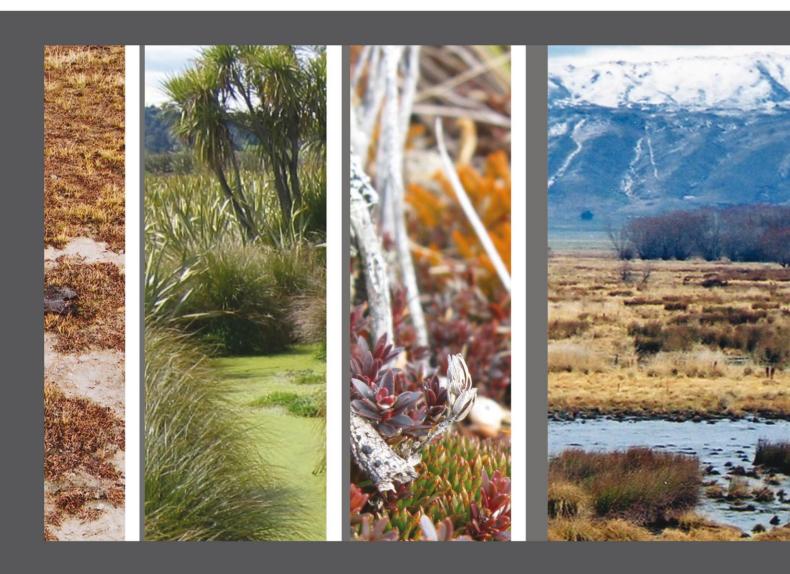
# Proposed Plan Change 2 (Regionally Significant Wetlands)



Regional Plan: Water for Otago



### Introduction

The Otago Regional Council has prepared Proposed Plan Change 2 (Regionally Significant Wetlands) to the Regional Plan: Water for Otago. Proposed Plan Change 2 builds on existing provisions for Regionally Significant Wetlands by:

- Protecting more wetlands that are regionally significant
- Strengthening protection for regionally significant wetlands
- Making provisions easier to read and understand
- Providing better wetland information

The changes proposed are detailed in this document. This document should be read in conjunction with the Section 32 Report – Summary of costs, benefits and alternatives. This can be found on our website, at <a href="http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/Regional-Plan-Water/">http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/Regional-Plan-Water/</a>

Amendments to the Regional Plan: Water for Otago as a result of this proposed plan change are shown with additions <u>underlined</u> and deletions <u>struckout</u>. Words in [square brackets and italics] are inserted to describe and assist understanding of the proposed plan changes and are not part of the Regional Plan: Water for Otago or proposed changes.

This proposed plan change will have legal effect from 2 July 2011 in accordance with section 86B(3) of the Resource Management Act 1991.

Any person may make submissions on this proposed plan change. You may do so by sending written submissions to the Otago Regional Council. The submission must be in Form 5, as prescribed by Schedule 1 of the Resource Management Act 1991. Copies of this form are available by phoning the Council on 0800 474 082, or can be found on the ORC website <a href="https://www.orc.govt.nz">www.orc.govt.nz</a>. When making a submission, please ensure you clearly state the provision you are submitting on by using the appropriate reference number.

| Post to    | Otago Regional Council<br>Private Bag 1954<br>Dunedin 9054 |  |   |  |  |
|------------|--|--|---|--|--|
| Fax to     | (03) 479 0015  |  |   |  |  |
| Email to   | policy@orc.govt.nz   |  |   |  |  |
| Deliver to | Otago Regional Council                                     |  |   |  |  |
|            | 70 Stafford<br>Street<br>Dunedin                           | William Fraser Building<br>Dunorling Street<br>Alexandra | The Station, First Floor<br>Cnr Shotover and Camp Streets<br>Queenstown |  |  |

If you have any questions concerning this process:

| Telephone | (03) 474 0827; 0800 474 082 |
|-----------|-----------------------------|
|-----------|-----------------------------|

Submissions close at 5 pm on Friday 29 July 2011.

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### Note:

The base document for Proposed Plan Change 2 (Regionally Significant Wetlands) is the Regional Plan: Water for Otago Incorporating Council decisions on Proposed Plan Change 1C (Water Allocation and Use).

Proposed Plan Change 1C (Water Allocation and Use) is under appeal and relates to matters substantially different from the current proposal. The provisions affected are Rules 12.1.4.8, 12.2.3.2A, 12.2.3.4, and 12.2 principal reasons for adopting.

Proposed Plan Change 4A (Groundwater and North Otago Volcanic Aquifer) has been notified, and does not affect the current proposal either. Changes proposed to Rule 12.2.2.2 by Proposed Plan Change 4A are not shown in this document.

Reference numbers for making submissions are in the left-hand margin e.g., R0123.

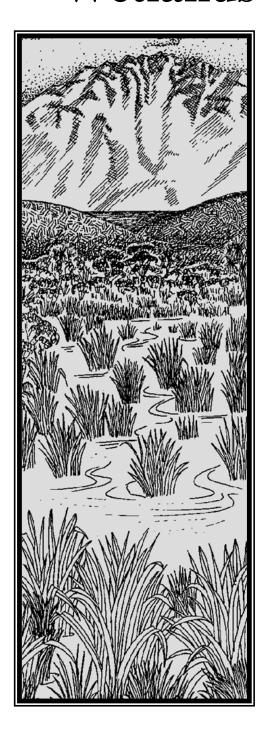
### Guidance table of main changes

| Subject area   | Main provisions of<br>Water Plan*      | Pages of this report |
|--|--|----------------------|
| Schedule 10 (Additional wetlands)  | Schedule 10                            | 115–118              |
| Move Schedule 10 wetlands (and newly identified wetlands) that contain regionally  | Schedule 9                             | 82–113               |
| significant wetland values to Schedule 9, and introduce maps for these.  | Policy 10.4.7                          | 13-14                |
| Repeal Schedule 10.  | Rule 12.1.2.6                          | 18                   |
| Repeat Schedule 10.  | Rule 12.3.2.2                          | 37                   |
|  | Regional Plan: Water<br>for Otago Maps | 125                  |
| Schedule 9 (Significant wetlands)  | Schedule 9                             | 82–113               |
| Refine the mapped extents of Schedule 9 wetlands to a higher resolution.   | Regional Plan: Water<br>for Otago Maps | 125                  |
| Remove description and values information of Schedule 9 wetlands, and develop a separate, non-regulatory wetland inventory.                  |  |                      |
| Improve provisions, including policies and rules for Regionally Significant Wetlands   | Policies 10.4.1 to 10.4.6              | 6–14                 |
| Tules for Regionally Significant Wetlands  | Chapters 12 and 13                     | 15–71                |
| Extend protection for Regionally<br>Significant Wetlands from the take, use<br>and management of water, and from some<br>land use activities | Chapters 12 and 13                     | 15–71                |

<sup>\*</sup>Regional Plan: Water for Otago incorporating Council decisions on Proposed Plan Change 1C (Water Allocation and Use), 10 April 2010

# 10

# Wetlands



### 10.1 Introduction

R001

Otago once had extensive areas of wetland. Development of Otago has since involved the drainage and reclamation of wetlands to make way for farms and settlements, and to allow for infrastructure to function. But it is now evident that in undertaking those activities, the values of the wetland areas have not, in general, been recognised. The result is that many wetlands have been lost or degraded.

The Otago region still contains a diverse range of wetland types including high altitude blanket bogs, ephemeral saline areas, swamp forest remnants, shallow lake complexes, estuarine saltmarshes and valley floor swamps. These wetlands remain because of the compatibility of past and present land use with the values those wetlands support, or their inaccessible location, and are now highly valued by the community and landholders alike.

However, some of the region's remaining wetlands may still be lost or modified through human activities including:

- Water management: taking, damming (resulting in inundation of wetlands), or diversion of water (including that for land drainage), discharge of water or contaminants;
- Physical disturbance: reclamation, excavation, earthworks, vehicle crossings, trampling by animals or people, fire or cultivation;
- Introduction or removal of vegetation;
- Grazing of wetland vegetation;
- Erection of structures; and
- Deposition of substances.

The community's focus is now, largely, on the need for the conservation of remaining wetlands. The Regional Policy Statement for Otago reflects this focus by providing for the protection of Otago's significant wetlands, and their associated values, from the adverse effects of any activity.

This Plan identifies significant wetland areas (see Schedule 9). The policies contained in this chapter seek to maintain or enhance the values these wetlands support for present and future generations. The opportunity to achieve this objective will arise when considering a resource consent for particular water or land use activities. Other wetlands that may or may not contain significant values are listed in Schedule 10. Drainage of these areas also requires a consent and the applicant is first asked to identify whether any significant values exist on the affected land.

Given the functions of local authorities under Sections 30 and 31 of the Resource Management Act, the management of the effects of activities on the identified wetlands will require a coordinated response between the Otago Regional Council and the region's city and district councils.

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### 10.2 Issues

R002

## 10.2.1 Otago has wetlands which contain irreplaceable values which are at risk of being lost wetland modification.

### **Explanation**

Otago contains wetlands which:

- (a) Provide a variety of critical habitats;
- (b) Are of an unmodified nature;
- (c) Possess a unique form or character; or
- (d) Are mahika kai or waahi taoka to Kai Tahu.

There is a risk that any wetland modification caused by the use or development of water or land resources will result in the permanent loss of the values identified in (a) to (d). Therefore, these values are considered to be irreplaceable and their loss will result in reduced opportunities to provide for the well being of Otago's people and communities. This would not only affect present generations, but would reduce the choices available to future generations.

Objectives: 10.3.1

Policies: 10.4.1, 10.4.2, 10.4.5, 10.4.7

R003

# 10.2.2 Otago has wetlands which provide a range of values which, while not irreplaceable, are at risk of degradation through inappropriate use and development of land and water resources.

### **Explanation**

Some of Otago's remaining wetlands are significant to the region's communities due to their value for a range of flora and fauna, including indigenous waterfowl, or their ability to function as water purifying or storage systems. Where wetlands are degraded by use or development of water or land resources, the values associated with these wetlands are diminished. Given the importance of wetland values to Otago's people and communities, such adverse effects are of concern.

Objectives: 10.3.1

Policies: 10.4.3 to 10.4.5, 10.4.7

R004

# 10.2.3 There is a risk that wetlands which do not contain significant values individually, but which collectively contribute to the values of Otago's wetlands, will be lost or degraded.

### **Explanation**

Otago has many wetlands areas that are not individually significant in terms of Issues 10.2.1 and 10.2.2, but collectively they contribute the following values:

- (a) Habitat for flora and fauna;
- (b) Natural character;
- (c) Hydrological values; and
- (d) Kai Tahu cultural and spiritual beliefs, values and uses.

Because these wetlands are not considered to be as important as other wetlands in the region, they are at risk of being lost or modified through both deliberate or inadvertent actions. Their cumulative loss may have a significant impact upon the values of wetlands in Otago.

Objective: 10.3.1
Policies: 10.4.5 to 10.4.7

### 10.3 Objective

- R005

  10.3.1

  Otago's wetlands and their values and services will be maintained or enhanced for present and future generations. To maintain or enhance the following values of Otago's remaining wetlands:
  - (a) Habitat for flora and fauna;
  - (b) Natural character;
  - (c) Hydrological values; and
  - (d) Kai Tahu cultural and spiritual beliefs, values and uses.

### **Explanation**

Otago's remaining wetlands allow for a range of community uses and have considerable intrinsic value. It is important that wetlands be maintained or enhanced to retain the opportunity for both present and future generations to experience and appreciate these uses and values. This will require that the use and development of the region's land and water resources be managed so that any adverse effects on wetlands, and their associated values, are avoided, remedied or mitigated.

### **Principal reasons for adopting**

This objective is adopted to promote an ethic for the conservation of Otago's remaining wetlands. It recognises the extent of wetland loss in Otago and the importance of remaining wetlands in terms of the values they support. It also gives effect to the Regional Policy Statement for Otago, which provides for the protection of significant wetlands.

Policies: 10.4.1 to 10.4.7

### 10.4 Policies

- R006 [Incorporates 10.4.3] To identify the following Type A The regionally significant wetland values of Otago's wetlands are in Schedule 9:
  - (a) A1 Habitat for nationally or internationally rare or threatened species or communities;
  - (b) A2 Critical habitat for the life cycles of indigenous fauna which are dependent on wetlands;
  - (e) A3 High diversity of habitat types;
  - (d) A4 Wetland with a high degree of naturalness;
  - (e)  $\overline{A5}$  Wetland scarce in Otago in terms of its ecological or physical character; and

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- (f) A6 Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka-;
  - A7 High diversity of indigenous flora and fauna; [unchanged from 10.4.3]
  - A8 Regionally significant habitat for waterfowl; and [unchanged from 10.4.3]
  - A9 Significant hydrological values including maintaining water quality or low flows, or reducing flood flows. [changed, from 10.4.3]

### **Explanation**

The values of Otago's wetlands that meet the criteria of the policy, hereafter termed Type A values, are significant to the region's people and communities because they are irreplaceable. Any wetland modification caused by the use or development of water or land resources is likely to result in their loss. For this reason, the Type A values of Otago's wetlands are to be protected.

Schedule 9 of this Plan identifies the region's significant wetlands and their associated Type A values. These wetlands are shown in Maps F1 F60 [map references to be added]. Principal reasons for adopting

This policy is adopted to provide a mechanism for determining the significance of Otago's remaining wetlands.

Rules: 12.1.1.1, 12.1.4.2 to 12.1.5.1, 12.2.4.1, 12.3.1.1 to 12.3.1.4, 12.3.3.1, 12.3.4.1, 12.4.2.1, 12.5.2.1, 12.6.2.1, 12.7.2.1, 12.8.2.1, 12.8.3.1, 12.9.2.1, 12.10.2.1, 12.13.1.1, 13.2.3.1, 13.3.2.1, 13.5.2.1, 13.5.3.1, 13.6.3.1, 13.7.2.1, 14.3.2.1

Other methods: 15.2.7.1, 15.2.8.1, 15.2.8.2, 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.4.3.1, 15.4.3.2, 15.5.1.1, 15.5.1.2

### **R007**

### **10.4.1A** A Regionally Significant Wetland is:

- (a) A wetland identified in Schedule 9 (that is not a wetland management area); or
- (b) A wetland physically within a wetland management area listed in Schedule 9; or
- (c) A wetland higher than 800 metres above sea level.

**R008** 

10.4.1B [Incorporates part of 10.4.1] Schedule 9 lists those Regionally Significant Wetlands that are mapped in Maps F1–F68 and contain one or more regionally significant wetland values.

R009

10.4.2 [Incorporates 10.4.4 and 10.4.5] To Priority will be given to the avoidance the of adverse effects of activities on the Type A Regionally Significant Wetlands values of any wetland. and values. Remedying or mitigating adverse effects will be considered only where those effects cannot be avoided.

### **Explanation**

The Type A values of Otago's wetlands are to be protected from any use, development or protection of land, or any taking, diversion, damming or discharge of water, which may affect them. For this policy the term "protect" means that any adverse effects arising from the use and development of water or land resources will have to be avoided rather than remedied or mitigated. This policy does not preclude activities which would enhance the Type A values of any wetland. Schedule 9 of this Plan identifies the region's significant wetlands and their associated Type A values. These wetlands are shown in Maps F1-F60.

### Principal reasons for adopting

This policy is adopted to ensure that the values of Otago's wetlands at greatest risk of irreversible loss, are protected. These values are considered irreplaceable as there is a risk that any wetland modification caused by the inappropriate use or development of water or land resources will result in their loss. Considering the past loss of wetlands in Otago, and their associated values, any adverse effects on existing Type A values should be avoided.

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Rules: 12.1.1.1, 12.1.4.2 to 12.1.5.1, 12.2.4.1, 12.3.1.1 to 12.3.1.4,
       <del>12.3.3.1, 12.3.4.1, 12.4.2.1, 12.5.2.1, 12.6.2.1, 12.7.2.1, 12.8.2.1,</del>
       12.8.3.1, 12.9.2.1, 12.10.2.1, 12.13.1.1, 13.2.3.1, 13.3.2.1, 13.5.2.1,
       13.5.3.1. 13.6.3.1. 13.7.2.1. 14.3.2.1
Other methods: 15.2.7.1, 15.2.8.1, 15.2.8.2, 15.2.8.3, 15.4.2.1, 15.4.2.2,
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15.4.3.1, 15.4.3.2, 15.5.1.1, 15.5.1.2

10.4.2A [Incorporates part of 10.4.4] Where the avoidance, remedy or mitigation **R010** of adverse effects is not possible, financial contributions may be

required to:

- (a) Improve, create or reinstate Regionally Significant Wetlands or regionally significant wetland values where those have been degraded; and
- (b) Create or reinstate Regionally Significant Wetlands or regionally significant wetland values where those have been lost.

The method of determining the contribution amount is set out in <u>section 17.3.</u>

10.4.3 [Refer to 10.4.1] To identify the following Type B values of Otago's R011 wetlands in Schedule 9:

- (a) Wetland with high diversity of indigenous flora and fauna;
- (b) Wetland which is regionally significant habitat for waterfowl; and
- (c) Wetland which has hydrological values including maintaining water quality or low flows, or reducing flood flows.

### **Explanation**

The values of Otago's wetlands that meet the criteria of the policy, hereafter termed Type B values, are significant to the region's people and communities. This is because of the contribution they make to the habitat, natural character and hydrological values of the region's water resources.

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Although not irreplaceable, these values are at risk of degradation through inappropriate use or development of water or land resources. Schedule 9 of this Plan identifies the region's significant wetlands and their associated Type B values. These wetlands are shown in Maps F1–F60.

### Principal reasons for adopting

This policy is adopted to provide a mechanism for determining the significance of Otago's remaining wetlands.

