86,628</b>	<b>75,902</b>	<b>114%</b>	<b>352,859</b>	<b>379,560</b>	<b>(26,701)</b>	<b>910,826</b>	<b>39%</b>	<b>304,091</b>
DEPRECIATION	6,526	0	0%	32,630	0	32,630	0	0%	32,630
<b>TOTAL EXPENDITURE</b>	<b>113,418</b>	<b>155,546</b>	<b>73%</b>	<b>740,885</b>	<b>777,812</b>	<b>(36,927)</b>	<b>1,866,562</b>	<b>40%</b>	<b>886,934</b>
<b>Profit (Loss)</b>	<b>207,761</b>	<b>10,007</b>		<b>598,853</b>	<b>49,961</b>	<b>548,892</b>	<b>120,067</b>		<b>668,184</b>



**Summary of Draft Profit and Loss Statement Expenses 31st January 2017**  
**As At 1/02/17**

Expense	Total Budget	Actual Expenditure	YtD %	Comment
		Ytd		
<b>Projects</b>				
Species	\$ 25,000.00	\$ 5,540.00	22%	
Habitat	\$ 8,000.00	\$ 34,808.00	435%	Includes expenditure to be reimbursed \$25039 and donations \$4800
Participation	\$ 31,000.00	\$ 21,471.00	69%	Fish News letter postage increased
Public Interface	\$ 4,500.00	\$ 9.00	0%	
Compliance	\$ 10,000.00	\$ 10,975.00	110%	
Licences	\$ 12,500.00	\$ 190.00	38%	
NZC Levies	\$ 839,736.00	\$ 209,934.00	25%	
Agent Commission	\$ -	\$ 52,939.00		
Council	\$ 12,000.00	\$ 5,064.00	42%	
Planning	\$ 13,000.00	\$ 14,466.00	111%	Audit 2016
<b>Projects Total</b>	<b>\$ 922,736.00</b>	<b>\$ 355,396.00</b>	<b>39%</b>	
<b>Administration</b>				
Salaries	\$ 718,462.00	\$ 284,597.00	40%	
Staff Expenses	\$ 18,564.00	\$ 7,304.00	39%	
Office Premises	\$ 81,200.00	\$ 31,258.00	38%	
Office Equipment	\$ 7,500.00	\$ 2,144.00	29%	
Communication	\$ 25,100.00	\$ 7,655.00	30%	
General	\$ 6,000.00	\$ 1,506.00	25%	
General Equipment	\$ 3,500.00	\$ 594.00	17%	
Depreciation		\$ 32,630.00		
Vehicles	\$ 50,500.00	\$ 17,801.00	35%	
<b>Administration Total</b>	<b>\$ 910,826.00</b>	<b>\$ 385,489.00</b>	<b>42%</b>	
<b>Total</b>	<b>\$ 1,833,562.00</b>	<b>\$ 740,885.00</b>	<b>40%</b>	

**Summary of Profit and Loss Statement Income 31st January 2017**  
**As At 1/02/17**

Income	Total Budget	Actual Income	YtD %	Comment
		Ytd		
<b>Fish</b>	\$ 1,596,522.00	\$ 1,278,555.00	80%	
<b>Game</b>	\$ 313,552.00	\$ 279.00	0%	
<b>Prosecutions</b>	\$ 5,000.00	\$ 3,845.00	77%	
<b>Rent</b>	\$ 40,000.00	\$ 14,841.00	37%	
<b>Interest</b>	\$ 31,555.00	\$ 14,199.00	45%	
<b>Grants Donations</b>	\$ -	\$ 4,800.00		
	<b>\$ 1,986,629.00</b>	<b>\$ 1,316,519.00</b>	<b>19%</b>	

**Summary of Position 31st January 2017**

<b>Total Expenditure</b>		<b>\$ 740,885.00</b>
<b>Less Depreciation</b>		<b>\$ 32,630.00</b>
<b>Less Levies</b>	<b>\$ 839,736.00</b>	<b>\$ 209,934.00</b>
<b>Less Commission</b>		<b>\$ 52,939.00</b>
<b>Less RMA Reimbursed</b>	<b>\$ 25,039.00</b>	<b>\$ 25,039.00</b>
<b>Net Expenditure</b>		<b>\$ 420,343.00</b>
<b>Budget</b>		<b>\$ 974,834.00</b>
<b>% Spent</b>		<b>43%</b>

Otago Sales YTD to 17 January 2017															
Channel	FWF	FWA	FWNA	FSLA	FLAA	FWJ	FWNJ	FLBA	FSBA	FDA	FDJ	Total	Fish LEQ	Fish Var	Fish \$
Otago	2,734	3,373	295	496	341	439	13	43	170	1,971	184	10059			
Agency Online															
Retail Book	0	3	0	0	0	1	0	0	0	8	1	13			
Public Online	1,345	1,332	399	160	236	158	7	20	119	1,480	75	5331			
Eyede Call Centre	40	34	6	22	1	1	0	0	1	20	0	125			
2015-2016	4119	4742	700	678	578	599	20	63	290	3479	260	15528	12671		\$1,366,317
Agency Online	2,508	3,330	292	505	234	426	18	35	161	2,240	166	9915			
Retail Book	0	0	0	0	0	0	0	0	0	0	0	0			
Public Online	1,486	1,618	537	226	224	191	21	29	130	1,767	98	6327			
Eyede Call Centre	9	4	3	11	0	2	0	0	0	4	0	33			
2016-2017	4003	4952	832	742	458	619	39	64	291	4011	264	16275	12933	2.1%	\$1,405,790

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

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

## **9 Committee Reports**

---

### **9.1 Clutha Fisheries Trust**

### **9.2 NZC Meeting**

## **10 Staff and Technical Reports**

---

### **10.1 Southern Reservoir TAKF 2016 - S Dixon**

#### **COUNCIL REPORT FEBRUARY 2017**

##### **Southern Reservoir Take a Kid Fishing 2016**

On Sunday the 18<sup>th</sup> September and Sunday 25<sup>th</sup> September 2016, the Otago Fish & Game Council had two 'Take a Kid Fishing' (TAKF) events at the Southern Reservoir.

##### **Planning**

The DCC approved two Fish & Game Council TAKF events at the Southern Reservoir. A conditional agreement was reached to use the venue.

##### **Sponsorship**

An application for assistance with funding for the events was put to Otago Community Trust and the Dunedin City Council. The Otago Community Trust generously donated \$2000.00 and the Dunedin City Council donated \$1317.00 towards the event. The money was used for things such as: toilet hire, traffic management, a lure for each child, colouring book and pencils and promotions. Allan Millars Hunting & Fishing and West Shell were asked and kindly donated some items such as rod & reel sets, tackle boxes, lures etc for a spot prize draw at the end of each day.

##### **Promotion**

The TAKF day was promoted by the way of a email that was sent out to all the primary schools and some high schools throughout Dunedin informing them of the event and asking them to mention the TAKF days in their school newsletters. It was also advertised on the Fish & Game web site. The ODT ran an article 5 day before the first event (attached below)

##### **Access**

The Southern Reservoir is closed for fishing for the month of September year round now. This is to facilitate the liberation of trout and help improve catch rates for the events.

##### **Support**

Brighton Surf Life Saving Club provides assistance with 4 life guards' and Traffic Management & Control LTD supplies and erects all the road signage for the event. A donation of \$300 was given to the Brighton Surf Life Saving Club.

##### **Entries**

All entries were done online through the Fish & Game web site using "Survey Monkey". This proved to be a cost effective and user friendly way to register children. On the day of the event participants lined up at the registration table and received a numbered lanyard, white ones were for kids that had fished before and red ones were for kids that had never fished. This gave the volunteer rangers an idea of which children/parents to spend more time with teaching knot tying, casting etc. The children also received a goody bag with a colouring book, pencils, spot prize entry form and a lure.

The “Take Me Fishing” trailer was set up beside the registration table, children that didn’t have a fishing rod or the rod they bought along was not suitable for trout fishing could borrow one for the event.

### **Stocking of the Southern Reservoir**

Eight hundred two year old rainbow trout and 20 larger fish were set aside at the Macraes Hatchery for the event. Four hundred & twenty fish were transported and released into the reservoir before the 18<sup>th</sup> September. Another 420 fish were released into the reservoir the week after the first event.

### **Events**

#### **Sunday 18<sup>th</sup>**

Two hundred & twenty one children signed up for the first day but 46 didn’t show. According to the spot prize entry form at least 30 fish were caught and of those 10 were returned. There may have been more fish caught as some people left the event before the end, they didn’t get their fish cleaned & they didn’t hand in a spot prize entry form. The reservoir was closed for fishing after 12noon.

#### **Sunday 25<sup>th</sup>**

One hundred & ninety six children signed up for the second day but 58 didn’t show. Once again according to the spot prize entry forms at least 27 fish were caught and of those 12 were returned. This event was similar to the previous event and not all the entry forms were handed in.

Fish ranged in weight from 800g to 3kg, only a handful of the big fish were caught. The children that caught fish were able keep the fish if they wished which were gutted and cleaned by Fish & Game rangers.

Fish & Game rangers and volunteers walked around the reservoir giving advice on knot tying, casting and assisting with the landing and releasing of fish.

At the end of each event there was a lucky number draw. The items donated by Allan Millars Hunting & Fishing & West Shell were given out to the lucky kids. A number of items from Otago Fish & Game Council (water bottles, Frisbees) were also given out.

### **Media coverage**

The ODT ran an article 5 day before the first event informing the public about the releases and about the events. There was another article in the ODT on the Monday after the first event and one more on the Monday after the second event. (Attached below)

### **User Survey**

A Survey form was filled in for each child and number of questions asked:

- How many fish were taken and how many fish released? (Figure 1)
- How did you hear about the event? (Figure 2)
- Have you been fishing before? (Figure 3)

### How many fish were taken and how many released?

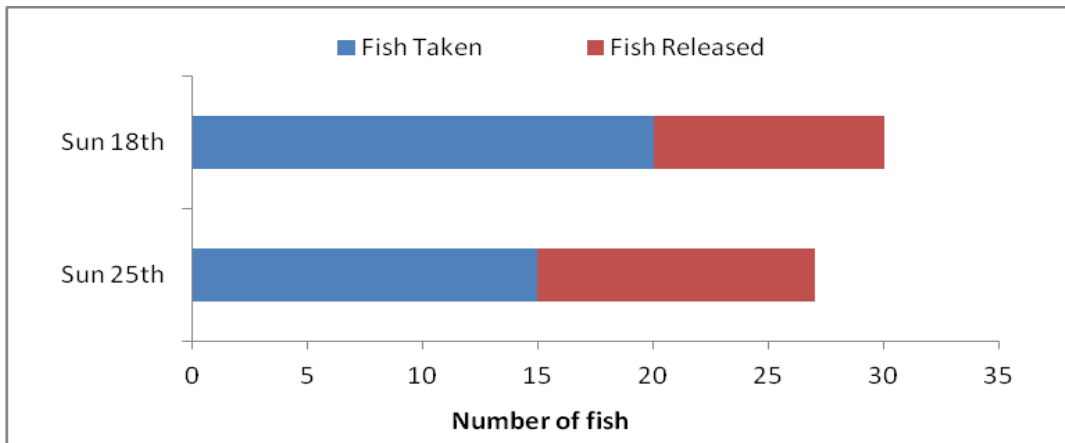


Figure 1: Number of fish taken and number of fish released on Sunday 18<sup>th</sup> and Sunday 25<sup>th</sup> at the 2016 TAKF events

Over the two days approximately 57 fish were caught and out of those 22 were released.

### How did you hear about the event?

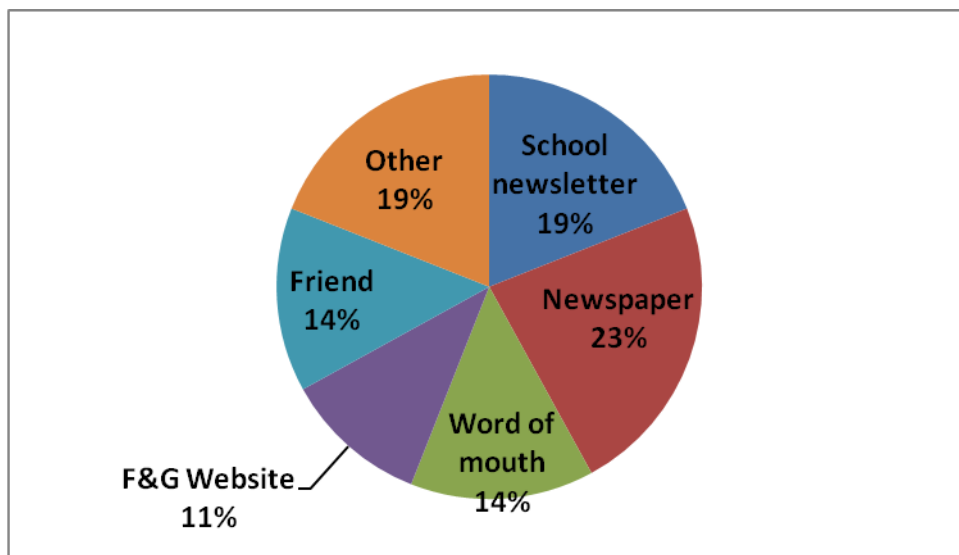


Figure 2: Percentage of people who found out about the 2016 TAKF event through various advertising outlets

The TAKF day was promoted by the way of an email that was sent out to all the primary schools and secondary schools throughout Dunedin informing them of the event and asking them to mention the TAKF days in their school newsletters. It was also advertised on the

F&G web site. This year the newspaper percentage was up and this was probably because of the Otago Daily Times articles.

