

# APPENDIX 1

## Proposed Plan Change 6A (Water Quality)

# Regional Plan: Water for Otago

Incorporating Council Decisions

*Note: All amendments to text in this Plan resulting from Proposed Plan Change 6A (Water Quality) as notified, and incorporating Council Decisions, are shown with additions underlined and deletions ~~struckout~~.*

*Proposed Plan Change 2 (Regionally Significant Wetlands) text is shown in this document in **blue italics**.*



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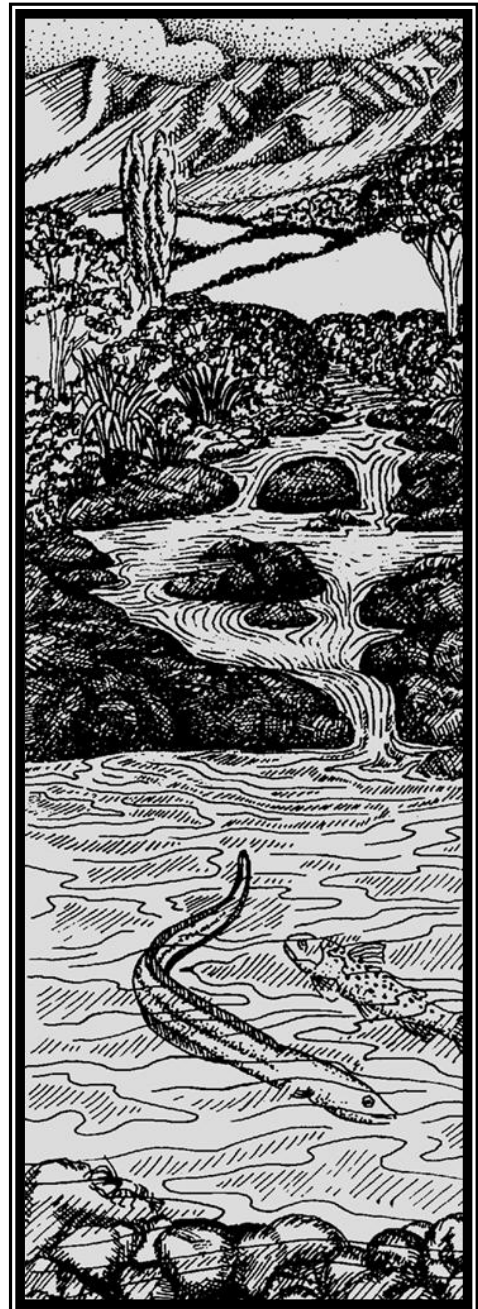
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# 7

## Water Quality



## 7.1 Introduction

The well being, health and safety of Otago's communities depends to a large degree on the quality of water in the region's lakes, and rivers and wetlands. Otago generally enjoys high quality water which provides opportunities for varied community use, including recreation, domestic and public water supply and irrigation. It also sustains indigenous flora and fauna, trout and salmon, and contributes to the amenity values and natural character of Otago's lakes, and rivers and wetlands.

Water quality can be adversely affected by discharges of contaminants and disturbance of the beds of rivers and lakes resulting from human activities. There are two main types of discharges that can affect water quality. These discharges are generally called "point source", those that occur at a definable place, often through a pipe or drain, and "non point source", those that enter a water body from a diffuse source, such as land runoff or infiltration. Where water quality is adversely affected by these discharges and bed disturbance, they will, in turn, reduce the ability of lakes and rivers to support Otago's people and communities, and aquatic life is reduced. There is a particular concern in relation to discharges of human sewage to water which Kai Tahu find culturally offensive.

Policy 6.5.5 of the Regional Policy Statement for Otago promotes a reduction in the adverse effects of contaminant discharges to Otago's water bodies. Existing water quality is to be maintained and, where appropriate, is to be enhanced to support aquatic life, and contact recreation. This chapter seeks to achieve this through the management of point source and non point source discharges. The management of discharges by resource users is also promoted where that can be effective.

This chapter provides for management of discharges that may adversely affect water quality. It is recognised that water quality can be adversely affected by the taking of water, in that such takes may reduce the capacity of a lake or river to assimilate contaminants. Adverse effects due to a contaminant discharge should be mitigated in the first instance by reducing the level of contaminant being discharged, rather than increasing the assimilative capacity of the water body.

The city and district councils of Otago have an essential role in achieving water quality objectives, particularly through their management of the effects of land use, in relation to non point source discharges. The objectives and policies of this Plan will provide the necessary direction for that.

**Note:** The provisions in this chapter are in addition to those in Chapter 5, which seek to maintain or enhance the natural and human use values supported by lakes, and rivers and wetlands.

The provisions in this chapter are in addition to those in Chapter 5, which seek to maintain or enhance the natural and human use values supported by lakes, and rivers and wetlands; and those included in Chapter 9, which contain policies on groundwater quality.

## 7.2 — Issues in general

### ~~7.2.1 — Discharges of contaminants, on their own or cumulatively, can adversely affect the life-supporting capacity and people's use of Otago's lakes and rivers.~~

#### **Explanation**

~~The discharge of contaminants may exceed a water body's capacity to absorb or assimilate them. This can result in any of the following changes to water quality:~~

- ~~(a) — Increased sediment loads;~~
- ~~(b) — The presence of floatables (grease, fat, solids etc);~~
- ~~(c) — Offensive odours;~~
- ~~(d) — Increased BOD<sub>5</sub>;~~
- ~~(e) — Increased nutrient levels;~~
- ~~(f) — Decreased oxygen concentrations;~~
- ~~(g) — Increased pathogenic contamination;~~
- ~~(h) — Increased levels of toxic substances.~~

~~Such changes can reduce the ability of water bodies to support people's use of water and the plants and animals that live in that water. Given the importance of water use to people and the intrinsic value of aquatic life, such reductions in water quality are of concern.~~

*Objectives: 7.5.1*

*Policies: 7.7.1 to 7.7.11, 7.8.1 to 7.8.6, 8.8.2*

### ~~7.2.2 — In some Otago lakes and rivers, discharges of contaminants have resulted in water quality degradation so that their ability to support aquatic life or contact recreation is compromised.~~

#### **Explanation**

~~The point source or non point source discharge of contaminants has already adversely affected the water quality in some of Otago's lakes and rivers. This has reduced the ability of these water bodies to support contact recreation, or plants and animals that live in that water. Such degraded water quality is of concern to Otago's communities and visitors.~~