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Rules: 12.1.1.1, 12.1.4.2 to 12.1.5.1, 12.2.4.1, 12.3.1.1 to 12.3.1.4,
       12.3.3.1, 12.3.4.1 12.4.2.1, 12.5.2.1, 12.6.2.1, 12.7.2.1, 12.8.2.1,
       12.8.3.1, 12.9.2.1, 12.10.2.1, 12.13.1.1, 13.2.3.1, 13.3.2.1, 13.5.2.1,
       13.5.3.1, 13.6.3.1, 13.7.2.1, 14.3.2.1
```

Other methods: 15.2.7.1, 15.2.8.1, 15.2.8.2, 15.2.8.3, 15.4.2.1, 15.4.2.2, *15.4.3.1, 15.4.3.2, 15.5.1.1, 15.5.1.2* 

- 10.4.4 [Refer to 10.4.2 and 10.4.2A] To avoid the adverse effects of activities R012 on the Type B values of any wetland, or where it is not possible to do so, require financial contributions, or works or services to offset any loss of wetland values in terms of the following:
  - (a) Improving the quality of habitat for flora and fauna of a similar but degraded habitat;
  - (b) Creating an artificial habitat of comparable or better quality;
  - (c) Reinstating habitat provided by wetland that no longer exists; or
  - (d) Offsetting any unavoidable adverse effect on the wetland's hydrological values.

#### **Explanation**

Any adverse effects of the use, development or protection of land or water resources on any Type B wetland value should be avoided where possible. Schedule 9 of this Plan identifies the region's significant wetlands and their associated Type B values. These wetlands are shown in Maps F1-F60. Compensation will be required, in terms of financial contributions, or works or services, where the adverse effects on any identified Type B value cannot be avoided. Such adverse effects are to be offset, remedied or mitigated by undertaking any of the actions identified in (a) to (d) of the policy. The consent authority must be satisfied that the actions appropriately offset, remedy or mitigate any loss or degradation of the Type B value. Financial contributions, or works or services, may not be required to mitigate shortterm effects where values will regenerate naturally. Any habitat which is created or reinstated as compensation will be subject to the same management as any other wetland supporting Type A or Type B wetland values. Financial contributions are detailed in Chapter 17 of this Plan.

### Principal reasons for adopting

This policy is adopted to ensure that the modification of any wetland supporting Type B values only occurs where there will be no loss in the habitat, natural character and hydrological values it contains. Considering the past loss of wetlands in Otago, and their associated values, any adverse effects on existing Type B values should be remedied or mitigated.

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Rules: 12.1.1.1, 12.1.4.2 to 12.1.5.1, 12.2.4.1, 12.3.1.1 to 12.3.1.4, 12.3.3.1, 12.3.4.1, 12.4.2.1, 12.5.2.1, 12.6.2.1, 12.7.2.1, 12.8.2.1, 12.8.3.1, 12.9.2.1, 12.10.2.1, 12.13.1.1, 13.2.3.1, 13.3.2.1, 13.5.2.1, 13.5.3.1, 13.6.3.1, 13.7.2.1, 14.3.2.1
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Other methods: 15.2.7.1, 15.2.8.1, 15.2.8.2, 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.4.3.1, 15.4.3.2, 15.5.1.1, 15.5.1.2

See also: Chapter 17; Policies 6.5.6, 8.4.2

R013 10.4.5 [Refer to 10.4.2] In the management of any activity above 800m above sea level, priority will be given, where practicable, to avoiding any adverse effect on any value that meets a Type A or B wetland criterion.

### **Explanation**

Upland bogs, tarns and flushes often occur in steep or alpine terrain, frequently in remote locations. These wetlands can contain the significant values described by Policies 10.4.1 and 10.4.3. Type A and B values of wetlands situated above 800 metres above sea level are not identified in Schedule 9. This is because high altitude wetlands are generally considered not to be at risk in terms of the activities that can be regulated under the Regional Plan: Water or relevant district plans, given the extensive or infrequent use of this land.

In the event that activities above 800m above sea level are likely to affect wetland values, consent authorities must have regard to the maintenance of the values of high altitude wetlands when considering resource consent applications. While avoidance of adverse effects is a priority, where avoidance is not practicable such adverse effects must be remedied, mitigated, or appropriately compensated for.

### Principal reasons for adopting

This policy is adopted to ensure that the values of high altitude wetlands are retained even though they are generally considered not to be at risk.

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Rules: 12.1.4.8, 12.1.5.1, 12.2.4.1, 12.3.1.3, 12.3.3.1, 12.3.4.1, 12.4.2.1, 12.5.2.1, 12.6.2.1, 12.7.2.1, 12.8.2.1, 12.8.3.1, 12.9.2.1, 12.13.1.1, 13.2.3.1, 13.3.2.1, 13.5.2.1, 13.5.3.1, 13.6.3.1, 13.7.2.1, 14.3.2.1

Other methods: 15.2.7.1, 15.2.8.1, 15.2.8.2, 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.4.3.1, 15.4.3.2, 15.5.1.1, 15.5.1.2
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- R014 10.4.6 To promote the conservation, creation and reinstatement of wetland areas and enhancement of wetland values by:
  - (a) Educating Otago's people and communities about land use activities that may result in the loss of wetlands and their values;
  - (b) Initiating or supporting investigations <u>and monitoring</u> of wetlands and their values:
  - (c) Supporting voluntary community and landholder programmes; or
  - (d) Initiating or undertaking works in consultation with local communities; or

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### (e) Providing information on wetlands and their values.

### **Explanation**

The conservation, creation and reinstatement of wetlands in Otago through voluntary action should be encouraged wherever it can be reasonably achieved. This policy identifies a range of means for the Otago Regional Council to promote and support such voluntary actions. A greater community awareness of the importance of wetlands, and the threats to them, is critical in achieving recognition of the need for maintaining or enhancing the region's wetlands. This awareness will be generated among landholders, industry groups, community groups, and city and district councils.

### **Principal reasons for adopting**

This policy is adopted to encourage voluntary actions that would retain the natural character of Otago's wetlands and increase the total wetland area within Otago. Given the historical loss of wetlands within the region, such actions would enhance the use by people and communities, and the intrinsic values of Otago's wetlands.

Other methods: 15.2.7.1, 15.2.8.1, 15.2.8.2, 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.4.3.1, 15.4.3.2, 15.5.1.1, 15.5.1.2

10.4.7 To protect the Type A and B values that may be supported by the wetlands identified in Schedule 10 by requiring resource consent for the drainage of those wetlands.

### **Explanation**

The wetlands identified in Schedule 10 may or may not support Type A or B values. Rules 12.1.2.6 and 12.3.2.2 require a resource consent to be obtained before land drainage occurs at any of the Schedule 10 sites. If, through a consent process, a Schedule 10 wetland is found to support any Type A or B value, Policies 10.4.2 and 10.4.4 will ensure that those values are appropriately protected.

Over time, further information on the presence or absence of Type A or B values in Schedule 10 sites will come to light. If Type A or Type B values are found to be present, wetlands will be moved from Schedule 10 onto Schedule 9 via a plan change or plan review and their values identified in the Plan. For wetlands where Type A or B values are found to be absent, the wetland will be removed from the Plan's schedules. Artificial wetlands created by water storage dams, for example hydro electric, irrigation, stock water, community water supply, or farm effluent dams, will not be included in Schedule 9 where their inclusion will interfere with the purpose and operation of the dam.

### **Principal reasons for adopting**

This policy is adopted to ensure that the Type A and B values of wetlands on Schedule 10 are not inadvertently lost due to a lack of information about Otago's wetlands.

### Rules: 12.1.2.6 and 12.3.2.2.

Note that Chapter 13 rules also apply where a Schedule 10 wetland is located within the bed of a lake or river.

### 10.5 Anticipated environmental results

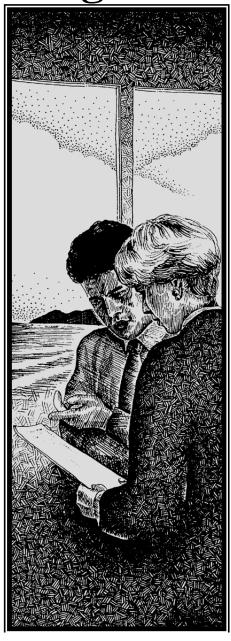
- R016 10.5.1 Kai Tahu spiritual and cultural beliefs values and uses associated with wetlands are maintained or enhanced.
- R017 10.5.2 The natural character of Otago's wetlands is protected from the inappropriate use and development of water and land resources.
- R018

  10.5.3 Habitat and hydrological values of Otago wetlands are maintained or enhanced.
- R019

  10.5.4 Wetlands are created, reinstated or enhanced, providing useful benefits, restoring lost values and reversing the adverse effects of the past loss of wetlands.
- Monitoring of the achievement of these anticipated environmental results will be carried out as outlined in Chapter 19.

12

# Rules: Water Take, Use and Management



### 12.0 Applications for taking water [Unchanged]

### 12.1 The taking and use of surface water

**12.1.1 Prohibited activities: No resource consent will be granted** [Unchanged] 12.1.1.1 and 12.1.1.2 [Unchanged]

### **R021** 12.1.1A Non-complying activities: Resource consent required

R022

12.1.1A.1 Unless covered by Rules 12.1.1.1, 12.1.1.2, 12.1.2.1 and 12.1.2.3, the taking and use of surface water from any Regionally Significant Wetland is a non-complying activity.

**R023** 

12.1.1A.2 [Moved substantially unchanged from 12.1.6.1] Except as provided for by Rules 12.1.1.2 to 12.1.5.1 and 12.1.6.2 12.1.1A.3, the taking and use of surface water in the Waitaki catchment when, by itself or in combination with any other take, use, dam or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rules 12.1.4.5 to 12.1.4.7 is a non-complying activity.

In considering an application to which this rule applies the consent authority will have regard, among other matter to Policies 6.6A.1 to 6.6A.5.

R024

- 12.1.1A.3 [Moved substantially unchanged from 12.1.6.2] Except as provided for by Rules 12.1.1.2 and 12.1.1A.1, the taking and use of surface water from Welcome Creek is a non-complying activity when:
  - (i) By itself or in combination with any other take, use, dam or diversions, the sum of the <u>annual volumes</u> authorised by resource consent, exceeds the allocations to activities set out in Rule 12.1.4.2; and
  - (ii) The take does not comply with the minimum flow specified in Schedule 2A.

In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

### 12.1.2 Permitted activities: No resource consent required

12.1.2.0 and 12.1.2.1 [Unchanged]

**R025** 

12.1.2.2 Except as provided for by Rules 12.1.1A.1 and 12.1.1.2, the taking and use of surface water from the main stem of the Clutha/Mata-Au or Kawarau Rivers, or Lakes Wanaka, Hawea, Wakatipu, Dunstan or Roxburgh, is a *permitted* activity, providing:

- (a) The take does not exceed 100 litres per second, nor 1,000,000 litres per day; and
- (b) No more than one such take occurs per landholding; and
- (c) No back-flow of any contaminated water occurs to the water body; and
- (d) Fish are prevented from entering the intake structure.

### 12.1.2.3 [*Unchanged*]

- 12.1.2.4 Except as provided for by Rules 12.1.1.1 to 12.1.2.3, the taking and use of surface water for no more than 3 days in any one month, is a *permitted* activity, providing:
  - (a) The water is not used for irrigation, and
  - (b) The water is not taken from There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
  - (c) No lawful take of water is adversely affected as a result of the taking; and
  - (d) No take is for a volume greater than 100,000 litres per day; and
  - (e) No take is at a rate greater than 10 litres per second; and
  - (f) No back-flow of any contaminated water occurs to the water body; and
  - (g) Fish are prevented from entering the intake structure; and
  - (h) The taking of surface water is not suspended.

The Otago Regional Council may, by public notice, suspend the taking of water under this rule if the taking of water as primary allocation, under a resource consent has had to cease in accordance with Rule 12.1.4.9, for the catchment or river, or part of the catchment or river, at which the taking of water under this rule is occurring.

**R027** 

- 12.1.2.5 Except as provided for by Rules 12.1.1.1 to 12.1.2.4, the taking and use of surface water is a *permitted* activity, providing:
  - (a) The water is not taken from There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
  - (b) No lawful take of water is adversely affected as a result of the taking; and
  - (c) No take is for a volume greater than 25,000 litres per day at any landholding; and
  - (d) No take is at a rate greater than 0.5 litres per second in the North Otago, Maniototo or Central Otago subregions (as identified on Maps A1-A8), or greater than 1 litre per second elsewhere in Otago; and

- (e) No back-flow of any contaminated water occurs to the water body; and
- (f) Fish are prevented from entering the intake structure; and
- (g) The taking of surface water is not suspended.

The Otago Regional Council may, by public notice, suspend the taking of water under this rule if the taking of water as primary allocation, under a resource consent has had to cease in accordance with Rule 12.1.4.9, for the catchment or river, or part of the catchment or river, at which the taking of water under this rule is occurring.

R028

- 12.1.2.6 <u>Unless covered by Rule 12.1.1A.1, The taking of surface water</u> for the purpose of land drainage is a *permitted* activity, providing:
  - (a) The water is not taken from, nor is there any alteration of the water level of, There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
  - (b) The taking does not result in the lowering of the level of water in any lake or river; and
  - (c) The water is not taken from any wetland identified in Schedule 10: and
  - (d) The taking does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage.

### 12.1.3 Controlled activity: Consent required but always granted

R029

12.1.3.1 <u>Unless covered by Rule 12.1.1A.1, The taking and use of surface water for community water supply, up to any volume or rate authorised as at 28 February 1998, by any take identified in Schedule 1B is a *controlled* activity.</u>

In granting any resource consent for the taking and use of surface water in terms of this rule, the Otago Regional Council will restrict the exercise of its control to the following:

- (a) Any need for a residual flow at the point of take; and
- (b) Any need to prevent fish entering the intake; and
- (c) The rate, volume, timing and frequency of the water to be taken and used; and
- (d) The quantity of water required to meet the needs of the community; and
- (da) The proposed method of take and delivery of the water taken; and
- (e) The duration of the resource consent; and
- (f) The information and monitoring requirements; and
- (g) Any bond; and
- (h) The review of conditions of the resource consent-; and
- (i) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

### 12.1.4 Restricted discretionary activities: Resource consent required

### 12.1.4.1 [Unchanged]

**R030** 

### *Note:*

Rules 12.1.4.2 to 12.1.4.7 below do not apply to the taking of surface water prohibited by rules in 12.0, or provided for by permitted and controlled activity rules in 12.1.2 and 12.1.3 above.

For taking water:

- 1. From Lakes Dunstan, Hawea, Roxburgh, Wanaka, Wakatipu or the main stem of the Clutha/Mata-Au or Kawarau Rivers; or
- 2. Where all of the surface water or connected groundwater taken is immediately returned to the source water body; or
- 3. Where all of the water has been delivered to the source water body for the purpose of that subsequent take:

Any take which does not meet the permitted activity standards is considered under Rules 12.1.4.1, 12.1.5.1 or in Section 12.1.1A 12.1.6, as it is exempt from primary allocation in accordance with Policy 6.4.1.

R031

12.1.4.2 Taking and use of surface water as primary allocation in the following Schedule 2A catchment areas:

Lake Hayes (Map B1),

Welcome Creek (Map B3),

Kakanui (Map B3),

Waianakarua (Map B3),

Trotters (Map B3),

Shag (Map B3),

Taieri Catchment upstream of Paerau (Map B4),

Taieri Catchment Sutton to Outram (Maps B4 and B5),

Water of Leith (Map B5),

Waitahuna (Map B5), and

Lake Tuakitoto (Map B5):

- (i) This rule applies to the taking of surface water, as primary allocation, in the above catchment areas, and subject to the minimum flows specified in Schedule 2A.
- (ii) <u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water to which this rule applies is a *restricted discretionary* activity, provided that, in the case of Welcome Creek, by itself or in combination with any other take, use, dam, or diversion, the sum of the annual volumes

authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2.

- (iiA)The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
- (iii) The conditions of all existing consents will be reviewed by the Otago Regional Council under Sections 128 to 132 of the Act to enable the minimum flows specified in Schedule 2A to be met, the volume and rate of take to be measured in accordance with Policy 6.4.16 and the taking to be subject to Rule 12.1.4.9, as soon as practicable after the Plan becomes operative.

Table 12.1.4.2 [Unchanged]

- 12.1.4.3 Taking and use of surface water as supplementary allocation specified in Schedule 2B:
  - (i) This rule applies to the taking of surface water as supplementary allocation as specified in Schedule 2B, subject to the minimum flows specified in Schedule 2B.
  - (ii) <u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water to which this rule applies is a *restricted discretionary* activity. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
  - (iiA)<u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water in the Waitaki catchment to which this rule applies is a *restricted discretionary* activity provided that by itself or in combination with any other take, use, dam, or diversion, the sum of the annual volumes authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2 and is subject to Rule 12.1.4.9. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
  - (iii) The conditions of all existing consents will be reviewed by the Otago Regional Council under Sections 128 to 132 of the Act to enable the minimum flows set in Schedule 2A or Schedule 2B to be met, the volume and rate of take to be measured in accordance with Policy 6.4.16 and the taking to be subject to Rule 12.1.4.9, as soon as practicable after the Plan becomes operative.

R033

12.1.4.4 Taking and use of surface water as primary allocation applied for prior to 28 February 1998 in the following Schedule 2A catchments:

Luggate Catchment (Map B1a),

Manuherikia Catchment Upstream of Ophir (Maps B2 and B4), Taieri Catchment Paerau to Waipiata (Maps B2 and B4) Taieri Catchment Waipiata to Tiroiti (Maps B2, B3 and B4), and

Taieri Catchment Tiroiti to Sutton (Maps B3 and B4):

- (i) This rule applies to the taking of surface water, as primary allocation, in the above catchment areas, if the taking was the subject of a resource consent or other authority:
  - (a) Granted before 28 February 1998, or
  - (b) Granted after 28 February 1998, but was applied for prior to 28 February 1998; or
  - (c) Granted to replace a resource consent or authority of the kind referred to in paragraph (a) or (b).
- (ii) <u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water to which this rule applies is a *restricted discretionary* activity. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
- (iii) The minimum flows set out in Schedule 2A of this Plan for the above catchments shall affect the exercise of every resource consent or other authority, of the kind referred to in paragraph (i) of this rule, in the Luggate catchment area, Manuherikia catchment area (upstream of Ophir) and Taieri catchment areas Paerau to Waipiata, Waipiata to Tiroiti and Tiroiti to Sutton, upon review of consent conditions.
- (iv) The conditions of all such consents will be reviewed by the Otago Regional Council under Sections 128 to 132 of the Act to enable the minimum flows set by Schedule 2A to be met, the volume and rate of take to be measured in accordance with Policy 6.4.16 and the taking to be subject to Rule 12.1.4.9.
- (v) The minimum flows set in Schedule 2A for the Luggate catchment area, Manuherikia catchment area (upstream of Ophir) and Taieri catchment areas Paerau to Waipiata, Waipiata to Tiroiti and Tiroiti to Sutton, shall not apply to any consents referred to in clause (i), paragraphs (a) to (c) of this rule until the review of consent conditions set out in clause (iv) of this rule occurs.

### 12.1.4.4A [Repealed] [Unchanged]

R034

- 12.1.4.5 Taking and use of surface water as primary allocation applied for prior to 28 February 1998 in catchments not listed in Schedule 2A:
  - (i) This rule applies to the taking of surface water, as primary allocation, in catchment areas not listed in Schedule 2A, if the taking was the subject of a resource consent or other authority:
    - (a) Granted before 28 February 1998, or
    - (b) Granted after 28 February 1998, but was applied for prior to 28 February 1998; or.
    - (c) Granted to replace a resource consent or authority of the kind referred to in paragraph (a) or (b).
  - (ii) <u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water to which this rule applies is a *restricted discretionary* activity. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
  - (iiA)<u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water in the Waitaki catchment to which this rule applies is a *restricted discretionary* activity provided that by itself or in combination with any other take, use, dam, or diversions, the sum of the annual volumes authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
  - (iii) Takes to which this rule applies will not be subject to a minimum flow condition until the minimum flow has been determined by investigation and added to Schedule 2A by a plan change.

Note: If a minimum flow has been determined for a catchment previously not listed in Schedule 2A, and that minimum flow has been set by a plan change, the catchment will then be listed in Schedule 2A and Rule 12.1.4.2 or Rule 12.1.4.4 will apply.

- 12.1.4.6 Taking and use of surface water as a new primary allocation take in catchment areas not listed in Schedule 2A:
  - (i) This rule applies to the taking of surface water as primary allocation in catchment areas not listed in Schedule 2A, and not subject to Rule 12.1.4.5.
  - (ii) <u>Unless covered by Rule 12.1.1A.1</u>, <u>Tthe taking and use of surface water to which this rule applies is a *restricted discretionary* activity. The matters to which the Otago</u>

Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.

- (iiA)<u>Unless covered by Rule 12.1.1A.1</u>, <u>T</u>the taking and use of surface water in the Waitaki catchment to which this rule applies is a *restricted discretionary* activity provided that by itself or in combination with any other take, use, dam, or diversions, the sum of the annual volumes authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.
- (iii) Minimum flows for catchments not listed in Schedule 2A will be set on a case-by-case basis such that any minimum flow set will allow the taking of water, while providing for the aquatic ecosystems and natural character of the catchment water bodies and the taking to be subject to Rule 12.1.4.9.
- (iv) The minimum flows set on a case-by-case basis will continue to apply until investigations have established the appropriate minimum flow. The new minimum flow will be added to Schedule 2A by a plan change and Rule 12.1.4.2 or Rule 12.1.4.4 will then apply.

12.1.4.7 Taking and use of surface water as supplementary allocation in any catchment other than a Schedule 2B catchment:

- (i) This rule applies to the taking of surface water as supplementary allocation for any catchment area, except for any Schedule 2B catchment as set out in clause (ii) below, subject to the minimum flows set in paragraph (iii) below.
- (ii) This rule does not apply to the taking of any surface water that is in addition to the first supplementary allocation provided for by Schedule 2B, for any catchment area in Rule 12.1.4.3.
- (iii) The taking of surface water as supplementary allocation for any catchment is subject to a minimum flow which is not less than either:
  - (a) 50% of the natural flow at the point of take, or, if a resource consent so provides, not less than 50% of the natural flow at a point specified in the resource consent; or
  - (b) The natural mean flow at the point of take, or, if a resource consent so provides, not less than the natural mean flow at a point specified in the resource consent, as the Otago Regional Council determines in granting a resource consent.

- (iv) <u>Unless covered by Rule 12.1.1A.1</u>, <u>Tthe taking and use of surface water to which this rule applies is a *restricted discretionary* activity, and is subject to Rule 12.1.4.9. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.</u>
- (ivA)<u>Unless covered by Rule 12.1.1A.1</u>, <u>Tthe taking and use of surface water in the Waitaki catchment to which this rule applies is a *restricted discretionary* activity provided that by itself or in combination with any other take, use, dam, or diversions, the sum of the annual volumes authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2 and is subject to Rule 12.1.4.9. The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.</u>
- (v) This rule shall affect the exercise of any resource consent which was either:
  - (a) Granted before 28 February 1998; or
  - (b) Granted after 28 February 1998 but was applied for prior to 28 February 1998,

for the taking of surface water where a condition on the consent requires the take to be suspended at a minimum flow higher than that which would be set by Schedule 2A.

(vi) The conditions of all such resource consents will be reviewed under Sections 128 to 132 of the Act to enable the minimum flows in paragraph (iii)(a) or (iii)(b) of this rule to be met, the volume and rate of take to be measured in accordance with Policy 6.4.16 and the taking to be subject to Rule 12.1.4.9, as soon as practicable after the Plan becomes operative.

### Note: Rule 12.1.4.8 is subject to appeal (refer page iii)

**R037** 

### 12.1.4.8 Restricted discretionary activity considerations

In considering any resource consent for the taking and use of water in terms of Rules 12.1.4.2 to 12.1.4.7 and 12.2.3.1A, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (i) The rate, volume, timing and frequency of water to be taken and used; and
- (iv) The proposed methods of take, delivery and application of the water taken; and
- (iii) The source of water available to be taken; and
- (iv) The location of the use of the water, when it will be taken out of a local catchment; and
- (v) Competing lawful local demand for that water; and

- (vi) The primary and supplementary allocation limits for the catchment; and
- (vii) Whether the proposed take is primary or supplementary allocation for the catchment; and
- (viii) Any arrangement for cooperation with other takers or users; and
- (ix) Any water storage facility available for the water taken, and its capacity; and
- (x) The minimum flow to be applied to the take of water, if consent is granted; and
- (xi) Where the minimum flow is to be measured, if consent is granted; and
- (xii) Any adverse effect on any lawful take of water, if consent is granted, including potential bore interference; and
- (xiii) Any actual or potential effects on any groundwater body; and
- (xiv) The consent being exercised or suspended in accordance with any Council approved rationing regime; and
- (xv) Any need for a residual flow at the point of take; and
- (xvi) Any need to prevent fish entering the intake; and
- (xvii) Any adverse effect on a significant wetland value identified in Schedule 9 or any wetland higher than 800 metres above sea level any Regionally Significant Wetland or on any regionally significant wetland value; and
- (xviii) Any financial contribution for Type B regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (xix) The duration of the resource consent; and
- (xx) The information, monitoring and metering requirements; and
- (xxi) Any bond; and
- (xxii) The review of conditions of the resource consent; and
- (xxiii) For resource consents in the Waitaki catchment the matters in (i) to (xxv) above, as well as matters in Policies 6.6A.1 to 6.6A.6; and
- (xxiv) Whether the taking of water under a water permit should be restricted to allow the exercise of another water permit.

[Note: The above list will be reordered and renumbered before becoming operative.]

### Notification and written approvals

(a) Applications for resource consent to which this Rule applies, to take and use water from a river, may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the

consent authority, may be adversely affected by the activity, if the application is to take and use water from:

- (i) A river for which a minimum flow has been set by or under this Plan; or
- (ii) A river for which it is not necessary for the Council to consider whether, if consent is granted, the taking should be subject to a condition requiring a residual flow to remain in the river at the point of take, or a condition requiring other provision for native fish, other than a condition requiring fish screening.

Other applications for resource consent to take and use water from a river may be considered without notification under Section 93 of the Resource Management Act in those circumstances in which the Act allows applications to be considered on a non-notified basis.

(b) Applications for resource consent to which this rule applies, to take and use water from a water body other than a river, may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

### 2 12.1.4.9 The suspension of takes

It is a term of any taking of surface water under Rules 12.1.1A.1, 12.1.2.4, 12.1.2.5 and 12.1.4.2 to 12.1.4.7 that, when the flow is equal to or less than a minimum flow applied by or under these rules, the Council may, by public notice, suspend all taking to enable the minimum flow to be met.

For catchments that have access to flow information via the "Water Info" telephone service, the taking of water under those consents shall cease automatically (without notification by Council) when the flow is at or below the minimum set in Schedule 2A or 2B until the flow again exceeds the minimum flow specified in Schedule 2A or 2B.

For catchments or parts of catchments where there is no access to flow information via the "Water Info" telephone service, the Council will notify the consent holders in those catchments that the taking of water shall cease. The Otago Regional Council will suspend takes in these catchments, or parts of catchments, by public notification through public media (newspaper, radio, television) until further notice that taking can recommence.

### 12.1.5 Discretionary activities: Resource consent required

R039

12.1.5.1 Except as provided for by Rules 12.1.1.1 to 12.1.4.7, and except in the Waitaki catchment, the taking and use of surface water is a *discretionary* activity.

**R040 12.1.6** [Moved to 12.1.1A] Non-complying activities: Resource consent required

R041

12.1.6.1 [Moved to 12.1.1A.2] Except as provided for by Rules 12.1.1.2 to 12.1.5.1 and 12.1.6.2, the taking and use of surface water in the Waitaki catchment when, by itself or in combination with any other take, use, dam or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rules 12.1.4.5 to 12.1.4.7 is a non-complying activity.

In considering an application to which this rule applies the consent authority will have regard, among other matter to Policies 6.6A.1 to 6.6A.5.

R042

- 12.1.6.2 [Moved to 12.1.1A.3] Except as provided for by Rules 12.1.1.2 the taking and use of surface water from Welcome Creek is a non-complying activity when:
  - (i) By itself or in combination with any other take, use, dam or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rule 12.1.4.2; and
  - (ii) The take does not comply with the minimum flow specified in Schedule 2A.

In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

### Principal reasons for adopting

R043

The taking and use of water can only occur if it is expressly allowed by a rule in a regional plan, or in any relevant proposed regional plan, or by a resource consent (Section 14(3) of the Resource Management Act).

Rule 12.1.1.1 is adopted to prohibit takes of water from Lake Tuakitoto when the minimum level established by this Plan is in force. This rule continues the minimum lake level already established to protect the lake's recreational and wildlife features by The Local Water Conservation (Lake Tuakitoto) Notice, 1991.

Rule 12.1.1.2 is adopted to provide for and be fully consistent with Policy 12.5.1 of the Regional Policy Statement for Otago. The rule prohibits all taking of surface water for use in nuclear power generation plants and in nuclear weapons manufacturing.

Rule 12.1.2.0 is adopted to permit the use of surface water taken under a resource consent granted prior to 10 April 2010.

The taking and use of surface water under Rules 12.1.2.1 to 12.1.2.6 will have no more than minor adverse effects on the natural and human use values supported by water bodies, or on any other person taking water. These rules are adopted to enable access to resources while providing protection for those values and uses.

The taking and use of surface water for existing community water supply identified in Schedule 1B is a controlled activity in order that the needs of Otago's communities can continue to be met.

Where surface water that is to be taken and used has been specifically supplied from an augmentation scheme, the Council only needs to consider what portion of that water is still available to be taken, and the quantity of water required for the intended purpose of use. Therefore the taking and use of water, delivered for the purpose of that subsequent taking, is a restricted discretionary activity.

The taking of surface water within the primary and supplementary allocation limits identified in this Plan will be subject to minimum flows which will protect aquatic ecosystems and natural character. As such, the Council has restricted the exercise of its discretion when considering applications for resource consents under Rules 12.1.4.1 and 12.1.4.2 to 12.1.4.7, to take and use water. Any other activity involving the taking and use of surface water is either a discretionary activity or a noncomplying activity in order that any adverse effects can be assessed. Non-complying activity rules 12.1.1A.2 and 12.1.1A.3 were added to this Plan by the Waitaki Catchment Water Allocation Regional Plan.

### 12.2 The taking and use of groundwater

R045

Note: The construction or alteration of any bore for taking groundwater requires a resource consent under Rule 14.1.1.

# **12.2.1 Prohibited activities: No resource consent will be granted** [Unchanged] 12.2.1.1 and 12.2.1.2 [Unchanged]

R044 12.2.1A Non-complying activities: Resource consent required