### Have you been fishing before?

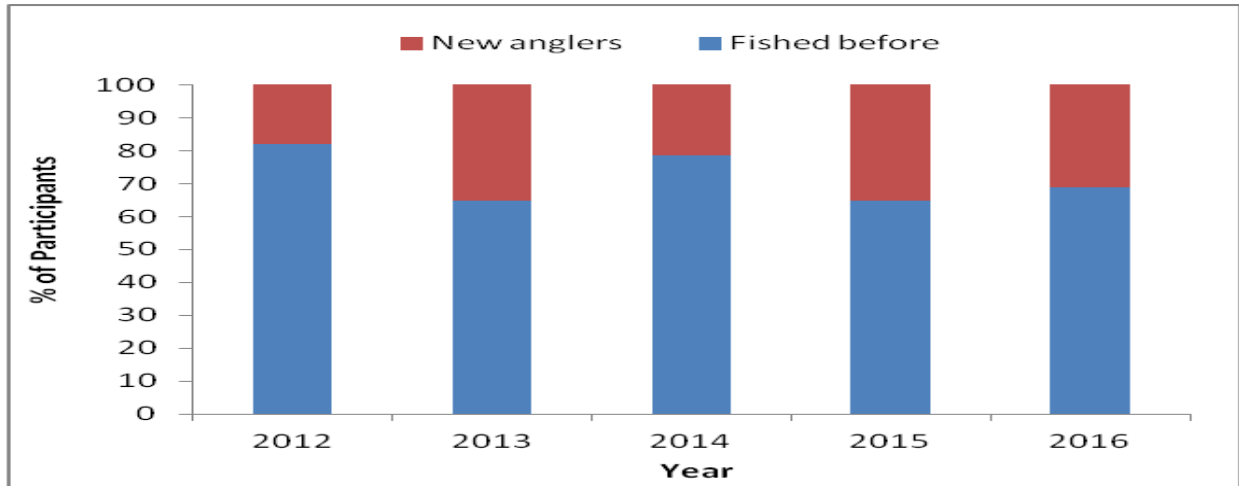


Figure 3: Percentage of participants who had fished previously and who had never fished before.

Each year we try to encourage more non-fishers to give fishing a go so it was encouraging to see again this year the percentage of children that hadn't fished before reasonably high.

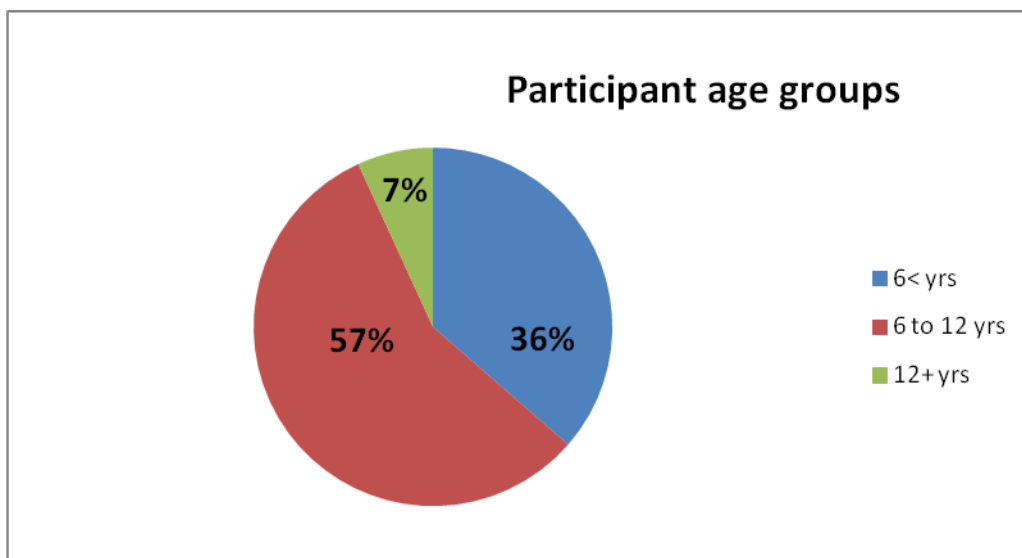


Figure 4: Relative percentage of participants across age groups at the 2016 TAKF events

The most represented group of children were the 6-12 age groups with the pre-teens not showing much interest. This seems to be the trend for the last 5 years.



## Catch Rate

Year	Number of fish released	Catch rate (fish per person)
2016	820	0.18
2015	1000	0.19
2014	600	0.39
2013	800	0.55
2012	450	0.26

Figure 5: Summary of the catch rate for the last 5 years.

It is not certain why the catch rate was so low again this year. Each year we have tried releasing different numbers of fish at different weights. The weather conditions and barometric pressure systems can be blamed for low catch but it's just not known what turns fish on!

### Acknowledgements

Otago Community Trust, Allan Millars Hunting & Fishing, West Shell, DCC, Macraes Oceana Gold, Brighton Surf Life saving Club, Traffic Management & Control LTD.

**Volunteers/rangers** - Gordon McManus, Ross Taylor, Mike Teasdale, Robbie Natta, Gordon Munn

**Fish & Game staff** - Ian Hadland, Morgan Trotter, Sharon Milne, Helen Trotter, Steven Dixon

### Recommendations

That this report be received.

Steven Dixon  
Fish & Game Officer  
January 2017





"Healthy pastime" ... Otago Fish & Game Council officer Steve Dixon gets set to release a 3kg rainbow trout in Dunedin's Southern Reservoir yesterday. PHOTOS: STEPHEN JAQUIER

# Reservoir stocked for young anglers

By SHAWN McAVINUE

TROUT beware — the children are coming and are ready to fight.

Otago Fish & Game Council officer Steve Dixon released 40 trout into Dunedin's Southern Reservoir yesterday.

The fish were part of a school of 400 trout released for novice anglers to catch at the Take a Kid Fishing Day on Sunday.

Another 400 trout would be released in the reservoir next week for another children's fishing day on September 25.

"It's a great day to get the family out and to get the kids away from their smartphones and iPads ... it's a healthy pastime and it's about getting kids outside again."

A fight with a trout was a sure way to put a smile on a child's face, he said.

A child under the age of 17



For the kids ... A trout swims from a fish transporter into Dunedin's Southern Reservoir yesterday.

could be registered for either day on the Fish & Game website, he said.

Children could use their own rod and tackle but sets could be provided, and a fishing licence

It's a great day to get the family out and to get the kids away from their smartphones and iPads

was not required.

On both days, children could fish between 10am and noon.

The new trout fishing season starts on October 1.

The 800 fish released into the reservoir weighed between 1kg and 6kg.

"There are some big ones going in."

The fish were transported from a hatchery at Macraes' Oceana Gold mine.

Up to 12,000 fish were taken from the hatchery annually and released in Otago waters.

26/9/16

## 180 children at fishing day

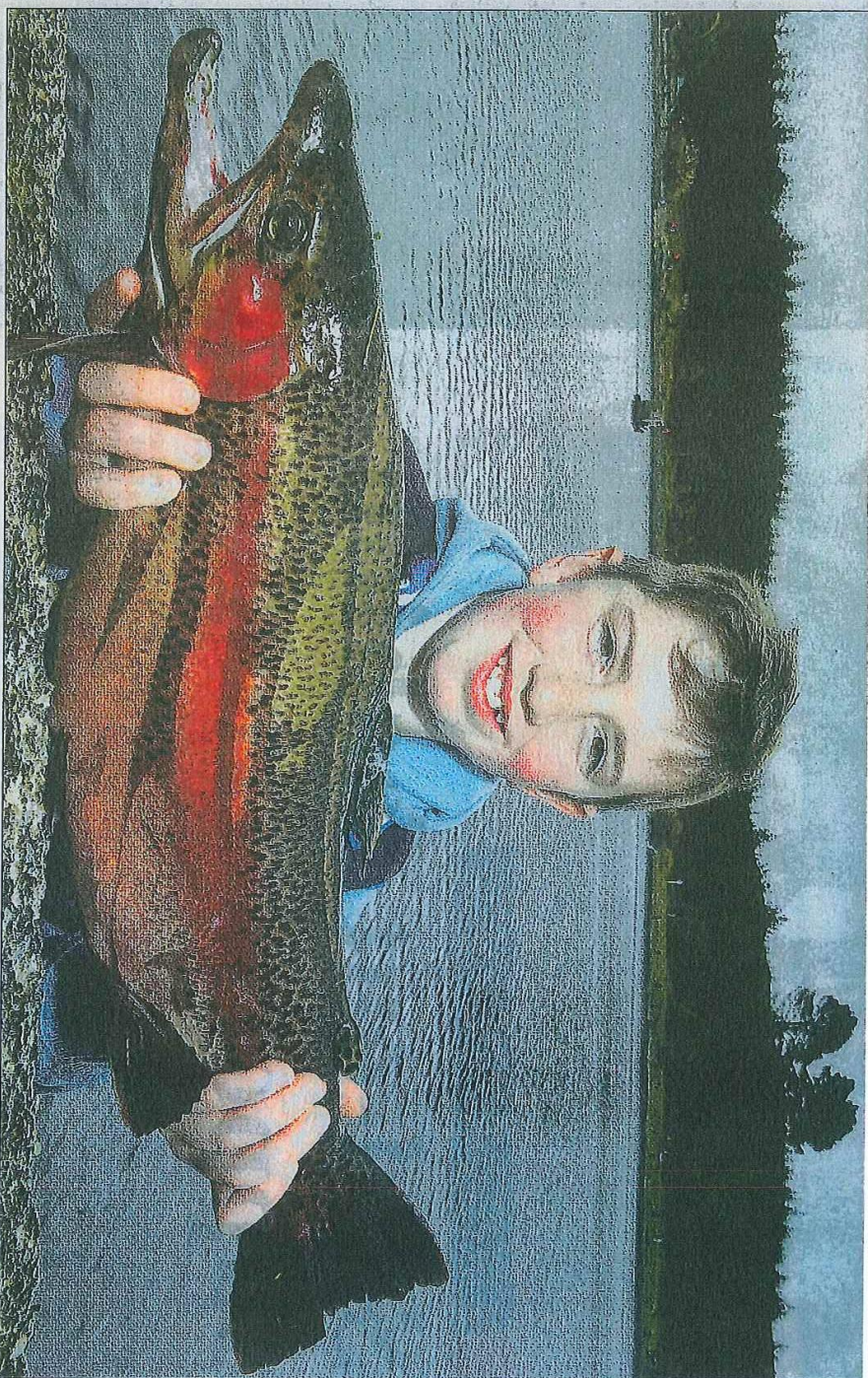
STAFF REPORTER

THE Otago Fish and Game Council's Take a Kid Fishing day was a crowd-puller. About 180 children, accompanied by parents, took part at Dunedin's Southern Reservoir yesterday.

Fish and Game officer Steven

Dixon said between 30 and 50 rainbow trout were caught yesterday, the biggest weighing 3.5kg, and even those who missed out enjoyed the event.

"Kids who didn't catch fish saw fish get caught, so they had just as much fun. It was good to see," he said.



Rainbow's end . . . Kyall McKean shows off the 2.9kg rainbow trout he caught at yesterday's Take a Kid Fishing day at the Southern Reservoir.

PHOTO: GREGOR RICHARDSON

## First time lucky for budding fisherman

By TIMOTHY BROWN

EVERY fisherman has a tale about the big one that got away.

But Kyall McKean not only reeled his almost 3kg catch in, he snagged the monster rainbow trout on his first cast of the day.

The 12-year-old was among 185 children who took part in

Otago Fish and Game Council's Take a Kid Fishing day yesterday.

The "sort of" fisherman said he was pleased with his haul and he had plans to fillet the catch and eat it for tea.

Event organiser Steve Dixon said he was pleased with the turnout to the event, with the children being joined by

parents and caregivers in the hopes of catching one of the 400 trout released into Dunedin's Southern Reservoir by the council.

"Just over 30 fish were caught," he said.

"It's not too bad. It could have been better, but . . . fish will bite when fish will bite." The weather had played its

part, with temperatures reaching double digits and forecast rain holding off.

"It's gone really well," he said.

It was the sixth time the event had been held and it was the biggest turnout yet, he said. "It's a really good turnout and people have had fun."

timothy.brown@odt.co.nz

## 10.2 Otago Pukeko Monitoring 2016 - S Dixon

### COUNCIL REPORT FEBRUARY 2017

#### Otago Pukeko Monitoring 2016

##### Introduction

The purpose of monitoring Pukeko is to enable an annual estimate of population change within a geographic region.

##### Method

The most practical monitoring technique for Pukeko is a roadside survey. Randomly selected transects (roadways) of 8-30kms are driven at slow speed and the number of Pukeko clearly identified with the naked eye from each side of the vehicle are recorded by two observers.

##### *Sites selected*

The sites selected were from historical sites surveyed in the 1980s.