*Objectives: 7.5.1*

*Policies: 7.6.1 to 7.6.3, 7.7.3, 7.7.11*

### ~~7.3 Issues related to point source discharges to water~~

#### ~~7.3.1 Inappropriately large mixing zones for the discharge of contaminants can compromise the natural and human use values supported by water bodies for considerable distances downstream.~~

##### **Explanation**

~~Discharges of contaminants authorised under resource consents must meet any specified water quality standard set in respect of receiving waters after reasonable mixing. Reasonable mixing occurs in a mixing zone, which can be regarded as an accepted area of non-compliance. Beyond the mixing zone, there should be no adverse effects on the natural and human use values supported by the water body.~~

~~Where the size of mixing zones is inappropriate, the effect of the contaminant extends over a wider area of the water body. The treatment of contaminants prior to discharge can enable a reduction in the extent of a mixing zone. What is acceptable as a mixing zone in one water body may not be acceptable in others, due to differences in the sensitivity of supported values, the physical nature of the natural processes, and the nature of the discharge. All of these factors need to be considered in the determination of reasonable mixing.~~

*Objectives: 7.5.1*

*Policies: 7.7.6*

#### ~~7.3.2 Some point source discharges, including those that are subject to a resource consent, can have unforeseen adverse effects on water quality.~~

##### **Explanation**

~~When resource consents are granted allowing discharges of contaminants to water, conditions are included with the intention that, if they are complied with, the natural and human use values supported by the receiving water body would not be adversely affected. In some cases, the values of a water body are adversely affected by the discharge, even though the resource consent conditions are being complied with. Where this occurs, it may be necessary to review the conditions of the resource consent.~~

*Objectives: 7.5.1*

*Policies: 7.7.8, 7.7.9*

#### ~~7.3.3 Stormwater discharges are unavoidable, but may contain contaminants that have the potential to degrade water quality.~~

##### **Explanation**

~~Stormwater is the water that runs off any impervious surface. In urban or industrial areas, stormwater is commonly collected, reticulated and discharged to water. The water can pick up contaminants prior to collection, as it runs over land. These contaminants may be derived from a number of sources, including:~~



- (a) — Oil residues and other contaminants from roads and car parks;
- (b) — Accidental spills;
- (c) — Contaminated land; and
- (d) — Litter.

Once stormwater reaches a reticulation system, it can become contaminated through:

- (a) — Sewerage and stormwater systems not being effectively separated; or
- (b) — Inappropriate disposal of material to the system.

There are a number of techniques used to improve the condition of stormwater prior to its discharge.

*Objectives: 7.5.1*

*Policies: 7.7.4, 7.7.10, 7.7.11*

#### ~~7.3.4 — Contaminants are not always discharged to the most appropriate receiving environment.~~

##### **Explanation**

Receiving environments need to be able to assimilate, treat, or absorb the contaminants discharged to them. In the past, water has been used as the most common medium for the disposal of contaminants, although soil is increasingly being seen as an alternative receiving environment. There is a risk of contamination where the discharge exceeds the capacity of the water or land to contain it. Where soil's capacity to assimilate the contaminants is exceeded, subsequent contamination of water may occur through runoff and infiltration.

*Objectives: 7.5.1, 7.7.5*

*Policies: 7.7.1 to 7.7.4*

### ~~7.4 — Issues related to non-point source discharges to water~~

#### ~~7.4.1 — Water can become contaminated as a result of land use activities which:~~

- ~~(a) — Result in discharges of effluent, nutrients or other contaminants;~~
- ~~(b) — Could potentially result in accidental spills of contaminants; and~~
- ~~(c) — Disturb or generate sediment.~~

##### **Explanation**

The contaminants generated by, or used in conjunction with, land use activities may be carried to surface water bodies through runoff. The risk of contamination of surface water depends on the:

- (a) — Nature and intensity of the land use;
- (b) — Distance of the activity from a lake or river;
- (c) — Nature of the land between the activity and the water; and
- (d) — Degree to which the associated contaminants are contained.

~~It is more difficult to manage non-point source contamination, including accidental spills, compared to point source contamination, due to its diffuse or random nature. Non-point source discharges can, however, undermine all efforts previously made to maintain or enhance water quality.~~

~~Objectives: 7.5.1~~

~~Policies: 7.8.1 to 7.8.4~~

~~**7.4.2 The erection of a dam for the storage of contaminants can result in the loss or damage to:**~~

- ~~(a) The health and safety of people and communities;~~
- ~~(b) Property and infrastructure;~~
- ~~(c) The natural and human use values identified in Schedule 1 supported by any water body affected;~~
- ~~(d) The natural character of any water body affected; and~~
- ~~(e) The amenity values supported by any water body affected, should the dam fail or be overtopped.~~

~~**Explanation**~~

~~Dams may be used to hold quantities of contaminants such as mining tailings, which can lead to degradation of water quality if there is an uncontrolled release. Such a release could occur through a failure of the structure, or an overtopping caused by, for example, a landslide into the reservoir. The adverse effects may include contamination of water, or loss of values supported by affected water bodies. The scale of the risk of damage depends on the size of the dam structure, the volume and nature of contaminants stored, and topography.~~

~~Objectives: 7.5.1~~

~~Policies: 7.8.6~~

~~**7.4.3 Water can be contaminated where contaminated land:**~~

- ~~(a) Is flooded by an impoundment of water; or~~
- ~~(b) Has water diverted over or through it.~~

~~**Explanation**~~

~~There is the potential for adverse effects on surface and groundwater quality where land, contaminated by a hazardous substance, is in contact with water. Damming or diverting water can lead to such direct contact.~~

~~Objectives: 7.5.1, 9.3.3~~

~~Policies: 7.8.5, 9.4.18 to 9.4.21~~

**7.5A Objectives**

~~**7.5.1 To maintain or enhance the quality of water in Otago's lakes and rivers so that it is suitable to support their natural and human use values and people's use of water.**~~

**Explanation**

Otago's lakes and rivers contain a diverse range of natural and human use values and are extensively used by people and the community. The existing water quality in most of the region's lakes and rivers is sufficient to support these values. It is therefore important that no degradation is allowed to occur. This is consistent with Policy 6.5.5 of the Regional Policy Statement for Otago which requires that existing water quality be used as the minimum acceptable standard. This policy also identifies the circumstances in which enhancement of water quality will be sought so that it is suitable for contact recreation and aquatic life. Policies 7.6.1, 7.6.2 and 7.6.3 of this Plan identify those water bodies which are considered to be degraded in this context.