12.2.1A.1 Unless covered by Rules 12.2.1.1, 12.2.1.2, 12.2.2.1 and 12.2.2.3, the taking of groundwater from any Regionally Significant Wetland is a *non-complying activity*.

R046

12.2.1A.2 [Moved substantially unchanged from 12.2.5.1] Except as provided for by Rules 12.2.1.1 and 12.2.1A.1, the taking and use of groundwater in the Waitaki catchment when, by itself or in combination with any other take, use, dam or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rule 12.2.4.1 is a non-complying activity. In considering an application to which this

rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

### 12.2.2 Permitted activities: No resource consent required

12.2.2.0 and 12.2.2.1 [Unchanged]

Note: Changes proposed to Rule 12.2.2.2 by Proposed Plan Change 4A are not shown below (refer page iii)

- 12.2.2.2 Except as provided for by Rules 12.2.1.1 to 12.2.2.1, the taking and use of groundwater is a *permitted* activity, providing:
  - (a) No lawful take of water is adversely affected as a result of the taking; and
  - (aa) The water is not taken from any aquifer identified in Schedule 2C; and
  - (ab) The water is not taken from within 100 metres of any wetland, lake or river; and
  - (b) The take is for a rate no greater than 1.5 l/s, and a volume no greater than 10,000 litres per day, at any landholding, from the following aquifers:
    - (i) [Repealed]
    - (ii) [Repealed]
    - (iii) Roxburgh Basin (as identified on Map C12);
    - (iv) Manuherikia Claybound (as identified on Map C4);
    - (v) Dunstan Flats Groundwater Zone B (as identified on Map C4);
    - (vi) Manuherikia Alluvium (as identified on Map C4); and
    - (vii) Wakatipu Basin (as identified on Map C2); and
  - (c) The take is for a rate no greater than 2.5 l/s, and a volume no greater than 30,000 litres per day, at any landholding, from the following aquifers:
    - (i) Lower Waitaki Plains Groundwater Protection Zone B (as identified on Map C9);
    - (ii) Lower Taieri (as identified on Map C15);
    - (iii) Kuriwao Basin (as identified on Map C16);
    - (iv) Pomahaka Basin (as identified on Maps C13 and C14);
    - (v) Earnscleugh Terrace (as identified on Map C4);
    - (vi) Dunstan Flats Groundwater Zone A (as identified on Map C4);
    - (vii)Maniototo Tertiary (as identified on Maps C5-C8);
    - (viii)Cromwell Terrace (as identified on Map C3);
    - (ix) Hawea Basin (as identified on Map C1);
    - (x) Wanaka Basin Cardrona Gravel (as identified on Map C1);
    - (xi) Papakaio (as identified on Map D1); and
  - (d) The take is for a rate no greater than 3.5 l/s, and a volume no greater than 50,000 litres per day, at any landholding, from the following aquifers:

- (i) Lower Waitaki Plains Groundwater Protection Zone A (as identified on Map C9); and
- (ii) Inch Clutha Gravel (as identified on Map C17); and
- (e) Except as provided by Conditions (b) to (d) above, the take is for a rate no greater than 1.5 l/s, and a volume no greater than 25,000 litres per day, at any landholding, elsewhere in Otago; and
- (f) No back-flow of any contaminated water occurs to the aquifer; and
- (g) The taking of groundwater is not suspended.

The Otago Regional Council may, by public notice, suspend the taking of water under this rule if the taking of water, under a resource consent has had to cease in accordance with Rule 12.2.3.5, for the aquifer from which the taking of water under this rule is occurring.

### 12.2.2.3 and 12.2.2.4 [Unchanged]

12.2.2.5 Except as provided for by Rules 12.2.1.1 to 12.2.2.4, the taking and use of groundwater from:

- (i) Any aquifer listed in Schedule 2C; or
- (ii) Within 100 metres of any wetland, lake or river, for no more than 3 days in any one month, is a *permitted* activity, providing:
  - (a) The water is not used for irrigation; and
  - (b) The water is not taken from There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
  - (c) No lawful take of water is adversely affected as a result of the taking; and
  - (d) No take is for a volume greater than 100,000 litres per day; and
  - (e) No take is at a rate greater than 10 litres per second; and
  - (f) No back-flow of any contaminated water occurs to the water body; and
  - (g) The taking of surface water is not suspended.

The Otago Regional Council may, by public notice, suspend the taking of water under this rule if the taking of water as primary allocation, under a resource consent has had to cease in accordance with Rule 12.2.3.5, for the catchment or river, or part of the catchment or river, at which the taking of water under this rule is occurring.

- 12.2.2.6 Except as provided for by Rules 12.2.1.1 to 12.2.2.5, the taking and use of groundwater from:
  - (i) Any aguifer listed in Schedule 2C; or
  - (ii) Within 100 metres of any wetland, lake or river,

R048

is a *permitted* activity, providing:

- (a) The water is not taken from There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
- (b) No lawful take of water is adversely affected as a result of the taking; and
- (c) No take is for a volume greater than 25,000 litres per day at any landholding; and
- (d) No take is at a rate greater than 0.5 litres per second in the North Otago, Maniototo or Central Otago subregions (as identified on Maps A1–A8), or greater than 1 litre per second elsewhere in Otago; and
- (e) No back-flow of contaminated water occurs to the water body; and
- (f) The taking of surface water is not suspended.

The Otago Regional Council may, by public notice, suspend the taking of water under this rule if the taking of water as primary allocation, under a resource consent has had to cease in accordance with Rule 12.2.3.5, for the catchment or river, or part of the catchment or river, at which the taking of water under this rule is occurring.

### 12.2.2.A Controlled activity: Consent required but always granted

**R050** 

12.2.2A.1 <u>Unless covered by Rule 12.2.1A.1</u>, <u>The taking and use of groundwater for community water supply, up to any volume or rate authorised as at 28 February 1998, by any take identified in Schedule 3B is a *controlled* activity.</u>

In granting any resource consent for the taking and use of groundwater in terms of this rule, the Otago Regional Council will restrict the exercise of its control to the following:

- (a) Any need for a residual flow at the point of take; and
- (aa) The rate, volume, timing and frequency of the water to be taken and used; and
- (b) The quantity of water required to meet the needs of the community; and
- (ba) The proposed methods of take and delivery of the water taken; and
- (c) The duration of the resource consent; and
- (d) The information and monitoring requirements; and
- (e) Any bond; and
- (f) The review of conditions of the resource consent-; and
- (g) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

### 12.2.3 Restricted discretionary activities: Resource consent required

12.2.3.1 [Repealed] [Unchanged]

R051

12.2.3.1A <u>Unless covered by Rule 12.2.1A.1</u>, <u>T</u>the taking of groundwater from any Schedule 2C aquifer or from within 100 metres of any connected perennial surface water body, and the use of that groundwater, is a *restricted discretionary* activity, if all the standards and terms set out under Rules 12.1.4.1 to 12.1.4.7 that apply to the proposed taking and use are met, as if the take is surface water, except that any date should be read as 10 April 2010.

The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.1.4.8.

12.2.3.2 [Repealed] [Unchanged]

### Note: Rule 12.2.3.2A is subject to appeal (refer page iii)

R052

- 12.2.3.2A Except as provided for by <u>Rules 12.2.1A.1 and</u> 12.2.3.1A, the taking and use of groundwater is a *restricted discretionary* activity, if:
  - (a) The volume sought is within:
    - (i) The maximum allocation volume identified in Schedule 4A: or
    - (ii) 50% of the calculated mean annual recharge for any aquifer not specified in Schedule 4A; or
    - (iii) That specified on a resource consent granted before 10 April 2010, or the take applied for is a volume equal to or less than that on the existing consent; and
  - (b) It is subject to aquifer restriction levels identified in Schedule 4B; and
  - (c) Where the rate of surface water depletion is greater than 5 l/s, as calculated using Schedule 5A:
    - (i) Primary surface water allocation is available; and
    - (ii) For the Waitaki catchment, allocation to activities set out in Table 12.1.4.2 is available.

The matters to which the Otago Regional Council has restricted the exercise of its discretion are set out in Rule 12.2.3.4.

12.2.3.3 [Repealed] [Unchanged]

Note: Rule 12.2.3.4 is subject to appeal (refer page iii)

**R053** 

### 12.2.3.4 Restricted discretionary activity considerations

In considering any resource consent for the taking and use of groundwater in terms of Rule 12.2.3.2A, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (i) The rate, volume, timing and frequency of groundwater to be taken and used; and
- (ii) The proposed methods of take, delivery and application of the groundwater taken; and
- (iii) The source of groundwater available to be taken; and
- (iv) The location of the use of the groundwater, when it will be taken out of a local catchment; and
- (v) Any arrangement for cooperation with other takers or users; and
- (vi) Any water storage facility available for the groundwater taken, and its capacity; and
- (vii) In the case of takes from an aquifer identified in Schedule 4B, the restriction levels for the aquifer (as identified in that schedule) to be applied to the take of groundwater, if consent is granted; and
- (viii) Any adverse effect on any lawful take of water, if consent is granted, including potential bore interference; and
- (ix) Any actual or potential effects on any surface water body; and
- (x) Whether any part of the take would constitute allocation from any connected perennial surface water body, and the availability of that allocation; and
- (xi) The consent being exercised or suspended in accordance with any Council approved rationing regime; and
- (xii) Any adverse effect on the existing quality of groundwater in the aquifer; and
- (xiii) Any adverse effect on a significant wetland value identified in Schedule 9 or any wetland higher than 800 metres above sea level any Regionally Significant Wetland or on a regionally significant wetland value; and
- (xiv) Any financial contribution for Type B regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (xv) The duration of the resource consent; and
- (xvi) The information, monitoring and metering requirements; and
- (xvii) Any bond; and
- (xviii) The review of conditions of the resource consent; and
- (xix) For resource consents in the Waitaki Catchment the matters in (i) to (xxi) above, as well as matters in Policies 6.6A.1 to 6.6A.6; and

(xx) Whether the talking of water under a water permit should be restricted to allow the exercise of another water permit.

[Note: The above list will be reordered and renumbered before becoming operative.]

Notification and written approvals

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

**R054** 12.2.3.5 The suspension of takes

(i) It is a term of any taking of groundwater under Rules 12.2.1A.1, 12.2.2.5, 12.2.2.6 and 12.2.3.1A that, when the flow in the catchment in which the take occurs is equal to or less than a minimum flow set by or under these rules, the Council may, by public notice, suspend all taking to enable the minimum flow to be met.

These catchments have access to flow information via the "Water Info" telephone service, and the taking of water under those consents shall cease automatically (without notification by Council) when the flow is at or below the minimum set in Schedule 2A until the flow again exceeds the minimum flow specified in Schedule 2A.

- (ii) It is a term of any taking of groundwater under Rule 12.2.2.2 that, when the aquifer levels are equal to or less than those set by those rules, the Otago Regional Council may, by public notice, suspend the taking of groundwater to enable the restrictions to be met.
- (iii) Any notice given under paragraph (i) or (ii) of this rule comes into force on the date specified in the notice and continues in force until revoked by public notice. Any notice may relate to one or more catchments or aquifers.

### 12.2.4 Discretionary activities: Resource consent required

12.2.4.1 (i) Except as provided for by Rules 12.2.1.1 to 12.2.3.5 the taking and use of groundwater is a *discretionary* activity.

(iA) <u>Unless covered by Rule 12.2.1A.1</u>, <u>Tthe taking and use of groundwater in the Waitaki catchment</u> to which this rule applies is a *discretionary* activity provided that by itself or in combination with any other take, use, dam or diversions, the sum of the <u>annual volumes</u> authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2. In considering an application to which this rule applies, the consent

authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

**R056** 

## **12.2.5** [Moved to 12.2.1A] Non-complying activities: Resource consent required

**R057** 

12.2.5.1 [Moved to 12.2.1A.2] Except as provided for by Rule 12.2.1.1, the taking and use of groundwater in the Waitaki catchment when, by itself or in combination with any other take, use, dam or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rule 12.2.4.1 is a non-complying activity. In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

**R058** 

### Principal reasons for adopting

The taking and use of groundwater can only occur if they are expressly allowed by a rule in a regional plan, or in any relevant proposed regional plan, or by a resource consent (Section 14(3) of the Resource Management Act).

Rule 12.2.1.1 is adopted to provide for and be fully consistent with Policy 12.5.1 of the Regional Policy Statement for Otago. The rule prohibits all taking of groundwater for use in nuclear power generation plants and in nuclear weapons manufacturing.

Rule 12.2.1.2 is adopted to prohibit takes of water from Lake Tuakitoto when the minimum level established by this plan is in force. This rule continues the minimum lake level already established to protect the lake's recreational and wildlife features by The Local Water Conservation (Lake Tuakitoto) Notice, 1991.

Rule 12.2.2.0 is adopted to permit the use of groundwater take under a resource consent granted prior to 10 April 2010.

### Note: 12.2 paragraph following is subject to appeal (refer page iii)

The taking and use of groundwater under Rules 12.2.2.1 to 12.2.2.6 will have no more than minor adverse effects on the aquifer from which the water is taken, any wetland, lake or river, or on any other person taking water. These rules are adopted to enable access to resources while providing protection for the existing consumptive uses of the groundwater.

The taking and use of groundwater under Rule 12.2.2A.1 for existing community water supply takes identified in Schedule 3B is a controlled activity in order that the needs of Otago's communities can continue to be met.

The taking of groundwater under Rule 12.2.3.1A is treated as surface water taking, subject to the standards and terms in the specified surface water

rules, which include the minimum flows that apply in the relevant catchments. This will maintain surface water levels and the groundwater volume of the aquifers, protect aquifer ecosystems and natural character, while ensuring recognised uses can continue.

The taking of groundwater under Rule 12.2.3.2A, is treated as the taking of groundwater and part surface water, where surface water depletion is greater than 5 l/s. This will maintain the levels identified for the specified aquifers and the groundwater volume of the aquifers, while ensuring the aquifers' recognised uses can continue. This will also ensure that the effect of the take on the surface water body is recognised.

The Council has restricted the exercise of its discretion when considering applications for resource consents under Rules 12.2.3.1A and 12.2.3.2A.

Any other activity involving the taking of groundwater is either a discretionary activity or a non-complying activity in order that any adverse effects can be assessed. Non-complying activity rules were 12.2.1A.2 was added to this Plan by the Waitaki Catchment Water Allocation Regional Plan.

### 12.3 The damming or diversion of water

Note: The erection of a dam in the bed of a lake or river is covered by Rules 13.2.1.3 and 13.2.3.1.

**12.3.1 Prohibited activities: No resource consent will be granted** [Unchanged] 12.3.1.1 to 12.3.1.4 [Unchanged]

### **R059** 12.3.1A Non-complying activities: Resource consent required

R060

- 12.3.1A.1 Unless covered by Rules 12.3.1.1 to 12.3.1.4, and 12.3.3.1(i):
  - (i) The diversion of water from or within any Regionally Significant Wetland, or
  - (ii) The damming or diversion of water that affects the water level of any Regionally Significant Wetland,

is a *non-complying* activity.

R061

12.3.1A.2 [Moved substantially unchanged from 12.3.5.1] Except as provided for in Rules 12.3.1A.1, and 12.3.1A.3 12.3.5.2, the damming or diversion of water in the Waitaki catchment when, by itself or in combination with any other take, use, dam, or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rules 12.3.3.1 and 12.3.4.1 is a non-complying activity. In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.5.

12.3.1A.3 [Moved substantially unchanged from 12.3.5.2] Unless covered by Rule 12.3.1A.1, Tethe damming or diversion of water from Welcome Creek is a **non-complying** activity. In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

#### 12.3.2 Permitted activities: No resource consent required

**R063** 

- 12.3.2.1 <u>Unless covered by Rules 12.3.1A.1, and Except as provided for by Rules 12.3.1.1</u> to 12.3.1.4, the damming or diversion of water is a *permitted* activity, providing:
  - (a) The size of the catchment upstream of the dam, weir or diversion is no more than 50 hectares in area; and
  - (b) In the case of damming, the water immediately upstream of the dam is no more than 3 metres deep, and the volume of water stored by the dam is no more than 20,000 cubic metres; and
  - (c) In the case of diversion, the water is conveyed from one part of any lake or river, or its tributary, to another part of the same lake, river or tributary; and
  - (d) No lawful take of water is adversely affected as a result of the damming or diversion; and
  - (e) No wetland identified in Schedule 9 nor any wetland higher than 800 metres above sea level is adversely affected There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland; and
  - (f) The damming or diversion does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
  - (g) The damming or diversion is not within the <u>Waitaki</u> catchment.

- 12.3.2.2 <u>Unless covered by Rule 12.3.1A.1, The diversion of water, for the purpose of land drainage, is a *permitted* activity, providing:</u>
  - (a) The water is not diverted from, nor is there any alteration of the water level of, There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
  - (b) The diversion does not result in the lowering of the level of water in any lake or river; and
  - (c) The water is not taken from any wetland identified in Schedule 10; and
  - (d) The diversion does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage.

- 12.3.2.3 Except as provided for by Rules 12.3.1.4, <u>12.3.1A.1</u>, 12.3.2.1 and 12.3.2.2, the diversion of water carried out for the purposes of allowing the erection, placement, repair or maintenance of a lawful structure, is a *permitted* activity, providing:
  - (a) The course of the water always remains within the bed of the lake or river; and
  - (b) The course of the water is returned to its normal course following the completion of the repair or maintenance, and no more than one month after the diversion occurs; and
  - (c) No lawful take of water is adversely affected as a result of the diversion; and
  - (d) No wetland identified in Schedule 9 nor any wetland higher than 800 metres above sea level is adversely affected There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland; and
  - (e) The diversion does not cause any erosion, land instability, sedimentation or property damage.

#### 12.3.3 Restricted discretionary activities: Resource consent required

**R066** 

- 12.3.3.1 (i) Except as provided for by Rules 12.3.1.1 to 12.3.1.4, and 12.3.2.1 to 12.3.2.3 and except in Welcome Creek, the damming of water, which has been previously carried out under a resource consent or other lawful authority, is a restricted discretionary activity.
  - (iA) <u>Unless covered by Rule 12.3.1A.1</u>, <u>The damming of water in the Waitaki catchment</u>, except in Welcome Creek, to which this rule applies is a *restricted discretionary* activity provided that by itself or in combination with any other take, use, dam, or diversions, the sum of the <u>annual volumes</u> authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2.

In considering any resource consent for the damming of water in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following matters:

- (a) Any adverse effects of continuing or discontinuing the damming of water on:
  - (i) Any natural or human use value identified in Schedule 1 for any affected water body including the impoundment itself;
  - (ii) The natural character of any affected water body including the impoundment itself;
  - (iii) Any amenity value supported by any affected water body including the impoundment itself;
  - (iv) Any heritage value associated with any affected water body including the impoundment itself;

- (v) Any significant wetland value identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
- (vi) Any existing lawfully established take or damming of water; and
- (aa) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and
- (b) Any maximum or minimum level or flow of water, and the range, or rate of change, of levels or flows of water; and
- (c) Flooding, erosion, land instability, sedimentation or property damage resulting from the damming or from the discontinuation of the damming; and
- (d) Any restoration of exposed lake bed resulting from any reduction in authorised lake level; and
- (e) The purpose of the existing dam or lake level control; and
- (f) The duration of the resource consent; and
- (g) The information and monitoring requirements; and
- (h) Any financial contribution, including for regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (i) Any bond; and
- (j) Any insurance or other appropriate means of remedying the effects of failure; and
- (k) Any adverse effect on any lawful priority attached to any resource consent or deemed permit; and
- (l) Whether the damming of water under a water permit should be restricted to allow the damming or taking of water under any other permit; and
- (m) The review of conditions of the resource consent; and
- (n) For resource consents in the <u>Waitaki catchment</u>, matters in (a) to (m) above as well as matters in Policies 6.6A.1 to 6.6A.5.

#### 12.3.4 Discretionary activities: Resource consent required

- 12.3.4.1 (i) Except as provided for by Rules 12.3.1.1 to 12.3.3.1 and except in the <u>Waitaki catchment</u>, the damming or diversion of water is a *discretionary* activity.
  - (iA) <u>Unless covered by Rule 12.3.1A.1</u>, <u>Tthe damming or diversion of water in the Waitaki catchment</u>, except in Welcome Creek to which this rule applies is a *discretionary* activity provided that by itself or in combination with any other take, use, dam, or diversions, the sum of the <u>annual volumes</u> authorised by resource consent, does not exceed the allocation to activities set out in Table 12.1.4.2. In considering an application to which this rule applies the

consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.5.

**12.3.5** [Moved to 12.3.1A] Non-complying activities: Resource consent required

12.3.5.1 [Moved to 12.3.1A.2] Except as provided for in Rule 12.3.5.2, the damming or diversion of water in the Waitaki catchment when, by itself or in combination with any other take, use, dam, or diversions, the sum of the annual volumes authorised by resource consent, exceeds the allocations to activities set out in Rules 12.3.3.1 and 12.3.4.1 is a non-complying activity. In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.5.

12.3.5.2 [Moved to 12.3.1A.3] The damming or diversion of water from Welcome Creek is a non-complying activity. In considering an application to which this rule applies the consent authority will have regard, among other matters, to Policies 6.6A.1 to 6.6A.6.

# R071 Principal reasons for adopting

The damming or diversion of water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, or by a resource consent (Section 14(3) of the Resource Management Act).

The Water Conservation (Kawarau) Order and the Lake Wanaka Preservation Act prohibit the damming of water. The Pomahaka River and Tributaries and Lower Clutha River Local Water Conservation Notice, deleted by this Plan, also prohibited the damming of water. It is therefore appropriate to prohibit the damming of the same waters within this Plan, as provided for by Rules 12.3.1.1 to 12.3.1.3.

Rule 12.3.1.4 is adopted to prohibit the diversion of water from Lake Tuakitoto when the minimum level established by this Plan is in force. This rule continues the minimum lake level already established to protect the lake's recreational and wildlife features by The Local Water Conservation (Lake Tuakitoto) Notice, 1991.

The damming or diversion of water under Rules 12.3.2.1 to 12.3.2.3, will have no more than minor adverse effects on the natural and human use values supported by water bodies, or on any other person. These rules are adopted to enable small dams or diversions while providing protection for those values and the interests of those people. Any other activity involving the damming or diversion of water is either a restricted discretionary activity, a discretionary activity or a non-complying activity in order that any adverse effects can be assessed. Non-complying activity rules 12.3.1A.2 and 12.3.1A.3 were added to this Plan by the Waitaki Catchment Water Allocation Regional Plan.

R070

**R069** 

Proposed Plan Change 2 (Regionally Significant Wetlands) to the Regional Plan: Water for Otago 2 July 2011

# 12.4 Discharge of stormwater

#### 12.4.1 Permitted activities: No resource consent required

R072

- 12.4.1.1 The discharge of stormwater from a reticulated stormwater system to water, or onto or into land in circumstances where it may enter water, is a *permitted* activity, providing:
  - (a) Where the system is lawfully installed, or extended, after 28 February 1998:
    - (i) The discharge is not to any <u>Regionally Significant</u> Wetland wetland identified in Schedule 9; and
    - (ii) Provision is made for the interception and removal of any contaminant which would give rise to the effects identified in Condition (d) of this rule; and
  - (b) The discharge does not contain any human sewage; and
  - (c) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
  - (d) The stormwater discharged, after reasonable mixing, does not give rise to all or any of the following effects in the receiving water:
    - (i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
    - (ii) Any conspicuous change in the colour or visual clarity; or
    - (iii) Any emission of objectionable odour; or
    - (iv) The rendering of fresh water unsuitable for consumption by farm animals; or
    - (v) Any significant adverse effects on aquatic life.

#### 12.4.1.2 [*Unchanged*]

#### 12.4.2 Restricted discretionary activities: Resource consent required

R073

12.4.2.1 Except as provided for by Rules 12.4.1.1 to 12.4.1.2, the discharge of stormwater to water, or onto or into land in circumstances where it may enter water, is a *restricted discretionary* activity.

In considering any resource consent for the discharge of stormwater in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the discharge on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
- (b) Any adverse effect on any Regionally Significant Wetland

- or on any regionally significant wetland value identified in Schedule 9; and
- (c) Any financial contribution for Type B regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (d) The volume, rate and method of the discharge; and
- (e) The nature of the discharge; and
- (f) Treatment options; and
- (g) The location of the discharge point or area, and alternative receiving environments; and
- (h) The likelihood of erosion, land instability, sedimentation or property damage resulting from the discharge of stormwater; and
- (i) The potential for soil contamination; and
- (i) The duration of the resource consent; and
- (k) The information and monitoring requirements; and
- (l) Any bond; and
- (m) Any existing lawful activity associated with any affected water body; and
- (n) The review of conditions of the resource consent.

#### **Principal reasons for adopting** [Unchanged]

# 12.5 Discharge of drainage water

#### 12.5.1 Permitted activities: No resource consent required

- 12.5.1.1 The discharge of drainage water to water, or onto or into land in circumstances where it may enter water, from any drain, is a *permitted* activity, providing:
  - (a) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
  - (aa) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland; and
  - (b) The discharge, after reasonable mixing, does not give rise to all or any of the following effects in the receiving water:
    - (i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
    - (ii) Any conspicuous change in the colour or visual clarity; or
    - (iii) Any emission of objectionable odour; or
    - (iv) The rendering of fresh water unsuitable for consumption by farm animals; or
    - (v) Any significant adverse effects on aquatic life.

#### 12.5.2 Restricted discretionary activities: Resource consent required

**R075** 

12.5.2.1 Except as provided for by Rule 12.5.1.1, the discharge of drainage water to water, or onto or into land in circumstances where it may enter water, is a *restricted discretionary* activity.

In considering any resource consent for the discharge of drainage water in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the discharge on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
- (b) Any adverse effect on any Regionally Significant Wetland or on any regionally significant wetland value identified in Schedule 9; and
- (c) Any financial contribution for Type B regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (d) The volume, rate and method of the discharge; and
- (e) The nature of the discharge; and
- (f) Treatment options; and
- (g) The location of the discharge point or area, and alternative receiving environments; and
- (h) The likelihood of flooding, erosion, land instability, sedimentation or property damage resulting from the discharge; and
- (i) The duration of the resource consent; and
- (j) The information and monitoring requirements; and
- (k) Any existing lawful activity associated with any affected water body; and
- (1) Any bond; and
- (m) The review of conditions of the resource consent.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

Principal reasons for adopting [Unchanged]

# **12.6 Discharge of human sewage** [Unchanged]

# 12.7 Discharge of pesticides

#### 12.7.1 Permitted activities: No resource consent required

**R076** 

- 12.7.1.1 The discharge of any herbicide to water for the control of aquatic plants is a *permitted* activity, providing:
  - (a) The herbicide and any associated additive are authorised for aquatic use in New Zealand, and are used in accordance with the authorisation; and
  - (b) The discharge is carried out in accordance with any manufacturers' directions and is carried out by a person who holds a Growsafe Registered Applicator Certificate of Qualification; and
  - (c) The herbicide is applied in the form of a gel; and
  - (d) The discharge is for the purpose of controlling aquatic plants and does not exceed the quantity, concentration or rate required for that purpose; and
  - (e) No lawful take of water is adversely affected as a result of the discharge; and
  - (f) The discharger notifies, at least one week before commencing the discharge:
    - (i) Every person taking water for domestic supply, and every holder of a resource consent or deemed permit for the taking of water within one kilometre downstream of the proposed discharge in any river or water race, or within one kilometre of the proposed discharge in any lake; and
    - (ii) The community through Public Notice, where the discharge will occur directly into a lake, or river or any Regionally Significant Wetland.

**R077** 

- 12.7.1.2 Except as provided for by Rule 12.8.1.1, the land-based discharge of any pesticide onto land is a *permitted* activity, providing:
  - (a) The pesticide is authorised for use in New Zealand and is used in accordance with the authorisation; and
  - (b) The discharge is carried out in accordance with any manufacturers' directions; and
  - (c) The discharge is for the purpose of controlling animals, plants or other organisms and does not exceed the quantity, concentration or rate required for that purpose; and
  - (d) There is no direct discharge of the pesticide to water in any water body, drain, water race or the coastal marine area-; and
  - (e) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.

- 12.7.1.3 The discharge of herbicide to air or land in circumstances where it will enter water, is a *permitted* activity, providing:
  - (a) The herbicide and any associated additive are authorised for use in or over water in New Zealand and are used in accordance with the authorisation; and

- (b) The use is carried out in accordance with any manufacturers' directions; and
- (c) The discharge is for the purpose of controlling plants and does not exceed the quantity, concentration or rate required for that purpose; and
- (d) All reasonable measures are taken to minimise any direct discharge of the herbicide to water in any water body, drain, water race, or to the coastal marine area; and
- (e) No lawful take of water is adversely affected as a result of the discharge; and
- (f) The discharger notifies, at least one week before commencing the discharge:
  - (i) Every person taking water for domestic supply, and every holder of a resource consent or deemed permit for the taking of water within one kilometre downstream of the proposed discharge alongside any river or water race, or within one kilometre of the proposed discharge alongside any lake; and
  - (ii) The community through Public Notice, where the discharge will occur directly into any lake, or river, or any Regionally Significant Wetland; and
- (g) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.
- 12.7.1.4 Except as provided for by Rule 12.7.1.3, the aerial discharge of any pesticide onto land in circumstances where it, or any contaminant associated with its breakdown, may enter water, is a *permitted* activity, providing:
  - (a) The pesticide is authorised for use in New Zealand and is used in accordance with the authorisation; and
  - (b) The discharge is carried out in accordance with any manufacturers' directions, by a person who holds a Growsafe Pilots' Agrichemical Rating Certificate of Oualification; and
  - (c) The discharge is for the purpose of controlling animals, plants or other organisms and does not exceed the quantity, concentration or rate required for that purpose; and