##### *Inch Clutha*

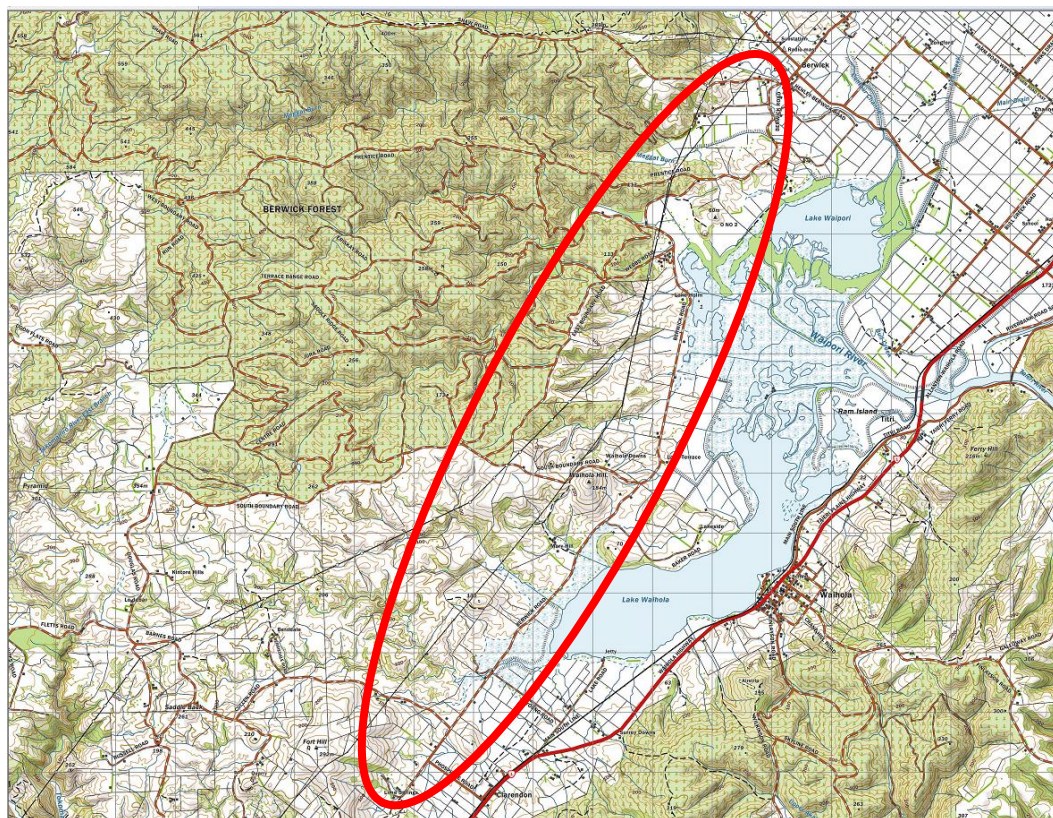


## *Puerua*



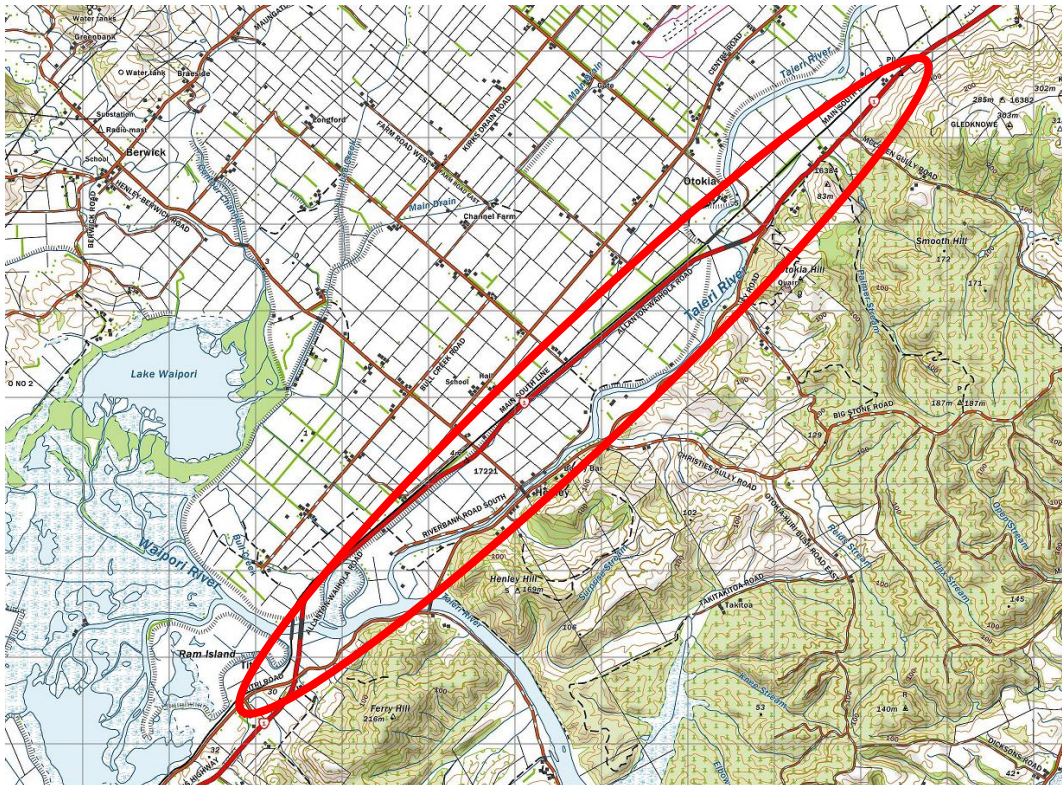
## *Berwick*

The length of Berwick Road from the intersection of Phosphate Road to Berwick



**Flood Free (Borrow Pit)**

From the Otokia Reserve to the bridge over the Waipori River on State Highway one.



**Timing**

Surveys were conducted in March in conjunction with the annual Shoveler trend count.

**Data Collection**

The information recorded at each transect:

Date, transect name, start time, finish time, weather, and the number of Pukeko seen from each side of the vehicle over the section or subsection.

**Travel Speed**

20-50kph, depending on the amount Pukeko cover.

**Limitations**

Weather appears to effect Pukeko activity and hence visibility.

Observers may have difficulty identifying birds at distance.

There may be some variance between observer vision

**Results**

	1981	1999	2000	2001	2004	2011	2012	2013	2014	2015	2016
Flood free	1.5	16.2	40	0	42	18	49	24	110	105	133
Puerua	0	4.5	2.6	5.6	0	13	5	0	0	12	89
Berrick	0	20.7	64	0	2	74	81	27	143	112	84
Inch Clutha	0	19.5	24	6.6	1	15	6	1	35	1	26

Figure 1: Pukekos counted since 1981

There was more than one survey done in the years from 1981 - 2011 so an average of the Pukekos counted was taken in these years. From 2011 – 2016 there was only one survey done per year.

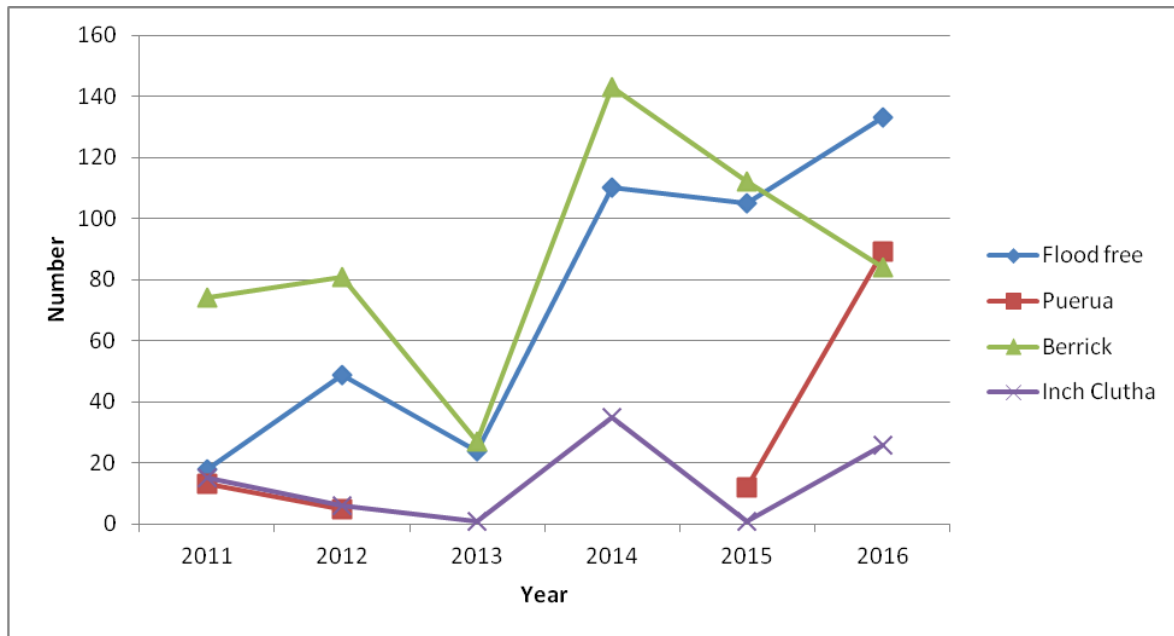


Figure 2: Total Pukeko Counts from 2011 - 2016

Between 2011 and 2016 the total number of Pukekos counted at Otago sites has varied. This year all sites except for Berwick have showed an increase (Figure 2).

It is unknown why Pukeko numbers vary from year to year but what is known is that Pukeko are aggressive and territorial and limitations such as bird movement (birds moving to other habitats outside the monitored areas) must be taken into consideration. Other factors such as changing weather patterns and time of year may also need to be considered when looking at these results.

### Conclusions

While there is some upward movement in the pukeko population the numbers of birds are generally low.

### Recommendations

That there continue to be no hunting season for pukeko in Otago  
 That this report be received.

**Steven Dixon**  
**Fish & Game Officer**  
**January 2017**

**10.3 CONFIDENTIAL Habitat Enhancement Fund – P van Klink**

**10.4 CONFIDENTIAL Habitat Enhancement Fund – M Trotter**



## **10.5 2017 Game Bird Season Regulations - C Halford**

### **COUNCIL REPORT JANUARY 2017**

#### **2017 Game Bird Season Regulations**

##### ***Last Season Regulation Changes***

Apart from the alteration to dates to fall in line with the first Saturday in May for ducks and swans, the opening of the upland game season on Queens Birthday weekend opening and season closing dates no other changes were made to the regulations for the Otago Region in 2016.

##### ***Mallard Population Monitoring***

Otago staff have undertaken aerial monitoring in the past two seasons to monitor mallard duck populations based on methodology used by Southland Fish and Game which will be repeated again in April this season prior to the game season opening.

At this stage staff consider that it is too early to set bag limits based on two season's counts and that additional seasonal information will be required. For this reason changes to grey/mallard hybrid bag limits are not being considered and the 25 daily bag limit has been drafted into the 2017 Game Gazette.

The final proof of the Game Gazette and regulation guides has a deadline of the week following this meeting.

##### ***First Schedule of the Regulations***

The First Schedule of the regulations sets hunting conditions common to all Fish and Game regions and there are no changes to the draft regulations for the 2017 game season.

##### ***20 Gauge Review***

The New Zealand Fish and Game Council has responded to the Minister of Conservations request to review the use of 20 gauge shotguns but hasn't had a response to date.

##### ***Neighbouring Fish and Game Regions***

Both the Central South Island and Southland Fish and Game regions are retaining their mallard/ hybrid bags limits from last season but paradise shelduck and swan bag limits will be assessed from aerial trend counts during late January.

While it can be useful to align with neighbouring limits and conditions, regional variation does reflect differences in weather, topography and land use so some differences should be expected.

### **Recommendations for 2017 season**

There is a very tight deadline for final confirmation of gamebird regulations to the NZC Office immediately after the January trend count in order to obtain Ministerial approval and get regulations printed in time for the season.

Staff have already responded to NZC Office requirements and provided feedback for the draft regulations in line with last season and have recommended no changes for 2017 subject to the results of the January 2017 paradise shelduck and swan trend counts which are included in this agenda in a separate report by Morgan Trotter

The 2017 draft Game Regulations have been attached as appendix 1.

### **Recommendation**

**That the report be received noting that the only proposed changes are to the season opening and closing dates for mallards (6 May to 30 July 2017) paradise shelduck (6 May to 27 August 2017), upland game (3 June to 27 August 2017), and the one day summer paradise shelduck for junior hunters on March 3 2018.**

Cliff Halford  
Fish and Game Officer  
January 2017

## Appendix 1.

### OTAGO FISH AND GAME REGION<sup>1</sup>

#### 1 Game That May be Hunted or Killed—Duration of 2017/2018 Season

Species	Season Duration (dates inclusive)	Daily Bag Limit	Hunting Area
Grey/mallard duck and any hybrid of those species	6 May to 30 Jul 2017	25	All areas
NZ shoveler duck	6 May to 30 Jul 2017	2	All areas
Paradise shelduck	6 May to 27 Aug 2017	12	All areas
	3 Mar 2018 (one day only)	5	All areas junior hunting day (refer to clause 5.4 for this Region)
Pukeko	Closed season	0	All areas
Black swan	Closed season	0	Area A
	6 May to 27 Aug 2017	5	Area B
California quail	3 Jun to 27 Aug 2017	10	All areas
Pheasant	3 Jun to 27 Aug 2017	5	All areas excluding upland game properties with special conditions specified in clause 7 for this Region
	6 May to 27 Aug 2017	No limit	Upland game properties with special conditions specified in clause 7 for this Region
Red-legged partridge	6 May to 27 Aug 2017	No limit	Upland game properties with special conditions specified in clause 7 for this Region
Chukar	3 Jun to 27 Aug 2017	2	All areas

#### 2 Definition of Areas

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

#### 3 Shooting Hours

**Area A:** 7.00am to 6.45pm

**Area B:** 7.00am to 6.30pm

#### 4 Decoy Limit

No limit.

## 5 Special Conditions

- (1) No person shall use or cause to be used on any water within the region for the hunting or killing of game, any fixed stand, pontoon, hide, loo or maimai, except within a distance of 10 metres from the water margin in non-tidal waters, or from the low water mark in tidal waters, or from the outside edge of the raupo growth where raupo abounds, without the prior consent of the Otago Fish and Game Council.
- (2) No person may leave on the hunting ground the bodies or parts of bodies of Black swan or other game shot in the Otago Fish and Game region.
- (3) Shooting from a boat is prohibited on the Clutha River from 6 to 14 May 2017 (refer to First Schedule clause 7).
- (4) The summer paradise duck season is open for one day on 3 March 2018 for junior licence holders only, and is restricted to locations 200 metres or more from open water.