**Principal reasons for adopting**

This objective is adopted to ensure that the uses and values of Otago's lakes and rivers that are significant to the region's people and communities, or are important due to their intrinsic value, can continue to be used, enjoyed or appreciated. This reflects the community's expectation that water quality within Otago should support these uses and values.

*Policies: 7.6.1 to 7.6.3, 7.7.1 to 7.7.11, 7.8.1 to 7.8.6*

*See also: 8.6.1, 8.6.2, 8.7.1, 8.8.1, 8.8.2*

**7.A.1 To maintain water quality in Otago lakes, rivers, wetlands, and groundwater, but enhance water quality where it is degraded.****7.A.2 To enable the discharge of water or contaminants to water or land, in a way that maintains water quality and supports natural and human use values.****7.A.3 To have individuals and communities manage the effects, including cumulative effects, of their activities on water quality.****7.B Policies general****7.B.1 Manage the quality of water in Otago lakes, rivers, wetlands and groundwater by:**

- (a) Recognising the differences in the effects and management of point and non-point source discharges; and**
- (b) Defining, in Schedule 15, characteristics and standards that describe good quality water; and**
- (c) Maintaining, from the dates specified in Schedule 15, good quality water; and**
- (d) Enhancing water quality where it does not meet Schedule 15 standards; and**
- (e) Recognising discharge effects on groundwater.**

**7.B.2 Avoid objectionable discharges of water or contaminants that degrade the natural and human use values of Otago lakes, rivers, wetlands and groundwater.**

**7.B.3 Allow discharges of water or contaminants to Otago lakes, rivers, wetlands and groundwater that have minor effects or are short-term.**

**7.B.4 [Moved from 7.7.2] When considering the any discharge of water or any contaminants to land, to have regard to:**

- (a) The ability of the land to assimilate the water or contaminants; and**
- (b) Any potential for soil contamination; and**
- (c) Any potential for land instability; and**
- (d) Any potential adverse effects on water quality.**

**7.B.5 When considering any discharge of water from one catchment to water in another catchment, have regard to:**

- (a) Tangata whenua values; and**
- (b) The adverse effects of introducing species that are new to the receiving catchment.**

**7.B.6 [Moved from 7.7.8] To require, as appropriate, that any resource consent for discharging water or contaminants contains a review condition provision be made for review of the conditions of any resource consent for discharging a contaminant.**

**7.B.7 Encourage land management practices that reduce the adverse effects of water or contaminants discharged into water.**

**7.B.8 Encourage adaptive management and innovation that reduces the level of contaminants in discharges.**

## **~~7.6 Policies for the enhancement of water quality~~**

**~~7.6.1 To enhance the water quality in the following water bodies so that they become suitable to support primary contact recreation:~~**

- ~~(a) Mill Creek and Lake Hayes;~~**
- ~~(b) Kaikorai Stream;~~**
- ~~(c) Water of Leith;~~**
- ~~(d) Lower Taieri River (below Allanton);~~**
- ~~(e) Lower Silver Stream (below Riccarton Road);~~**
- ~~(f) Koau Branch of the Clutha River/Mata-Au;~~**
- ~~(g) Tokomairiro River;~~**
- ~~(h) Lower Waiwera River (below SH 1);~~**
- ~~(i) Heriot Burn; and~~**
- ~~(j) Crookston Burn.~~**

**Explanation**

~~The water bodies identified above meet one or more of the criteria for enhancement in Policy 6.5.5 of the Regional Policy Statement for Otago.~~

~~Otago Regional Council monitoring has shown that the identified water bodies all have median faecal coliform numbers exceeding the level recommended for primary contact recreation (200 CFU/100 ml – USEPA Criteria). Faecal coliforms are an indicator of the presence of disease-causing pathogens, associated with human or animal waste. The ability to safely undertake recreational activities in water is an appropriate indicator of the quality of water within Otago. High numbers of faecal coliforms prevent the safe contact with water in the water bodies identified above.~~

~~The enhancement of water quality to a standard suitable for contact recreation will be pursued through the management of point source and non-point source discharges, regardless of whether the water bodies are artificially augmented or not.~~

**Principal reasons for adopting**

~~This policy is adopted to implement Policy 6.5.5 of the Regional Policy Statement for Otago, which requires, where appropriate, the enhancement of Otago's water quality. This reflects the community expectation that water quality within Otago will continue to support natural and human use values. The successful implementation of this policy would provide the opportunity for safe contact recreation in the identified water bodies.~~

~~Rules: 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, 12.11.3.1, 12.13.1.1~~

~~Other methods: 15.2.3.1, 15.2.5.1 to 15.2.7.1, 15.2.8.1 to 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.5.1.1, 15.5.1.2, 15.9.1.1, 15.9.1.2~~

~~**7.6.2 To enhance the water quality in the following rivers so that the Macroinvertebrate Community Index score is increased:**~~

- ~~(a) Hayes Creek;~~
- ~~(b) Lower Horne Creek (below gardens walkway);~~
- ~~(c) Lower Kaikorai Stream (below Townleys Road);~~
- ~~(d) Lower Taieri River (below Allanton);~~
- ~~(e) Lower Waipori River (below Lake Waipori);~~
- ~~(f) Lower Tokomairiro River (below Tokoiti);~~
- ~~(g) Lower Owaka River (below SH 92);~~
- ~~(h) Lower Waiareka Creek (below Elderslie Road, Round Hill);~~
- ~~(i) Lower Kaihiku Stream (below Clifton Road); and~~
- ~~(j) Lower Wairuna Stream (below Waipahi-Clydevale Road).~~

**Explanation**

~~The rivers identified above meet one or more of the criteria for enhancement in Policy 6.5.5 of the Regional Policy Statement for Otago.~~

~~The condition of aquatic habitat can be measured by the Macroinvertebrate Community Index (MCI) which is an indicator of the condition of benthic~~

~~(bottom dwelling) invertebrate communities. The MCI is the most widely used and best known index for New Zealand aquatic invertebrates, and is an appropriate indicator of the life-supporting capacity of rivers. Otago Regional Council monitoring has shown that the identified water bodies all have invertebrate communities which are not characterised by the diversity and composition which could be expected in like habitat types (see Appendix 1). This condition is thought to be at least partly related to poor water quality.~~