  - (d) All reasonable measures are taken to prevent any discharge of the pesticide within 20 metres of water in any water body, drain or water race, or of the coastal marine area-; and
  - (e) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.
- 12.7.2 Discretionary activities: Resource consent required [Unchanged]

12.7.2.1 [*Unchanged*]

# 12.8 Discharge of agricultural waste and fertiliser

#### 12.8.1 Permitted activities: No resource consent required

**R080** 

- 2.8.1.1 The discharge of any animal dip material onto production land is a *permitted* activity, providing:
  - (a) The dip material is lawfully authorised for use in New Zealand and is used in accordance with the authorisation;
     and
  - (b) The discharge occurs more than 50 metres from any surface water body or mean high water springs; and
  - (c) The discharge occurs more than 100 metres from any bore used to supply water for domestic needs or drinking water for livestock; and
  - (d) The discharge does not exceed 5000 litres per hectare; and
  - (e) The discharge is carried out on land with a continuous cover of vegetation which has a minimum of 25 mm thickness;
     and
  - (f) The discharge is not carried out on land which has already been used for the disposal of animal dip material in the previous eight months; and
  - (g) The discharge is carried out in accordance with any manufacturers' directions; and
  - (h) Contaminants from the discharge do not run off to any other person's property; and
  - (i) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
  - (j) There is no direct discharge of animal dip material to water in any drain or water race, or to groundwater:; and
  - (k) There is no change to the water level or hydrological function, or no damage to flora, fauna or its habitat, in or on any Regionally Significant Wetland.

- 12.8.1.2 The discharge of contaminants that have been collected in any animal waste collection system, onto production land in Zone A of the Lower Waitaki Plains Groundwater Protection Zone (as identified on Map C9), is a *permitted* activity, providing:
  - (a) Any collection or storage system is sealed so as to prevent any contamination of water in any water body, drain or water race; and
  - (b) No hazardous substance is added to the material to be discharged; and
  - (c) The discharge occurs more than 50 metres from any surface water body, mean high water springs or any direct conduit to groundwater; and
  - (d) The discharge occurs more than 50 metres from any bore used to supply water for domestic needs or drinking water for livestock; and
  - (e) The discharge does not occur on saturated soils; and

- (f) The application of animal waste does not exceed 25 mm depth at one time, and a minimum of 15 days expires before any re-application to the same land; and
- (g) There is no direct discharge of animal waste to water in any drain or water race; and
- (h) Effluent from the discharge does not run off onto any other person's property; and
- (i) Ponding of animal waste from the discharge does not occur; and
- (j) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
- (k) The Nitrogen loading due to the discharge does not exceed 75 kg N per hectare per year-\*; and
- (l) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.
- \* Note in terms of Condition (k): 6.5 kg N is produced annually in the shed by a cow milked 270 days/year, requiring 866 m<sup>2</sup> of land area for application under ideal conditions. A 100 cow herd would require no less than 8.66 ha for land application of their waste, to be within this annual loading limit but, depending on soil moisture status, a greater area may be required in order to meet the other conditions of the rule.
- 12.8.1.3 The discharge of contaminants that have been collected in any animal waste collection system, onto production land not in Zone A of a Groundwater Protection Zone (as identified on Maps C1-C17), is a *permitted* activity, providing:
  - (a) Any collection or storage system is sealed so as to prevent any contamination of water in any water body, drain, or water race; and
  - (b) No hazardous substance is added to the material to be discharged; and
  - (c) The discharge occurs more than 50 metres from any surface water body or mean high water springs; and
  - (d) The discharge occurs more than 50 metres from any bore used to supply water for domestic needs or drinking water for livestock; and
  - (e) The discharge does not occur on saturated soils; and
  - (f) There is no direct discharge of animal waste to water in any drain, or water race, or to groundwater; and
  - (g) Effluent from the discharge does not run off onto any other person's property; and
  - (h) Ponding of animal waste from the discharge does not occur; and
  - (i) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and

- (j) The Nitrogen loading due to the discharge does not exceed 150 kg N per hectare per year\*; and
- (k) The discharge does not exceed the application requirements identified in Schedule 8-; and
- (1) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.
- \* Note in terms of Condition (j): 6.5 kg N is produced annually in the shed by a cow milked 270 days/year, requiring 433 m<sup>2</sup> of land area for application under ideal conditions. A 100 cow herd would require no less than 4.33 ha for land application of their waste, to be within this annual loading limit but, depending on soil moisture status, a greater area may be required in order to meet the other conditions of the rule.

#### 12.8.1.4 [*Unchanged*]

R083

- 12.8.1.5 The discharge of fertiliser onto production land, in circumstances where it may enter water, is a *permitted* activity, providing:
  - (a) All reasonable measures are taken to minimise any discharge of the fertiliser to water in any water body, drain or water race, to any wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level, or to the coastal marine area; and
  - (b) The discharge is carried out in accordance with the manufacturer's directions-; and
  - (c) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.

#### 12.8.2 Restricted discretionary activities: Resource consent required

R084

12.8.2.1 The discharge of contaminants from any animal waste collection system onto production land in Zone A of the Kakanui-Kauru, Shag, Roxburgh, Ettrick or Lower Taieri Groundwater Protection Zones (as identified in Maps C10-C12 and C15), is a *restricted discretionary* activity.

In considering any resource consent for the discharge of animal waste in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the discharge on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and

- (aa) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and
- (b) Any adverse effect on the aquifer; and
- (c) Any adverse effect on an existing lawful take of water; and
- (d) The volume, rate and method of discharge; and
- (e) The nature of the discharge; and
- (f) The location and nature of the area affected by the discharge, and alternative receiving environments; and
- (g) The capacity and security of any storage; and
- (h) The potential for soil contamination; and
- (i) The duration of the resource consent; and
- (i) The information and monitoring requirements; and
- (k) Any existing lawful activity associated with any affected water body; and
- (l) Any bond; and
- (m) The review of conditions of the resource consent-; and
- (n) Any financial contribution for regionally significant wetland values or Regionally Significant Wetlands that are adversely affected.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

# 12.8.3 Discretionary activities: Resource consent required [Unchanged]

12.8.3.1 [*Unchanged*]

# 12.9 Discharges from drilling and bore testing

#### 12.9.1 Permitted activities: No resource consent required

- 12.9.1.1 The discharge of water associated with down-hole pump testing to water, or to land in circumstances where it may enter water, is a *permitted* activity, providing:
  - (a) The discharge is not to any wetland identified in Schedule 9
    There is no change to the water level or hydrological
    function, or no damage to the flora, fauna or its habitat, in or
    on any Regionally Significant Wetland; and
  - (b) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
  - (c) The discharge, after reasonable mixing, does not give rise to all or any of the following effects in the receiving water:
    - (i) The production of any conspicuous oil or grease films,

- scums or foams, or floatable or suspended materials; or
- (ii) Any conspicuous change in the colour or visual clarity; or
- (iii) Any emission of objectionable odour; or
- (iv) The rendering of fresh water unsuitable for consumption by farm animals; or
- (v) Any significant adverse effects on aquatic life.

- 12.9.1.2 The discharge of contaminants to land associated with drilling is a *permitted* activity, providing:
  - (a) The discharge is not to any wetland identified in Schedule 9 or any wetland higher than 800 metres above sea level. There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland; and
  - (b) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage; and
  - (c) There is no direct discharge of contaminant to water in any water body, drain or water race, or to the coastal marine area.

#### 12.9.2 Restricted discretionary activities: Resource consent required

**R087** 

12.9.2.1 Except as provided for by Rules 12.9.1.1 and 12.9.1.2, the discharge of water associated with down-hole pump testing or contaminants associated with drilling, to water or onto or into land, in circumstances where it may enter water, is a *restricted discretionary* activity.

In considering any resource consent for the discharge of water associated with bore testing or contaminants associated with drilling in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the discharge on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
- (b) Any adverse effect on any Regionally Significant Wetland or on any regionally significant wetland value identified in Schedule 9 or any wetland higher than 800 metres above sea level; and
- (c) Any financial contribution for Type B regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (d) Any adverse effect on the aquifer; and
- (e) Any adverse effect on an existing lawful take of water; and

- (f) The volume, rate and method of the discharge; and
- (g) The nature of the discharge; and
- (h) Treatment options; and
- (i) The location of the discharge point or area, and alternative receiving environments; and
- (j) The potential for soil contamination; and
- (k) The duration of the resource consent; and
- (1) The information and monitoring requirements; and
- (m) Any existing lawful activity associated with any affected water body; and
- (n) Any bond; and
- (o) The review of conditions of the resource consent.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

**Principal reasons for adopting** [Unchanged]

# 12.10 Discharges from vessels

#### 12.10.1 Permitted activities: No resource consent required

**R088** 

- 12.10.1.1 The discharge of any contaminant or water from a vessel into water is a *permitted* activity, providing:
  - (a) The discharge is not to any wetland identified in Schedule 9

    There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland; and
  - (b) No non-biodegradable material is included in the discharge; and
  - (c) The discharge contains no hazardous substance, human sewage, petroleum product, pest plant material (as identified in the Pest Management Strategy for Otago 2001) or waste from an industrial or trade process; and
  - (d) The discharge, after reasonable mixing, does not give rise to all or any of the following effects in the receiving water:
    - (i) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
    - (ii) Any conspicuous change in the colour or visual clarity; or
    - (iii) Any emission of objectionable odour; or
    - (iv) The rendering of fresh water unsuitable for consumption by farm animals; or
    - (v) Any significant adverse effects on aquatic life.

#### 12.10.2 Restricted discretionary activities: Resource consent required

R089

12.10.2.1 Except as provided for by Rule 12.10.1.1, the discharge of any contaminant or water from a vessel, or from the maintenance of a

vessel, to water, or onto or into land in circumstances where it may enter water, is a *restricted discretionary* activity.

In considering any resource consent for the discharge of contaminants or water from a vessel, or from the maintenance of a vessel in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the discharge on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
- (b) Any adverse effect on any Regionally Significant Wetland or on any regionally significant wetland value identified in Schedule 9; and
- (c) Any financial contribution for Type B regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and
- (d) The volume, rate and method of the discharge; and
- (e) The nature of the discharge; and
- (f) The location of the discharge point or area, and alternative receiving environments; and
- (g) Treatment options; and
- (h) The duration of the resource consent; and
- (i) The information and monitoring requirements; and
- (j) Any existing lawful activity associated with any affected water body; and
- (k) Any bond; and
- (1) The review of conditions of the resource consent.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

**Principal reasons for adopting** [Unchanged]

# 12.11 Discharge of water or tracer dye

# 12.11.1 Prohibited activities: No resource consent will be granted [Unchanged]

12.11.1.1 [Unchanged]

#### 12.11.2 Permitted activities: No resource consent required

- 12.11.2.1 The discharge of sullage, cooling water or water from any drinking-water supply reservoir, water supply pipeline or swimming pool to water, or onto or into land in circumstances where it may enter water, is a *permitted* activity, providing:
  - (a) The discharge does not contain:
    - (i) A greater concentration of faecal coliforms than that of the receiving water, or a concentration that could cause the faecal coliform concentration of the receiving water, after reasonable mixing, to exceed 150 CFU per 100 mls; or
    - (ii) Any disinfectant, antiseptic or pesticide; or
    - (iii) Any residual flocculant, except for aluminium at acidsoluble aluminium concentrations less than 0.1 grams per cubic metre; or
    - (iv) Any free or residual chlorine at the point where the discharge enters water in any surface water body or mean high water springs; or
    - (v) Human sewage; or
    - (vi) Any hazardous substance; and
  - (b) The discharge does not increase the natural temperature of the receiving water, after reasonable mixing, by more than 3° Celsius, and does not cause the temperature of the receiving water, after reasonable mixing, to rise above 25° Celsius; and
  - (c) The discharge does not increase the suspended solids levels in the receiving water, after reasonable mixing, by more than 10 grams per cubic metre; and
  - (d) The discharge does not change the pH of the receiving water, after reasonable mixing, by more than 0.5 pH units; and
  - (e) The discharge does not, after reasonable mixing, give rise to any significant adverse effect on aquatic life; and
  - (f) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage-; and
  - (g) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.

- 12.11.2.2 The discharge of water which has been used for the purpose of holding live organisms to water, or onto or into land in circumstances where it may enter water, is a *permitted* activity, providing:
  - (a) The discharge is not to There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland wetland identified in Schedule 9; and
  - (b) No contaminant has been added that is toxic to the aquatic life of the receiving water body; and
  - (c) The discharge contains no pest plant material (as identified in the Pest Management Strategy for Otago 2001); and
  - (d) The discharge does not increase the natural temperature of the receiving waters, after reasonable mixing, by more than 3° Celsius, and does not cause the temperature of the receiving water, after reasonable mixing, to rise above 25° Celsius; and
  - (e) The discharge does not increase the suspended solids levels in the receiving water, after reasonable mixing, by more than 10 grams per cubic metre; and
  - (f) The discharge does not, after reasonable mixing, give rise to any significant adverse effect on aquatic life; and
  - (g) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage.

- 12.11.2.3 Except as provided for by Rules 12.4.1, 12.5.1, 12.9.1.1, 12.10.1.1, 12.11.1.1, 12.11.2.1 and 12.11.2.2, the discharge of any other water to water, or onto or into land in circumstances where it may enter water, is a *permitted* activity, providing:
  - (a) In the case of a discharge from a dam, the conditions of Rule 12.3.2.1 are met; and
  - (b) Except in the case of surplus irrigation water from a system that was operational on or before 28 February 1998, the water is discharged to a water body with the same coastal mouth as that from which the water has been sourced; and
  - (c) The discharge does not contain any hazardous substance; and
  - (d) The discharge does not increase the natural temperature of the receiving water, after reasonable mixing, by more than 30 Celsius, and does not cause the temperature of the receiving water, after reasonable mixing, to rise above 250 Celsius; and
  - (e) The discharge does not increase the suspended solids levels in the receiving water, after reasonable mixing, by more than 10 grams per cubic metre; and
  - (f) The discharge does not, after reasonable mixing, give rise to any significant adverse effect on aquatic life; and

- (g) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage:; and
- (h) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.
- 12.11.3 Controlled activities: Resource consent required but always granted [Unchanged]

12.11.3.1 [Unchanged]

- 12.12 Discharges from dams and reservoirs [Unchanged]
- 12.13 Other discharges [Unchanged]

13

Rules: Land Use on Lake or River Beds or Regionally Significant Wetlands



Note: 1.Where the rules in this chapter provide for any activity in the bed of a lake or river, or in any Regionally Significant Wetland, a resource consent may also be required for activities associated with it, such as discharges to water, takes of water, damming or diversion of water, bed disturbance or structures.

2. A wetland may include open water which is part of a lake.

# **13.1** The use of a structure [Unchanged]

# 13.2 The erection or placement of a structure

#### 13.2.1 Permitted activities: No resource consent required

**R095** 

Note: Any alteration of the bed of a lake or river, or of any Regionally Significant Wetland, in association with the following activities must also comply with Rules under 13.5 in order to be classified as a permitted activity.

- 13.2.1.1 The erection or placement of any fence, pipe, line or cable over the bed of a lake or river, or any Regionally Significant Wetland, is a *permitted* activity, providing:
  - (a) The fence, pipe, line or cable does not cross a lake or river identified in Schedule 1A as being an "Outstanding natural feature or landscape" unless it is attached to an existing lawfully established support structure; and
  - (b) No part of the fence, pipe, line or cable is fixed to the bed of the lake or river unless it is attached to an existing lawfully established support structure; and
  - (c) No part of any pipe, line or cable is less than two metres above the 1 percent probability flood level, unless it is attached to an existing lawful structure; and
  - (d) Where it is attached to an existing lawful structure, no part of any pipe, line or cable extends below the underside of the existing structure; and
  - (e) Any fence over the bed of a lake or river, or the wetland, does not impede the flow of flood water or debris, or is installed and maintained so it results in no flooding or erosion of the bed or banks of the lake or river, or of the wetland; and
  - (f) The fence, pipe, line or cable does not interfere with navigation; and
  - (g) For existing overhead network utility services over the bed of a lake or river, there is no reduction in the height of clearance above the waterway; and
  - (h) The fence, pipe, line or cable is maintained in good repair.

- 13.2.1.2 The placement of any pipe, line, or cable on or under the bed of a lake or river, or any Regionally Significant Wetland, is a *permitted* activity, providing:
  - (a) The pipe, line, or cable does not impede the flow of water or debris, or is installed and maintained so it results in no flooding, erosion or sedimentation; and
  - (b) The location of the pipe, line, or cable is identified by markers on the banks of the river or lake; and
  - (c) The pipe, line, or cable is maintained in good repair.

#### 13.2.1.3 [*Unchanged*]

**R098** 

- 13.2.1.4 The erection or placement of any flow or level recording device, outfall or intake structure or navigational aid structure, that is fixed in, on or under the bed of any lake or river, or any Regionally Significant Wetland, is a *permitted* activity, providing:
  - (a) The structure does not exceed 2 square metres in area provided that in respect of any flow or level recording device any catwalk to the nearest bank shall be excluded from the area calculation; and
  - (b) The structure, or its erection or placement, does not cause any flooding or erosion; and
  - (c) The Otago Regional Council is notified of the location and nature of the structure, at least seven working days prior to commencing the erection or placement; and
  - (d) Except in the case of a navigational aid, or the sight board of any gauge, any visible part of the structure is of a neutral colour to blend in with the surroundings; and
  - (e) The structure is maintained in good repair; and
  - (f) The site is left tidy following the erection or placement.

R099

- 13.2.1.5 The erection or placement of any maimai that is fixed in, on or under the bed of any lake or river, or any Regionally Significant Wetland is a *permitted* activity, providing: that for the bed of any lake or river:
  - (a) The structure does not exceed 10 square metres in area; and
  - (b) The structure is open piled; and
  - (c) The structure is at least 90 metres from any adjacent maimai; and
  - (d) The site is left tidy following the erection or placement.

- 13.2.1.6 The erection or placement of any whitebait stand or eel trap that is fixed in, on or under the bed of any lake or river, or any Regionally Significant Wetland is a *permitted* activity, providing: that for the bed of any lake or river:
  - (a) The structure is open piled; and
  - (b) The structure does not exceed three square metres in area; and

- (c) The dimension of the structure perpendicular to the flow of water is no more than 10 percent of the width of the bed of the lake or river, or no more than three metres, whichever is the lesser; and
- (d) The structure is at least 20 metres from any neighbouring structure, flood gate, confluence or culvert located within the bed of a lake or river; and
- (e) In the case of a whitebait stand, the structure is erected or placed in or on the bed of the Clutha River/Mata-Au, or its branches; and
- (f) The site is left tidy following the erection or placement.

- 13.2.1.7 The erection or placement of any bridge, <u>boardwalk</u> or culvert in, on or over the bed of a lake or river, <u>or any Regionally Significant Wetland</u>, is a *permitted* activity, providing:
  - (a) The size of the catchment upstream of the bridge or culvert is no more than 50 hectares in area; and
  - (b) The bridge, <u>boardwalk</u> or culvert, or its erection or placement, does not cause any flooding, nor cause any erosion of the bed or banks of the lake or river; and
  - (c) The site is left tidy following the erection or placement.

R102

- 13.2.1.8 The placement of a floating boom in, on or over the bed of a lake, or any Regionally Significant Wetland is a *permitted* activity, providing: that for the bed of any lake:
  - (a) The boom is securely fixed to the bed or margins of the lake; and
  - (b) The boom is not more than 850 metres upstream of a lawfully established hydro-electric dam or control structure or within 200 metres of any other lawfully established dam or control structure; and
  - (c) The boom is maintained at all times in a safe condition, good repair and substantially free of debris; and
  - (d) The boom and all associated equipment are clearly visible.

#### 13.2.2 Restricted discretionary activities: Resource consent required

R103

13.2.2.1 Except as provided for by Rules 13.2.1.1, 13.2.1.2, and 13.2.1.5 to 13.2.1.7, the erection or placement of any fence, pipe, line, cable, whitebait stand, eel trap, maimai, jetty, bridge or culvert in, on, under, or over the bed of any lake or river, or the erection or placement of any fence, pipe, line, cable, jetty, bridge, culvert, or boardwalk in, on, under or over any Regionally Significant Wetland, is a *restricted discretionary* activity.

In considering any resource consent for the erection or placement of any fence, pipe, line, cable, whitebait stand, eel trap, maimai, jetty, bridge or culvert in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

(a) Any adverse effects of the activity on:

- (i) Any natural and human use value identified in Schedule 1 for any affected water body;
- (ii) The natural character of any affected water body;
- (iii) Any amenity value supported by any affected water body; and
- (iv) Any heritage value associated with any affected water body; and
- (aa) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and
- (b) Flow and sediment processes; and
- (c) Any adverse effect on a defence against water; and
- (d) Any adverse effect on existing public access; and
- (e) Fish passage; and
- (f) The method of construction; and
- (g) The duration of the resource consent; and
- (h) The information and monitoring requirements; and
- (i) Any existing lawful activity associated with any affected water body; and
- (j) Any bond; and
- (k) The review of conditions of the resource consent.
- (1) Any financial contribution for regionally significant wetland values or Regionally Significant Wetlands that are adversely affected.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

#### 13.2.3 Discretionary activities: Resource consent required

13.2.3.1 Except as provided for by Rules 13.2.1.1 to 13.2.2.1, the erection or placement of any structure fixed in, on, under, or over the bed of any lake or river, or any Regionally Significant Wetland is a *discretionary* activity.

**Principal reasons for adopting** [Unchanged]

# 13.3 The extension, alteration, replacement or reconstruction of a structure

#### 13.3.1 Permitted activities: No resource consent required

R105

(a) Note: Any alteration of the bed of a lake or river, or of any wetland identified in Schedule 9 or any Regionally Significant Wetland, in association with the following activities must also comply with Rules under 13.5 in order to be classified as a permitted activity.

R106

- 13.3.1.1 The repair or maintenance of any lawful structure in, on, under or over the bed of a lake or river, or any Regionally Significant Wetland, is a *permitted* activity providing:
  - (a) There is no permanent change to the scale, nature or functions of the structure.

R107

- 13.3.1.2 The extension, alteration, replacement or reconstruction of any lawful structure in, on, under or over the bed of a lake or river, or any Regionally Significant Wetland, is a *permitted* activity providing:
  - (a) In the case of a replacement or reconstruction, the structure is replaced or reconstructed in the same location as the original structure; and
  - (b) There is no permanent change to the, scale, nature or functions of the structure, except where a rule under 13.2.1 applies to that structure and the conditions of that rule are met.

#### 13.3.2 Restricted discretionary activities: Resource consent required

R108

13.3.2.1 Except as provided for by Rules 13.3.1.1 and 13.3.1.2, the extension, alteration, replacement or reconstruction of any structure, fixed in, on, under or over the bed of any lake or river, or any Regionally Significant Wetland, is a *restricted discretionary* activity.

In considering any resource consent for the extension, alteration, replacement or reconstruction of any structure in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the activity on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
- (aa) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and

- (b) Flow and sediment processes; and
- (c) Any adverse effect on a defence against water; and
- (d) Any adverse effect on existing public access; and
- (e) The method of construction; and
- (f) The duration of the resource consent; and
- (g) The information and monitoring requirements; and
- (h) Any existing lawful activity associated with any affected water body; and
- (i) Any insurance or other appropriate means of remedying the effects of failure; and
- (j) Any bond; and
- (k) A financial contribution if the structure is a dam, or <u>for</u> regionally significant wetland values or Regionally Significant Wetlands that are adversely affected an activity that adversely affects any Type B wetland value; and
- (l) The review of conditions of the resource consent.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

Principal reasons for adopting [Unchanged]

#### 13.4 Demolition or removal of a structure

#### 13.4.1 Permitted activities: No resource consent required

R109

Note: Any alteration of the bed of a lake or river, or any Regionally Significant Wetland, in association with the following activities must also comply with Rules under 13.5 in order to be classified as a permitted activity.

- 13.4.1.1 The demolition or removal of any structure or any part of a structure that is fixed in, on, under, or over the bed of any lake or river, or any Regionally Significant Wetland, is a *permitted* activity providing:
  - (a) Where any part of the structure remains in situ, nothing remains above the level of the bed; and
  - (b) The structure is not identified as a registered historic place, a building or place identified in any district plan as being of historic value, an archaeological site or a place with interim historic place registration; and
  - (c) The structure is not a sacred place identified by Kai Tahu and located in any area identified as MA3 in Schedule 1D; and
  - (d) There is no use of explosives; and

- (e) The Otago Regional Council is notified of the demolition or removal, at least seven working days prior to commencing the activity; and
- (f) The demolition or removal of the structure does not cause any erosion; and
- (g) The site is left tidy following the demolition or removal; and
- (h) In the case of any dam structure, the dam is no more than 3 metres high, and the volume of water stored by the dam is no more than 20,000 cubic metres; and
- (i) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.

#### 13.4.2 Restricted discretionary activities: Resource consent required

R111

13.4.2.1 Except as provided for by Rule 13.4.1.1, the demolition or removal of any structure or any part of a structure that is fixed in, on, under, or over the bed of any lake or river, or any Regionally Significant Wetland, is a *restricted discretionary* activity.

In considering any resource consent for the demolition or removal of any structure in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the activity on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
- (aa) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and
- (b) Flow and sediment processes; and
- (c) Any adverse effect on a defence against water; and
- (d) Any adverse effect on existing public access; and
- (e) The method of demolition or removal; and
- (f) The duration of the resource consent; and
- (g) The information and monitoring requirements; and
- (h) Any existing lawful activity associated with any affected water body; and
- (i) Any bond; and
- (i) The review of conditions of the resource consent.
- (k) Any financial contribution for regionally significant wetland values or Regionally Significant Wetlands that are adversely affected.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

Principal reasons for adopting [Unchanged]

# R112 13.5 Alteration of the bed of a lake or river, or of a Regionally Significant Wetland

R113

Note: Alteration of the bed <u>or wetland</u> includes any bed <u>or wetland</u> disturbance, reclamation or deposition.

# 13.5.1 Permitted activities: No resource consent required

R114

- 13.5.1.1 The disturbance of the bed of any lake or river, or any Regionally Significant Wetland, associated with:
  - (i) The erection, placement, extension, alteration, replacement, reconstruction, repair, maintenance, demolition or removal, of any structure that is fixed in, on, under or over the bed of any lake or river, or the wetland; or
  - (ii) The clearance of debris or alluvium from within, or immediately surrounding, any structure in order to safeguard the function or structural integrity of the structure; or
  - (iii) The maintenance or reinstatement of a water intake, in order to enable the exercise of a lawful take of water,

is a *permitted* activity, providing:

- (a) Except in the case of the demolition or removal of a structure, the structure is lawfully established; and
- (b) Except in the case of (i), there is no increase in the scale of the existing structure; and
- (c) The bed <u>or wetland</u> disturbance is limited to the extent necessary to undertake the work; and
- (d) The bed <u>or wetland</u> disturbance does not cause any flooding or erosion; and
- (e) The time necessary to carry out and complete the whole of the work does not exceed 10 consecutive hours in duration; and
- (f) All reasonable steps are taken to minimise the release of sediment to the lake or river during the disturbance, and there is no conspicuous change in the colour or visual clarity of the water body beyond a distance of 250 metres downstream of the disturbance; and
- (g) No lawful take of water is adversely affected as a result of the bed or wetland disturbance; and
- (h) The site is left tidy following completion of the activity-; and

(i) Except for activities covered by Rules 13.2.1.5, 13.2.1.6, or 13.2.1.8, there is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.

#### 13.5.1.2 [*Unchanged*]

R115

- 13.5.1.3 The disturbance or reclamation of, or the deposition of any substance in, on or under, <u>either</u> the bed of any lake or river, <u>or</u> any Regionally Significant Wetland, for the purpose of:
  - (i) The erection, placement, extension, alteration, replacement, reconstruction, repair, maintenance, demolition or removal, of any structure carried out under Rules 13.2.1.1 to 13.2.1.7, 13.3.1.1, 13.3.1.2 or 13.4.1.1; or
  - (ii) The repair or maintenance of any defence against water constructed or placed by artificial means,

#### is a *permitted* activity providing:

- (a) The structure or defence against water is lawfully established; and
- (b) There is no change to the original scale of the structure or defence against water; and
- (c) The time necessary to carry out and complete the whole of the work does not exceed 10 consecutive hours in duration; and