## 6 Refuges and Closed Game Areas

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

### Refuges

### Location

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

### Closed Game Areas

- |  |   |
|--|---|
| (4) Ashley Downs                       | Near Clinton, South Otago                           |
| (5) Tomahawk Lagoon                    | Dunedin   |
| (6) Kawarau River outlet<br>confluence | From Lake Wakatipu downstream to the Shotover River |

## 7 Upland Game Properties with Special Conditions

- (1) **Rough Ridge:** The total area of Rough Ridge Farm with special conditions is described as Rough Ridge and defined as approximately 900 hectares of Rough Ridge Farm near Oturehua that includes Section 24 Block XV1 and Section 2 Block XV11 Blackstone Survey District, Section 3 Block V1 Poolburn Survey District, and Section 42 PT and Section 10 Block XV1 Blackstone Survey District. The boundaries are marked with signposts reading “Rough Ridge Game Preserve”. The property “Rough Ridge” is owned by Fraser and Murray McKnight.

## 10.6 Cardrona River Fishery Monitoring - C Halford

### COUNCIL REPORT FEBRUARY 2017

#### CARDRONA RIVER FISHERY MONITORING

##### *Introduction*

In 2013/14 monitoring of the Cardrona River was implemented to assess outmigration of juvenile trout and observe the river recession during the low flow period (C. Halford - Cardrona River Fishery Monitoring June 2014) in preparation for the setting of minimum flows in the catchment. Further monitoring was undertaken during the 2014/15 season along with additional spawning surveys in 2016. This report summarises those findings.

##### *Electro Fishing*

The main stem Cardrona River was sampled randomly at the same four monitoring sites as in 2013/14 shown on the attached map (Appendix 1). The fifth site at Branch Creek was not surveyed in 2014/15 as the significance of the stream for trout spawning and juvenile recruitment has been solidly established.

##### *Method*

One electric fishing machine was used in conjunction with a pole net to cover sections of the site and allowing for variations with dropping flows. Sites were marked with a GPS. Fish captured were measured and recorded with all details subsequently stored on a data base.

##### *Results*

Electro fishing was undertaken on four days starting on December 24, 2014 and finishing on March 4, 2015 (Results in Table 2). Flows in the Cardrona River were steady throughout the spring and into December so monitoring was held back to specifically target the low flow period immediately prior to and during the flow disconnection period.

While it was again difficult to accurately assess the level of outmigration due to the unpredictability of this activity some of the findings during the low flow period confirm that outmigration and general fish movement is progressive and not necessarily characterised by a triggered outmigration event.

This was evident at monitoring site four on 24.12.14 when only two upland bullies and two rainbow juveniles were caught. Then at the same site with diminishing flows on 21 January 2015 and disconnection downstream to monitoring site 3, twenty juvenile rainbow trout ranging in size from 54mm – 168mm were captured along with three galaxiids 35mm, 40mm and 74mm in length and 3 bullies.

As with the 2013/14 results the lower section of river from the State Highway 6 Road Bridge to the Clutha River confluence confirmed its value as important rearing and holding habitat

with the contribution of cooler through gravel flows and Camerons Creek input. This section of river continuously held the highest population of trout during the summer period.

Visual assessments of the drying reach were also undertaken to monitor the flow recession as shown in Table 1. The 5km stretch of river from downstream of monitoring site four to the State Highway Bridge remained dry until mid- late April.



*Figure 1. Low flows through the drying reach at monitoring Site 3 showing significant algae growth. Several yearling trout and bullies were trapped with temperatures recorded at 25°C. 16 January 2015*

### ***Spawning Surveys***

With flushing spring flows it was difficult to get ideal conditions to undertake rainbow trout spawning surveys as experienced in 2013/14 therefore only one survey was undertaken on 23.10.14 with the assistance of two Upper Clutha Angling Club members.

The 3km section of river from the Avalon DOC track to James Road was surveyed on foot with low and clear river conditions. Nine adult brown trout, ten adult rainbows, and one large long fin eel estimated at about a meter long was seen. Only one redd was positively identified. Whilst viewing conditions were suitable, loose gravels associated with bed movement through regular flushing flows made it difficult to clearly identify redds, and timing of spawning varies seasonally.

In 2016 surveys planned to assess rainbow trout spawning in October were interrupted with high river levels and a fresh peaking at 47 cumecs on October 11.

On November 2 with improved river conditions the section from the Branch Burn confluence upstream to the Waiorau Ski Field Road Bridge (approx 6 kilometers) was surveyed. In total 35 adult trout (mostly rainbow with some unidentified), 3 small trout and a school of fingerling brown trout were observed. Four pairs of rainbow were actively spawning and 1 adult rainbow was seen in midstream slowly out-migrating. Three redds were identified.

On November 4 a further stretch of river from Spot Burn upstream to the Branch Burn (approx 8 kilometers) was surveyed. In total 28 fish were seen comprising of 22 adult rainbow, 4 adult brown trout and two small trout. Six redds were identified.

Whilst spawning surveys in 2016 were undertaken later than planned the November surveys indicate the extent of the spawning period. Additional surveys will be undertaken through late autumn and winter months this year to gain a better understanding of fish distribution and migration times, key spawning sites and species behavior.



**Figure 2** A stable section of the Cardrona River downstream of James Road which held adult trout in the pool at the top of the run.

### ***Presence of Native Fish in the Cardrona Mainstem***

Clutha flathead galaxias were caught on two separate surveys of site four, the Clutha River confluence, and on a separate visit immediately downstream of the State Highway 6 Road Bridge. On 04.03.15 juvenile galaxiid ranging in size from 38mm to 45mm were caught at the Clutha Confluence with others lost through the pole net due to their small size.

While electro fishing surveys were focused on trout presence and migration patterns it is interesting to note that adult and juvenile galaxiid were again captured at the monitoring sites as in 2013/14. While DOC makes reference to a 'sink' population (recruited from a self contained, self sustaining tributary population) it is likely that small populations of Clutha flathead galaxias co-exist with trout in selected river habitats within the mainstem Cardrona River.

A Cardrona River mainstem survey of Clutha flathead galaxias undertaken by Department of Conservation in March 2015 has been included in this report as *appendix 2*.

**Table 1: Monitoring of the flow recession**

<b>Date</b>	<b>Area GPS Reference</b>	<b>Observations</b>
11.01.15	E1295390 N5040520	Point where the flow ceases with minor connections downstream to the Ballantyne Road Bridge.
11.01.15	E1294816 N5039410	Several yearling trout were seen in a run between sites 3 and 4 that would eventually dry. <b>22°C</b>
11.01.15	E1294754 N5039224	3 large adult brown trout seen in a pool in the drying reach with very shallow inflows and outflows restricting their movements. <b>22°C</b>
11.01.15	<b>Site 3</b> E1295677 N5040807	The river previously flowed through 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, no trout were seen. <b>22°C</b>
11.01.15	State Highway Bridge	70 metres above the bridge flows emerge from gravels. Algae were present but water clarity was excellent. Temp <b>15°C</b> . No fish observed. Flows started disconnecting downstream from the Ballantyne Road Bridge at the end of December.
16.01.15	<b>Site 3</b> True right channel	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 was seen actively feeding in the vicinity <b>25°C</b> . See figure 1.
16.01.15	E1294755 N5039229	Between sites 3 and 4 in very low flows within the drying reach, six adult trout and several 1+ trout were seen in separate pools. Pied stilts were seen feeding in the shallow flows <b>25°C</b>
16.01.15	E1294493 N5039066	Between sites 3 and 4 in very low flows within the drying reach, 4 adult trout, several 1+ and trout fry were seen in a pool/run and a further 2 adult trout were seen in a pool 100 metres upstream. <b>24°C</b>
21.01.15	General observation	A minor flow increase on January 19 prompted fish to move downstream within the drying reach but these were eventually trapped as flows receded quickly again. Below the Ballantyne Road Bridge in a disconnected run a post spawning adult rainbow was caught and killed due to its stressful state and very poor condition. 12 yearling trout were also seen. <b>26°C</b>



**Table 2: Schedule Of Electric fishing survey results**

Area and site description	Date	Flow/Visibility/Habitat	Species and Numbers Sampled				
			BT	RT	Bullies	Galaxiid	LF eels
<b>SITE 1</b>  <b>Small bed gravels near the Clutha confluence in two channels</b>  <b>Overhead willow cover and bank vegetation increases upstream</b>	24.12.14	Water clarity good with nice flow. Channel split into two with good bank cover. <b>13°C</b>	(0+) 0 (1+) 0	(0+) 12 (1+) 4	moderate	1 @64mm	nil
	21.01.14	Increased flows from a showery period on January 19. Good flow	(0+) 0 (1+) 0	(0+) 9 (1+) 17	low	nil	nil
	04.03.15	Less visual flow than the previous visit with cold temperature at <b>10°C</b> due to subsurface flows upwelling and contribution from Camerons Creek	(0+) 0 (1+) 1	(0+) 8 (1+) 4	low	* 8 Juveniles	nil
<p><i><b>Observations:</b> The main channel had changed from 2013/14 and split in two. Juvenile rainbow trout were the dominant species in both young of the year and yearlings. Bank cover was good and similar to 2013/14 showing this to be a stable section of river providing good juvenile trout habitat.</i></p> <p><i>*The juvenile galaxiid caught on March 4 ranged from 38mm- 45mm in length with several others lost through the pole net</i></p>							
<b>State Highway 6 Bridge, downstream</b>	26.02.15	Low and clear with bank cover and overhead willow, mostly unchanged from 2013/14 with similar flows.	(0+) 0 (1+) 13	(0+) 5 (1+) 12	high	*1@65mm	1 disturbed
<p><i><b>Observations:</b> Approx 350 meters of water was randomly fished downstream. Juvenile trout were abundant in the deeper water with 51 rainbow trout of combined 0+ and 1+ class released immediately. Only a sample of captured fish were taken for measuring due to the distance back to the sampling equipment and the warm temperatures.</i></p> <p><i>*1 adult Clutha flathead galaxiid was measured at 65mm and 2 others about the same size were seen evading capture.</i></p>							

Area and site description	Date	Flow/Visibility/Habitat	Species and Numbers Sampled				
			BT	RT	Bullies	Galaxiid	LF eels
<b>SITE 2</b> <b>Braided mobile river bed with little cover and similar to 2013/14</b>	24.12.14	Water clarity good with nice flow contained in one channel <b>18°C</b>	(0+) 0 (1+) 0	(0+) 0 (1+) 0	nil	nil	nil
	21.01.14	Slight increase in flows upstream but the bed was dry in this section and no further information was collected from this reach	(0+) 0 (1+) 0	(0+) 0 (1+) 0	nil	nil	nil
<i><b>Observations:</b> On the first survey when the reach had water no trout or native fish were seen or caught. It is expected that out-migrating fish would move through this reach quickly so surveying would have to be done more frequently. This reach remained dry until the end of April 2015.</i>							
<b>SITE 3</b> <b>Braided mobile river split into two channels with some bank cover</b>  <b>Algae growth increased as flows diminished</b>	24.12.14	Reasonable flow in two separate channels. Very few fish were seen or caught which was similar to the same period in 2013/14.	(0+) 0 (1+) 0	(0+) 3 (1+) 0	low	nil	nil
	21.01.15	Reach was dry prior to brief showers on January 19. Flow had increased and flushed the bed. Temp was <b>14°C</b> due to the additional flows. This section then dried quickly.	(0+) 0 (1+) 0	(0+) 5 (1+) 1	nil	nil	nil
<i><b>Observations:</b> The river section had changed from 2013/14 by splitting into two channels. Filamentous algae was prolific clogging the waterway then a flush on January 19 cleaned the bed. Seven adult trout in total were seen in three separate pools over a 200 meter stretch of river immediately upstream of the survey site. Nine yearling trout were seen in one pool showing there was some downstream movement through the survey period.</i>							

Area and site description	Date	Flow/Visibility/Habitat	Species and Numbers Sampled				
			BT	RT	Bullies	Galaxiid	LF eels
<b>SITE 4</b>  <b>Near the top of the drying reach</b>  <b>Mobile river bed with little bank cover and similar to 2013/14</b>	24.12.14	Water clarity good with nice flow contained in one channel. Very few fish seen	(0+) 0 (1+) 0	(0+) 1 (1+) 1	low	nil	nil
	21.01.15	Slight increase in flows with some broken water in a fast run providing good habitat for fish. <b>14°C</b>	(0+) 0 (1+) 0	(0+) 6 (1+) 14	low	*3	nil
	26.02.15	Water clarity was excellent with less flow than the previous visit.	(0+) 0 (1+) 1	(0+) 0 (1+) 10	moderate	*3	nil
<p><b>Observations:</b> <i>Few fish were seen or caught on the first visit then a good number of juvenile rainbow were caught in January and February showing that there is downstream movement during the summer months through the drying period. Results in 2013/14 showed a similar pattern.</i></p> <p><i>*Adult Clutha flathead galaxiid were present similar to 2013/14 and caught on two separate surveys this season which shows that some co-existence with trout populations in this river stretch is likely.</i></p>							

## ***Conclusions***

1. Yearling trout were still gathering at the top of the drying zone during February which was also noted in 2013/14 indicating that outmigration is progressive rather than being characterised by a triggered outmigration event.
2. Minor flushes as experienced on January 19 encouraged both adult and juvenile trout to migrate downstream and in most cases led them to less desirable holding water within the drying reach where they became stranded and died through dewatering and predation.
3. Loss of water through the 5 kilometer drying reach has a significant impact on the aquatic ecosystem and natural character of the river where trout and native fish become stranded and die.
4. The river section downstream of the State Highway Bridge to the Clutha River confluence is confirmed important trout and native fish habitat requiring robust water management to ensure continuous flow is maintained year round.
5. The Cardrona River catchment supports important trout rearing and recruitment to the Upper Clutha fishery which needs to be maintained and protected long term.