~~While this policy aims to increase MCI scores, other types of monitoring may also be used in the pursuit of enhancing water quality and habitat. The enhancement of water quality to a standard which supports a higher MCI score will be pursued through the management of point source and non-point source discharges. Appendix 1 identifies the MCI scores that will be sought for the water bodies identified in the policy.~~

**~~Principal reasons for adopting~~**

~~This policy is adopted to implement Policy 6.5.5 of the Regional Policy Statement for Otago, which requires, where appropriate, the enhancement of Otago's water quality. This reflects the community expectation that water quality within Otago will continue to support natural and human use values. The successful implementation of this policy would reflect improved habitat quality in the identified rivers.~~

~~Rules: 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, 12.11.3.1, 12.13.1.1~~

~~Other methods: 15.2.3.1, 15.2.5.1 to 15.2.7.1, 15.2.8.1 to 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.5.1.1, 15.5.1.2, 15.9.1.1, 15.9.1.2~~

**~~7.6.3 To enhance the water quality in the following lakes so that the aquatic ecosystem is enhanced:~~**

- ~~(a) Lake Hayes;~~
- ~~(b) Lake Johnson;~~
- ~~(c) Lake Tuakitoto;~~
- ~~(d) Lake Waipori; and~~
- ~~(e) Lake Waihola.~~

**~~Explanation~~**

~~The lakes identified above meet one or more of the criteria for enhancement in Policy 6.5.5 of the Regional Policy Statement for Otago.~~

~~Otago Regional Council monitoring has shown that the identified water bodies all have had nitrogen and phosphorus loadings exceeding that recommended (0.5 gN/m<sup>3</sup> and 0.05 gP/m<sup>3</sup> respectively — ANZECC Guidelines) as being suitable for aquatic ecosystems.~~

~~The enhancement of water quality to a standard which supports an enhanced aquatic ecosystem will be pursued through the management of point source and non-point source discharges.~~

**Principal reasons for adopting**

This policy is adopted to implement Policy 6.5.5 of the Regional Policy Statement for Otago, which requires, where appropriate, the enhancement of Otago's water quality. This reflects the community expectation that water quality within Otago will continue to support natural and human use values.

*Rules:* ~~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, 12.11.3.1, 12.13.1.1~~

*Other methods:* ~~15.2.3.1, 15.2.5.1 to 15.2.7.1, 15.2.8.1 to 15.2.8.3, 15.4.2.1, 15.4.2.2, 15.5.1.1, 15.5.1.2, 15.9.1.1, 15.9.1.2~~

~~7.6.4~~ **When considering any application for a discharge the Council will have regard to the following matters:**

- ~~(a) The extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and~~
- ~~(b) The extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.~~

~~This policy applies to the following discharges (including a diffuse discharge by any person or animal):~~

- ~~(a) A new discharge or~~
- ~~(b) A change or increase in any discharge – of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.~~

~~This policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management takes effect on 1 July 2011.~~

~~7.7~~ **Policies for point source discharges**

**7.C Policies for discharges of human sewage, hazardous substances, hazardous wastes, specified contaminants, and stormwater; and discharges from industrial or trade premises and consented dams**

**~~7.7.1 To promote discharges of contaminants to land in preference to water, where appropriate.~~**

**Explanation**

~~The Otago Regional Council's preference for the discharge of contaminants to the environment is that they be discharged to land, including constructed wetlands, as opposed to water. It is recognised that the discharge of organic materials may benefit soil health. Some discharges to land, however, may still contaminate water resources, through runoff to surface waters, or through leaching to groundwater, or have adverse effects on soil. Such effects are addressed in Policy 7.7.2. The Regional Council may not promote discharges of contaminants to land in circumstances where those adverse effects could occur.~~

~~In any case involving the discharge of contaminants to land or to water, the requirements of this Plan will apply in managing their effects on the environment.~~

**Principal reasons for adopting**

~~This policy is adopted to avoid the adverse effects of discharges to water by promoting land disposal as a suitable alternative to such discharges in appropriate circumstances. This is particularly important to Kai Tahu, who find the discharge of human sewage to water culturally offensive.~~

~~Rules: 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, 12.11.3.1, 12.13.1.1~~

**~~7.7.2 [Policy moved to 7.B.4] When considering the discharge of any contaminant to land, to have regard to:~~**

- ~~(a) The ability of the land to assimilate the contaminant;~~
- ~~(b) Any potential for soil contamination; and~~
- ~~(c) Any potential for land instability.~~

**Explanation**

~~While the discharge of contaminants to land is often preferable to the direct discharge to water, the ability of the land to assimilate the discharge without adverse effects has its limits. Where those limits may be exceeded, there is a need to consider potential adverse effects on water quality, soil, and land stability. Subsequent policies in this section address the effects of these discharges on lakes and rivers. Discharges to land may also result in contaminants leaching to groundwater. Policy 9.4.18 addresses the management of land associated with groundwater protection. Policies in Chapter 10 address any adverse effects of discharges on wetlands.~~

~~The land resource can also be adversely affected by discharges:~~



- (i) ~~Where the presence of particular substances in the discharge can result in soil contamination; or~~  
 (ii) ~~Where land becomes physically unstable and prone to slippage due to excessive ground moisture.~~

~~In the consideration of resource consents for the discharge of contaminants to land regard will be had to matters (a) to (c) of the policy.~~

~~In assessing activities regarding (b) and (c) of this policy, regard may be had to guidelines produced by the Department of Health and industry groups, as appropriate.~~

**Principal reasons for adopting**

~~This policy is adopted to ensure that any adverse effects from the discharge of contaminants to land are considered in relation to the effects of the same discharge to water.~~

~~Rules: 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, 12.11.3.1, 12.13.1.1~~

~~Other methods: 15.5.1.1, 15.5.1.2~~

**7.7.3 to 7.7.4 [no change]**

**~~7.7.5 When considering applications for resource consents, to have regard to the cumulative effects of discharges of contaminants and the assimilative capacity of the water body.~~**

**Explanation**

~~Discharges of contaminants from all sources can exceed the capacity of the receiving water body to assimilate them. The opportunity to manage the cumulative effect of discharges will arise when considering applications for resource consents.~~