- (d) All reasonable steps are taken to minimise the release of sediment to the lake, or river or wetland during the activity, and there is no conspicuous change in the colour or visual clarity of the water body beyond a distance of 250 metres downstream of the activity; and
- (e) No lawful take of water is adversely affected as a result of the activity; and
- (f) In the case of reclamation or deposition, only cleanfill is used; and
- (g) The site is left tidy following completion of the activity-:
- (h) Except for activities covered by Rules 13.2.1.5, 13.2.1.6, 13.2.1.8, there is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland.

#### 13.5.1.4 and 13.5.1.5 [Unchanged]

R116

13.5.1.5A The alteration of any Regionally Significant Wetland, associated with the introduction, planting, removal or clearance of plant material is a *permitted* activity providing the control is carried out under Rules 13.6.2.0 or 13.7.1.2, or under a resource consent.

- 13.5.1.6 Except as provided for by Rule 13.5.1.1, the extraction of alluvium within the bed of a river is a *permitted* activity, providing:
  - (a) No person takes more than 20 cubic metres in any month; and
  - (b) The alluvium is not taken from the wet bed of the river and the surface of the remaining alluvium is not left lower than the level of the water in the river; and
  - (c) The area from which the material is taken is smoothed over, as far as practicable; and
  - (d) The activity is not carried out within 20 metres of any structure which has foundations in the river bed, or any ford or pipeline; and
  - (e) No material is taken directly from the bank or from any defence against water.; and
  - (f) The activity does not occur within any wetland identified in Schedule 9.

#### 13.5.1.7 [*Unchanged*]

R118

- 13.5.1.8 The disturbance of the bed of any lake or river, or any Regionally Significant Wetland, by livestock is a *permitted* activity, providing:
  - (a) No lawful take of water is adversely affected as a result of the activity; and
  - (b) The activity does not cause or induce conspicuous slumping, pugging or erosion; and
  - (c) The activity does not cause any conspicuous change in the colour or visual clarity of the lake, or river or wetland; and
  - (d) There is no change to the water level or hydrological function, or no damage to the flora, fauna or its habitat, in or on any Regionally Significant Wetland The activity does not adversely affect any Type A or B value of any wetland identified in Schedule 9; and
  - (e) The activity does not significantly disturb indigenous vegetation or the habitat of indigenous fauna, trout or salmon in, on, or under the bed of any lake or river, or the wetland; and
  - (f) No feeding out occurs on the bed of any lake or river, or the wetland.

Note: This rule does not authorise any discharge to water or discharge to land in circumstances where contaminants may enter water. Sections 15(1)(a) and 15(1)(b) of the Act apply.

#### 13.5.1.9 [*Unchanged*]

#### 13.5.2 Restricted discretionary activities: Resource consent required

R119

13.5.2.1 Except as provided for by Rules 13.5.1.1 and 13.5.1.6, the extraction of alluvium within the bed of a lake or river, or within any Regionally Significant Wetland, is a *restricted discretionary* activity.

In considering any resource consent for the extraction of alluvium in terms of this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any adverse effects of the activity on:
  - (i) Any natural and human use value identified in Schedule 1 for any affected water body;
  - (ii) The natural character of any affected water body;
  - (iii) Any amenity value supported by any affected water body; and
  - (iv) Any heritage value associated with any affected water body; and
  - (v) Any significant wetland identified in Schedule 9; and
- (aa) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and
- (b) Any financial contribution for <u>regionally significant</u> Type B wetland values <u>or Regionally Significant Wetlands</u> that are adversely affected;
- (c) Any adverse effect on a defence against water; and
- (d) The quantity of alluvium to be extracted, and the location and the method of removal; and
- (e) Any adverse effect on existing public access; and
- (f) The duration of the resource consent; and
- (g) The information and monitoring requirements; and
- (h) Any existing lawful activity associated with any affected water body; and
- (i) Any bond; and
- (i) The review of conditions of the resource consent.

Except in the case of extraction from the wet bed of a lake or river, or within a Regionally Significant Wetland, applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

#### 13.5.3 Discretionary activities: Resource consent required

13.5.3.1 [*Unchanged*]

R120

13.5.3.2 Unless covered by Rules 13.5.1.1, 13.5.1.3, 13.5.1.5A, or 13.5.1.8, the alteration of any Regionally Significant Wetland, is a *discretionary* activity.

Principal reasons for adopting [Unchanged]

# 13.6 The introduction or planting of vegetation

Note: The Otago Regional Council's Pest Management Strategy 2009 addresses the management of pest plants in Otago under the Biosecurity Act 1993. The Biosecurity Act 1993 bans a number of aquatic plants that have been declared unwanted organisms, from sale, distribution and propagation.

#### 13.6.1 Prohibited activities: No resource consent granted

**R121** 

- 13.6.1.1 The introduction of material of the following species:
  - (i) Lagarosiphon *Lagarosiphon major*; or
  - (ii) Eel Grass Vallisneria spiralis; or
  - (iii) Egeria Egeria densa; or
  - (iv) Hornwort Ceratophyllum demersum; or
  - (v) Hydrilla Hydrilla verticillata; or
  - (vi) Sagittaria Sagittaria graminea ssp platyphylla; or
  - (vii)Spartina Spartina anglicatownsendii; or
  - (viii)Salvinia Salvinia molesta; or
  - (ix) Water Hyacinth Eichhornia crassipes; or
  - (x) Water Lettuce Pistia stratiotes,
  - to the bed or water of any Otago lake, or river, or any Regionally Significant Wetland, is a *prohibited* activity for which no resource consent will be granted.

#### 13.6.2 Permitted activities: No resource consent required

R122

- 13.6.2.0 The introduction or planting of any New Zealand native plant to any Regionally Significant Wetland, is a *permitted* activity providing:
  - (a) All reasonable steps are taken to minimise the release of sediment to the wetland during the introduction or planting; and there is no conspicuous change in the colour or visual clarity of the water body; and
  - (b) The introduction or planting does not cause any flooding or erosion; and
  - (c) The wetland alteration is limited to that which is necessary for the introduction or planting of the plant material.
- 13.6.2.1 [*Unchanged*]

# 13.6.3 Discretionary activities: Resource consent required

R123

13.6.3.1 Except as provided for by Rules 13.6.1.1 and to 13.6.2.1, the introduction or planting of vegetation to the bed of any lake or river, or any Regionally Significant Wetland is a *discretionary* activity.

Principal reasons for adopting [Unchanged]

# 13.7 The removal of vegetation

#### 13.7.1 Permitted activities: No resource consent required

13.7.1.1 [*Unchanged*]

R124

- 13.7.1.2 The removal or clearance of plant material exotic to New Zealand from any Regionally Significant Wetland, is a *permitted* activity providing:
  - (a) The plant is not Lagarosiphon (*Lagarosiphon major*) in Lake Wanaka or Lake Dunstan; and
  - (b) All reasonable steps are taken to minimise the release of sediment to the wetland during the removal or clearance; and
  - (c) The wetland alteration is limited to that which is necessary for the removal or clearance of the plant material.

#### 13.7.2 Controlled Activities: Resource consent required but always granted

R125

- 3.7.2.1 Except as provided for by Rules 13.7.1.1 and 13.7.1.2, physical removal of material of any of the following plants:
  - (i) Lagarosiphon *Lagarosiphon major*; or
  - (ii) Eel Grass Vallisneria spiralis; or
  - (iii) Egeria Egeria densa; or
  - (iv) Hornwort Ceratophyllum demersum; or
  - (v) Hydrilla Hydrilla verticillata; or
  - (vi) Sagittaria Sagittaria graminea ssp platyphylla; or
  - (vii) Spartina Spartina anglica; or
  - (viii) Salvinia Salvinia molesta; or
  - (ix) Water Hyacinth Eichhornia crassipes; or
  - (x) Water Lettuce *Pistia stratiotes*,

from the bed of any lake or river, or from any Regionally Significant Wetland, is a *controlled* activity.

In granting any resource consent for the removal of material of the above identified plants in terms of this rule, the Otago Regional Council will restrict the exercise of its control to the following:

- (a) The method of removal; and
- (aa) Any disturbance of a Regionally Significant Wetland.
- (b) The duration of the resource consent; and
- (c) The information and monitoring requirements; and
- (d) Any bond; and
- (e) The review of conditions of the resource consent.

Applications may be considered without notification under Section 93 and without service under Section 94(1) of the Resource Management Act on persons who, in the opinion of the consent authority, may be adversely affected by the activity.

#### 13.7.3 Discretionary activities: Resource consent required

**R126** 

13.7.3.1 Unless covered by Rules 13.7.1.1 to 13.7.2.1, removal or clearance of plant material from any Regionally Significant Wetland, is a *discretionary* activity.

**Principal reasons for adopting** [Unchanged]

## **15**

# Methods other than Rules



#### **15.1 to 15.3** [Unchanged]

#### 15.4 Promotion and education

**15.4.1 to 15.4.2** [Unchanged]

- R127 15.4.3 Promoting the protection of wetlands, lakes and rivers, and their values
- R128

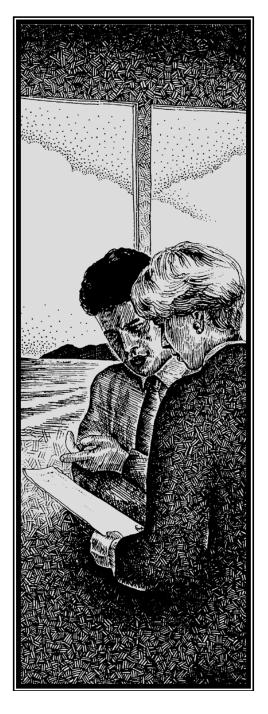
  15.4.3.1 The Otago Regional Council will encourage landholders to avoid undertaking activities on, or adjacent to, wetlands that will adversely affect wetland values.
- R129

  15.4.3.2 The Otago Regional Council will support the protection of significant indigenous biota and habitat, and the preservation of the natural character of wetlands, lakes and rivers.
- R130 Principal reasons for adopting

These methods are adopted to promote activities of benefit to wetlands and other water bodies, or their values, and to avoid activities that could adversely affect them. By advocating directly to the relevant landholders, the Council can encourage appropriate actions on the part of the landholder to voluntarily protect the natural and human use values supported by the water body. It is therefore also appropriate for the Council to support landholders where they are already protecting such values, whether by formal covenant, fencing or other means.

#### **15.5 to 15.9** [*Unchanged*]

# 16 Information Requirements



#### **16.1 to 16.2** [Unchanged]

#### **16.3** Specific information requirements

**16.3.1 to 16.3.10** [Unchanged]

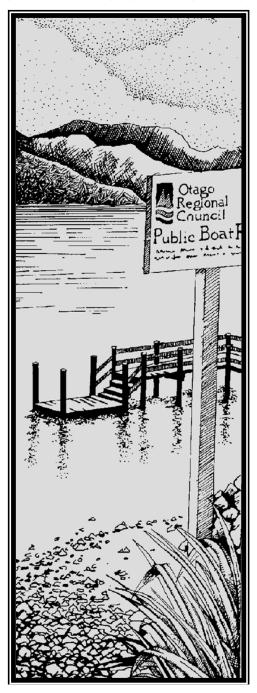
- R131 16.3.11 Activities associated with a wetland identified in Schedule 9, or a high altitude wetland in terms of Policy 10.4.5, including taking water or discharging water or contaminants
  - 1. The effect of the proposed activity on the wetland and the Types A and B values:
    - (a) Identified in Schedule 9 of this Plan; or
    - (b) Supported by the high altitude wetland in terms of Policy 10.4.5, that are present on that wetland.
  - 2. A description of the compensatory provisions to be used in the event of any adverse effect on a Type B value.
- R132 16.3.12 Activities associated with taking or diverting water from a wetland identified in Schedule 10
  - 1. The effect of the proposed taking or diverting on the wetland and any Type A or B values that are present on that wetland.
  - 2. A description of the compensatory provisions to be used in the event of any adverse effect on a Type B value.

**16.3.13** [*Unchanged*]

**16.4** [*Unchanged*]

## **17**

# Financial Contributions



#### 17.1 Introduction

Where the Otago Regional Council grants a resource consent under the rules in this Plan for diversions, reclamations or dams, and for activities that adversely affect Type B Wetland Regionally Significant Wetlands or regionally significant wetland values, it may impose a condition requiring that a financial contribution be made for the purposes specified in this chapter of the Plan.

The term "financial contribution" is defined in Section 108(9) of the Resource Management Act as a contribution of:

- (b) Money; or
- (c) Land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent), but excluding Maori land within the meaning of the Maori Land Act 1993 unless that Act provides otherwise; or
- (d) A combination of money and land.

Policies 6.5.6, 8.4.2 and 10.4.4 10.4.2A of the Plan outline the activities for which a financial contribution, or for which works or services, may be required.

Policies 6.5.6 and 8.4.2 require financial contributions, or works or services, for activities involving the diversion of water, reclamation or damming, to offset, remedy or mitigate unavoidable adverse effects on:

- (a) Any natural or human use value identified in Schedule 1;
- (b) The natural character of the water body;
- (c) Any amenity value supported by the water body; or
- (d) Any heritage value associated with any affected water body.

Policy 10.4.4 10.4.2A allows requires financial contributions, or works or services, to offset the adverse effects of activities on Type B Regionally Significant Wetlands or regionally significant wetland values identified in Schedule 9, or hydrological values where the avoidance, remedy or mitigation of adverse effects is not possible.

Works and services apply to remediation or mitigation activities, while financial contributions may apply to the offsetting of adverse effects that cannot be fully avoided or completely remedied or, in the Council's opinion, adequately mitigated.

Financial contributions may be for various purposes including ensuring positive effects on the environment to offset any adverse effects. The provisions which follow are intended to reflect the requirements of Section 108(9) of the Resource Management Act and Clause 5 of Part 1 of the Second Schedule of the Act, and set out:

- 1. The circumstances when such contributions may be imposed;
- 2. The purposes for which such contributions may be required and used;
- 3. The manner in which the level of the contribution will be determined.

In addition to these matters, the chapter also specifies the assessment criteria to which the Council will have regard when deciding whether to impose a financial

contribution, the type and amount of any such contribution, and the general provisions that would apply.

In deciding on any financial contribution, the Otago Regional Council will take into account that requiring a contribution may not be appropriate in every case, even where there are adverse effects. Every resource consent application needs to be considered on a case by case basis as to the nature and extent of any contribution that may be required. The Otago Regional Council does not intend that environmental effects should be "fully mitigated" or fully compensated in every case. The actual amount of particular contributions will vary depending upon the circumstances.

In considering the use to which financial contributions may be put, the Otago Regional Council may consult special interest groups as it considers appropriate.

### 17.2 Circumstances, purpose and method of determining contribution amount

**17.2.1 to 17.2.7** [Unchanged]

**R134** 17.2.8 [Refer to 10.4.1]

To improve, create or reinstate wetland habitat, or offset adverse effects on the hydrological values of a wetland

Circumstances: Where the activity for which consent is granted will

adversely affect any Type B wetland value and the

effects cannot be avoided.

Purposes: To offset the effects of the activity by providing

money, land or a combination of both, to\_improve, create or reinstate wetland habitat, or by making alternative provision for hydrological value lost, beyond the area occupied by or immediately affected

by the activity.

#### **Method of determining contribution amount:**

The amount of the contribution will be determined having regard to the criteria set out in 17.3, but will reflect the actual costs of works and of providing land sufficient to offset such effects.

#### 17.3 Financial contribution assessment criteria [Unchanged]

## Schedule 1: Schedule of natural and human use values of Otago's surface water bodies

This schedule identifies some of the natural and human use values of Otago's lakes and rivers. These are the characteristics of a water body which are important to, or are an essential part of, ecological communities, or are enjoyed or utilised by people and communities. The values are identified by geographic subregion and by individual water bodies, or groups of water bodies, within each subregion (see Maps A1-A8 for subregions).

*[...]* 

Natural and human use values are not limited to those characteristics identified in the schedule. The natural character and amenity values of lakes and rivers are also important natural and human use values, which are given particular regard to by Policies 5.4.8 and 5.4.9. The non-listing of values in Schedule 1A is not to be taken as meaning that an area, value or habitat is not important or worthy of protection.

- Some water bodies may be wholly or partly wetland, with regionally significant wetland values. These water bodies may be identified in Schedule 9.
- R136 [Delete notes throughout Schedule 1A that state: "(note: see Schedule 9 for wetland values)".]

[No other changes to Schedule 1]

## R137 Schedule 9: Schedule of <u>identified Regionally</u> <u>S</u>significant <u>W</u>wetlands

This schedule identifies <u>lists</u> Otago's identified Regionally Significant <u>Wwetlands in conjunction with Maps F1 F60</u>. The schedule identifies the Type A and Type B values for each wetland. An identified Regionally Significant Wetland is one that has been mapped in Maps F1–F68 and contains one or more regionally significant wetland values (see Chapter 10). Schedule 9 is not exhaustive.

The Otago Regional Council holds information on wetlands listed in this schedule in an inventory of wetlands which will be made freely available. In addition, GIS (geographical information systems) data on wetland extents can be made available on request. The objective of this Plan is to maintain or enhance the identified values through the management of water use and land use activities

#### The values identified in the schedule include:

- A1 Habitat for nationally or internationally rare or threatened species or communities;
- A2 Critical habitat for the life cycles of indigenous fauna which are dependent on wetlands:
- A3 High diversity of habitat types;
- A4 Wetland with a high degree of naturalness;
- A5 Wetland scarce in Otago in terms of its ecological or physical character; and
- A6 Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.
- B1 Wetland with high diversity of indigenous flora and fauna;
- B2 Wetland which is regionally significant habitat for waterfowl; and
- B3 Performing a hydrological function including maintaining water quality or low flows, or reducing flood flows.

NB: Criteria A1 A6 represent the values identified in Policy 10.4.1, while B1 B3 represent the values identified in Policy 10.4.3 of this Plan (see Chapter 10).

[Note: The list of wetlands will be reordered when the plan change becomes operative.]

#### **Index to Otago's Significant Wetlands**

| #                      | Wetland Name                              | Map <del>No</del>         |   |
|------------------------|---|---------------------------|---|
| 1                      | Akatore Creek Swamp                       | F46                       | [includes Stoneygrove Wetland (Schedule 10)]  |
| 2                      | All Day Bay Lagoon                        | F29 F65                   |   |
| <u>3</u>               | Andersons Pond                            | <u>F56</u>                | [moved from Schedule 10]  |
| 2                      | <u>Margins</u>                            |                           |   |
| <u>4</u>               | Aramoana Salt-M <u>m</u> arsh             | <del>F39</del> <u>F57</u> |   |
|                        | <del>(Upper)</del>                        |                           |   |
|                        | Belmont Inland Saline                     | <del>F19</del> <u>F25</u> |   |
| <u>6</u>               | Wetland Management                        |                           |   |
|                        | Area                                      | F10                       |   |
| <u>7</u>               | Bendigo Wetland                           | F18                       | [not previously scheduled]  |
| <u>8</u>               | Big Boggy Swamp and                       | <del>F3</del> <u>F1</u>   | [see Little Boggy Swamp]  |
|                        | Little Boggy Wetlands  Plack Book Marshas | F68                       | Invariously Plank Pook Swamp Compley (Schodule 10)  |
| 9                      | Black Rock Marshes                        |                           | [previously Black Rock Swamp Complex (Schedule 10)]   |
| <u>10</u>              | Black Swamp<br>Blackcleugh Burn           | F48 F33                   | Isaa Jahu O'Cusata Hill Earl  |
| <u>11</u>              | Swamp Wetlands                            | <del>F47</del> <u>F32</u> | [see John O'Groats Hill Fen]  |
|                        | Blackman <sup>2</sup> s Inland            | <del>F9</del> F14         |   |
| <u>12</u>              | Saline Wetland                            | 1 / 1 1 7                 |   |
| 12                     | Management Area                           |                           |   |
| 13                     | Blair Fen                                 | F35                       | [previously part of Blair Swamp (Schedule 10)]  |
| 14                     | Blair Swamp                               | F35                       | [previously part of Blair Swamp (Schedule 10)]  |
|                        | Boundary Creek Fen                        | F31                       | [previously East Boundary Creek Swamp (Schedule 10) and West  |
| <u>15</u>              |   |                           | Boundary Creek Swamp (Schedule 10)]   |
| 16                     | Braeside Swamp                            | F59                       | [previously Braeside Wetland (Schedule 10)]   |
| 17                     | Bungtown Swamp Bog                        | <del>F41</del> F51        |   |
| 18                     | Butterfield Wetland                       | <u>F2</u>                 | [not previously scheduled]  |
| 172                    | Cairn Road Bog                            | F39                       | [previously Cairn Road Swamp (Schedule 10)]   |
| <u>19</u>              | Camp Stream Swamp                         | <u>F44</u>                | [moved from Schedule 10]  |
| <u>20</u>              | Campbells Reserve Pond                    | <u>F3</u>                 | [moved from Schedule 10]  |
| 20                     | <u>Margins</u>                            |                           |   |
| 21                     | Cannibal Bay Road                         | <u>F40</u>                | [previously Cannibal Bay Road Wetland (Schedule 10)]  |
|                        | <u>Swamp</u>                              |                           |   |
| <u>22</u>              | Catlins River Wetland                     | <del>F58</del> <u>F37</u> | [see Ratanui Swamp]   |
| 23                     | Chapman Road Inland                       | <del>F10</del> <u>F18</u> |   |
|                        | Saline Area Wetland                       | 777                       |   |
| <u>25</u>              | Church Hill Wetland                       | <u>F7</u>                 | [not previously scheduled]  |
|                        | Clashanhum Marsh                          | F25                       | Impositionals Western deading contact the Commercial Description (C. 1. 1.1.                        |
| <u>26</u>              | Clachanburn Marsh                         | <u>F25</u>                | [previously Wetland adjacent to the Stony Creek Dams (Schedule                                      |
| 27                     | Clifton Hill Marshes                      | F33                       | [10)] [previously Mifton Hill Swamp (Schedule 10)]  |
| <u>27</u><br><u>28</u> | Clutha Matau Wetlands                     | F41                       | [previously Million Hill Swamp (Schedule 10)] [previously part of Clutha Mouth Lagoon (Schedule 9)] |
|                        | Clutha River Mouth                        | <del>F54</del> <u>F41</u> | [see Clutha Matau Wetlands]   |
| <u>29</u>              | Lagoon                                    | 1 77 <u>1 <b>7</b> 1</u>  | [see Sama manu menanus]   |
|                        | Conroy's Dam Inland                       | <del>F10</del> <u>F18</u> |   |
| <u>30</u>              | Saline Wetland                            | 110 <u>110</u>            |   |
|                        | Management Area                           |                           |   |
|                        | Conroy's Road Inland                      | F10 F18                   |   |
| <u>31</u>              | Saline Wetland Complex                    |                           |   |
| L                      | Areas                                     |                           |   |
| 32                     | Cross Eden Creek Marsh                    | <u>F16</u>                | [previously Cross Eden Burn Swamps (Schedule 10)]   |
| <u>32</u>              | Complex                                   |                           |   |
| <u>33</u>              | Culcairn Oxbow Marsh                      | <u>F42</u>                | [previously Culcairn Oxbow (Schedule 10)]   |
| <u>34</u>              | Devils Bridge Wetland                     | F28 <u>F64</u>            |   |

| #         | Wetland Name                        | Map <del>No</del>         |  |
|-----------|-------------------------------------|---------------------------|--|
|           | Diamond Lake/Earnslaw               | F5 F3                     | [see Lake Reid Wetland]  |
| <u>35</u> | Burn Wetland                        |                           |  |
|           | Management Area                     |                           |  |
| <u>36</u> | Dingle Lagoon                       | <del>F2</del> <u>F1</u>   |  |
|           | Dunard Inland Saline                | <del>F15</del> <u>F13</u> |  |
| <u>37</u> | Wetland Management                  |                           |  |
|           | Area                                |                           |  |
| <u>38</u> | Dunvegan <del>Pond</del> <u>Fen</u> | F49 F38                   | [includes Wyndham Station Road Swamp (Schedule 10)]  |
| 30        | <u>Complex</u>                      |                           |  |
| 39        | East Benhar Swamp                   | <u>F43</u>                | [previously part of Lake Tuakitoto Wetlands Complex (Schedule  |
| 37        |                                     |                           | 9)]  |
| <u>40</u> | Ellison Saltmarsh                   | <u>F61</u>                | [previously Ellison Wetland (Schedule 10)]   |
| <u>41</u> | False Islet Wetland                 | F57 F40                   |  |
| 41        | Management Area                     |                           |  |
| <u>42</u> | Fernhill Marsh                      | <u>F55</u>                | [previously Fernhill Swamp (Schedule 10)]  |
| <u>43</u> | Finegand Lagoon Marsh               | <u>F42</u>                | [previously Finegand Lagoon (Schedule 10)]   |
| 11        | Flat Top Hill Ephemeral             | <u>F19</u>                | [not previously scheduled]   |
| <u>44</u> | Wetlands                            |                           |  |
|           | Fortification Creek                 | F22 F31                   |  |
| <u>45</u> | Wetland Management                  |                           |  |
|           | Area                                |                           |  |
| 1.0       | Fortification Stream                | <u>F56</u>                | [moved from Schedule 10]   |
| <u>46</u> | Headwaters Swamp                    |                           |  |
|           | Frasers Stream                      | F44                       | [previously Poverty Hill Swamp (Schedule 10)]  |
| <u>47</u> | Headwaters Marsh                    |                           |  |
|           | Complex                             |                           |  |
|           | Galloway No. 1 Inland               | F16 F14                   |  |
| <u>48</u> | Saline Area Wetland                 |                           |  |
|           | Complex                             |                           |  |
|           | Galloway No. 2 Inland               | F16 F14                   |  |
| <u>49</u> | Saline Wetland                      |                           |  |
| _         | Management Area                     |                           |  |
| 50        | Gilmour Road Marsh                  | F15                       | [previously Gilmour Road Wetland (Schedule 10)]  |
| 51        | Glendhu Swamp                       | F32                       | [moved from Schedule 10]   |
|           | Glenorchy Lagoon                    | F5 F9                     |  |
| <u>52</u> | Wetland                             |                           |  |
|           | Glyn Wye Wetland                    | F23 F55                   |  |
| <u>53</u> | Management Area                     |                           |  |
|           | Goodwood Saltmarsh                  | F33 F67                   | [includes Pleasant River Estuary Swamp (Schedule 10)]  |
| 123       | Pleasant River Estuary              |                           | Land I amount a sum of the sum of |
| 120       | Wetland Complex                     |                           |  |
|           | Governors Point Swamp               | F47                       | [previously part of Taieri River Mouth Wetland Management Area   |
| <u>54</u> |                                     | <del></del>               | (Schedule 9)]  |
| <u> </u>  | Great Moss Swamp                    | F21 F29 &                 | (~~~~~~)]  |
| <u>55</u> | Creat 111000 D wamp                 | F30                       |  |
|           | Harrington Mill Road                | F35                       | [previously Diggers Creek Swamp (Schedule 10)]   |
| <u>56</u> | Swamp                               | 1 2 2 2                   | ip. c. would, 2.88610 Greek Brump (beneame 10)]  |
|           | Hawkdun Runs Road                   | F21                       | [previously Hawkdun Runs Road Swamp Complex (Schedule 10)]   |
| <u>57</u> | Marsh                               | 121                       | [p. c. cousty Hamman Rans Roun Swamp Complex (schedule 10)]  |
| <u>58</u> | Hawksbury Lagoon                    | F34 F61                   |  |
| <u>58</u> | Hazeldale Fens                      | F53                       | [previously Hazeldale Road Swamp (Schedule 10)]  |
| 60        | Henley Swamp                        | F48                       | [moved from Schedule 10]   |
|           |                                     | F39 F58                   | [movea from schedule 10]   |
| 61        | Hoopers Inlet Swamp                 |                           |  |
| <u>62</u> | Hukihuki Swamp                      | F60 F36                   | [not proviously solveduled]  |
| <u>63</u> | Hungerford Point                    | <u>F36</u>                | [not previously scheduled]   |
|           | Saltmarsh Use Crook Systems         | E21                       | Innaviously Het Crook Commer Commerce (C.L. J. J. 10)1   |
| <u>64</u> | Hut Creek Swamps                    | <u>F21</u>                | [previously Hut Creek Swamp Complex (Schedule 10)]   |

| [previously Mayds Island Pond Margins (Schedule 10) and Mayo Island Wetland Complex (Schedule 10)] [previously Jennings Creek Swamp (Schedule 10)] [previously part of Blackcleugh Burn Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Old Dunstan Road Wetlands Complex (Schedule 10)]  [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  [moved from Schedule 10]  [moved from Schedule 10] | F17<br>F57<br>F32<br>F38 F62<br>F65 | Wetland Name  | #         |
|---|-------------------------------------|---|-----------|
| [previously Jennings Creek Swamp (Schedule 10)] [previously part of Blackcleugh Burn Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Old Dunstan Road Wetlands Complex (Schedule 10)]  [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [moved from Schedule 10]  [moved from Schedule 10]   | F32<br>F38 F62                      | Island Block Pond   | <u>65</u> |
| [previously part of Blackcleugh Burn Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Old Dunstan Road Wetlands Complex (Schedule 10)]  [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F32<br>F38 F62                      | <u>Marshes</u>  | 03        |
| [moved from Schedule 10]  [previously Old Dunstan Road Wetlands Complex (Schedule 10)]  [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  | F38 F62                             | Jennings Creek Marsh  | <u>66</u> |
| [previously Old Dunstan Road Wetlands Complex (Schedule 10)]  [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  |                                     | John O'Groats Hill Fen  | <u>67</u> |
| [previously Old Dunstan Road Wetlands Complex (Schedule 10)]  [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  | LF65                                | Kaikorai Lagoon Swamp   | <u>68</u> |
| [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | . <del></del>                       | Kakaho Creek Swamp  | <u>69</u> |
| [not previously scheduled]  [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F31 F65                             | Kemps Road Lagoon   | <u>70</u> |
| [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | <u>F17</u>                          | Kirk Creek Headwaters   | 72        |
| [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]   | F4 F16                              | Marsh Complex Kirkwoods Creek   |           |
| [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]   | <del>14</del> <u>110</u>            | Wetland Management  | <u>73</u> |
| [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]   |                                     | Area  | 13        |
| [previously part of Diamond Lake/Earnslaw Burn Wetland Management Area (Schedule 9)] [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]   | F53                                 | Kuriwao Saddle Fen  |           |
| Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   |                                     | Complex   | <u>74</u> |
| Management Area (Schedule 9)]  [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F6 F8                               | Lake Hayes Margins  | <u>75</u> |
| [see East Benhar Swamp]  [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  | <u>F3</u>                           | Lake Reid Wetland   | 76        |
| [previously part of Tautuku Wetland Complex (Schedule 9)]  [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   |                                     |   | <u>70</u> |