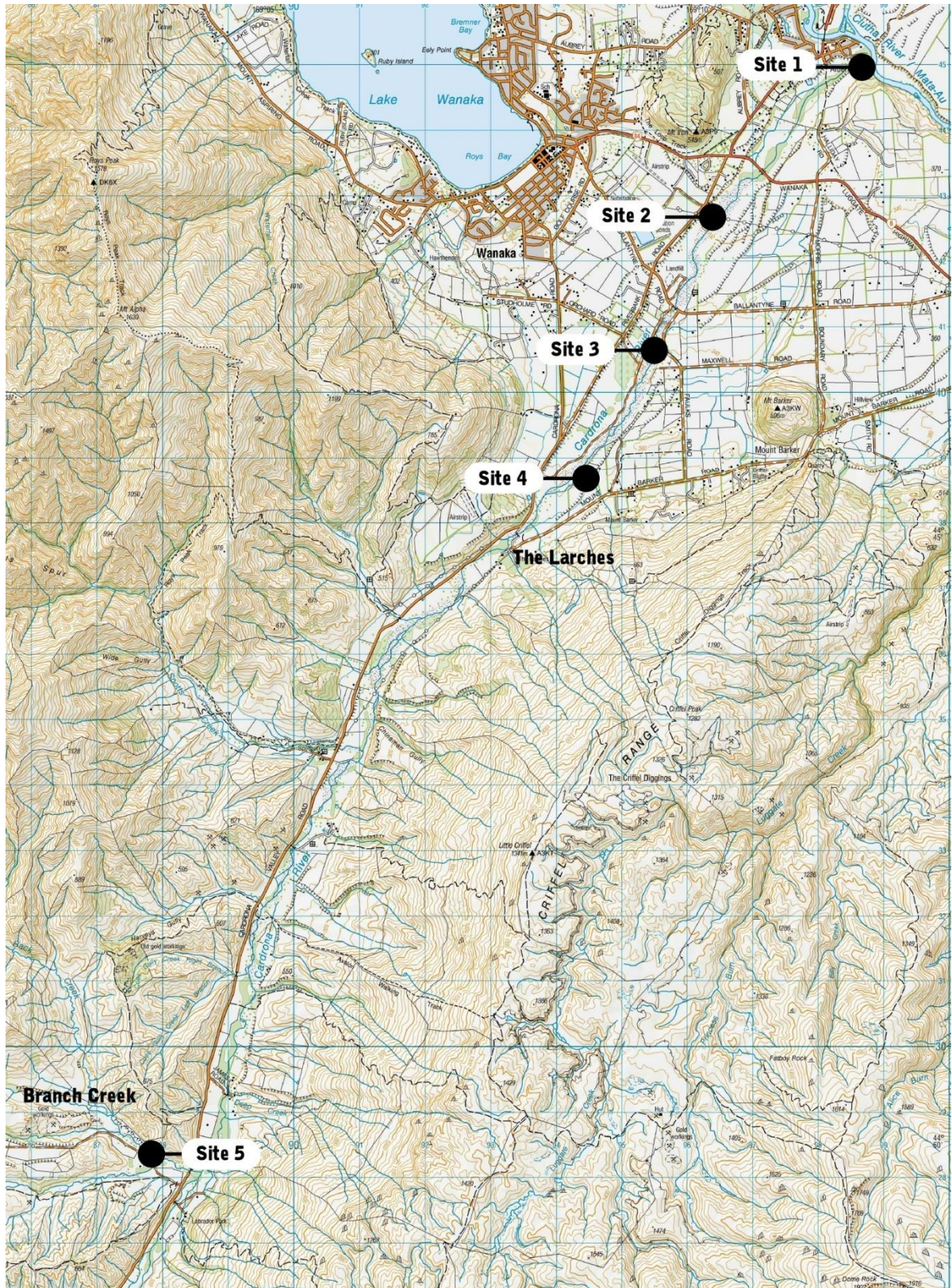
## ***Recommendation***

That the report be received.

Cliff Halford  
Fish and Game Officer  
February 2017

## Appendix 1

### Map detailing the survey sites on the Cardrona River mainstem



Note : Branch Creek shown as Site 5 should be referred to as Branch Burn from mapping.

## *Appendix 2*

### **Cardrona River Clutha Flathead Galaxias Survey, 18 March 2015.**

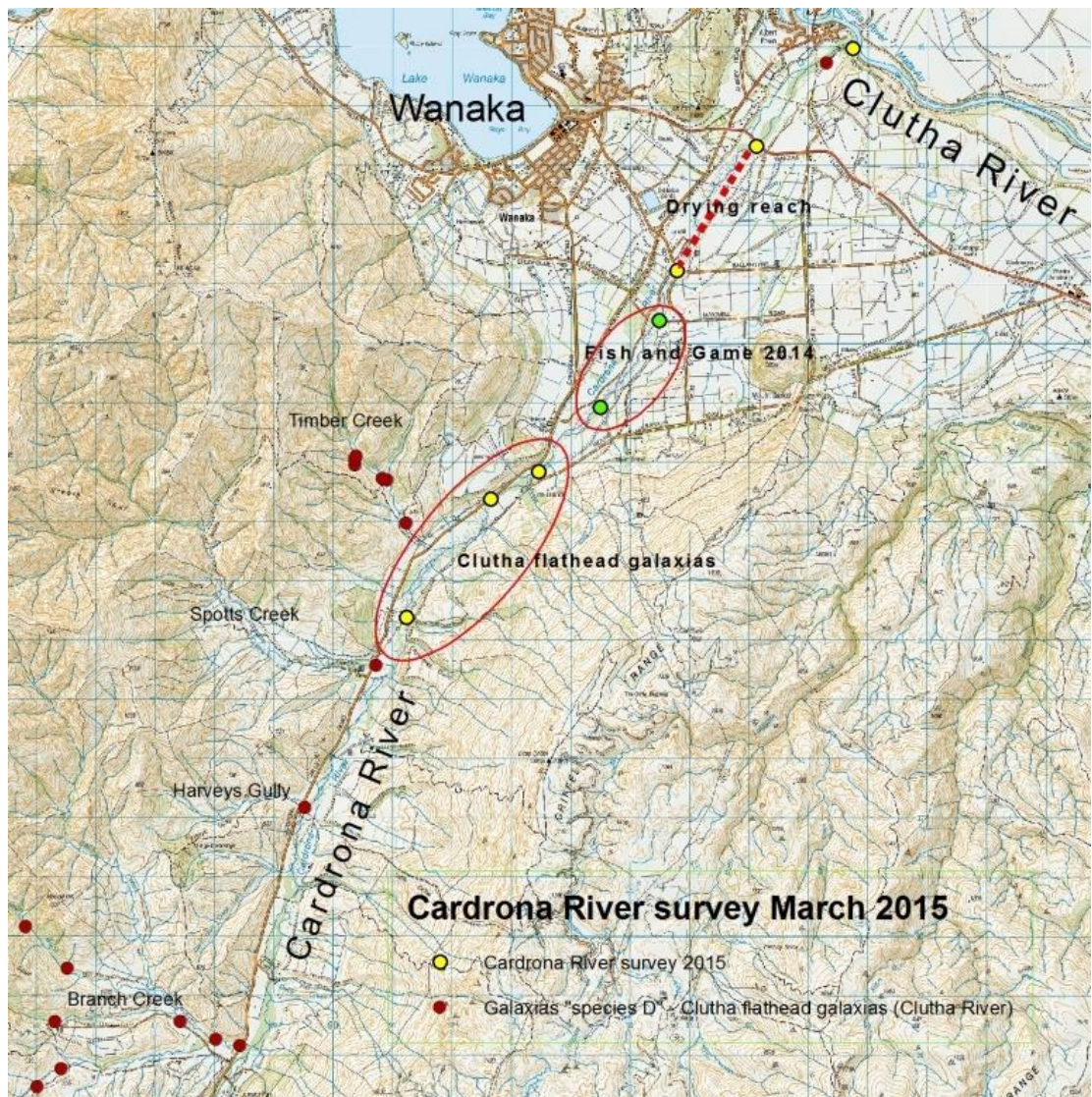
*Reporting and fieldwork by Daniel C. Jack, Department of Conservation Otepoti/Dunedin Office and assistance in the field provided by Aaron Horrell, Clutha Fisheries Trust, Cromwell.*

#### ***Introduction***

The Otago Fish and Game have been undertaking survey work to establish the effects of different seasonal water flow on the sports fishery in the main channel of the Cardrona River (Halford 2014). During these surveys the field team has encountered the endemic galaxias species Clutha flathead galaxias (Map 1). Clutha flathead galaxias have only been observed twice in the main channel of the Cardrona River recorded on the New Zealand Freshwater Fish Database (NZFFD); confluence of Harvey's Gully and the Cardrona River (NZFFD card 25974) and above the confluence with the Clutha/Mata-Au River (NZFFD card 101734). Both these records are over ten years old. Recent survey work in the Cardrona River catchment (Ravesncroft 2013) found Clutha flathead galaxias scattered throughout many tributaries. However no survey work in the main channel was undertaken. The objective of this survey is to establish an up to date distribution of Clutha flathead galaxias within the main channel of the Cardrona River.

#### ***Methods***

Survey work was undertaken on the 18 March 2015 at six sites. At each site approximately 50m<sup>2</sup> of shallow riffle habitat was fished using back-pack electro-fishing machine (Kainga EFM300, NIWA Instrument Systems). Survey site locations were obtained using hand held Global Positioning System receiver (Garmin Corp, *GPSmap 60CSx*). All fish species captured were identified, measured (mm) and then released.



Map 1. Freshwater fish survey work in the Cardrona River by Department of Conservation and Otago Fish and Game Council 2014 – 15, and NZFFD records of Clutha flathead galaxias.

Table 1. The location, species, abundance and life stage/size range (mm), Cardrona River, 18 March 2015.

<b>Location</b>	<b>GPS (NZTM)</b>	<b>Species (number/abundance)</b>	<b>Life stage/Size Range (mm)</b>
Upstream of Clutha/Mata-Au River confluence	E1298734	Upland bully (common)	Adults and juveniles
	N5044979	Rainbow trout (13)	60 - 100
		Brown trout (1)	< 100
Upstream of State Highway 6 Road Bridge	E1297118	Upland bully (abundant)	Adults and juveniles
	N5043334	Rainbow trout (12)	70 – 250
		Brown trout (4)	80 - 300
Ballantyne Road Bridge	E1295784 N5041225	No species observed	
Downstream of The Larches Road Bridge	E1293447	Upland bully (common)	Adults and juveniles
	N5037840	Clutha flathead galaxias (2)	50, 60
		Rainbow trout	200, 500
Upstream of ORC flow gauge	E1292645	Upland bully (common)	Adults
	N5037380	Clutha flathead galaxias (3)	50, 55, 70
		Rainbow trout (3)	120, 200
Pisa Range track river crossing	E1291227	Upland bully (abundant)	Adults
	N5035386	Clutha flathead galaxias (1)	68
		Rainbow trout (3)	60 - 100



## ***Results***

Survey work was undertaken between the confluences with the Clutha/Mata-Au River upstream to the confluence with Spotts Creek. Clutha flathead galaxias were captured at three sites, The Larches road bridge, ORC flow gauge and Pisa Range track river crossing, (Map 1, Table 1). A total of six fish were captured, ranging in size 50 – 70 mm and mean 58.8 mm.

No fish species were observed in the river at Ballantyne Road Bridge despite surface water being present. Surface water percolated into the alluvium immediately downstream of the road bridge and resurfaced upstream of the State Highway 6 Road Bridge. Upland bully and rainbow trout occurred at all sites where fish species were present and brown trout were observed at the State Highway 6 Road Bridge and at the Clutha River confluence (Map 1).

## ***Discussion***

The Clutha flathead galaxias is confined to the upper Clutha/Mata-Au River system downstream as far as the Benger Burn, including tributaries of Cardrona and Lindis Rivers, two small tributaries in the Bannock Burn and several tributaries of the lower Manuherikia River (McDowall 2010). Evidence from recent survey work (Ravenscroft 2013, Jack 2011, 2012, 2013) suggests that this species is becoming absent from creeks where it has historically been documented over the last decade. This has led to the Clutha flathead galaxias receiving a threatened species threat ranking of “*Nationally Critical*” (Goodman et al. 2014). Barriers to colonization by brown and rainbow trout are the only mechanism protecting Clutha flathead galaxias from becoming regionally extinct in the Wanaka / Lindis area. Small populations are temporarily persisting where instream environmental conditions are present which reduce trout dominance. These factors generally come in the form of low water flow with corresponding high water temperatures (Leprieur et al. 2006) and or high gravel bed movement and habitat complexity (Townsend and Crowl 1991). The presence of small numbers of Clutha flathead galaxias in the main channel of the Cardrona River is encouraging although these fish are likely to be a demographic sink population (Woodford and McIntosh 2010, 2011). Many small unprotected Clutha flathead galaxias populations exist in Timber, Spotts and Branch Creeks are likely to be providing recruits into the main channel. The long-term future of these tributary populations is in doubt however and over time will slowly become displaced by trout species. There is currently only one known naturally protected Clutha flathead population in the Cardrona River catchment, situated at Roadmans Gully which may continue to provide small numbers of recruits into the lower Cardrona River, should they survive long enough. The present water management regime appears to be providing for Clutha flathead galaxias in the primary channel of the Cardrona River.