~~The taking of water can also influence the effect of discharges on a water body, by reducing the quantity of water available to assimilate contaminants. Although effects of takes on water quality are not considered to be an issue in terms of the Plan's scheduled minimum flows, consents considered under Policy 6.4.4, 6.4.6, 6.4.7 or 6.4.9(b) would need to have regard to any cumulative effects on assimilative capacity.~~

~~Regard will have to be had to existing discharges to the proposed receiving waters and the adverse effects they are having. Water quality monitoring will be critical in establishing the cumulative effects of discharges.~~

**Principal reasons for adopting**

~~This policy is adopted to ensure that the cumulative effects of discharges, the assimilative capacity of the water body and the effects of any takes of water considered under Policy 6.4.4, 6.4.6, 6.4.7 or 6.4.9(b), will all be considered when assessing applications for resource consents.~~

*Rules: 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, 12.11.3.1, 12.13.1.1*

**7.7.6 to 7.7.7** [no change]

**7.7.8** [*Policy moved to 7.B.6*] ~~To require, as appropriate, that provision be made for review of the conditions of any resource consent for discharging a contaminant.~~

**Explanation**

~~Except as provided for by Policy 7.7.9(b) and (c), resource consents to discharge contaminants are issued with the expectation that the natural and human use values of the receiving water body will be maintained or enhanced. There are occasions however, where a consented discharge has unforeseen effects on water quality. In circumstances where the potential for an adverse effect is greatest, particularly due to the nature of the material discharged, review of the resource consent conditions may become necessary. Reviews of this nature are provided for by Section 128(1)(a)(i) of the Resource Management Act. To enable this review, a condition will be included, as appropriate, on any resource consent to discharge contaminants to water or land.~~

**Principal reasons for adopting**

~~This policy is adopted to provide an opportunity to review the conditions of resource consents within their duration, to address any unforeseen adverse effects on water quality resulting from the exercise of the resource consent. Such adverse effects may result from environmental or community change over time. Where a resource consent has been issued for a long term, it may be unacceptable to wait for the end of its duration to deal with any problem that has arisen.~~

*Rules: 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, 12.11.3.1, 12.13.1.1*

**7.7.9 to 7.7.11** [no change]

**7.8 — Policies for non-point source discharges**

~~**7.8.1** — To promote the avoidance, remediation or mitigation of the adverse effects of the increased runoff of nutrients and sediments caused by:~~

- ~~(a) Agricultural land uses;~~
- ~~(b) Urban development;~~
- ~~(c) Forest harvesting and site preparation;~~
- ~~(d) Roading and tracking ; and~~
- ~~(e) Any other activity that may generate increased runoff of sediment or nutrients.~~

**Explanation**

~~Non-point source discharges are the cause of much of the contamination entering Otago's lakes and rivers.~~

The Otago Regional Council will inform those involved with the activities identified in the policy of the actions that can be undertaken to reduce the level of nutrients or sediment present in runoff. Actions that would be promoted would vary, depending on the nature and scale of the activity and the land concerned, but could include any of the following:

- Facilitation of communication between interested groups;
- Development of environmental farm plans, including the establishment of a nutrient budget, and the prevention of inappropriate stock access to water bodies;
- Development of forest management plans;
- Encouragement of self-monitoring programmes;
- Riparian planting and management; and
- Including relevant provisions in district plans, and relevant conditions on district council resource consents.

The Council also has a role in enforcing compliance with the duty of any person, under Section 17 of the RMA, to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of that person.

#### **Principal reasons for adopting**

This policy is adopted to recognise that the adverse effects of particular land use activities on water quality can be reduced by changing some management practices and implementing new ones. Education and promotion will be the most effective way of bringing about more desirable management practices.

*Other methods: 15.2.3.1, 15.2.7.1, 15.4.2.1, 15.4.2.2, 15.5.1.1, 15.5.1.2*

7.8.2 to 7.8.6 [no change]

## **7.D Policies for discharges of water and contaminants, excluding those discharges provided for in 7.C**

### **7.D.1 Encourage innovation in management practices and the sharing of information, including by:**

#### **(a) Council:**

- (i) Providing information on water quality and water quantity; and**
- (ii) Supporting landholders in measuring or assessing contaminants in discharges; and**
- (iii) Supporting the development of means to measure or assess contaminants in discharges.**

#### **(b) Landholders:**

- (i) Implementing practices that reduce the level of contaminants in discharges; and**
- (ii) Providing relevant information to support the catchment or aquifer studies undertaken by Council.**

**7.D.2 Schedule 16 discharge contaminant concentration limits apply, from 1 April 2020, at or below the reference flows set in Schedule 16B based on median flows.**

**7.D.3 Prohibit objectionable discharges of water or contaminants that degrade the natural and human use values of Otago lakes, rivers, wetlands and groundwater.**

**7.D.4 Provide for the consenting of any discharge under section 12.C:**

- (a) Where changes to land management practices or infrastructure have not been sufficient to meet permitted activity rules; or**
- (b) As part of the development of technology or innovative practices associated with improving water quality; or**
- (c) From a short-term activity with short-term adverse effects.**

**7.D.5 When considering any discharge under section 12.C, have regard to:**

- (a) The effects of the discharge on water quality, including cumulative effects; and**
- (b) A staged timeframe and management plan to achieve compliance with the permitted activity rules; and**
- (c) The extent to which the contaminants in the discharge result from the activities of the applicant; and**
- (d) The likelihood that the staged timeframe and management plan can be successfully applied; and**
- (e) The current state of technical knowledge.**

**7.D.6 When considering the duration of a resource consent under section 12.C, have regard to:**

- (a) The staged timeframe to achieve compliance with the permitted activity rules;**
- (b) The extent to which the contaminants in the discharge result from the activities of the applicant;**
- (c) Trends in the quality of the receiving water relative to the Schedule 15 standards;**
- (d) Any adverse effects of the discharge on the maintenance of natural and human use values;**
- (e) The extent to which the risk of potentially significant, adverse effects arising from the activity may be adequately managed through review conditions;**
- (f) The value of the investment in infrastructure; and**
- (g) The use of industry best practice.**

**7.D.7 The duration of a resource consent for a discharge, which breaches any relevant Schedule 16 or nitrogen leaching limit, will not exceed:**

- (1) Two years for discharges from a short-term activity with short-term adverse effects; or**
- (2) Five years for all other discharges where the contaminants in the discharge result from the activities of the applicant.**

**7.9 Anticipated environmental results**

~~7.9.1 Water quality is enhanced so that it is suitable for contact recreation or aquatic life, where there is:~~