| [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  | F51 F43                             | Lake Tuakitoto  | 77        |
| [moved from Schedule 10]  [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)]  [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  |                                     | Wetlands Complex  |           |
| [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)] [moved from Schedule 10] [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)] [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | <u>F36</u>                          | Lake Wilkie Swamp   | <u>78</u> |
| [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)] [moved from Schedule 10] [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  | <del>F35</del> <u>F57</u>           | Lamb Hill Wetlands Fen  | <u>79</u> |
| [previously part of Big Boggy and Little Boggy Wetlands (Schedule 9)] [moved from Schedule 10] [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)] [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | 71.0                                | Complex   |           |
| [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F13                                 | Laws Road Swamp   | 80        |
| [moved from Schedule 10]  [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F59 F36                             | Lenz Reserve Wetlands   | <u>81</u> |
| [moved from Schedule 10] [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)] [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | <u>F5</u>                           | <u>Little Boggy Swamp</u>   | <u>82</u> |
| [previously Loch Loudon Swamp Complex (Schedule 10)]  [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)]  [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F4                                  | Little Stoney Bog   | 83        |
| [previously Loch Luella Swamp Complex (Schedule 10), and includes Pioneer Wetland Management Area (Schedule 9)] [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]  | F50                                 | Loch Loudon Fen   |           |
| includes Pioneer Wetland Management Area (Schedule 9)] [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | 130                                 | Complex   | <u>84</u> |
| includes Pioneer Wetland Management Area (Schedule 9)] [previously Alexandra Swamp (Schedule 10)]  [moved from Schedule 10]   | F50 & F51                           | Loch Luella Fen   |           |
| [previously Alexandra Swamp (Schedule 10)] [moved from Schedule 10]   |                                     | Complex   | <u>85</u> |
|   | <u>F14</u>                          | Long Gully Marsh  | 86        |
|   | F45 F46                             | Lower Coutts Gully  | 87        |
|   |                                     | Swamp   | <u>87</u> |
| [not previously scheduled]  | <u>F15</u>                          | Lower Manorburn Dam   | 88        |
| [not previously scheduled]  |                                     | Margins   |           |
| [ p. errowsty serieumeu]  | <u>F58</u>                          | Lower Otokia Creek  | 89        |
|   | F2.4                                | Marsh D. 1  |           |
| [previously MacFarlane Road Oxbow Pond Margins (Schedule  | <u>F34</u>                          | Macfarlane Road   | <u>91</u> |
| [10)]   | F56 F54                             | Oxbow Swamp  Maclennan River  |           |
|   | <del>130</del> <u>134</u>           |   | <u>92</u> |
|   |                                     | Complex   | <u> </u>  |
|   | F1                                  | Makarora Flat Wetland   |           |
|   |                                     | Swamp Complex   | <u>93</u> |
| [moved from Schedule 10]  | F32                                 | Malones Dam Margins   | 94        |
| [moved from Schedule 10]  | <u>F34</u>                          | Marana Swamp  | 95        |
| [previously The Gorge Swamp (Schedule 10)]  | <u>F4</u>                           | Matakauri Wetland   | 96        |
| [not previously scheduled]  | <u>F2</u>                           | Matukituki Bluff  |           |
|   |                                     | Ephemeral Wetland   | <u>97</u> |
|   | <u> </u>                            | Management Area   |           |
|   | F3 <u>F6</u>                        |   |           |
|   |                                     | _   | <u>98</u> |
|   | E40 E62                             |   |           |
|   | <del>F40</del> <u>F63</u>           |   | 00        |
|   | 1                                   | Area  | <u> </u>  |
| [moved from Schedule 10]  |                                     |   | 100       |
|   | F3 F6<br>F40 F63                    | Matukituki Valley Wetland Management Area Maungatua Summit Wetland Management | 98<br>99  |

| #          | Wetland Name                         | Map <del>No</del>         |   |
|------------|--------------------------------------|---------------------------|---|
| 101        | McKays Triangle                      | <u>F58</u>                | [not previously scheduled]  |
|            | Wetland                              | 7764                      |   |
| <u>102</u> | McLachlan Road Marsh                 | <u>F61</u>                | [not previously scheduled]  |
| <u>103</u> | Measly Beach Wetland Complex         | <u>F45</u>                | [not previously scheduled]  |
| 104        | Middle Swamp                         | F31                       | [not previously scheduled]  |
| 105        | Minaret Bay Swamp                    | F1                        | [moved from Schedule 10]  |
|            | Moa Creek Inland Saline              | <del>F17</del> F14        | [moved from schedule 10]  |
| <u>106</u> | Area Wetland                         |                           |   |
| <u>107</u> | Moke Creek Swamp                     | <u>F4</u>                 | [moved from Schedule 10]  |
| <u>108</u> | Moke Lake Bog                        | <del>F7</del> <u>F4</u>   |   |
| <u>110</u> | Mount Nicholas Lagoon                | <u>F8</u>                 | [not previously scheduled]  |
|            | Murray-s Road Inland                 | <del>F25</del> <u>F55</u> |   |
| <u>111</u> | Saline Wetland                       |                           |   |
|            | Management Area                      | F27 F64                   |   |
| <u>112</u> | Nenthorn Ridge Wetland               | <del>F27</del> <u>F64</u> |   |
| 114        | Management Area Office Creek Seepage | F63                       | [previously Office Creek Swamp (Schedule 10)]                     |
| 114        | Nevis Plateau Wetland                | F13                       | [previously Office Creek Swamp (Scheaule 10)] [deleted from Plan] |
|            | Management Area                      | 113                       |   |
| 4.1-       | Okia Flat Wetland                    | <del>F39</del> F68        |   |
| <u>115</u> | Management Area                      |                           |   |
| 116        | Old Dunstan Road                     | <u>F56</u>                | [moved from Schedule 10]  |
| <u>116</u> | <u>Swamp</u>                         |                           |   |
| 117        | Otanomomo Tuatiki                    | <del>F52</del> <u>F37</u> |   |
|            | Reserve                              |                           |   |
| <u>118</u> | Otokia Wetlands Swamp                | F43 F59                   |   |
| <u>119</u> | Paddys Rock Ephemeral                | F24 <u>F64</u>            |   |
| 120        | Tarn Papanui Inlet Saltmarsh         | F59                       | [not previously scheduled]  |
| 120        | Papatowai Scenic                     | F56                       | [see Tahakopa River Bogs]   |
|            | Reserve Wetland                      | 130                       | [see Tanakopa River Bogs]   |
| 121        | Patearoa <u>Inland</u> Saline        | F19 F25                   |   |
| <u>121</u> | Area Wetland                         |                           |   |
| 122        | Peat Moss Hills Fen                  | <u>F60</u>                | [previously Peat Moss Hills (Schedule 10)]                        |
| 122        | Complex                              |                           |   |
|            | Pioneer Wetland                      | F41                       | [see Loch Luella Fen Complex]                                     |
|            | Management Area                      | 7700                      |   |
| 124        | Pomahaka River Oxbow                 | <u>F33</u>                | [previously part of Pomahaka Oxbow Wetlands (Schedule 10)]        |
| <u>124</u> | Marsh (Dalvey School<br>Road)        |                           |   |
|            | Pomahaka River Oxbow                 | F33                       | [previously part of Pomahaka Oxbow Wetlands (Schedule 10)]        |
| <u>125</u> | Marsh (Koi Creek)                    | 133                       | [previously part of I officialism Oxform wellulus (Schedule 10)]  |
| 100        | Puerua Wetland                       | <del>F55</del> F41        |   |
| <u>109</u> | Molyneux Bay Swamp                   |                           |   |
| <u>126</u> | Ratanui Swamp                        | <u>F37</u>                | [previously part of Catlins River Wetland (Schedule 9)]           |
| 127        | Red Bank Wetland                     | <del>F27</del> <u>F67</u> |   |
|            | Management Area                      |                           |   |
| 128        | Reefs Pond Margins                   | <u>F56</u>                | [moved from Schedule 10]  |
| <u>129</u> | Rigney Pond Margins                  | <u>F17</u>                | [moved from Schedule 10]  |
| 120        | Rockdale <u>Inland</u> Saline        | F14 <u>F13</u>            |   |
| <u>130</u> | Wetland Management                   |                           |   |
|            | Area Rocky Hill Tidal                | F47                       | [previously part of Taieri River Mouth Wetland Management Area    |
| <u>131</u> | Marshes                              | <del>1 7 /</del>          | (Schedule 9)]   |
| 132        | Samson Hill Marshes                  | F35                       | [previously Lower Waipati River Swamp (Schedule 10)]              |
| 133        | Scaifes Lagoon                       | <u>F2</u>                 | [moved from Schedule 10]  |
| _          | -                                    |                           | -   |

| #          | Wetland Name  | Map No                    | ]  |
|------------|---|---------------------------|--|
| 124        | Schoolhouse Flat Red                                | F20                       | [not previously scheduled]                               |
| <u>134</u> | Tussock Fen   |                           |  |
|            | Schoolhouse Flat                                    | F8 <u>F20</u>             |  |
| <u>113</u> | Wetland Area Nevis Red                              |                           |  |
|            | Tussock Fen   |                           |  |
| 135        | Shag Point Dam                                      | <u>F64</u>                | [moved from Schedule 10]                                 |
|            | Margins Chan Birran Fatronson                       | E22 E64                   |  |
| <u>136</u> | Shag River Estuary<br>Swamp                         | <del>F32</del> <u>F64</u> |  |
|            | Shotover River                                      | F5                        | [previously Confluence Swamp (Schedule 10)]              |
| <u>137</u> | Confluence Swamp                                    | 1.3                       | [previously Confluence Swamp (Schedule 10)]              |
| 138        | Signal Hill Swamp                                   | <u>F5</u>                 | [moved from Schedule 10]                                 |
| 100        | Southern Garvie                                     | F13                       | [deleted from Plan]                                      |
|            | Mountains Wetland                                   |                           |  |
|            | Management Area                                     |                           |  |
| <u>139</u> | Stirling Marsh Complex                              | <u>F43</u>                | [previously Stirling Swamp Complex (Schedule 10)]        |
| <u>140</u> | Stuarts Marsh                                       | <u>F54</u>                | [previously Stewarts Swamp (Schedule 10)]                |
| 141        | Styx Ephemeral Wetland                              | <u>F15</u>                | [not previously scheduled]                               |
| 171        | Management Area                                     |                           |  |
| 1.42       | Sutton Salt Lake                                    | <del>F26</del> <u>F60</u> |  |
| <u>142</u> | Wetland Management                                  |                           |  |
|            | Area<br>Swampy Summit                               | <del>F36</del> F57        |  |
| <u>143</u> | Wetland Area Swamp                                  | 1-30 <u>F3/</u>           |  |
|            | Tahakopa Bay Podocarp                               | <del>F56</del> F54        |  |
| <u>144</u> | Swamp   | 130 134                   |  |
| 1.45       | <u>Tahakopa Marsh</u>                               | F40                       | [previously Tahakopa River Swamp (Schedule 10)]          |
| <u>145</u> | Complex   |                           | II   |
| 146        | Tahakopa Peat River                                 | <del>F56</del> <u>F54</u> | [includes part of Papatowai Scenic Reserve (Schedule 9)] |
| 140        | Bogs  |                           |  |
|            | Taieri River Mouth                                  | F44                       | [see Rocky Hill Tidal Marshes and Governors Point Swamp] |
|            | Wetland Management                                  |                           |  |
| 1.47       | Area Talita a Carraga                               | E47                       | [  |
| <u>147</u> | <u>Takitoa Swamp</u><br>Tautuku <del>Wetland</del>  | <u>F47</u>                | [moved from Schedule 10]                                 |
| 148        | Complex River Mouth                                 | <del>F59</del> <u>F36</u> | [see Lake Wilkie Swamp]                                  |
| 140        | Marsh   |                           |  |
| 171        | Te Hua Taki Wetland                                 | F66                       | [not previously scheduled]                               |
|            | Te Matai Marsh                                      | <u>F68</u>                | [previously Te Matai Swamp Complex (Schedule 10)]        |
| <u>149</u> | Complex   | <u> </u>                  | ir   |
| 150        | The Neck Wetlands                                   | <u>F2</u>                 | [not previously scheduled]                               |
|            | Three Stones Fen                                    | <u>F53</u>                | [previously Three Stones Swamp (Schedule 10)]            |
| <u>151</u> | Complex   |                           |  |
| <u>152</u> | <u>Timber Creek Seepage</u>                         | <u>F13</u>                | [previously Timber Creek Tarn (Schedule 10)]             |
| 153        | Tokomairiro River                                   | <del>F50</del> <u>F52</u> |  |
|            | Swamp   | P05 F50                   |  |
| <u>154</u> | Tomahawk Lagoon                                     | F37 F58                   |  |
| 155        | Totara Creek <u>Inland</u>                          | <del>F19</del> <u>F25</u> |  |
| <u>155</u> | Saline <u>Wetland</u><br><del>Management Area</del> |                           |  |
| 156        | Trig Q Ephemeral Pool                               | F30 F55                   |  |
| 157        | Trig Y Bogs   | F34                       | [not previously scheduled]                               |
|            | Two Stone Hill Stream                               | <u>F34</u><br><u>F44</u>  | [not previously scheduled]                               |
| <u>158</u> | Swamp   | <del>- 1  </del>          | [not proviously sometimen]                               |
| 1.50       | Upper Black Stream                                  | F15                       | [previously Black Stream Tributary Swamps (Schedule 10)] |
| <u>159</u> | <u>Marshes</u>                                      |                           | Z  |
| 160        | Upper Tahakopa                                      | <u>F35</u>                | [previously Upper Tahakopa Swamp (Schedule 10)]          |
|            | Swamps  | I                         |  |

#### SCHEDULE 9: SIGNIFICANT WETLANDS

| #          | Wetland Name                    | Map <del>No</del>       |  |
|------------|---------------------------------|-------------------------|--|
| 161        | Upper Taieri Wetlands           | F18 F21 F22             |  |
| 101        | Complex                         | <u>to F28</u>           |  |
| 162        | Upper Waiareka Creek            | <u>F66</u>              | [previously Upper Waiareka Stream Swamp]             |
| 102        | Swamp                           |                         |  |
|            | Von Valley Wetland              | F11 and F12             |  |
| <u>163</u> | Complex Management              | F11 & F12               |  |
|            | Area                            |                         |  |
| 164        | Waianakarua River               | <u>F65</u>              | [previously Upper Waianakarua Estuary (Schedule 10)] |
| 104        | Estuary Swamp                   |                         |  |
|            | Waikouaiti River                | F34 F61                 | [includes Clover Downs Wetland (Schedule 10)]        |
| <u>165</u> | Estuary Wetland                 |                         |  |
|            | <u>Complex</u>                  |                         |  |
| 166        | Waipori Boot <del>Wetland</del> | F42 F48 & 49            |  |
| 100        | Swamp                           |                         |  |
| 167        | Waipori/Waihola                 | F42 F48 & 49            |  |
| 107        | Wetlands Complex                |                         |  |
| 168        | Wairepo Creek Marsh             | <u>F38</u>              | [not previously scheduled]                           |
| 108        | Complex                         |                         |  |
|            | Waitepeka Swamp                 | F53 F42                 |  |
| <u>24</u>  | Cheetwood Road                  |                         |  |
|            | <u>Wetlands</u>                 |                         |  |
|            | Welcome Creek                   | F30A                    | [proposed to be removed from Schedule 9]             |
| 169        | Whareakeake Marsh               | <u>F57</u>              | [not previously scheduled]                           |
| <u>170</u> | Willowburn Bog                  | <u>F34</u>              | [not previously scheduled]                           |
| 71         | Woodbine Wetland Area           | <del>F5</del> <u>F3</u> |  |
| <u>71</u>  | Kinloch Wetland                 |                         |  |

400

#### **Akatore Creek (Map F46)**

Physical Description: Extensive area of saltmarsh and swamp above coastal marine area south of Akatore Creek. Altitude 5–10m.

| Wetland Value   | Value Type |
|---|------------|
| A high degree of naturalness  | A4         |
| Scarce wetland type; a complete sequence of indigenous vegetation from the high tide      | A5         |
| mark through saltmarsh and flax to tall Leptospermum Carmichaelia Olearia scrub.          |            |
| Scrub considered an intrinsic part of the wetland and the only example of its type in the |            |
| Ecological Region.  |            |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.           | A6         |

#### All Day Bay Lagoon (Map F29)

Physical Description: Brackish water lagoon with swampy rush, sedge and succulent herb margins. Protected by QEII National Trust Open Space Covenant since 1993. A Management Statement was prepared in 1994. Area 10 ha.

| Wetland Value   | Value Type    |
|---|---------------|
| High diversity of fauna. Habitat for shoveller and grey ducks, grey teal, oyster catcher, | <del>B1</del> |
| pied and black stilt. Also visited by royal spoonbill, glossy ibis and white heron.       |               |

#### Aramoana Salt Marsh (Upper) (Map F39)

Physical Description: Upper saltmarsh and flax dominated swamp areas, above the coastal marine area at Aramoana.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| High degree of naturalness. Saltmarsh is largely intact with a complete vegetation         | <del>A4</del>         |
| sequence from tidal to dryland a feature which most other saltmarshes in Otago no          |                       |
| longer retain, as the highest part of the sequence has usually been reclaimed or otherwise |                       |
| destroyed. There is also no Spartina at Aramoana.  |                       |
| Scarce type of wetland. The saltmarsh grades into a jointed rush Leptocarpus similis       | A5                    |
| saltmarsh ribbonwood Plagianthus divaricatus community. Beyond the salt influence,         |                       |
| some of the wet dune hollows (known as "slacks") contain a swamp variously dominated       |                       |
| by the tall native flax <i>Phormium tenax</i> , and by native rush and sedge communities.  |                       |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.            | A6                    |

#### Belmont Saline Management Area (Map F19)

Physical Description: Salt pan area on low terrace near Belmont. Included in 21 ha Belmont Saline Area Reserve. Altitude 395 m.

| Wetland Value  | Value Type |
|--|------------|
| Wetland scarce in terms of ecological character; one of only two sites at which the salt | A5         |
| tolerant plant Sarcocornia quinqueflora is recorded in Central Otago. Other saline soil  |            |
| plants present and a distinctive salt adapted moth fauna.                                |            |

#### Big Boggy and Little Boggy Wetlands (Map F3)

Physical Description: A spring fed lagoon (with flax covered islands) and a small raupo fringed pond on the Upper Matukituki River flats, Western Otago. Altitude 305m.

| Wetland Value  | Value Type    |
|--|---------------|
| Presence of threatened banded dotterel Charadrius bicinctus bicinctus.                   | A1            |
| High diversity of habitat types. Important feeding and breeding sites for waterfowl and  | <del>B1</del> |
| wading birds including paradise shelduck, grey duck (breeding), pukeko and pied stilt.   |               |
| South Island pied oystercatcher, white faced heron and marsh crake also use the wetland. |               |
| High degree of naturalness. Largely unmodified wetland system which is self-sustaining   | A4            |
| because of its spring fed character.   |               |

#### Black Swamp (Map F48)

Physical Description: A cushion-plant bog with large peat dome, wire rush, sedges, herbs and shrubs, 14 km northwest of Milton. Black Swamp Conservation Area administered by Department of Conservation covers part of the bog. Area 2.5 ha.

| Wetland Value  | Value Type |
|--|------------|
| Scarce wetland type; very little of this type of wetland left in the Otago Region. | A5         |

#### Blackcleugh Burn Wetlands (Map F47)

Physical Description: Several small areas of copper tussock wetlands.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| High species diversity; copper tussock and a wide range of shrubs, herbs and invertebrate | <del>B1</del>         |
| species   |                       |

#### Blackman's Saline Management Area (Map F9)

Physical Description: A small saline area on Earnscleugh Station. Altitude 320m.

| Wetland Value   | Value Type |
|---|------------|
| Presence of the threatened species Myosurus minimus subsp. novae zelandiae. A large     | A1         |
| area of Myosurus surrounds the bare salty area.   |            |
| Scarce wetland type. An extensive community of salt tolerant plants including Atriplex  | A5         |
| buchananii. Distinctive lepidoptera and moth fauna associated with salty soils and salt |            |
| tolerant plants. One of few saline sites in the region.                                 |            |

#### **Bungtown Swamp (Map F41)**

Physical Description: A small area of swamp, including a peat dome. Administered by the Department of Conservation as a scientific reserve.

| Wetland Value  | Value Type |
|--|------------|
| Scarce type of wetland; raised peat dome with Sphagnum, wire rush, bog pine and Hebe | A5         |
| sp. growing on it.   |            |

#### **Catlins River Wetland (Map F58)**

Physical Description: A large area of shrub wetland, with kahikatea silver beech remnants, on each side of the lower Catlins River. Area 100 ha. Altitude 5 m.

| Wetland Value   | Value Type    |
|---|---------------|
| Wetland scarce in region in terms of its physical/ecological character.         | A5            |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka. | A6            |
| High diversity of flora.  | <del>B1</del> |

#### **Chapman Road Saline Area (Map F10)**

Physical Description: A small saline area near Alexandra. Altitude 150m. A scientific reserve (8.4 ha). Type site for Manorburn soil.

| Wetland Value  | Value Type |
|--|------------|
| Presence of threatened plants Lepidium kirkii, Isolepis basilaris and Puccinellia 'Central | A1         |
| Otago'.  |            |
| Scarce type of wetland. Salt tolerant plants including Apium filiforme, Samolus repens     | A5         |
| (one of only two inland sites) in shallow small grassy gully along with Juncus gerardii,   |            |
| Atriplex buchananii and Puccinellia spp. (best area of inland salt grasses, 4 species, one |            |
| of which is endemic). Lepidium kirkii grows on a salty hillslope at the southeast corner.  |            |
| Distinctive saline soil moth fauna.  |            |

#### Clutha Mouth Lagoon (Map F54)

Physical Description: Old river channel at mouth of Clutha River/Mata-Au.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| Presence of threatened banded dotterel Charadrius bicinctus bicinctus.                  | A1                    |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.         | <del>A6</del>         |
| An important loafing, roosting and feeding area for a variety of waders (eg banded      | <del>B2</del>         |
| dotterel, pied stilt and pectoral sandpiper) and waterfowl (grey teal, shoveller duck). |                       |

#### Conroy's Dam Saline Management Area (Map F10)

Physical Description: Salt pan on planar valley footslope adjacent to Conroy's dam. Part of 17 ha Conroy's Dam Reserve which includes the 15 ha Conroy's Dam impoundment. Altitude 280m.

| Wetland Value   | Value Type |
|---|------------|
| Presence of the threatened plants Lepidium kirkii, and Crassula tetramera.            | A1         |
| Scarce wetland type. One of few truly saline soil types (very high conductivity), and | A5         |
| alkaline. Distinctive salt adapted moth fauna present.                                |            |

#### Conroy's Road Saline Areas (Map F10)

Physical Description: Small salt pan areas to the east of the intersection of Conroy's Road and Shepherd Station Road, near Alexandra.

| Wetland Value  | Value Type |
|--|------------|
| The threatened species Myosurus minimus subsp. novae zelandiae, Puccinellia      | A1         |
| raroflorens (type locality).   |            |
| Scarce wetland type; salt tolerant plants, an endemic stonefly and some uncommon | A5         |
| moths (see Grove 1994, p73).   |            |

#### **Devils Bridge Wetland (Map F28)**

Physical Description: Previously an ephemeral lake, after installation of a weir this area has become a permanent lagoon protected by a QEH covenant. It provides important habitat for many wetland bird species and is one of the few habitats of this type in North Otago.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| High diversity of fauna. Habitat for marsh crake, banded rail, Australian coot, NZ scaup, | <del>B1</del>         |
| white heron, white faced heron, pied stilt, grey teal, black swan, pukeko and others.     |                       |

#### Diamond Lake/Earnslaw Burn Wetland Management Area (Map F5)

Physical Description: Swampland adjacent to Diamond Lake and Lake Reid in Rees River Catchment, 12km north of Glenorchy. Administered by Department of Conservation as Diamond Lake/Lake Reid Wildlife Management Reserve. Altitude 330-350m.

| Wetland Value   | Value Type    |
|---|---------------|
| Habitat for threatened banded dotterel and black fronted tern.                          | A1            |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.         | <del>A6</del> |
| High diversity of fauna. Provides nesting and feeding habitat for paradise ducks, black | <del>B1</del> |
| swan, pied stilt, black backed gull, South Island pied oystercatcher and shags.         |               |

#### **Dingle Lagoon (Map F2)**

Physical Description: The margins of a shallow lake.

| Wetland Value                                 | Value Type    |
|---|---------------|
| Regionally significant habitat for waterfowl. | <del>B2</del> |

#### **Dunard Saline Management Area (Map F15)**

Physical Description: Saline area on flat terrace on Moutere Station. Altitude 330m.

| Wetland Value  | Value Type |
|--|------------|
| Scarce wetland type; native salt tolerant plants including Puccinellia sp., Atriplex | A5         |
| buchananii and Ceratocephalus pungens, the native herb Acaenia buchananii plus the   |            |
| threatened herb Myosurus minimus subsp. novae zelandiae.                             |            |

#### **Dunvegan Pond (Map F49)**

Physical Description: Small pond on valley floor.

| Wetland Value   | Value Type |
|---|------------|
| Habitat for threatened Australasian bittern Botaurus poiciloptilus. | A1         |

#### False Islet Wetland Management Area (Map F57)

Physical Description: Moist hollow on sandflats behind foredunes.

| Wetland Value  | Value Type |
|--|------------|
| Presence of the threatened plant species Mazus 'False Islet' and the "insufficiently | A1         |
| known" species Libertia peregrinans.   |            |

#### Fortification Creek Wetland Management Area (Map F22)

Physical Description: An extensive wetland area covering the slow moving meandering lower reaches of Fortification Stream and the Teviot River, associated oxbow lakes and ponds, and adjacent sedge and red tussock wetlands on the alluvial valley floor in an open flat basin of the Upland Plateau land unit. Also covers the swamps at the inlets to Lake Onslow.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Habitat for threatened banded dotterel Charadrius bicinctus bicinctus. The threatened  | A1                    |
| plant species Cardamine 'tarn' and Ranunculus ternatifolius also present.              |                       |
| Scarce wetland type. One of the last remaining relatively uniform areas of red tussock | A5                    |
| wetland combined with meandering streams.  |                       |
| Regionally significant habitat for waterfowl.  | <del>B2</del>         |

#### Galloway No 1 Saline Area (Map F16)

Physical Description: Saline site on high terraces on true left of the Manuherikia River at the southern end of the Raggedy Range. Altitude 220-350m.

> The site contains a fully representative Lepidoptera fauna of saline soils and salt tolerant vegetation of Central Otago. Several uncommon insects occur, feeding on the salt tolerant plants. A

rare grasshopper is found on the rocky ground above the saline area (Patrick 1989).

| Wetland Value  | Value Type    |
|--|---------------|
| The only know location of Lepidium sisymbrioides subsp. matau. Lepidium kirkii and | <del>A1</del> |
| other salt tolerant species are found at the site.                                 |               |

#### Galloway No 2 Saline Area (Map F16)

Physical Description: A saline site approximately 1 km to the east of the Galloway No. 1 site, adjacent to the Crawford Hills Road.

| Wetland Value  | Value Type    |
|--|---------------|
| The threatened salt tolerant plant Lepidium kirkii is present, along with populations of | <del>A1</del> |
| Plantago coronopus and Atriplex buchananii. Also the rare grasshopper Sigaus minutus.    |               |

#### **Glenorchy Lagoon (Map F5)**

Physical Description: Lagoon immediately north of Glenorchy. Administered by Department of Conservation as a Wildlife Management Reserve.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| Regionally significant habitat for waterfowl and swamp birds, including       | <del>B2</del>         |
| paradise/mallard/grey ducks, black swan, grey teal, pukeko and oystercatcher. |                       |

#### Glyn Wye Wetland Management Area (Map F23)

Physical Description: Medium turf ephemeral tarns on broad ridge crest, east of Middlemarch. Cover approx 10% of 70 ha area. Altitude 300 320m.

| Wetland Value   | Value Type    |
|---|---------------|
| Tarns contain three threatened herbaceous species: Cardamine 'tarn' which is listed as    | A1            |
| endangered, and Gratiola nana and Myosurus minimus subsp. novae zelandiae which are       |               |
| listed as rare (Cameron et al 1995). Occurrence of Pratia perpusilla, locally rare within |               |
| Macraes Ecological District   |               |
| High diversity of indigenous rushes, herbs and other species. The best and most           | <del>B1</del> |
| extensive examples of medium turf ephemeral tarns within the Fault Block Ridges land      |               |
| system (see Bibby 1997 for details).  |               |

#### Goodwood Saltmarsh (Map F33)

Physical Description: Saltmarsh above coastal marine area near mouth of Pleasant River.

| Wetland Value   | Value Type |
|---|------------|
| Scarce wetland type; saltmarsh community with Sarcocornia quinqueflora (glasswort), | A5         |
| Puccinellia spp. Atriplex spp. Selliera radicans, Samolus repens and jointed rush.  |            |

#### **Great Moss Swamp (Map F21)**

Physical Description: Remnant of previously more extensive 500 ha swamp flooded by the Logan Burn Reservoir. Altitude 820m. Areas of red and silver tussock and sedge tussock Schoenus pauciflorus and Sphagnum squarrosum. One of few remaining subalpine swamp areas in the Rock and Pillar Ecological District.

| Wetland Value  | Value Type |
|--|------------|
| Presence of threatened plant species Deschampsia caespitosa and Carex secta var. | A1         |
| tenuiculmus  |            |

#### Hawksbury Lagoon (Map F34)

Physical Description: A shallow fresh-brackish water lagoon at the mouth of the Hawksbury River, adjacent to the town of Waikouaiti. Little tidal influence within the lagoon as a causeway along the channel entrance restricts the entry of seawater. Most of the lagoon is part of the Hawksbury Wildlife Reserve. An adjacent lagoon which is not included within the wetland, is identified as a Coastal Protection Area within the Regional Plan: Coast. Area 63 ha. Altitude 0 - 2m.