There is an opportunity to translocate Clutha flathead galaxias from the main channel into any Cardrona River tributaries that are fishless and have barriers such as waterfalls, for example, the upper reaches of Pringles Creek. Taking fish from the main channel may avoid putting pressure on small protected populations like Roadmans Gully.

## **References**

- Goodman, J.M.; Dunn, N.R.; Ravenscroft, P.J.; Allibone, R.M.; Boubee, J.A.T.; David, B.O.; Griffiths, M.; Ling, N.; Hitchmough, R.A.; Rolfe, J.R. 2014: *New Zealand Threat Classification Series 7*. Department of Conservation, Wellington.
- Halford, C. 2014: Cardrona River Fishery Monitoring. *Council Report June 2014*. Otago Fish and Game Council, Dunedin.
- Jack, D.C. 2011: Clutha Flathead galaxias annual fieldwork report 2011. *Unpublished internal report*. Department of Conservation, Coastal Otago Area Office, Dunedin. [DOCDM-1142647](#)
- Jack, D.C. 2012: Clutha Flathead galaxias annual fieldwork report 2012. *Unpublished internal report*. Department of Conservation, Coastal Otago Area Office, Dunedin. [DOCDM-1142640](#)
- Jack, D.C. 2013: Clutha Flathead galaxias annual fieldwork report 2012 - 13. *Unpublished internal report*. Department of Conservation, Coastal Otago Area Office, Dunedin. [DOCDM-1222872](#)
- Leprieur, F.; Hickey, M.A.; Arbuckle, C.J.; Closs, G.P.; Brosse, S.; Townsend C.R. 2006: Hydrological disturbance benefits a native fish at the expense of an exotic fish. *Journal of Applied Ecology* 43: 930–939.
- McDowall, R.M. 2010: *New Zealand Freshwater Fishes, an Historical and Ecological Biogeography*. *Fish and Fisheries Series 32*. Springer Sciences+Business Media ([www.springer.com](http://www.springer.com)).
- Ravenscroft, P.J. 2013: A distributional survey of the fish communities in tributary streams of the Cardrona River, Central Otago, New Zealand. *Unpublished internal report*. Department of Conservation, Coastal Otago Area Office, Dunedin. [DOCDM-1169013](#)
- Townsend C.R.; Crowl T.A. 1991: Fragmented population structure in a native New Zealand fish: an effect of introduced brown trout? *Oikos* 61: 347–354.
- Woodford, D.J.; McIntosh, A.R. 2010: Evidence of source-sink metapopulations in vulnerable native galaxiid fish driven by introduced trout. *Ecological Applications* 20: 967-977.
- Woodford, D.J.; McIntosh, A.R. 2011: Location of demographic sources affects the distributions of a vulnerable native fish in invaded river networks. *Freshwater Biology* 56: 311-324.

## **10.7 Proposed Template for Anglers Notice Review - R Boyd**

### **COUNCIL REPORT FEBRUARUY 2017**

#### **Proposed Template for Anglers Notice Review – Otago Fish and Game**

At its 16 June 2016 meeting, Council agreed to establish a working party convened by Councillor Boyd to develop a Template for assessing changes to the Anglers Notice. This is the report of the working party comprised of Councillors Boyd, Barlow and Cole.

#### **Background**

Otago Fish and Game's practise has been to undertake 3 yearly reviews of the Anglers Notice. However, there is no formal policy to undertake the reviews at 3 yearly intervals and no specific format or agreed process for the reviews. For a number of reasons it is now more than 4 years since the last review of the Otago Anglers Notice.

What is proposed in this paper is a template for periodic Anglers Notice Reviews that is intended to better meet the Council's statutory responsibilities. Such reviews need to be detailed enough so that Council can be confident that overall the regulations in place will be fit for purpose until at least the next periodic review. In adopting a more formal and in depth approach for such periodic reviews, it is suggested that there should also be an annual staff assessment of any pressing matters that Council may need to address through interim amendments to the regulations in the between years. Overall, the Template is aimed at ensuring Otago Fish and Game adopts best practice in undertaking its Anglers Notice Reviews, including always providing opportunity for public/angler input.

#### **The Template**

##### **Purpose**

The overall purpose of the proposed template is to provide a more consistent, structured and formal approach to periodic/regular reviews of the Anglers Notice using a process that is proactively driven by Council. It is proposed that these formal reviews should be undertaken either every fourth or fifth year – with the interval a decision that Council needs to make.

The Template is designed to ensure that the full range of information available on the fishery as well as anglers' views are taken into account when Council makes decisions on how the fishery is regulated and managed. A key element of this is to also ensure that the Anglers Notice is consistent with Council's overall responsibilities and that it contributes to achieving the objectives of the Sports Fish and Game Management Plan for the Otago Region.

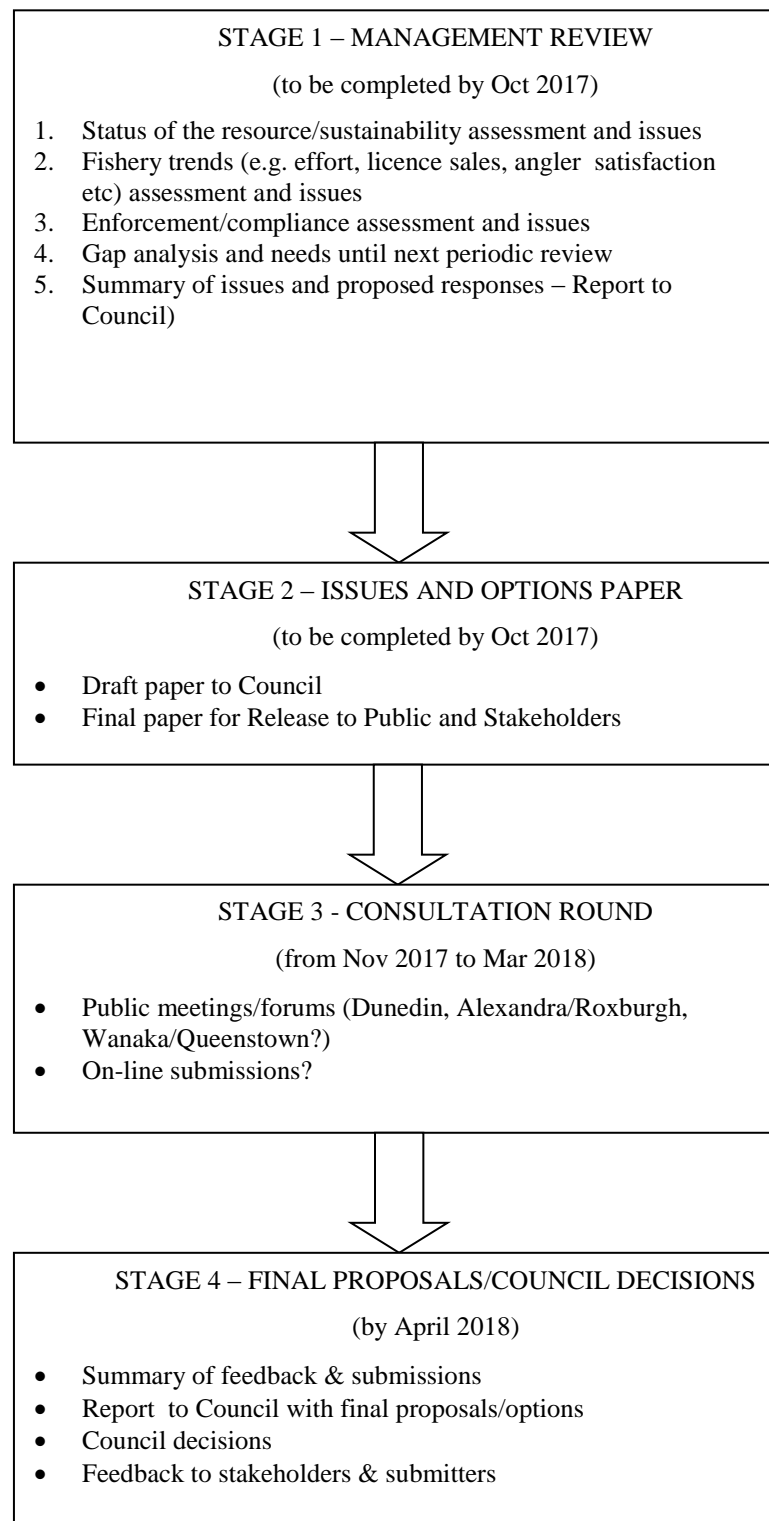
The adoption of a consistent approach to periodic reviews means anglers can become familiar with how the process provides opportunities for their input. At staff level the adoption of a structured and formal approach means that the necessary outputs associated with the review will be clearly defined from the outset. Thus, the work associated with each output can be planned in advance and programmed into staff work plans with the results of the review

included on the Council's meeting agenda at the required times for implementation by Government.

The adoption of the Template is intended to give Council better information on which to base decisions on regulations. It will give Council, staff and the angling community confidence that the regulations will maintain and enhance sports fish resources and angling opportunities for future generations. The Template is designed to ensure that the Anglers Notice Review fully complies with the Council's statutory responsibilities as well as being effective in addressing both the short and longer term needs of the Otago sport fishery and anglers.

## The Process & Template

The Template flowchart below gives an overview of the proposed process and timeline. An explanation of what would be involved in each stage of the Anglers Notice Review follows.



## **Stage 1 – Fishery Management Review**

The first stage comprises a review of information on the resource, on the fishery and the then current regulations to identify issues that might be able to be addressed through changes to the Anglers Notice. This review is critical to the success of the entire process.

**Review of the resource** would focus on what could be termed as ‘biological’ information – for example population numbers from swim surveys, spawning surveys, environmental surveys, or any other resource surveys that provide new or improved information on the current status of sports fish stocks and/or stock trends by catchment or area. The review would focus on identifying resource issues and not possible solutions that might address these issues – identifying a response to the issues is a separate task undertaken later in the process.

**Review of fishery trends** would compile and review new information on the fishery and anglers since the last periodic review – for example new information such as the National Angling Survey, creel surveys, catch and effort trends, methods and tackle, licence sales trends, angler satisfaction surveys, user conflicts etc. Again, this review would focus on identifying fishery issues, not the potential solutions.

**Review of compliance** would take a broad look at the main trends and issues in compliance with the regulations throughout the region, including compliance by area, by licence holder type, and by method. The review would identify any trends and issues with compliance including public awareness and understanding of the regulations.

**Gap analysis** would aim to assess whether or not the current regulations will address the issues identified in the three reviews above. In other words will the current regulations address these issues and how do they do this? If not, why not? What changes to the Anglers Notice would address these issues? Are there other solutions that lie outside of changes to the Anglers Notice?

**The Report to Council** would provide Council with the results of the review and the issues it identifies. It would provide Council with options for changes to the Anglers Notice to address issues identified in the review. It would include an assessment of how the options are consistent with the Otago Sports Fish and Game Management Plan and how they conform to the Council’s statutory responsibilities.

## **Stage 2 – Issues and Options Paper**

The draft Issues and Options Paper follows on from the Report to Council (above) and could be provided to Council at the same time as the Report. What is proposed here is the draft of a concise paper that will ultimately be released to the public to form the basis for consultation with anglers and other stakeholders.

Council would provide feedback on the draft followed by formal approval of the final *Otago Issues and Options - Anglers Notice Review* for release to the public and stakeholders.

### **Stage 3 – Consultation/engagement with stakeholders**

Consultation is essential to provide stakeholders with an up to date and informed picture of the status of the fishery and any issues that Otago Fish and Game believe should be addressed. Consultation would include outlining the options that are being considered and the benefit of each option.

Three approaches to consultation are proposed:

Press release/post on the Otago Fish and Game website

Public meetings (Dunedin, Alexandra/Roxburgh, Queenstown/Wanaka?) for anglers/stakeholders to have direct input

On-line and postal submissions – perhaps using an online submission form.

### **Stage 4 – Finalisation/Council Decisions**

The final stage involves the following elements:

Preparation of a summary of feedback and submissions for Council

A report to Council with final proposals/options

Council decisions

Feedback to stakeholders and submitters

Council's decisions would form the basis for its request to Fish and Game in Wellington for amendments to the Otago Anglers Notice.

### **Timeline**

The proposed Template above has a suggested timeline for 2017-18 and a similar timeline is proposed for future years, spanning an overall period from about mid-winter to the following April.

Should Council adopt the proposed Template then the earliest that it could make changes to the current Anglers Notice for Otago would be the start of the 2018-19 licence year. The first review using the Template is likely to be a learning exercise and therefore may be a little more difficult than in future.

Rick Boyd  
Councillor  
Otago Fish & Game Council  
February 2017

## 10.8 Aerial Trend Counts 2017 - M Trotter

### COUNCIL REPORT FEBRUARY 2017

#### *Aerial Trend Counts 2017*

#### Summary

Trend counts of paradise duck, Canada goose and black swan are conducted in the last week of January every year on a selection of molting sites throughout Otago. The total number of paradise ducks observed increased slightly since last summer. There was a marked increase in Canada geese and swan numbers were similar to last year's count. There is no recommendation for paradise duck or swan regulation adjustment.

#### Methods

Approximately 90 waterfowl molting sites throughout the Otago are investigated and bird numbers counted. Flights are made in a fixed-wing light aircraft. Count sites are circled at low level and the numbers of each species (paradise shelduck, black swan and Canada geese) are estimated by Fish & Game staff. Photographs are also taken of the birds and these are counted at a later date to increase accuracy. Some sites in Arrowtown, near Dunedin and in the Ida Valley were also counted from the ground. Trend counts are not a census of populations. They are designed to reflect population changes by regularly monitoring molting sites.