- ~~(a) A high public interest in, or use of the water; or~~
- ~~(b) A particular Kai Tahu interest in the water; or~~
- ~~(c) A particular value to be maintained or enhanced; or~~
- ~~(d) A direct discharge containing human sewage or wastes from commercial or industrial activities.~~

~~7.9.2 Existing water quality is maintained.~~

~~7.9.3 People and communities have access to suitable supplies of high quality water for their present and reasonably foreseeable needs.~~

~~7.9.4 Alternative receiving environments are adopted in preference to contaminants being discharged to water.~~

~~7.9.5 Appropriate receiving environments are utilised for any discharge of contaminants.~~

~~7.9.6 Land use practices that are sustainable in terms of water quality requirements are utilised.~~

~~7.9.7 Hazardous substances and other contaminants do not enter surface water bodies and adversely affect water quality.~~

~~7.9.8 There is no increase of sediment or nutrient loads in surface water bodies resulting from the use, development or protection of land.~~

~~7.9.9 Water quality is maintained or enhanced in order to support:~~

- ~~(i) Aquatic life fit for human consumption; and~~
- ~~(ii) Mauri of water and mahika kai values.~~

~~Note that anticipated environmental results 7.9.1 to 7.9.4 and 7.9.6 to 7.9.9 apply to water or water bodies other than those water bodies constructed to receive contaminants.~~

~~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** *[no change]*

**12.1 The taking and use of surface water** *[no change]*

**12.2 The taking and use of groundwater** *[no change]*

**12.3 The damming or diversion of water** *[no change]*

**~~12.4 Discharge of stormwater~~**

**~~12.4.1 Permitted activities: No resource consent required~~**

~~12.4.1.1 [Rule moved to 12.B.1.8]~~

~~12.4.1.2 [Rule moved to 12.B.1.9]~~

**~~12.4.2 Restricted discretionary activities: Resource consent required~~**

~~12.4.2.1 [Rule moved to 12.B.3.1]~~

**~~Principal reasons for adopting~~**

~~The discharge of stormwater to 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 regulation, or by a resource consent (Section 15(1) of the Resource Management Act 1991). The discharge of stormwater to land (where it does not enter water) cannot be carried out in a manner that contravenes a rule in a regional plan or proposed regional plan (Section 15(2) of the Resource Management Act).~~

~~The discharge of stormwater under Rules 12.4.1.1 and 12.4.1.2 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 stormwater to be discharged while providing protection for those values and the interests of those people. Any other activity involving the discharge of stormwater is a restricted discretionary activity in order that any adverse effects can be assessed.~~

**~~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~~

~~(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,~~



- ~~seums 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**

~~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 a significant wetland value identified in Schedule 9; and~~
- ~~(c) Any financial contribution for Type B wetland values 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~~
- ~~(l) 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**

~~The discharge of drainage water to 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 regulation, or by a resource consent (Section 15(1) of the Resource Management Act 1991).~~

~~The discharge of drainage water under Rule 12.5.1.1 will have no more than minor adverse effects on the natural and human use values supported by water bodies, or on any other person. This rule is adopted to enable drainage water to be discharged while providing protection for those values and the interests of those people. Any other activity involving the discharge of drainage water is a restricted discretionary activity in order that any adverse effects can be assessed.~~

## **12.6A Discharge of human sewage**

### **12.A.A General Rules for section 12.A**

12.A.A.1 The discharge rules in section 12.A apply where a discharge contains human sewage.

12.A.A.2 The discharge rules in sections 12.A and 12.B apply where a discharge:

(a) Contains both human sewage and a contaminant provided for in section 12.B; or

(b) Contains human sewage and is from an industrial or trade premises, or a consented dam.

Note: ~~1. Where sullage is separated from human sewage, its discharge is covered by Rules under 12.11 and 12.13.~~

~~2. The approval of particular technologies for the on-site treatment of human sewage under particular land conditions will usually require the involvement of the relevant city or district council, under the Building Act 2004 or the Health Act 1956. This Plan deals only with the effect of the discharge on the environment, and does not promote any particular technology or treatment method.~~

**12.6.1 to 12.6.2 [no change]**

**12.7B Discharge of pesticides hazardous substances, hazardous wastes, specified contaminants, and stormwater; and discharges from industrial or trade premises and consented dams**

**12.B.A General Rules for section 12.B**

12.B.A.1 The discharge rules in section 12.B apply where a discharge:

- (a) Contains a contaminant provided for in section 12.B; or
- (b) Is from an industrial or trade premises or consented dam.

12.B.A.2 The discharge rules in sections 12.A and 12.B apply where a discharge:

- (a) Contains both human sewage and a contaminant provided for in section 12.B; or
- (b) Contains human sewage and is from an industrial or trade premises, or a consented dam.

**12.B.1 ~~12.7.1~~ Permitted activities: No resource consent required**

12.B.1.1 ~~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 Chemical Applicator certificate ~~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, river or any Regionally Significant Wetland.*

12.B.1.2 ~~12.7.1.2~~ Except as provided for by Rule ~~12.8.1.1~~ 12.B.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 damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.*

12.B.1.3 ~~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, river or any Regionally Significant Wetland; and*
- (g) *There is no damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.*

12.B.1.4 ~~12.7.1.4~~ Except as provided for by Rule ~~12.7.1.3~~ 12.B.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 Chemical Rating certificate ~~Growsafe Pilots' Agrichemical Rating Certificate of Qualification~~; 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 damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.*

12.B.1.5 *[Moved from 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, 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 damage to fauna or New Zealand native flora, in or on any Regionally Significant Wetland; and*
- (d) Any discharge of nitrogen also complies with Rule 12.C.1.3.

12.B.1.6 *[Moved unchanged from 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 acid-soluble 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 range or hydrological function of any Regionally Significant Wetland; and*
- (h) *There is no damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.*

12.B.1.7 [*Moved unchanged from 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) *There is no change to the water level range or hydrological function of any Regionally Significant Wetland; and*
- (b) *There is no damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland; and*
- (c) No contaminant has been added that is toxic to the aquatic life of the receiving water body; and
- (d) The discharge contains no pest plant material (as identified in the Pest Management Strategy for Otago 2001); and
- (e) 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
- (f) 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
- (g) The discharge does not, after reasonable mixing, give rise to any significant adverse effect on aquatic life; and
- (h) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage.