| Wetland Value  | Value Type    |
|--|---------------|
| The wetland is of cultural importance to Kai Tahu as a mahika kai site where fish          | <del>A6</del> |
| (especially eels and inanga) and waterfowl were traditionally harvested.                   |               |
| High diversity of bird and fish life, including the following species: white heron, white- | <del>B1</del> |
| faced heron, royal spoonbill, pied stilt, black swan, grey teal, NZ shoveller, grey duck,  |               |
| arctic waders, eels and galaxiids.   |               |
| Regionally significant habitat for waterfowl.  | <del>B2</del> |

#### **Hoopers Inlet Swamp (Map F39)**

Physical Description: Saltmarsh and swamp area behind Allans Beach on eastern side of Hooper's Inlet. A Department of Conservation Reserve.

| Wetland Value   | Value Type |
|---|------------|
| Scarce wetland type; sequence from saltmarsh community to fresh water swamps    | A5         |
| dominated by Carex coriacea, C. virgata, C. gaudichaudiana and Isolepis nodosa. |            |

#### Hukihuki Swamp (Map F60)

Physical Description: A coastal rush/sedge/podocarp swamp. Area 66 ha. Altitude 1m.

| Wetland Value   | Value Type    |
|---|---------------|
| A diverse and interesting assemblage of wetland plant species, including Leptocarpus  | <del>B1</del> |
| similis (jointed wire rush), Carex sp. and Juneus sp., flax and Dacrydium cupressinum |               |
| <del>(rimu).</del>  |               |

#### Kaikorai Lagoon (Map F38)

Physical Description: A brackish water lagoon and extensive adjacent marsh areas at the mouth of the Kaikorai Stream, southeast of Dunedin City. Area 100 ha approximately. Altitude 0-1m.

> A range of marsh communities from brackish lagoon to saline lagoon. Vegetation includes jointed rush/saltmarsh ribbonwood rushland, herbfield communities in extensive marsh areas and a narrow strip of herbfield communities between the low bank and the lagoon in the Brighton Road area.

| Wetland Value  | Value Type    |
|--|---------------|
| Habitat for threatened Australasian bittern Botaurus poiciloptilus and the banded dotterel   | A1            |
| Charadrius bicinctus bicinctus.  |               |
| The area is important as a refuge, feeding and breeding areas for a wide range of wetland    | <del>A2</del> |
| birds. Birds that breed in the area include, mallard, shoveller duck, black swan, pukeko,    |               |
| pied stilts and black backed gull. Shags, gulls, royal spoonbill, terns, white faced herons, |               |
| oystercatchers and paradise duck also use the area. The marsh crake has also been            |               |
| observed here.   |               |
| Scarce wetland type; saltmarsh and Leptocarpus (rush) marsh.                                 | A5            |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.              | <del>A6</del> |

#### **Kemps Road Lagoon (Map F31)**

Physical Description: A shallow lagoon immediately inland from the mouth of Kemps Road Creek. Area 10 ha. Altitude 15m.

| Wetland Value  | Value Type    |
|--|---------------|
| Regionally significant waterfowl and wader habitat. Breeding and feeding area for a    | <del>B2</del> |
| number of species including paradise, shoveller and grey ducks, grey teal, pied stilt, |               |
| black swan and spur winged plover.   |               |

#### Kirkwoods Creek Wetland Management Area (Map F4)

Physical Description: An area of valley floor boglands (tussock bogs and cushion bogs)

within an altitudinal sequence of vegetation from the crest of the Hawkdun Range to the valley floor of Kirkwoods Creek, a tributary of the Manuherikia River. Altitude 740 - 1876 m.

| Wetland Value  | Value Type    |
|--|---------------|
| Scarce wetland types; regionally threatened plant communities. The red tussock and | A5            |
| cushion (sphagnum) bog communities are described by Grove (1992).                  |               |
| The area supports a wide range of native species in a variety of habitats.         | <del>B1</del> |

#### **Lake Hayes Margin (Map F6)**

Physical Description: Southern and western margin of a shallow, lowland, glacial lake near Queenstown. Altitude 325m. Covered in part by a Recreation Reserve and Wildlife Management Reserve (53.68 ha), administered by the Department of Conservation. The lake and its shores have the status of Wildlife Refuge.

| Wetland Value   | Value Type    |
|---|---------------|
| Habitat for threatened native fish species the Koaro (Galaxias brevipinnis) and for       | A1            |
| threatened swamp birds Australasian bittern Botaurus poiciloptilus and great crested      |               |
| grebe Podiceps cristatus australis.   |               |
| High species diversity. The lake supports a number of endemic bird species and is of      | <del>B1</del> |
| special value as a breeding area for a variety of waterfowl, including paradise shelduck, |               |
| grey duck, the New Zealand shoveller duck, the marsh crake and the Australian coot.       |               |

#### **Lake Tuakitoto Wetlands Complex (Map F51)**

Physical Description: A large lowland lake and adjoining swamp, near the coast north of the Clutha River/Mata-Au Mouth. Fed from inflow of Lovell's Creek at northern end of wetland. Area approx 500 ha. Altitude 2m. Wetland owned as endowment land by the Otago Regional Council. Best remaining example of a previously widespread wetland type. Covered by a conservation notice.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| Provides roosting, feeding and breeding habitat for the threatened Australasian bittern | A1                    |
| and banded dotterel. Also breeding area for the uncommon marsh and spotless crakes      |                       |
| and South Island fernbird. Habitat for threatened giant kokopu, Galaxias argenteus. The |                       |
| threatened plant species Urtica linearifolia and Isolepis basilaris present on swamp    |                       |
| margin.   |                       |
| A diverse mosaic of vegetation types and wildlife habitats. Regionally and nationally   | A3                    |
| important habitat for waterfowl, waders and swamp birds. Supports a significant         |                       |
| proportion of the national population of mallard and NZ shoveller ducks, grey teal and  |                       |
| black swan. All these species breed here. Considered nationally important as a fresh    |                       |
| water fishery habitat, supporting long and short finned eel, inanga and common bully    |                       |
| populations as well as the giant kokopu (Davis 1987).                                   |                       |

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Wetland highly valued by Kai Tahu for its historical associations, and as a traditional  | <del>A6</del>         |
| food gathering area.   |                       |
| An exceptionally high diversity of bird life present, a reflection of the high habitat   | <del>B1</del>         |
| diversity (above). Some 50 species of bird recorded.                                     |                       |
| Lake Tuakitoto and surrounding wetlands perform a valuable hydrological function.        | <del>B3</del>         |
| Serves as a flood ponding area and is an integral part of the Lower Clutha Flood Control |                       |
| and Drainage Scheme.   |                       |

#### **Lamb Hill Wetlands (Map F35)**

Physical Description: Areas of copper tussock wetland on gully floors in the southern part of Macraes Ecological District. Altitude 600 764m.

| Wetland Value  | Value Type    |
|--|---------------|
| The moist copper tussock wetland, although modified, contains a wide variety of wetland  | <del>B1</del> |
| species. Copper tussock, toetoe, the sedge Purci and the exotic rush Juncus effusus make |               |
| up the canopy and various mosses, liverworts, rushes and herbs make up the ground        |               |
| layer (see Bibby 1997, p121, for full description).                                      |               |

#### **Lenz Reserve Wetlands (Map F59)**

Physical Description: Swamp/bog wetlands within the Lenz Private Scenic Reserve, 34km south of Owaka, in the Fleming River Valley. Area 100 ha. Altitude 20 36m.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| Scarce wetland types. An intact peat dome (sphagnum moss 2m above forest floor) | A5                    |
| surrounded by forest and a remnant kahikatea rimu swamp forest.                 |                       |

#### **Lower Coutts Gully Swamp (Map F45)**

Physical Description: Fresh brackish water swamp near mouth of Duckbend Creek, southwest of mouth of Taieri River. A wildlife management reserve in part (Sawmill Wildlife Management Reserve) and part in private ownership. Area 40 ha. Altitude 1-10m.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Australasian Bittern have been recorded at this site.                                    | A1                    |
| An interesting and diverse variety of wetland plant species.                             | <del>B1</del>         |
| Regionally significant habitat for waterfowl. Pied stilt and spur winged plover breed in | <del>B2</del>         |
| the area.  |                       |

#### **Maclennan River Podocarp Swamp (Map F56)**

Physical Description: Riparian kahikatea/silver beech forest and Carex secta swamp adjacent to Maclennan River. Includes the Maclennan River Scenic Reserve and part of the Tahakopa Bay Scenic Reserve.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| High degree of naturalness.   | <del>A4</del>         |
| Wetland scarce in Region in terms of its ecological character. Rare example of riparian | A5                    |
| kahikatea/silver beech forest and the largest area of Carex secta swamp under reserve   |                       |
| status in Otago. High regional scientific value.  |                       |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.         | A6                    |

#### **Makarora Flat Wetland (Map F1)**

Physical Description: Carex/Juncus gregiflorus wetland on left bank of Makarora River.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
|  |                       |
| Regionally significant waterfowl habitat. Important feeding and sheltering habitat for | <del>B2</del>         |
| shoveller and grey ducks, grey teal and pukeko. Also used by waders (pied stilt,       |                       |
| <del>oystercatcher).</del>   |                       |

#### Matukituki Valley Wetland Management Area (Map F3)

Physical Description: The area comprises three remnants of a large wetland system that once covered much of the Matukituki Valley: the West Wanaka Lagoons, the Narrow Spur Wetland and the Broad Spur Tongue Spur Wetland. Swamps, bogs and open water together represent the largest complex of lowland wetlands in the Lakes Ecological Region. The three wetlands support similar floristic and faunistic values and retain much of their original character.

| Wetland Value  | Value Type    |
|--|---------------|
| Habitat for the threatened Australasian bittern.                                       | A1            |
| Critical feeding and nesting area for a wide variety of waterfowl and waders including | A2            |
| the NZ shoveller duck, crested grebe, pied stilt, black shag, and black swan.          |               |
| High diversity of habitat types.   | A3            |
| High degree of naturalness.  | A4            |
| Wetlands highly valued by Kai Tahu for presence of long finned eels.                   | <del>A6</del> |
| High diversity of native birds, insects, aquatic and plant life.                       | <del>B1</del> |

#### Maungatua Summit Wetland Management Area (Map F40)

Physical Description: Area containing cushion herb vegetation, Sphagnum bogs, flushes and small tarns on the summit and western slopes of Mt. Maungatua overlooking Taieri Plains, 24 km west of Dunedin. Altitude 800 - 890 m.

Wetland Value **Value Type** Scarce wetland type. Although highly modified by fires, grazing and trampling, the A5 Maungatua wetlands are the only remaining examples of high altitude wetlands on the eastern side of the Waipori Ecological District. Cushion forming plants are confined to poorly drained areas on the summit ridge. Scattered tarns are surrounded by Sphagnum spp. and sedges. Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka. <del>A6</del>

#### **Moa Creek Saline Area (Map F17)**

Physical Description: A small saline site on upper reaches of a broad alluvial plain to the east of Raggedy Range, adjacent to Crawford Hills Road. Altitude 450—460m.

| Wetland Value   | Value Type |
|---|------------|
| Threatened plant species Plantago spathulata and Selliera radicans present. | A1         |

#### **Moke Lake Bog (Map F7)**

Physical Description: Bog with rushes, sedges, herbs and sphagnum mounds at southern end of montane lake, near Queenstown. Area 15 ha. Altitude 525m.

| Wetland Value  | Value Type    |
|--|---------------|
| Presence of threatened plant species Triglochin palustris. | <del>A1</del> |
| Cultural sites of value to Kai Tahu are present.           | <del>A6</del> |

#### **Murray's Road Saline Management Area (Map F25)**

Physical Description: A salt pan on gently sloping surface of the Tor Plateau land system, the pan grading into a small wet area at one end. Area approx 2 ha. Altitude 190m.

| Wetland Value   | Value Type |
|---|------------|
| Scarce wetland type. This is the only known salt pan within the Macraes Ecological          | A5         |
| District. The salt pan is a mosaic of bare exposed saline soil and the native salt tolerant |            |
| plants Apium sp. and Selliera microphylla. The wet area contains native sedges and          |            |
| rushes (see Bibby 1997, p117).  |            |

#### Nenthorn Ridge Wetland Management Area (Map F27)

Physical Description: A wide variety of wetland types including a low turf ephemeral tarn, a medium turf ephemeral tarn, Purci wetlands, pools, bogs and moist red tussock grasslands in a relatively small area (112 ha) on the upper slope and ridge crests of the Rolling Hills land system. Altitude 540 – 570m.

| Wetland Value  | Value Type    |
|--|---------------|
| The threatened herb Gratiola nana is present in the low turf ephemeral tarn at Emerald   | A1            |
| Creek, one of only 23 known locations throughout the South Island (Johnson 1993). Two    |               |
| locally rare species Elatine gratioloides and Glossostigma sp. occur in the medium turf  |               |
| ephemeral tarns.   |               |
| A high diversity of wetland habitat types present.                                       | A3            |
| A very diverse range of wetland vegetation, a distinctive insect fauna and a diverse and | <del>B1</del> |
| relatively abundant waterfowl fauna (refer Bibby 1997, page 86-88 for details of species |               |
| present, and Johnson 1993).  |               |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.          | <del>A6</del> |

#### Nevis Plateau Wetland Management Area (Map F13)

Physical Description: The Nevis Plateau is dominated by the rectangularly incised course of the Roaring Lion Creek. The Plateau contains areas of low relief with wetland depressions and extensive bogs. Altitude 1200m - 1840m.

| Wetland Value  | Value Type |
|--|------------|
| High degree of naturalness, particularly in higher altitude areas. | A4         |

Note: These values have been recognised by the Water Conservation (Kawarau) Order 1997.

#### Okia Flat Wetland Management Area (Map F39)

Physical Description: Dune hollows (permanently or periodically wet), wetland turf, bogs and ponds within the Okia Reserve, Okia Flat, Otago Peninsula.

The best example of dune hollow vegetation in the Otago Coast Ecological Region.

| Wetland Value  | Value Type    |
|--|---------------|
| Very diverse native wetland vegetation within the dune hollows (described by Johnson | <del>B1</del> |
| 1993). Some paddocks are of special interest in having sphagnum moss, the only       |               |
| sphagnum known on Otago Peninsula, and a species Sphagnum novo zelandicum) which     |               |
| is generally uncommon in New Zealand. The bog sedges Baumea rubiginosa and B.        |               |
| tenax grow with the sphagnum.  |               |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.      | <del>A6</del> |

#### Otanomomo Tuatiki Reserve (Map F52)

Physical Description: A small pond and swamp area (0.5 ha) within the Otanomomo Tuatiki Scientific Reserve (36.45 ha). The only reserved stand of alluvial plain podocarp forest in the Otago Land District.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| High degree of naturalness. Native wetland vegetation in excellent condition. An | A4                    |
| important sequence from wetland vegetation through to native bush.               |                       |

#### Otokia Wetlands (Map F43)

Physical Description: Rush and sedge swamp adjacent to SH 1. Water levels fluctuate throughout the year. Adjacent land grazed. Area 10 ha.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Regionally significant breeding area for waterfowl, including NZ shoveller duck, | <del>B2</del>         |
| pukeko, pied stilt and spur winged plover.                                       |                       |

| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka. | A6 |  |
|---|----|--|
|---|----|--|

#### Paddys Rock Ephemeral Tarn (Map F24)

Physical Description: A low turf ephemeral tarn on a broad ridge crest within the Rolling Hills land system. Altitude 600m.

| Wetland Value  | Value Type    |
|--|---------------|
| Presence of threatened plant Tetrachondra hamiltonii on margin of tarn.                  | A1            |
| High plant diversity. The tarn contains the native herb Hypsela rivalis, the sedge Carex | <del>B1</del> |
| gaudichaudiana and the rush Eleocharis acuta.  |               |

#### Papatowai Scenic Reserve Wetland (Map F56)

Physical Description: Estuarine swamp and saltmarsh above the coastal marine area on south side of Tahakopa River, adjacent to Papatowai township.

| Wetland Value   | Value           |
|---|-----------------|
|   | <del>Type</del> |
| Scarce wetland type. A large area of <i>Leptocarpus similis</i> (rush) swamp and adjacent saltmarsh with interesting plant succession from saltmarsh to swamp to matai/rimu | A5              |
| forest.   |                 |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.   | <del>A6</del>   |

#### Patearoa Saline Area (Map F19)

Physical Description: A moderately large saline site near the Upper Taieri River consisting of small bare salty areas at the base of surrounding hillsides. On farm land adjacent to Styx Patearoa Road. Altitude 395m. Protected by QEII National Trust Open Space Covenant (4.55 ha.). A Management Statement was prepared in 1995.

| Wetland Value   | Value Type    |
|---|---------------|
| Presence of threatened plant species Myosurus minimus subsp. novae zelandiae            | A1            |
| High diversity of salt tolerant plants and moths (see Grove 1994, p59), its combined    | <del>B1</del> |
| botanical and entomological values making it the most important example of such habitat |               |
| in Central Otago and New Zealand.   |               |

#### Pioneer Wetland Management Area (Map F41)

Physical Description: Red tussock wetland, swamps and ponds on the floodplain of the upper Pioneer Stream, south of the western arm of Lake Mahinerangi. Site of old gold mining and partly Historic Reserve administered by Department of Conservation. Altitude 450 - 500 m.

| Watland Value            | Value Type             |
|--------------------------|------------------------|
| <del>Wetland Value</del> | <del>Value I voe</del> |

| Recorded sitings of the threatened Australasian bittern Botaurus poiciloptilus and the | A1            |
|--|---------------|
| fernbird Bowdleria punctata punctata.  |               |
| Diverse plant communities. In swampy areas on valley floor Carex gaudichaudiana        | <del>B1</del> |
| sedgeland occurs with exotic grasses, rushes and some large Sphagnum moss cushions     |               |
| and other cushion species.   |               |

#### **Puerua Wetland (Map F55)**

Physical Description: A moderately large rush and sedge swamp area near the mouth of the Clutha River/Mata Au. Administered by the Department of Conservation as the Puerua Wildlife Management Reserve. Area 200 ha. Altitude 5m.

| Wetland Value   | Value Type    |
|---|---------------|
| Regionally significant habitat for waterfowl (NZ shoveller duck and grey teal), wading  | <del>B2</del> |
| birds (pied stilt, godwit, spur winged plover), and swamp birds (pukeko, bittern, marsh |               |
| and spotless crake). South Island fernbird also present.                                |               |

#### Red Bank Wetland Management Area (Map F27)

Physical Description: Copper tussock wetland and a low turf ephemeral tarn on the western ridge crest in the upper catchment of a tributary of the North Branch of the Waikouaiti River. Altitude 470 645m.

| Wetland Value  | Value Type    |
|--|---------------|
| The threatened plant species Isolepis basilaris and Myosurus minimus subsp. novae      | A1            |
| zelandiae are present in the low turf ephemeral tarn.                                  |               |
| A high diversity of wetland species. A diverse and interesting aquatic insect fauna in | <del>B1</del> |
| seepages and creeks, including the brown caddis ( <i>Psilochorema tautoru</i> ).       |               |

#### Rockdale Saline Area (Map F14)

Physical Description: Small saline site adjacent to Chatto Creek Omakau Road. Altitude 270m.

| Wetland Value   | Value Type |
|---|------------|
| Scarce wetland type. Many uncommon salt tolerant plants and insects. (see Grove 1994, | A5         |
| <del>p65).</del>  |            |

#### Schoolhouse Flat Wetland Area (Map F8)

Physical Description: Bog and flush area on valley floor.

| Wetland Value  | Value Type    |
|--|---------------|
| Diverse flora and invertebrate fauna several alpine invertebrate species, possibly | <del>B1</del> |
| dependent on wetlands, eg. the moths Asaphodes oraria and A. helias.               |               |

#### **Shag River Estuary Swamp (Map F32)**

Physical Description: An area of saline swamp above coastal marine area at mouth of Shag River.

| Wetland Value  | Value Type    |
|--|---------------|
| Scarce wetland type. Saltmarsh community with Sarcocornia quinqueflora (glasswort) | A5            |
| jointed rush, and Atriplex spp.  |               |
| Wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.    | <del>A6</del> |

#### **Southern Garvie Mountains Wetland Management Area (Map F13)**

Physical Description: A range of alpine wetland types, including peat bogs, pools, patterned mires and flushes on the Nevis Plateau. Part of the 'Nokomai wetlands' (the other part, to the south, being within the Nokomai Ecological District). Altitude 1300-1830m.

| Wetland Value  | Value Type    |
|--|---------------|
| A high diversity of habitat types  | A3            |
| High degree of naturalness. These wetlands are the most extensive and spectacular in the | <del>A4</del> |
| Old Man Ecological District with dramatic contrasts between eastern glaciated and        |               |
| western non glaciated (stringbog) systems.   |               |
| Scarce wetland type. Patterned mires are rare wetland types in the southern hemisphere   | A5            |
| (Mark et al, 1995).  |               |
| High species diversity.  | <del>B1</del> |

Note: These values have been recognised by the Water Conservation (Kawarau) Order 1997.

#### **Sutton Salt Lake Wetland Management Area (Map F26)**

Physical Description: Salt Lake (near Sutton, 2 ha) is a shallow saline lake on the southern edge of the Strath Taieri Plain. Swampy margins with succulent herb, rush and sedge vegetation. Part of Sutton Salt Lake Scenic Reserve (142 ha) which embraces other tarns, seepages, grassland and shrubland communities. Altitude 250m.

| Wetland Value   | <del>Value Type</del> |
|---|-----------------------|
| Presence of threatened plant species Gratiola nana, Isolepis basilaris and Crass  | <del>rula</del> A1    |
| peduncularis.   |                       |
| Scarce wetland type. Sutton Salt Lake is New Zealand's only inland salt lake. T   | he Lake A5            |
| has an important sequence of salt tolerant vegetation around its margin. Native p | <del>olants</del>     |
| include Lilaeopsis ruthiana, Apium n.sp, and Chenopodium ambiguum. A range        | of water              |
| birds and waders use the lake, feeding on the tiny shrimp like organisms which    | <del>occur</del>      |
| there.  |                       |

#### **Swampy Summit Wetland Area (Map F36)**

Physical Description: Swampy areas and peat bogs with associated moss field, sedgeland and shrub communities on the flat plateau of Swampy Summit in the Silver Peaks area, west of Dunedin. Area 40 ha. Altitude 739m.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| A high diversity of habitat types. Swampy Summit peat bogs and associated plant    | A3                    |
| communities provide important habitat for South Island fernbird and other species. |                       |

#### Tahakopa Bay Podocarp Swamp (Map F56)

Physical Description: Swamp forests within Tahakopa Bay Scenic Reserve, inland of Tahakopa Bay, between the lower Maclennan River and the coast.

| Wetland Value   | Value Type |
|---|------------|
| Scarce wetland type. Areas of young podocarp swamp forest (with small areas of open | A5         |
| water) and mixed podocarp beech swamp forests, such as these, are now uncommon in   |            |
| the Otago Region.   |            |

#### Tahakopa Peat Bog (Map F56)

Physical Description: A rush/sedge/flax/podocarp bog near mouth of Tahakopa River. Altitude 5m.

| Wetland Value   | Value Type    |
|---|---------------|
| Threatened Australasian bittern and fernbird recorded at this site. | A1            |
| Active peat deposit (1.3 km²) including peat dome.                  | A5            |
| High wetland plant species diversity.                               | <del>B1</del> |

#### Taieri River Mouth Wetland Management Area (Map F44)

Physical Description: An area of wetland including marsh, river terrace and gully floor plant communities on both sides of the Taieri River, about 3km from its mouth. Included in Taieri River Scenic Reserve, administered by the Department of Conservation. Area 10 ha. Altitude 10m.

| Wetland Value   | Value Type |
|---|------------|
| High diversity of habitat types. The variety of plant communities within such a small   | A3         |
| area is remarkable and some are considered quite unique, eg. the marsh areas which have |            |
| some salt and some fresh water marsh characteristics, and the small kahikatea totara-   |            |
| matai miro stand on the west river terrace.   |            |

#### **Tautuku Wetland Complex (Map F59)**

Physical Description: A large area of wetlands, including Lake Wilkie, on the coastal terrace behind Tautuku Beach and part of the lower Tautuku River Valley. Area approx 100 ha. Altitude 0-350m.

| Wetland Value   | Value Type |
|---|------------|
| A diverse assemblage of habitat types and plant communities including rush swamps,          | A3         |
| swampy river flats (with sedge, jointed rush, shrubs) and swampy riverside                  |            |
| podocarp/kamahi/mixed broadleaf forest.   |            |
| Scarce wetland type. Lake Wilkie possesses an important example of a hydrach                | A5         |
| succession from <i>Eleocharis</i> at the Lake margin to mature podocarp rata kamahi forest. |            |
| Bog lakes are unusual on the east coast of the South Island.                                |            |

#### Tokomairiro River Swamp (Map F50)

Physical Description: Areas of rush/sedge/flax fresh water swamp adjacent to the Tokomairiro Estuary and the main river channel landward of the coastal marine area boundary. Area 100 ha. The area south of Toko Mouth Road (27.5 ha.) has been Protected by QEII National Trust Open Space Covenant since 1993. A Management Statement was prepared in 1994.

| Wetland Value  | Value Type    |
|--|---------------|
| Scarce wetland type. Scarce Sarcocornia quinqueflora saltmarsh community present.        | <del>A5</del> |
| High species diversity. Habitat for waterfowl species including the mallard, grey and NZ | <del>B1</del> |
| shoveller duck, the grey teal and black swan. Links directly with the downstream         |               |
| estuarine area which provides habitat for the same species. Marsh crake and South Island |               |
| fernbird also present.   |               |

#### Tomahawk Lagoon (Map F37)

Physical Description: Two shallow brackish water lagoons joined by a narrow channel and sharing a common sea outlet located on the outskirts of Dunedin, at the southern end of the Otago Peninsula. Sea outlet often blocked. Much of the area is managed by the Department of Conservation as a Wildlife Management Reserve. Area 33 ha. The Native Bush remnants along one third of the eastern boundary of the Western Lagoon, and the northeastern edge of the Eastern Lagoon are protected by QEII National Trust Open Space Covenant since 1995. A management Plan has been drawn up.

| Wetland Value  | Value Type    |
|--|---------------|
| Presence of threatened plant species Isolepis basilaris on margin of lagoon.             | A1            |
| Regionally significant habitat for waterfowl and waders. Species present include         | <del>B2</del> |
| shoveller duck, black swan, marsh crake, spotless crake, pukeko, pied stilt, variable    |               |
| oystercatcher and the spur winged plover. Part of chain of feeding habitats along coast. |               |
| Used by migrating waders. Habitat for native fish and eels.                              |               |

#### **Totara Creek Saline Management Area (Map F19)**

Physical Description: Scattered saline areas lying along an old river terrace on the true left of Totara Creek. Adjacent to the boundary between Awatea and Linnburn Stations on Awatea Station Road.

| Wetland Value  | Value Type    |
|--|---------------|
| Presence of the threatened plant Triglochin palustre.                                | A1            |
| Scarce wetland type; high value.   | A5            |
| High plant diversity. A diverse assembly of salt tolerant plants including Selliera  | <del>B1</del> |
| microphylla, Sarcocornia quinqueflora, Samolus repens, Puccinellia spp. and Atriplex |               |
| <del>buchananii.</del>   |               |

#### Trig Q Ephemeral Pool (Map F30)

Physical Description: Ephemeral Pool

| Wetland Value   | Value Type |
|---|------------|
| Presence of threatened plant species Crassula peduncularis. | A1         |

#### **Upper Taieri Wetlands Complex (Maps F18-F21)**

Physical Description: The Upper Taieri Wetlands Complex consists of three sub areas. the Styx (Paerau) Basin Wetlands, the Maniototo Basin Wetlands and Taieri Lake Wetlands. Altitude 300 - 550m. All three wetlands are on the floodplain of the Taieri River.

> The areas marked on these maps, except F18 (Inset 1), are predominantly in private ownership and much of this area comprises pasture land used for grazing. However, most of these pasture areas retain significant wetland values, depending on the season.

> The Styx Basin wetlands consist of a scroll-plain landform of meanders, oxbows, old braids, backwaters and cut-offs, stretching from near Paerau to Canadian Hut. The area includes the 136 ha Serpentine Wildlife Management Reserve.

> The Maniototo Basin Wetlands, downstream of the Styx Wetlands, are of similar landform. They include the 37.5 ha Eden Creek Wildlife Management Reserve and the 44 ha Halls Road Wildlife Management Reserve.

> The Taieri Lake Wetlands lie adjacent to the Taieri River, downstream of the Maniototo Wetlands. They encompass part of the 187 ha Taieri Lake Recreation Reserve.

| Wetland Value   | Value Type    |
|---|---------------|
| Habitat for several threatened species, including the nationally threatened Australasian  | A1            |
| bittern and the banded dotterel (Grove 1994, p52), and the threatened plant Deschampsia   |               |
| caespitosa.   |               |
| The area provides critical habitat for the lifecycles of many indigenous bird species.    | A2            |
| Very high diversity of habitat types, reflected in the presence of 52 bird species, 27 of | A3            |
| which are dependent on the wetland to meet their specialised needs. Many of the species   |               |
| breed in the wetland (see Grove 1994, p51-53, for details).                               |               |
| Scarce wetland type. The only scroll-plain in New Zealand, with a consequently unique     | A5            |
| combination of wetland habitats.  |               |
| Although the vegetation and form of the Upper Taieri Wetlands has been extensively        |               |
| modified by drainage, channelisation, the introduction of exotic species, grazing and     |               |
| other farming activities, they are the best remaining example of this type of wetland in  |               |
| the Otago Region. They also represent the only significant inland upland habitat of this  |               |
| type left in New Zealand.   |               |
| Valued by Kai Tahu as traditional mahika kai area.  | A6            |
| A very high species diversity, of both flora and fauna.                                   | <del>B1</del> |
| Regionally important habitat for waterfowl. Breeding area for a large number of           | <del>B2</del> |
| waterfowl species.  |               |
| Performs an important hydrological function in terms of ameliorating downstream flood     | <del>B3</del> |
| peaks and low flows.  |               |

#### **Von Valley Wetland Management Area (Map F11 and F12)**

Physical Description: A large area of wetlands (including tarns, kettle holes, restiad bogs, cushion bogs, rush and sedge swamps, moist depressions and seepages) west of Lake Wanaka in the Von Valley. Altitude 100 - 760 m.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Presence of threatened plant species Cardamine 'tarn', Oreomyrrhis colensoi var          | <del>A1</del>         |
| delicatula, Crassula multicaulis, Isolepis basilaris, Deschampsia caespitosa, Ranunculus |                       |
| ternatifolius and Brachyscome linearis.  |                       |
| High diversity of habitat types (see physical description above).                        | A3                    |
| Some of the wetlands are scarce in Otago Region terms of physical/ecological character.  | A5                    |
| High diversity of flora (The botany of the kettleholes and their margins is described by | <del>B1</del>         |
| <del>Johnson 1993).</del>  |                       |