#### Results

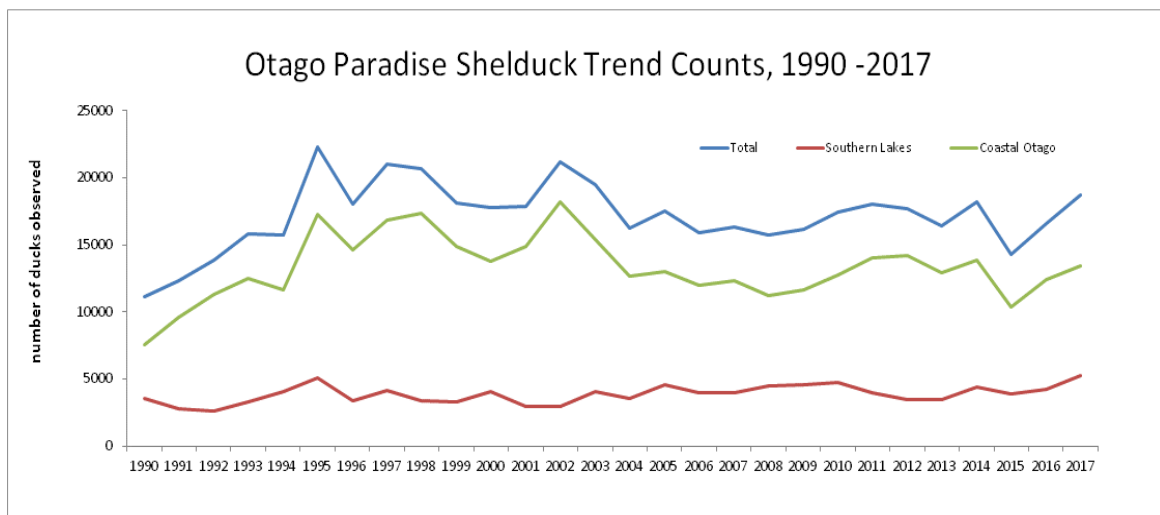


Figure 1: January aerial trend counts of paradise shelduck in the Otago Region, 1990 - 2016



The total number of paradise ducks counted in 2017 was 18,753 and it was 16,997 last summer (figure 1). The Southern Lakes and coastal area counts have been trending upwards over the last two years but are not dissimilar from historic results.

Site	Area	2017	2016	2015	2014
Kaikorai Estuary	E C	370	825	755	437
Tomahawk Lagoon	E C	490	482	1060	243
Hoopers Inlet	EC	nc	nc	nc	nc
Papanui Inlet	EC	nc	nc	nc	nc
Waikouaiti Estuary	E C	0	0	0	0
Waikouaiti Sewage	E C	1100	710	820	629
Hawksbury Lagoon	E C	0	0	0	0
Macraes Flat Ponds	ST	445	576	565	157
Two Johns Dam	ST	145	225	0	20
Peat Bog	ST	0	24	35	0
Billy's Flat	ST	475	57	65	287
Stewarts Dam	ST	0	0	51	0
Shinglea Road Dams	ST	20	0	0	0
Hunterleigh East Dams	ST	nc	nc	0	0
Sutton Pond	ST	0	nc	0	0
Middlemarch Sewage	ST	nc	nc	nc	nc
Kidds Rd (Bruhnes)	ST	122	8	6	0
Salt Lake	ST	0	0	nc	0
Andersons Pond (Deep Stream Sth)	ST	nc	nc	0	
Springfield Dams	ST	1100	nc	0	0
Rocklands Road Ponds	ST	0	560	45	909
Dunstan Rd Rocklands	ST	0	21	0	0
Loaganburn Dam	M	0	410	12	580
Styx Basin	M	825	155	70	685
Linburn Dissipation	M	0	5	182	0
Linnburn Dam	M	0	62	11	219
Falconers Dam	M	20	0	0	10
Totara Creek Confluence	M	0	0	208	12
Maniototo Taieri River	M	0	0	0	0
Duffys Lane	M	0	0	538	0
Pateoroa/Creamery Road Pond	M	270	600	0	715
Mathias Dam	M	0	0	0	0

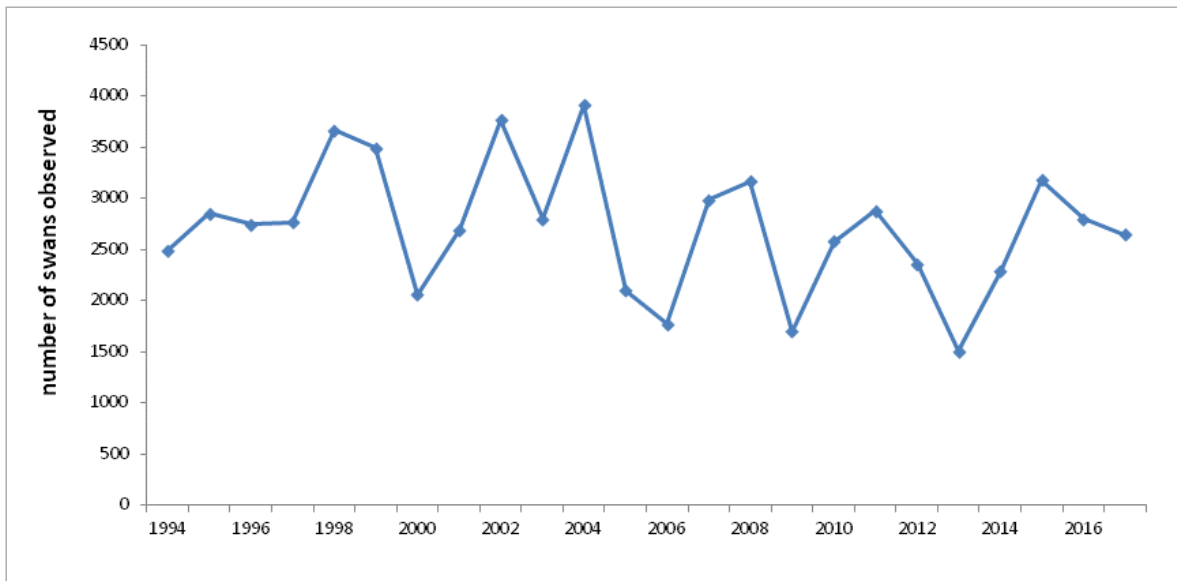
Taieri Lake	M	275	390	90	350
Rutherfords Dam	M	0	0	0	0
Ranfurly Sewage	M	nc	0	11	nc
Blakleys Dam	M	0	0	0	0
Smiths Dam Wedderburn	M	0	0	0	50
White Sow Rd Ponds	M	0	80	nc	0
Gillespies Ida Ponds	I	60	420	45	455
McSkimmings Dam	I	4	230	24	30
Falls Dam	I	40	90	186	40
Pennyweight Ponds	I	0	0	69	130
Poplar Pump Ponds	I	400	370	nc	384
Merton Hill	I	300	710	223	595
McBreens, Patersons	I	2600	1300	1003	2305
Speargrass Dam	I	260	175	182	310
Upper Manorburn Dam	I	72	140	513	856
Poolburn Dam	I	0	0	9	0
Lake Onslow	M	68	925	487	847
Raes Pond Teviot	M	495	20	779	10
Chitocks Moa Flat	WO	284	19	0	250
Toropuke Kelso	WO	0	0	0	0
Upper Waiwera Pond	SO	0	90	nc	25
Mathersons Dam Waipahi	SO	30	10	261	210
Dunvagan Dam Waipahi	SO	1260	670	216	80
Upper Owaka	SO	0	nc	nc	0
Catlins Lake	SO	570	630	605	755
Puerua Estuary	SO	0	nc	0	0
Old River Channel	SO	0	nc	12	0
Lake Tuakitoto	SO	480	710	682	520
Lake Waihola	E C	780	590	508	650
Sinclair Wetland	E C	0	0	44	0
Lake Waipori	E C	60	160	39	12
McLarens-Waipori	E C	25	235	0	0
Ram Island- Waipori	EC	10	60	0	60
Mt Nicholas Lagoon	Q	467	283	72	420
Von Lake	Q	nc	nc	nc	nc
Pondburn	Q	nc	nc	nc	nc
Lower Dart	Q	12	6	nc	
Routeburn Station	Q	85	12	nc	
Lake Sylvan	Q	185	145	39	180

Upper Dart	Q	0	0	0	
Diamond Lake	Q	521	395	311	350
Reids Lake	Q	46	6	0	190
Lower Rees	Q	0	0	0	
Glenorchy Lagoons	Q	15	67	65	42
Lake Luna	Q	0	nc	nc	nc
Moke Lake	Q	128	nc	60	nc
Lake Dispute	Q	nc	nc	nc	nc
Lake Johnson	Q	0	2	nc	nc
Hunter Road Pond	Q	10	4	0	3
Mooneys Pond	Q	55	19	74	40
QT Sewage	Q	402	628	356	523
Ham Hons Pond	Q	7	nc	nc	nc
Dingle Lagoon	UC	165	475	180	86
Hunter Valley	UC	22	12	nc	nc
Hunter Mouth	UC	342	215	164	345
Makaroroa Mouth	UC	1035	54	755	585
Wilken Ponds	UC	nc	4	nc	nc
Minaret Station	UC	130	380	142	70
Matukituki Valley	UC	357	118	188	22
Luggate Airport (was STP)	UC	296	n/a	closed	
Big Boggy Lagoon	UC	405	585	518	502
Luggate Area	UC	296	no water	985	1024
Lake Dunstan area	UC	317	843		
Total Region		18753	16997	14320	18209
Total East Coast		2835	3062	3226	2031
Total Strath Taieri		2307	1471	767	1373
Total Ida & Manuherikia		4299	4380	3520	5962
Total West Otago		284	19	0	250
Total South Otago		2340	2110	1776	1590
Total Queenstown		1933	1567	977	1748
Total Upper Clutha		3365	2686	2932	2634
Total Maniototo		1390	1702	1122	2621

Figure 2: Otago region paradise duck summer trend counts: raw data 2011-2017 (nc = not counted). The highest count was on Patersons Dam in the Ida Valley, an irrigation storage water.

In addition to the regularly monitored sites, some new moulting sites were found in the Manuhureikia Catchment during the flight. This includes 905 moulting paradise ducks observed on an irrigation storage dam near the racecourse at Omakau and 210 birds near Auripo Swamp Road in the Manuherikia Valley.

*Black Swan*



*Figure 3: January aerial trend counts of black swans in the Otago region, 1994-2017*

The total number of black swans counted in 2017 was 2,644 and it was 2,798 last summer.

Site	Area	2017	2016	2015
Kaikorai Estuary	E C	35	370	190
Tomahawk	EC	25	45	110
Waikouaiti	EC	11	49	16
Hawkesbury Lagoon	E C	70	0	0
Loganburn Dam	M	8	0	0
Styx Basin	M	24	37	45
Linnburn Dam	M	0	0	12
Falconers	M	14	0	0
Maniototo	M	0	76	0
Kidds Rd	M	0	0	0
Mathias Dam	M	0	0	0
Taieri Lake	M	0	0	4
Rutherfords Dam	M	15	0	0
Falconers Dam	M	0	0	0
Blakleys Dam	M	0	0	0
Lake Onslow	M	3	0	0
Falls Dam	I	0	0	0
Gillespes Ida	I	5	0	10
McBreens Pond	I	6	0	0
Upper Manorburn	I	0	0	0
Poolburn Dam	I	0	0	0
Mathersons Dam (Waipahi)	SO	0	0	0
Catlins Estuary	SO	21	2	110
Puerua Estuary	SO	60	40	150
Lower Clutha Mouth	SO	nc	nc	0
Clutha Ponding	SO	nc	nc	0
Lake Tuakitoto	SO	450	110	40
Old River Channel	SO	4	100	120
Tokomairoro Estuary	SO	nc	nc	nc
Lake Waihola	EC	1350	1680	1900
Lake Waipori	EC	280	120	210
Sinclair Wetland	EC	12	25	0
Ram's Island Waipori	EC	0	35	100
Makarora Mouth	UC	0	0	5
Big Boggy	UC	0	0	0
Paddock Bay	UC	0	0	0
West Wanaka Lagoons	UC	0	14	0
Dingle Lagoon	UC	0	0	2
Hunter Mouth	UC	0	0	8
Lake Dunstan	UC	145	0	64
Mt Nicholas	Q	23	0	11
Diamond Lake	Q	0	nc	0
Reid Lake	Q	10	30	42
Glenorchy Lagoon	Q	73	65	30
Lake Johnson	Q	nc	nc	nc
Totals Otago		2644	2798	3179
East coast		1783	2324	2526
Maniototo		61	113	61
Ida Valley & Manuherikia		14	0	10
South Otago		535	252	420
Upper Clutha		145	14	79
Queenstown/ Glenorchy		106	95	83

Figure 4: Otago region black swan summer trend counts: raw data 2010-2017

## Canada Geese

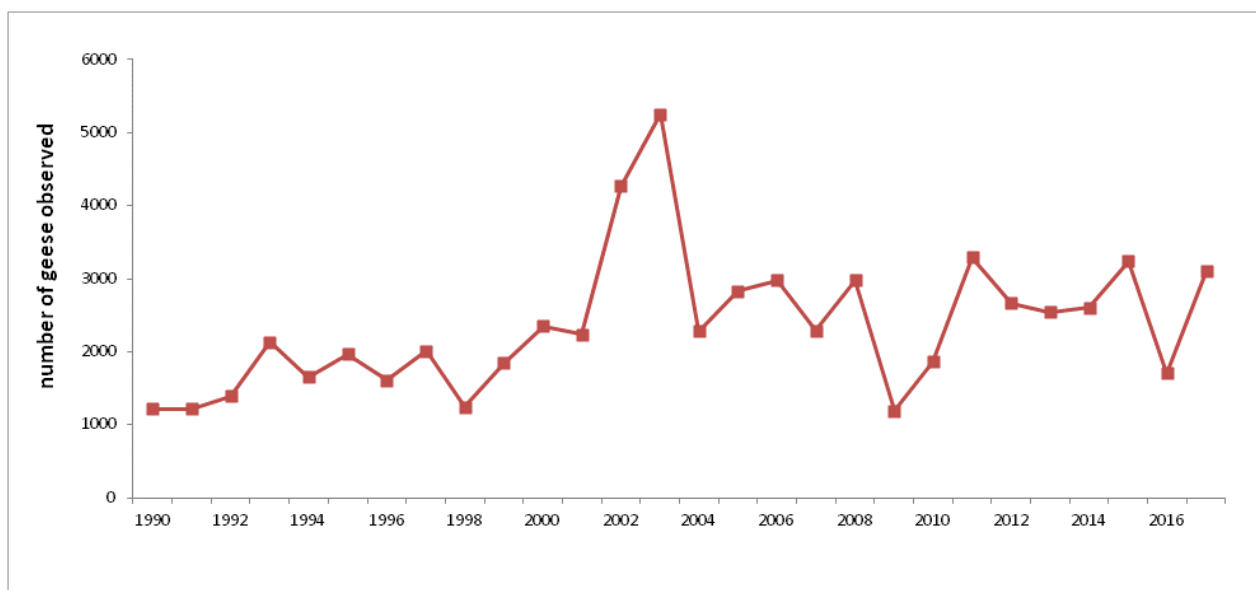


Figure 5: January aerial trend counts of Canada geese in the Otago Region, 1990-2017

The summer Canada goose count was 3,104 in 2017 and 1,705, in 2016.