12.B.1.8 [*Moved unchanged from 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 Regionally Significant Wetland; 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.B.1.9 [*Moved unchanged from 12.4.1.2*] The discharge of stormwater from any road not connected to a reticulated stormwater system to water, or onto or into land, 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
- (b) Where the road is subject to works, provision is made for the interception of any contaminant to avoid, after reasonable mixing, 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.B.1.10 [*Moved substantially unchanged from 12.12.1.1*] The discharge of any contaminant, excluding settled sediment, present in water impounded by a dam that is not permitted by Rule 13.2.1.3, to water in a lake or river, is a **permitted** activity, providing:

- (a) The purpose of the dam is not used for the storage of contaminants; and
- (b) The presence of the contaminant does not result from the damming activity or the activities of the dam operator has not caused the contaminant to be discharged into the dam from which it is discharged; and
- (c) The discharge, after reasonable mixing does not give rise to all or any of the following effects:
  - (i) The production of any conspicuous oil or grease films, scum or foams, or floatable or suspended materials; or
  - (ii) Any conspicuous change in 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 effect on aquatic life; and
- (d) The discharge ceases when an enforcement officer of the Otago Regional Council requires the discharge to cease to provide for

clean-up operations and prevent adverse effects on the environment.

12.B.1.11 [*Moved unchanged from 12.12.1.2*] Except as provided for by Rule 12.12.1.1, the discharge of a trace amount of any contaminant, originating from within a hydro-electric power structure, into water, is a *permitted* activity.

### **12.B.2 Controlled activities: Resource consent required but always granted**

12.B.2.1 [*Moved unchanged from 12.11.3.1*] The discharge of tracer dye to water is a *controlled* activity, providing it is chemically inert, non-radioactive, and non-toxic.

In granting any resource consent for the discharge of tracer dye in terms of this rule, the Otago Regional Council will restrict the exercise of its control 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; and
  - (iii) Any amenity value supported by any affected water body; and
- (b) Any adverse effect on an existing lawful take of water; and
- (c) The location and timing of the discharge; and
- (d) The nature of the dye; 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.

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.B.3 Restricted discretionary activities: Resource consent required**

12.B.3.1 [*Moved unchanged from 12.4.2.1*] Except as provided for by Rules ~~12.4.1.1~~ 12.B.1.8 to ~~12.4.1.2~~ 12.B.1.9, 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 effect on any Regionally Significant Wetland or on any regionally significant wetland value; and*
- (c) *Any financial contribution for 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
- (j) 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.

**12.B.4 ~~12.7.2~~ Discretionary activities: Resource consent required**

~~12.7.2.1 Except as provided for by Rules 12.7.1.1 to 12.7.1.4, the discharge of any pesticide to water, land, or to air or land in circumstances where it may, or will, enter water, is a discretionary activity.~~

12.B.4.1 The discharge of water (excluding stormwater) or any contaminant from an industrial or trade premises to water or to land is a **discretionary** activity, unless it is permitted by Rule 12.B.1.6 or 12.B.1.7.

12.B.4.2 The discharge of any hazardous substance to water or onto or into land in circumstances which may result in that substance entering water is a **discretionary** activity, unless it is:

- (a) Permitted by a rule in 12.B.1; or
- (b) Provided for by a rule in 12.B.2 or 12.B.3.

12.B.4.3 The discharge of water or any contaminant covered in section 12.B.1 or 12.B.2, to water or onto or into land in circumstances which may result in that water or contaminant entering water, is a **discretionary** activity, unless it is:

- (a) Permitted by a rule in 12.B.1; or
- (b) Provided for by a rule in 12.B.2, 12.B.3, 12.B.4.1 or 12.B.4.2.

**Principal reasons for adopting**

The discharge of any pesticide to water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, by a resource consent, or by regulation (Section 15(1) of the Resource Management Act). The discharge of pesticide to land (under conditions that ensure it does not enter water) cannot be carried out in a manner that contravenes a rule in a regional plan or proposed regional plan (Section 15(2) of the Resource Management Act).

The discharge of the above pesticides to water or land under Rules 12.7.1.1 to 12.7.1.4, 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 the use of pesticides while providing protection for those values and the interests of those people. Any other activity involving the discharge of the above materials, is a discretionary activity in order that any adverse effects can be assessed.

**12.8 Discharge of agricultural waste and fertiliser**

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

12.8.1.1 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.

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.\*~~

~~\* 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 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.~~

~~\* 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 Except as provided for by Rule 12.8.1.2 or 12.8.1.3, the discharge of contaminants from any feed pad, stand off pad or sacrifice paddock, into or onto land is a *permitted* activity providing:~~

- ~~(a) Any feed pad or stand off pad established after 28 February 1998 is not within 50 metres of any surface water body; 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 50 metres from any bore used to supply water for domestic needs or drinking water for livestock; and~~
- ~~(d) There is no direct discharge of contaminant to water in any drain, or water race, or to groundwater; and~~
- ~~(e) Effluent from the discharge does not run off to any other person's property; and~~
- ~~(f) The discharge does not cause flooding of any other person's property, erosion, land instability, sedimentation or property damage.~~

~~12.8.1.5 [Rule moved to 12.B.1.5]~~

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

~~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~~~~
- ~~(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~~
- ~~(j) 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.~~

~~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~~

~~12.8.3.1 Except as provided for by Rules 12.8.1.1 to 12.8.2.1, the discharge of any agricultural waste or fertiliser to water, or onto or into land in circumstances where it may enter water, is a *discretionary* activity.~~

#### ~~Principal reasons for adopting~~

~~The discharge of any agricultural waste or fertiliser to water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, by a resource consent, or by regulation (Section 15(1) of the Resource Management Act). The discharge of agricultural waste to land (under conditions that ensure it does not enter water) cannot be carried out in a manner that contravenes a rule in a regional plan or proposed regional plan (Section 15(2) of the Resource Management Act).~~

~~The discharge of the above materials to water or land under Rules 12.8.1.1 to 12.8.1.4, 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 the disposal of agricultural waste, or the use of fertiliser, while providing protection for those values and the interests of those people. Any~~

~~other activity involving the discharge of the above materials, is either a restricted discretionary or a discretionary activity in order that any adverse effects can be assessed.~~

## ~~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; 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, seums 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; 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~~

~~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 a 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 wetland values 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~~
- ~~(l) 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**