#### Waikouaiti Estuary Wetland (Map F34)

Physical Description: Remnant saltmarsh above coastal marine area near mouth of Waikouaiti River. Also known as Merton's Swamp.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Scarce wetland type. Saltmarsh community with Sarcocornia quinqueflora (glasswort) | A5                    |
| and jointed rush.  |                       |

#### Waipori Boot Wetland (Map F42)

Physical Description: An old oxbow of the Taieri River. A wildlife management reserve under the administration of the Department of Conservation. Area 64 ha.

| Wetland Value  | Value Type    |
|--|---------------|
| Habitat for threatened Australasian bittern, and the marsh crake.                | A1            |
| A high diversity of waterfowl species present.                                   | <del>B1</del> |
| (Values are generally similar to those outlined for the Waipori/Waihola Wetlands |               |
| Complex, below).   |               |

#### Waipori/Waihola Wetlands Complex (Map F42)

**Physical Description:** 

The wetlands complex consists of two large shallow lakes, Waipori [220 ha] and Waihola [640 ha] and an extensive system of lagoons, ponds, vegetated islands, channels and swamps, situated on the lower Taieri Plain, 30km south-west of Dunedin. The Complex includes the 315 ha. Sinclair Wetlands which has been subject to a QEII National Trust Open Space Covenant since 1986. A Management Plan has been in place since that time. Inflows are from the Waipori River, the Meggatburn, Boundary Creek and several man made drains. The wetlands drain into the Waipori River, then into the Taieri River. Area >2000 ha. Altitude 10m.

A total of 105 ha of the Complex is administered by the Department of Conservation as Wildlife Management Reserve (eg. McClaren's, Gillander's reserves) and marginal strip. See Department of Conservation (1996) for details of management and ownership. In 1995 the Clutha District Council accepted the requirement of the Minister of Conservation for a designation (as a Wildlife Management Area) over most of the wetland. The designation has now lapsed. In November 1996, the Department of Conservation released a Management Statement for the wetland.

| Wetland Value  | <del>Value Type</del> |
|--|-----------------------|
| Habitat for the threatened Australasian bittern Botaurus poiciloptilus, and threatened     | A1                    |
| indigenous fish species the giant kokopu (Galaxias argenteus) and the banded kokopu        |                       |
| (Galaxias fasciatus). Presence of the threatened plant species Urtica linearifolia and     |                       |
| <del>Deschampsia caespitosa.</del>   |                       |
| A very high diversity of habitat types (see physical description above). Internationally   | A3                    |
| significant as water bird habitat (Department of Conservation 1993) and nationally         |                       |
| important fish habitat (Davis 1987). The best remaining example of a lowland wetland       |                       |
| remaining in Otago and one of the largest and most significant remaining in New            |                       |
| <del>Zealand.</del>  |                       |
| A high degree of naturalness, notwithstanding drainage activities, and the introduction of | A4                    |
| exotic species etc. A considerable proportion of the wetland is relatively undisturbed and |                       |
| the plant communities are largely native. A wide variety of native wetland species are     |                       |
| present, specifically the native shrubland vegetation, jointed rush communities and back   |                       |
| swamp sedgeland present on the islands of the Waihola River delta. The presence of a       |                       |
| sequence of different vegetation types adds to the botanical value (Cromarty & Scott       |                       |

| Wetland Value   | Value Type    |
|---|---------------|
| <del>1995).</del>   |               |
| Wetlands of this type and size are scarce in the Region and in New Zealand; this has          | A5            |
| implications for the conservation of species such as the Australasian bittern and the         |               |
| marsh and spotless crakes, which require large contiguous blocks of swampland in order        |               |
| to maintain viable populations.   |               |
| The wetlands are of historical and cultural importance to Kai Tahu. A site of mahika kai      | <del>A6</del> |
| where eels are traditionally gathered. The wetlands are also highly valued as a source of     |               |
| <del>flax.</del>  |               |
| A very high diversity of flora and fauna, reflecting the diversity of habitats (above). Fifty | B1            |
| five species of birds and 12 species of native fish recorded. Provides habitat for several    |               |
| regionally and locally rare plant and animal species, including the endemic fernbird          |               |
| (Bowdleria punctata punctata).  |               |
| Regionally important habitat for waterfowl, with counts of up to 10,000 ducks and             | <del>B2</del> |
| swans. A major breeding and moulting site for black swan, paradise shelduck, mallard          |               |
| duck, grey duck, grey teal, NZ shoveller and NZ scaup.  |               |
| Performs a valuable hydrological function. Lakes Waipori and Waihola and associated           | <del>B3</del> |
| swamps function as a flood ponding area for the lower Taieri Plain. Also play a               |               |
| significant role in maintaining adjacent watertables and downstream flows in summer via       |               |
| the gradual release of ponded water.  |               |

#### Waitepeka Swamp (Map F53)

Physical Description: Three discrete areas of rush, sedge and flax swamp, beside the Puerua deviation channel, near the mouth of the Clutha River/Mata Au. Part of the area to the west of the road (11 ha.) is protected by a QEII National Trust Open Space Covenant. Part of it is managed as a Wildlife Management Reserve by the Department

of Conservation. Altitude 12m.

| Wetland Value  | Value Type    |
|--|---------------|
| Presence of threatened Australasian bittern.   | A1            |
| Regionally significant waterfowl habitat. Wading birds and swamp birds. South Island | <del>B2</del> |
| fernbird marsh crake and pukeko present.   |               |

#### Welcome Creek (Map F30A)

Physical Description: Welcome Creek is a spring-fed stream with a small catchment dominated by pastoral land use, predominantly dairy farming. The stream has a variable riparian buffer dominated by pasture grass species and crack willow. The spring drains water from the lower Waitaki alluvium aquifer to the Waitaki River. The upstream (source spring), flow has been measured at 56 – 59 l/s. The lower site (near Waitaki River) flow ranges from 1121 - 1381 l/s. It is important to note that a major bywash point for the Lower Waitaki Irrigation Scheme contributes flow to Welcome Creek between the upper and lower sites at all times of year, this bywash may range in flow from 250 l/s in the non irrigation season to over 500 l/s during irrigation months. It is estimated that Welcome Creek flow at Ferry Road (between the upper and lower sites) has a base spring flow of about 450 l/s.

Groundwater seepage is predominantly from the lower Waitaki alluvium (irrigation scheme sourced groundwater). However, at lower reaches of Welcome Creek (at the lower site and below), it is possible for Waitaki River sourced groundwater to be providing some flow to the stream. There have been no observed Waitaki River channels providing direct flow to the stream. However, NZMS 260 Series Maps and aerials indicate some historic channels connecting to the lower reaches of the creek from the Waitaki River.

Welcome Creek has a diverse and healthy freshwater invertebrate community. It is a noted spawning site for Salmo trutta (brown trout) and Oncorhynchus mykiss (rainbow trout). It has a wide ranging native fishery, including species such as, Gobiomorphus hubbsi (bluegill bully), Gobiomorphus breviceps (upland bully), Gobiomorphus cotidianus (common bully), Galaxias maculates (inanga), Anguilla dieffenbachii (longfin eel) and Anguilla australis (shortfin eel). Also Neochanna burrowsius (Canterbury mudfish) have also been located in wetland systems associated with the lower reaches of Welcome Creek, so far this is the only report of mudfish in the Otago province. This makes Welcome Creek one of the more diverse and regionally important streams with regard to fish species diversity present in Otago.

| Wetland Value  | Value Type |
|--|------------|
| Spring fed wetland maintaining local water table in gravels. | A1, A2, B3 |

#### **Woodbine Wetland Area (Map F5)**

Physical Description: Delta swamps and backwaters near mouth of Dart River/Te Awa Whakatipu.

| Wetland Value  | Value Type    |
|--|---------------|
| High diversity of fauna. A wide variety of waterfowl and swamp birds present including | <del>B1</del> |
| paradise shelduck, and grey duck, black swan, grey teal, pukeko.                       |               |

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### Schedule 10: Schedule of additional wetlands

This schedule contains wetlands which have not been assessed for Type A or Type B values. Drainage or diversion of water from these wetlands is not permitted without a resource consent. Before a resource consent will be granted, it will be necessary to ascertain whether a wetland in this schedule is found to support any Type A or Type B value.

This schedule is adopted to give effect to Policy 10.4.7 and relates to Rules 12.1.2.6 and 12.3.2.2.

It should be noted that the rules in Chapter 13 also apply where a wetland in this schedule is located within the bed of a lake or river.

| Site<br>Number | Wetland name                       | NZMS 260<br>series map sheet | Map<br>reference(s)           | <del>See Plan</del><br><del>map:</del> |  |
|----------------|------------------------------------|------------------------------|-------------------------------|--|--|
| 1.—            | Alexandra Swamp                    | G42                          | 288 484                       | <del>G4</del>                          | [moved to Schedule 9: see Long Gully<br>Marsh]                         |
| 2              | Anderson's Pond Margins            | I44                          | <del>975 930</del>            | <del>G7</del>                          | [moved to Schedule 9: see Andersons<br>Pond Margins]                   |
| 3.—            | Ashtonvale Dam Wetland<br>Areas    | 0H44                         | <del>827 984</del>            | <del>G7</del>                          | [deleted from Plan]  |
| 4.—            | Bailey's Hill Swamp                | F42                          | <del>890 366</del>            | <del>G3</del>                          | [deleted from Plan]  |
| 5.—            | Ben Nevis Swamp                    | F42                          | 952 495                       | <del>G3</del>                          | [deleted from Plan]  |
| 6.—            | Black Rock Swamp Complex           | <del>143</del>               | 002 181<br>015 193            | <del>G7</del>                          | [moved to Schedule 9: see Black Rock<br>Marshes                        |
| 7.—            | Black Stream Tributary<br>Swamps   | <del>G44</del>               | 488 904<br>486 907            | <del>G6</del>                          | [moved to Schedule 9: see Upper Black<br>Stream Marshes]               |
| 8.—            | Blair Swamp                        | G47                          | <del>218 089</del>            | <del>G8</del>                          | [moved to Schedule 9: see Blair Fen and Blair Swamp]                   |
| 9.—            | Braeside Wetland                   | H44                          | <del>864 710</del>            | <del>G7</del>                          | [moved to Schedule 9: see Braeside<br>Swamp]                           |
| <del>10</del>  | Bushbury Swamp Complex             | <del>G45</del>               | <del>395 578</del>            | <del>G6</del>                          | [deleted from Plan]  |
| 11.            | Cairn Road Swamp                   | <del>G46</del>               | <del>200 270</del>            | <del>G8</del>                          | [moved to Schedule 9: see Cairn Road Bog]                              |
| 12.            | Camp Stream Swamp                  | H46                          | <del>678 354</del>            | <del>G8</del>                          | [moved to Schedule 9: see Camp Stream Swamp]                           |
| 13.            | Campbell's Reserve Pond<br>Margins | <del>G40</del>               | <del>135 051</del>            | <del>G2</del>                          | [moved to Schedule 9: see Campbells<br>Reserve Pond Margins]           |
| 14.            | Cannibal Bay Road Wetland          | H46                          | <del>597 110</del>            | <del>G8</del>                          | [moved to Schedule 9: see Cannibal Bay<br>Road Swamp]                  |
| <del>15.</del> | Carson's Creek Swamp               | <del>G44</del>               | <del>374 773</del>            | <del>G6</del>                          | [deleted from Plan]  |
| <del>16.</del> | Charteris Bush Road Swamp          | F44                          | <del>096 847</del>            | <del>G6</del>                          | [deleted from Plan]  |
| <del>17.</del> | Clark's Junction Swamp             | H44                          | <del>826 938</del>            | <del>G7</del>                          | [deleted from Plan]  |
| 18.            | Clearview Swamp                    | G45                          | <del>343 455</del>            | <del>G8</del>                          | [deleted from Plan]  |
| <del>19.</del> | Clover Downs Wetland               | <del>143</del>               | <del>253 056</del>            | <del>G7</del>                          | [moved to Schedule 9: see Waikouaiti<br>River Estuary Wetland Complex] |
| <del>20.</del> | Confluence Swamp                   | <del>F41</del>               | <del>771 689</del>            | <del>G3</del>                          | [moved to Schedule 9: see Shotover<br>River Confluence Swamp]          |
| 21.            | Cross Eden Burn Swamps             | H41                          | 767 614<br>771 620<br>780 625 | <del>G4</del>                          | [moved to Schedule 9: see Cross Eden<br>Creek Marsh Complex]           |
| 22.            | Culcairn Oxbow                     | H46                          | <del>595 332</del>            | <del>G8</del>                          | [moved to Schedule 9: see Culcairn<br>Oxbow Marsh]                     |

| Site               | Wetland name                             | NZMS 260         | <del>Map</del>                | See Plan          |   |
|--------------------|--|------------------|-------------------------------|-------------------|---|
| Number             |  | series map sheet |                               | map:              |   |
| 23.                | Damper Pond Margins                      | F40              | <del>982 082</del>            | <del>G1</del>     | [deleted from Plan]   |
| <del>24.</del>     | Diggers Creek Swamp                      | <del>G47</del>   | <del>288 052</del>            | <del>G8</del>     | [moved to Schedule 9: see Harrington<br>Mill Road Swamp]            |
| 25.                | East Boundary Creek Swamp                | G43              | 4 <del>28 062</del>           | <del>G6</del>     | [moved to Schedule 9: see Boundary<br>Creek Fen]                    |
| <del>26.</del>     | Eldorada Dam Margins                     | H44              | <del>683 856</del>            | <del>G7</del>     | [deleted from Plan]   |
| <del>27.</del>     | Ellison Wetland                          | 143              | <del>265 064</del>            | <del>G7</del>     | [moved to Schedule 9: see Ellison<br>Saltmarsh]                     |
| <del>28.</del>     | Fernhill Swamp                           | H43              | <del>863 102</del>            | <del>G7</del>     | [moved to Schedule 9: see Fernhill<br>Marsh]                        |
| <del>29.    </del> | Finegand Lagoon                          | H46              | <del>586 317</del>            | <del>G8</del>     | [moved to Schedule 9: see Finegand<br>Lagoon Marsh]                 |
| <del>30.</del>     | Fortification Stream<br>Headwaters Swamp | H44              | <del>865 940</del>            | <del>G7</del>     | [moved to Schedule 9: see Fortification<br>Stream Headwaters Swamp] |
| 31.                | Gate Creek Swamp                         | H40              | <del>677 902</del>            | <del>G2</del>     | [deleted from Plan]   |
| 32.                | Gilmour Road wetland                     | G43              | <del>224-170</del>            | <del>G6</del>     | [moved to Schedule 9: see Gilmour<br>Road Marsh]                    |
| 33.                | Glendhu Swamp                            | H44              | <del>514 794</del>            | <del>G6</del>     | [moved to Schedule 9: see Glendhu<br>Swamp]                         |
| 34.                | Green Swamp                              | H42              | <del>684 330</del>            | <del>G4</del>     | [deleted from Plan]   |
| 35.                | Hawk's Burn Swamp                        | F42              | 093 493                       | G4                | [deleted from Plan]   |
| <del>36.</del>     | Hawkdun Runs Road Swamp<br>Complex       | <del>H40</del>   | 632 954<br>645 951<br>640 953 | <del>G2</del>     | [moved to Schedule 9: see Hawkdun<br>Runs Road Marsh]               |
| 37.                | Hazeldale Road Swamp                     | <del>G46</del>   | <del>278 292</del>            | <del>G8</del>     | [moved to Schedule 9: see Hazeldale<br>Fens]                        |
| <del>38.</del>     | Henley Swamp                             | H45              | 881 652 to<br>896 663         | <del>G7</del>     | [moved to Schedule 9: see Henley<br>Swamp]                          |
| <del>39.</del> –   | Hummock Runs Road Swamp                  | <del>143</del>   | <del>983-158</del>            | <del>G7</del>     | [deleted from Plan]   |
| 40.                | Hut Creek Swamp Complex                  | H40              | <del>672 918</del>            | <del>G2</del>     | [moved to Schedule 9: see Hut Creek<br>Swamps]                      |
| 41.                | Jennings Creek Swamp                     | <del>144</del>   | <del>296 911</del>            | <del>G7</del>     | [moved to Schedule 9: see Jennings<br>CreekMarsh]                   |
| <del>42</del>      | Johnson's Lagoon Margins                 | H46              | <del>717 326</del>            | <del>G8</del>     | [deleted from Plan]   |
| 43.                | Kaitangata Reservoir                     | H46              | <del>677 321</del>            | <del>G8</del>     | [deleted from Plan]   |
| 44.                | Kakaho Creek Swamp                       | J42              | <del>398 432</del>            | <del>G5</del>     | [moved to Schedule 9: see Kakaho<br>Creek Swamp]                    |
| <del>45.</del>     | Laws Road Swamp                          | H41              | <del>695 616</del>            | <del>G4</del>     | [moved to Schedule 9: see Laws Road<br>Swamp]                       |
| <del>46.</del>     | Linnburn Runs Road Wetland               | H43              | <del>627-265</del>            | <del>G4</del>     | [deleted from Plan]   |
| 47.                | Little Stoney Bog                        | E41              | 4 <del>76 819</del>           | <del>G1</del>     | [moved to Schedule 9: see Little Stoney Bog]                        |
| 48.                | Loch Loudon Swamp Complex                | H44              | 732 753                       | <del>G7</del>     | [moved to Schedule 9: see Loch Loudon Fen Complex]                  |
| 49.                | Loch Luella Swamp Complex                | H44              | 710 765<br>717 765            | <del>G7</del>     | [moved to Schedule 9: see Loch Luella<br>Fen Complex]               |
| 50.                | Lo-debar Swamp                           | H45              | <del>741 612</del>            | <del>G7</del>     | [deleted from Plan]   |
| 51.                | Lower Manorburn Dam<br>Margins           | <del>G42</del>   | <del>310 458</del>            | <del>G4</del>     | [moved to Schedule 9: see Lower<br>Manorburn Dam Margins]           |
| <del>52.</del>     | Lower Waipati River Swamp                | <del>G47</del>   | 247 952<br>256 945            | <del>G8</del>     | [moved to Schedule 9: see Samson Hill<br>Marshes]                   |
| 53.—               | MacFarlane Road Oxbow Pond<br>Margins    | G45              | <del>329 537</del>            | <del>G6, G8</del> | [moved to Schedule 9: see Macfarlane<br>Road Oxbow Swamp]           |
| 54.                | Malone's Dam Margins                     | H44              | 555 744                       | <del>G6</del>     | [moved to Schedule 9: see Malones<br>Dam Margins]                   |

| <del>Site</del>    | Wetland name   | NZMS 260         | <del>Map</del>                           | See Plan        |   |
|--------------------|--|------------------|--|-----------------|---|
| Number             | Trefferice frame   | series map sheet | reference(s)                             | <del>map:</del> | f 1. C.1.11.0 W   |
| <del>55.</del>     | Marana Swamp   | G45              | <del>375 564</del>                       | <del>G6</del>   | [moved to Schedule 9: see Marana<br>Swamp]  |
| <del>56.</del>     | Mayds Island Pond Margins                                  | <del>G</del> 44  | <del>353 906</del>                       | <del>G6</del>   | [moved to Schedule 9: see Island Block<br>Pond Marshes]   |
| 57.—               | Mayo Island Wetland Complex                                | <del>G</del> 44  | <del>355 907</del>                       | <del>G6</del>   | [moved to Schedule 9: see Island Block Pond Marshes]  |
| <del>58.</del>     | McGregor Swamp   | <del>143</del>   | <del>278 083</del>                       | <del>G7</del>   | [moved to Schedule 9: see McGregor Swamp]   |
| <del>59.    </del> | Mifton Hill Swamp  | <del>G45</del>   | <del>144 689</del>                       | <del>G6</del>   | [moved to Schedule 9: see Clifton Hill<br>Marshes]  |
| <del>60.</del>     | Minaret Bay Swamp  | F39              | 003-364                                  | <del>G1</del>   | [moved to Schedule 9: see Minaret Bay<br>Swamp]   |
| <del>61</del>      | Moffats Stream Swamp                                       | <del>G</del> 44  | 458 928                                  | <del>G6</del>   | [deleted from Plan]   |
| <del>62</del>      | Moke Creek Swamp   | <del>E41</del>   | 612 709                                  | <del>G3</del>   | [moved to Schedule 9: see Moke Creek<br>Swamp]  |
| <del>63</del>      | Office Creek Swamp   | H44              | <del>807 768</del>                       | <del>G7</del>   | [moved to Schedule 9: see Office Creek<br>Seepage]  |
| <del>64</del>      | <del>Old Dunstan Road Swamp</del>                          | H43              | <del>699 036</del>                       | <del>G7</del>   | [moved to Schedule 9: see Old Dunstan<br>Road Swamp]  |
| 65                 | <del>Old Dunstan Road Wetlands</del><br><del>Complex</del> | <del>H42</del>   | 505 430<br>506 439<br>512 430<br>499 424 | <del>G</del> 4  | [moved to Schedule 9: see Kirk Creek<br>Headwaters Marsh Complex]   |
| <del>66</del>      | Oldham Ponds Margins                                       | <del>F41</del>   | <del>754 745</del>                       | <del>G3</del>   | [deleted from Plan]   |
| <del>67</del>      | <del>Peat Moss Hills</del>                                 | <del>143</del>   | 060-108<br>060-101<br>060-093            | <del>G7</del>   | [moved to Schedule 9: see Peat Moss<br>Hills Fen Complex]   |
| <del>68</del>      | Phoenix Dam Margins  | H44              | <del>545 754</del>                       | <del>G6</del>   | [deleted from Plan]   |
| <del>69</del>      | Pleasant River Estuary Swamp                               | <del>J43</del>   | <del>308 146</del>                       | <del>G7</del>   | [moved to Schedule 9: see Pleasant<br>River Estuary Wetland Complex]  |
|                    | Pomahaka Oxbow Wetlands                                    | <del>G</del> 45  | 179 599<br>182 622                       | <del>G6</del>   | [moved to Schedule 9: see Pomahaka<br>River Oxbow Marsh (Koi Creek) and<br>Pomahaka River Oxbow Marsh (Dalvey<br>School Road) |
|                    | Pomahaka River Gully<br>Wetlands                           | <del>F44</del>   | <del>093 834</del>                       | <del>G6</del>   | [deleted from Plan]   |
| <del>72.  </del>   | Poverty Hill Swamp   | H46              | <del>704 387</del>                       | <del>G8</del>   | [moved to Schedule 9: see Frasers<br>Stream Headwaters Marsh Complex]   |
| <del>73.   </del>  | Rastus Burn Flats  | <del>F41</del>   | <del>808 696</del>                       | <del>G3</del>   | [deleted from Plan]   |
| 74.—               | Reefs Pond Margins   | <del>143</del>   | <del>957 023</del>                       | <del>G7</del>   | [moved to Schedule 9: see Reefs Pond<br>Margins]  |
| 75.—               | Rigney Pond Margins  | G44              | 354 <del>928</del>                       | <del>G6</del>   | [moved to Schedule 9: see Rigney Pond Margins]  |
| <del>76.</del>     | Scaife's Lagoon  | <del>F40</del>   | <del>960 085</del>                       | <del>G1</del>   | [moved to Schedule 9: see Scaifes<br>Lagoon]  |
| <del>77.    </del> | Shag Point Dam Margins                                     | <del>J43</del>   | <del>381 246</del>                       | <del>G7</del>   | [moved to Schedule 9: see Shag Point<br>Dam Margins]  |
| 78.                | Shagree Creek Swamp  | H46              | <del>770 349</del>                       | <del>G8</del>   | [moved to Schedule 9: see Measly<br>Beach Wetland Complex   |
| <del>79.</del>     | Signal Hill Swamp  | <del>E42</del>   | <del>540 545</del>                       | <del>G3</del>   | [moved to Schedule 9: see Signal Hill<br>Swamp]   |
| 80.                | Silver Peak Swamp  | G46              | <del>185-360</del>                       | <del>G8</del>   | [deleted from Plan]   |
| 81.                | South Boundary Road Swamp                                  | H45              | <del>766 628</del>                       | <del>G7</del>   | [deleted from Plan]   |
| 82.                | Stewarts Swamp   | <del>G47</del>   | <del>372 019</del>                       | <del>G8</del>   | [moved to Schedule 9: see Stuarts<br>Marsh]   |
| <del>83.    </del> | Stirling Swamp Complex                                     | <del>H46</del>   | <del>635 360</del>                       | <del>G8</del>   | [moved to Schedule 9: see Stirling Marsh Complex]   |

| <del>Site</del><br>Number | Wetland name                                | NZMS 260<br>series map sheet | <del>Map</del><br><del>reference(s)</del> | See Plan<br>map: |   |
|---------------------------|---|------------------------------|---|------------------|---|
| 84.                       | Stoneygrove Wetland                         | <del>145</del>               | 915 527                                   | <del>G8</del>    | [moved to Schedule 9: see Akatore<br>Creek Swamp]             |
| <del>85.</del>            | Tahakopa River Swamp                        | G47                          | <del>336 033</del>                        | <del>G8</del>    | [moved to Schedule 9: see Tahakopa<br>Marsh Complex]          |
| <del>86.</del>            | <del>Takitoa Swamp</del>                    | <del>145</del>               | <del>915-625</del>                        | <del>G7</del>    | [moved to Schedule 9: see Takitoa<br>Swamp]                   |
| <del>87.</del>            | Te Matai Swamp Complex                      | <del>1</del> 44              | 317 837                                   | <del>G7</del>    | [moved to Schedule 9: see Te Matai<br>Marsh Complex]          |
| <del>88.</del>            | The Gorge Swamp                             | <del>E41</del>               | <del>684 678</del>                        | <del>G3</del>    | [moved to Schedule 9: see Matakauri<br>Wetland]               |
| <del>89.</del>            | The Rivers Pond Margins                     | <del>143</del>               | <del>233 088</del>                        | <del>G7</del>    | [deleted from Plan]   |
| 90.                       | Three O'clock Stream Swamp                  | <del>143</del>               | 090 075                                   | <del>G7</del>    | [deleted from Plan]   |
| 91.                       | Three Stones Swamp                          | <del>G46</del>               | <del>320 373</del>                        | <del>G8</del>    | [moved to Schedule 9: see Three Stones Fen Complex]           |
| 92.                       | Timber Creek Tarn                           | <del>I41</del>               | 004-803                                   | <del>G5</del>    | [moved to Schedule 9: see Timber Creek<br>Seepage]            |
| <del>93.</del>            | Tokorangi Swamp                             | <del>G45</del>               | <del>178 668</del>                        | <del>G6</del>    | [deleted from Plan]   |
| 94.                       | Trig E Swamp                                | H45                          | <del>740 623</del>                        | <del>G7</del>    | [deleted from Plan]   |
| 95.                       | Trig F Swamp                                | <del>143</del>               | <del>085 199</del>                        | <del>G7</del>    | [deleted from Plan]   |
| <del>96.</del>            | <del>Upper Tahakopa Swamp</del>             | <del>G46</del>               | <del>205 175</del>                        | <del>G8</del>    | [moved to Schedule 9: see Upper<br>Tahakopa Swamps]           |
| <del>97</del>             | Upper Waiareka Stream Swamp                 | <del>J41</del>               | <del>359 788</del>                        | <del>G5</del>    | [moved to Schedule 9: see Upper<br>Waiareka Creek Swamp]      |
| <del>98.</del>            | Upper Waianakarua Estuary                   | <del>J42</del>               | <del>416 485</del>                        | <del>G5</del>    | [moved to Schedule 9: see Waianakarua<br>River Estuary Swamp] |
| <del>99.</del>            | Upper Waipahi River Swamp                   | <del>G46</del>               | <del>168 373</del>                        | <del>G8</del>    | [deleted from Plan]   |
| 100.                      | Upper Waipati River Swamp                   | G47                          | <del>243 968</del>                        | <del>G8</del>    | [deleted from Plan]   |
| 101.                      | Valley Creek Tributary Swamp                | <del>G44</del>               | 124 942                                   | <del>G6</del>    | [deleted from Plan]   |
| 102.                      | West Boundary Creek Swamp                   | G43                          | 420 070                                   | <del>G6</del>    | [moved to Schedule 9: see Boundary<br>Creek Fen]              |
| <del>103.</del>           | Wetland adjacent to the Stony<br>Creek Dams | H42                          | 668 410                                   | <del>G4</del>    | [moved to Schedule 9: see Clachanburn<br>Marsh]               |
| <del>104.</del>           | Wyndham Station Road Swamp                  | <del>G46</del>               | 194 304                                   | <del>G8</del>    | [moved to Schedule 9: see Dunvegan Fen Complex]               |

### Glossary

| R139 | <b>Regionally</b>  | See Policy 10.4.1A. |
|------|--------------------|---------------------|
|      | <b>Significant</b> |                     |
|      | Wetland            |                     |

| R140 | Regionally         | See Policy 10.4.1 |  |  |
|------|--------------------|-------------------|--|--|
|      | <b>Significant</b> |                   |  |  |
|      | Wetland Value      |                   |  |  |

R141 Tarn Small mountain lake or pool, often formed in a cirque basin.

Vpland bogs

A wet or spongy high altitude area of ground chiefly composed of decaying vegetable matter or peat.

[Provisions other those above unchanged]

## **Regional Plan: Water for Otago Maps**

[Note: The F-series of maps in the Regional Plan: Water for Otago Maps are proposed to be amended, and are shown in Appendix 1.]

[Note: The G-series of maps are proposed to be deleted.]

# R143 Consequential and minor changes

| <b>Plan Provision</b>                         | Detail of consequential or minor change   |  |                                  |                                  |  |
|---|---|--|----------------------------------|----------------------------------|--|
| Page numbers                                  | Change page numbers.  |  |                                  |                                  |  |
| Footer  | Change each footer to read:  Regional Plan: Water for Otago (Updated to 1 March 2010 < date to be inserted>)  |  |                                  |                                  |  |
| Various                                       | Amend or delete all references to changed provisions as appropriate.  |  |                                  |                                  |  |
| Various                                       | Replace references to "Pest Management Strategy for Otago 2001" with "Pest Management Strategy for Otago 2009".   |  |                                  |                                  |  |
| Title page                                    | Change the date to read:  Updated to 1 March 2010 < date to be inserted>  |  |                                  |                                  |  |
| Chronicle of<br>Key Events                    | Add the follow  | ving to the end                          | of the table:                    |                                  |  |
| Key Events                                    | Key event   | Date<br>notified                         | Date decisions released          | Date operative                   |  |
|   | Plan Change 2 (Regionally Significant Wetlands) to the Regional Plan: Water for Otago   | <date be<br="" to="">inserted&gt;</date> | < <u>Date to be</u><br>inserted> | < <u>Date to be</u><br>inserted> |  |
| Section 1.4<br>Process of Plan<br>preparation | Plan Change 2 (Regionally Significant Wetlands) was made operative on < date to be inserted>. It strengthened protection for regionally significant wetlands, as well as making provisions easier to read and understand, and providing better wetland information. |  |                                  |                                  |  |
| Schedule 9                                    | Reorder list of wetlands.   |  |                                  |                                  |  |
| Regional Plan:<br>Water for<br>Otago Maps     | Change proposed date to operative date.   |  |                                  |                                  |  |