	Area	2017	2016	2015	2014
Shag Estuary	EC	nc	0	nc	
Two Johns Dam	M	0	0	0	
Loganburn Dam	M	550	450	250	500
Styx Basin	M	450	250	190	460
Linnburn Dam	M	0	0	0	
Maniototo Basin/Taieri Lake	M	220	40	0	10
Rutherfords Dam	M	0	0	0	
Blaiklies Dam	M	0	0	0	
Lake Onslow	I	350	0	570	380
Gillespies Ida Ponds/Patersons	I	10	0	20	50
McSkimmings Dam	I	0	0		
Falls Dam	I	60	40	95	350
Speargrass Dam	I	75	40	250	20
Upper Manorburn Dam	I	0	0	800	275
Poolburn Dam	I	250	0	260	150
Lake Waihola	EC	100	170	0	
Hawkesbury Lagoon	EC	12	25	0	12
Dunvagan Dam	SO	0	0	0	
Lower Clutha	SO	100	0	0	48
Lake Tuakitoto	SO	80	270	0	20
Dingle Lagoon	UC	0	120	26	50
Dingle Mouth	UC	0	0	58	

Hunter Mouth	UC	350	180	400	62
Hunter Valley	UC	0	0	nc	
Hawea Neck	UC	0	0	nc	
Makarora Mouth Area	UC	202	45	150	110
Wilken	UC	0	0	nc	
Paddock Bay Wanaka	UC	0	0	0	
Matukituki Valley	UC	75	0	10	
Big Boogey	UC	105	75	24	
Mt Nicholas Lagoon	Q	75	0	74	78
Von Lake	Q	nc	0	nc	
Pondburn	Q	nc	0	nc	
Lower Dart	Q	0	0	nc	
Route Burn Station	Q	0	0	nc	
Lake Sylvan	Q	0	0	0	5
Rockburn	Q	0	0	0	
Upper Dart	Q	0	nc	15	
Diamond Lake	Q	40	nc	0	
Reid Lake	Q	0	nc	25	
Lower Rees	Q	0	0	0	
Glenorchy Swamp	Q	0	0	25	
Lake Wakatipu (general)	Q	0	0	0	24
Wyuna Pond	Q	nc	0	0	
Caples	Q	nc	nc	nc	
<b>Total Region</b>		<b>3104</b>	<b>1705</b>	<b>3242</b>	<b>2604</b>
Total Queenstown Area	Q	115	nc	139	107
Total Upper Clutha	UC	732	420	668	222
Total Maniototo	M	1220	700	440	970
Total Ida & Manuherikia	I	745	120	1995	1225
Total South & East Coast	SO EC	292	465	0	80

*Figure 6: Otago region Canada geese summer trend counts: raw data 2014-2017*

## **Discussion & Conclusions**

### *Paradise duck*

The total number of birds observed has trended upwards over the last two summers indicating that Otago's paradise duck population is in good health. This summer's count is not unusually high when compared to records and there is no recommendation for a bag limit increase. It has been a relatively good season for grass growth in North Otago and the Maniototo areas and this combined with a general increase in pasture and irrigation dam development could be expected to provide favorable conditions for paradise duck production.

Two new moult sites were found in the Manuherikia Valley (near Omakau Race course and Auriipo Swamp Road). These sites have not been added to the official trend count list at this stage but will be observed again next season.

I would like to thank Ranger Trevor Beck who was able to verify some counts in the Ida Valley area from the ground.

### *Canada Geese*

Geese are recorded when seen in order to maintain the database. Their numbers observed increased by approximately 1400 birds since last summer.

### *Black swan*

The 2016 total was similar to historic records.

### *Otago Hunter Harvest*

A summary of hunter harvest results (from telephone surveys) is provided in the appendix. The total estimated harvest of mallards (including grey hybrids) was 44 892 birds which is less than recent years but not dissimilar from historic results. There appears to be a correlation between total harvest and hunter effort. We have experienced a relatively wet spring and summer throughout much of the region and this could be expected to increase mallard production and harvest potential this coming season.

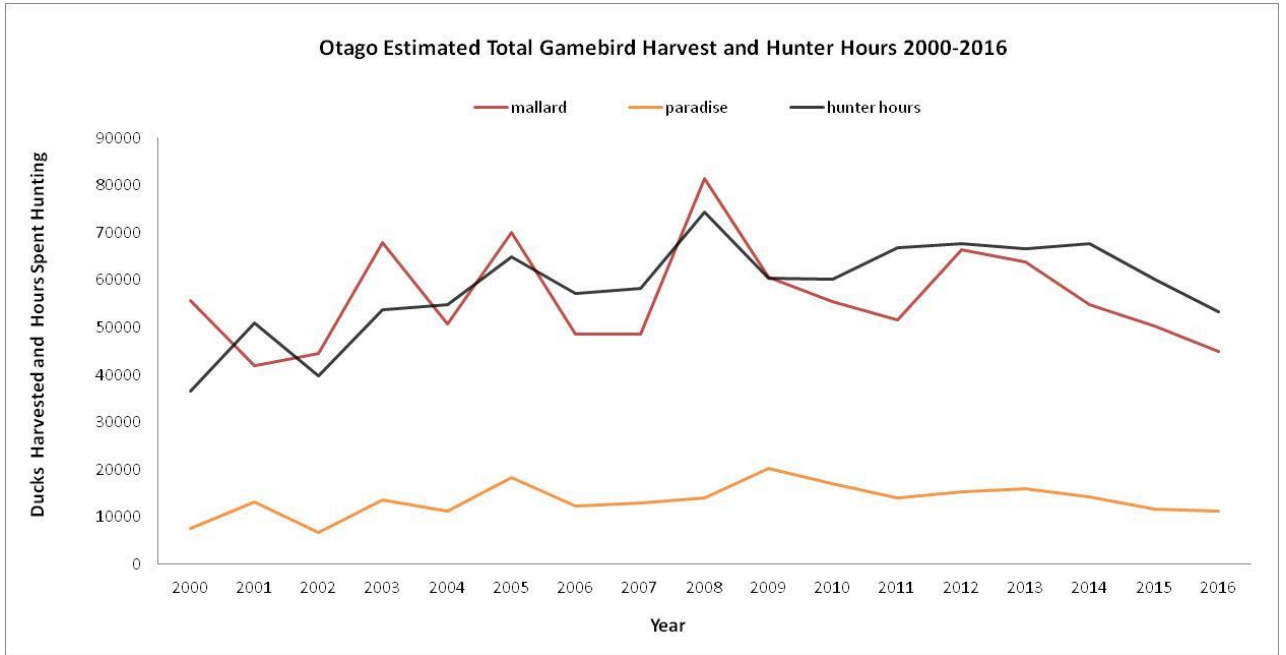
### ***Recommendation***

**That this report is received.**

Morgan Trotter  
Fish and Game Officer  
February 2017



**APPENDIX 1**



## 11 Correspondence

---

### 11.1 Salmon Anglers Association – Otago Branch Letter of thanks.

NEW ZEALAND  
**SALMON ANGLERS**  
ASSOCIATION INCORPORATED  
OTAGO BRANCH  
PO Box 6244, Dunedin North

Fish & Game Otago  
Cnr Hanover & Harrow St  
Dunedin

15<sup>th</sup> December 2016

Re; NZ Salmon Anglers thank you

Dear Niall

The NZ Salmon Anglers Assn Inc. – Otago Branch wishes to thank you and all the staff at Fish & Game Otago for your help and support over the last year. Especially with some of the issues we experienced in our last Otago Harbour fishing competition.

Thank you for the use of your board room for our committee meetings which is very much appreciated.

We look forward to our continued excellent working relationship with everyone in your team.

Wishing you all the very best for a great Christmas and the New Year.

Kind regards



NZ Salmon Anglers Assn committee.



## 11.2 DLA Piper –cover letter for Dairy Farms partnership covenant.

### Refer CE report



DLA Piper New Zealand  
205 Queen Street  
Auckland 1010  
PO Box 160  
Auckland 1140  
New Zealand  
DX CP24027 AKLD  
T +64 9 303 2019  
F +64 9 303 2311  
W www.dlapiper.co.nz

Our ref: 1008556

16 December 2016

Ian Hadland / Peter Wilson  
Otago Fish and Game Council  
Corner Harrow/Hanover Streets  
DUNEDIN 9016  
**By courier**

Dear Ian and Peter

**CONSERVATION COVENANT - DF1, LIMITED AND DF3, LIMITED (TRADING AS THE DAIRY FARMS PARTNERSHIP), OTAGO FISH AND GAME COUNCIL AND THE MINISTER OF CONSERVATION**

Please find attached the conservation covenant signed by the Dairy Farms Partnership and the surrenders of covenant.

Can you please arrange for the attached to be signed and returned to us. Once we receive the original documents, we will arrange for registration with Land Information New Zealand.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Sonya Carter'.

**Sonya Carter**  
Senior Associate  
Direct +64 9 916 3785  
sonya.carter@dlapiper.com  
Encl

**Martin Thomson**  
Partner  
Direct +64 9 300 3850  
martin.thomson@dlapiper.com

DLA Piper New Zealand is an independent law firm. It is associated with DLA Piper, a global law firm operating through various separate and distinct legal entities.

2864973\_1

**11.3 Gant Holmes –Letter concerning access to the Pomahaka and willow growth.  
For Discussion**

**From:** Grant Holmes [<mailto:grnhlms@hotmail.com>]  
**Sent:** Wednesday, 18 January 2017 10:51 a.m.  
**To:** Otago Fish & Game  
**Subject:** Pomahaka river access.

Dear chairman and councillors.

I live in Christchurch and mostly fish Canterbury waters. However I have longed for a number of years to fish Otago and Southland waters, particularly the Matuara and Pomahaka, iconic rivers of which I have read so much. With a recent purchase of a caravan I now have the freedom to take my fly fishing to new areas and so I arrived at Tapanui early in the new year.

I was impressed with the beauty of the Pomahaka : the bedrock interspersed with golden gravel and the amber water. To me it is more appealing than the Mataura which overshadows it, but to say that I was disappointed with access to the river is an understatement. Heavily willow lined banks made access and progress both up and downstream impossible in many areas. Particularly from the Kelso bridge up Paradise Flat road as far as the Leithley picnic area.

I judge that this would be the best water for fly anglers, but could only find my way with difficulty into one small restricted area where I was lucky enough to get a lovely fish even though a gale was blowing down the river.

To me the Pomahaka is a neglected treasure which needs some TLC and restoring to something of it's former glory. With some judicious willow clearing and angler access posted I am sure that more people would be attracted to the area which has to be good for the region as a whole.

I respectfully suggest that Fish and Game should approach the Otago regional council with a view to making willow clearance and angler access a joint project.

Yours Sincerely Grant Holmes ( former North Canterbury Fish and Game councillor)

Sent from Windows Mail

## 11.4 Dan Rae – Letter advising of resignation from CFT

12 December 2016

To Otago Fish and Game Council  
Chairman Mr Monty Wright  
And CEO Niall Watson

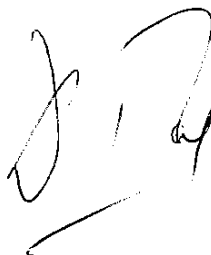
Re Trusteeship of the Clutha Fisheries Trust

As I have recently informally indicated to you both, I hereby formally advise you of my intention to retire as Chair and Trustee of Clutha Fisheries Trust(CFT) to be effective as of the closure of the CFT meeting to be held in Dunedin 14 December 2016.

During my tenure at CFT we have achieved much for the environment over recent years, and particularly in the field of public access. The one big win of which I am most proud is our combined efforts to successfully stop the proposed hydro development within the Nevis Valley catchment.

I look forward to continuing my involvement with Otago Fish and Game.

Yours Faithfully  
Dan Rae  
Bannockburn

A handwritten signature in black ink, appearing to be 'Dan Rae', written over a horizontal line.

## **12 General Business**

---