~~The discharge of any water associated with down hole pump testing or contaminants associated with drilling, to water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, by a resource consent, or by regulation (Section 15(1) of the Resource Management Act). The discharge of such material to land (under conditions that ensure it does not enter water) cannot be carried out in a manner that contravenes a rule in a regional plan or proposed regional plan (Section 15(2) of the Resource Management Act).~~

~~The discharge of the above materials to water or land under Rules 12.9.1.1 and 12.9.1.2, 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 the down hole pump testing and drilling to occur, while providing protection for those values and the interests of those people. Any other activity involving the discharge of the above materials, is a restricted discretionary activity in order that any adverse effects can be assessed.~~

## **~~12.10 Discharges from vessels~~**

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

~~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; 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~~**

~~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 a significant wetland value identified in Schedule 9; and~~
- ~~(c) Any financial contribution for Type B wetland values 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~~
- ~~(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**

~~The discharge of any water or contaminant to water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, by a resource consent, or by regulation (Section 15(1) of the Resource Management Act).~~

~~The discharge of the above materials to water or land under Rule 12.10.1.1 will have no more than minor adverse effects on the natural and human use values supported by water bodies, or on any other person. This rule is adopted to enable discharges from vessels, while providing protection for those values and the interests of those people. Any other activity involving the discharge of the above materials, is a restricted discretionary activity in order that any adverse effects can be assessed.~~

**12.11 Discharge of water or tracer dye**

**12.11.1 Prohibited activities: No resource consent will be granted**

~~12.11.1.1 The discharge of water from nuclear power generation or nuclear weapon manufacturing is a *prohibited* activity for which no resource consent will be granted.~~

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

~~12.11.2.1 [Rule moved to 12.B.1.6]~~

~~12.11.2.2 [Rule moved to 12.B.1.7]~~

~~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 3o Celsius, and does not cause the temperature of the receiving water, after reasonable mixing, to rise above 25o 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.~~

### ~~12.11.3 Controlled activities: Resource consent required but always granted~~

~~12.11.3.1 [Rule moved to 12.B.2.1]~~

#### ~~Principal reasons for adopting~~

~~The discharge of the above water or tracer dye to water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, by a resource consent, or by regulation (Section 15(1) of the Resource Management Act).~~

~~Rule 12.11.1.1 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 discharges of water used in nuclear power generation plants and in nuclear weapons manufacturing.~~

~~The Otago Regional Council considers the effects of discharging water as identified in Rule 12.11.2.1 to 12.11.2.3, 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 discharges of water, while providing protection for those values and the interests of those people.~~

~~Rule 12.11.3.1 is adopted to ensure that the Otago Regional Council has the opportunity to manage the colour change likely to arise from the discharge of tracer dye to water.~~

## ~~12.12 Discharges from dams and reservoirs~~

### ~~12.12.1 Permitted activities: No resource consent required~~

~~12.12.1.1 [Rule moved to 12.B.1.10]~~

~~12.12.1.2 [Rule moved to 12.B.1.11]~~

#### ~~Principal reasons for adopting~~

~~Rule 12.12.1.1 recognises that a dam operator is not always able to control what enters and leaves a dam. Environmental safeguards are contained in Condition (d) and the discharge must cease if requested by an enforcement officer for containment and clean-up operations.~~

~~Rule 12.12.1.2 recognises that minute amounts of contaminants may be discharged from hydro-electric facilities during normal operations without any measurable adverse effect on the environment.~~

## ~~12.13 Other discharges~~

### ~~12.13.1 Discretionary activities: Resource consent required~~

~~12.13.1.1 Except as provided for by Rules 12.4.1.1 to 12.12.1.2, the discharge of water or contaminants to water, or onto or into land in circumstances which may result in that contaminant entering water, is a *discretionary* activity.~~

#### ~~Principal reasons for adopting~~

~~The discharge of any water or contaminants to water can only occur if it is expressly allowed by a rule in a regional plan or any proposed regional plan, by a resource consent, or by regulation (Section 15(1) of the Resource Management Act).~~

~~Under Rule 12.13.1.1, any other discharge not specified in the rules of this Plan is a discretionary activity in order that any adverse effects can be assessed.~~

## 12.C Other discharges

### 12.C.A General Rules for section 12.C

12.C.A.1 Discharge rules in section 12.C apply to any discharge not provided for in sections 12.A, 12.B or 13.5.

12.C.A.2 Within section 12.C, prohibited activity rules prevail over any permitted, controlled, restricted discretionary and discretionary activity rules.

### 12.C.0 Prohibited activities: No resource consent will be granted

12.C.0.1 The discharge of any contaminant to water, that produces an objectionable odour, or a conspicuous oil or grease film, scum, or foam in any:

- (i) Lake, river or Regionally Significant Wetland; or
  - (ii) Drain or water race that flows to a lake, river or Regionally Significant Wetland; or
  - (iii) Bore or sump.
- is a *prohibited* activity.

12.C.0.2 The discharge of any contaminant from an animal waste system, silage storage or a composting process:

- (i) To any lake, river or Regionally Significant Wetland; or
- (ii) To any drain or water race that connects to a lake, river or Regionally Significant Wetland; or

- (iii) To the bed of any lake, river or Regionally Significant Wetland;  
or
- (iv) To any bore or sump; or
- (v) To land within 50 metres of:
  - (a) Any lake, river or Regionally Significant Wetland; or
  - (b) Any bore or sump; or
- (vi) To saturated land; or
- (vii) That results in ponding,  
is a *prohibited* activity.

- 12.C.0.3 Any discharge of sediment from disturbed land to water in any:
- (i) Lake, river or Regionally Significant Wetland; or
  - (ii) Drain or water race that flows to a lake, river or Regionally Significant Wetland,  
where no measure is taken to mitigate sediment runoff, is a *prohibited* activity.

### **12.C.1 Permitted activities: No resource consent required**

- 12.C.1.1 The discharge of water or any contaminant to water, or onto or into land in circumstances which may result in that contaminant entering water, is a *permitted* activity, providing:
- (a) The discharge does not result in flooding, erosion, land instability or property damage; and
  - (b) There is no discharge of water from one catchment to water in another catchment; and
  - (c) The discharge does not change the water level range or hydrological function of any Regionally Significant Wetland; and
  - (d) Where the discharge first enters water in any lake, river, wetland, or any open drain or water race that flows to a lake, river or wetland, the discharge:
    - (1) From 01 April 2020, does not exceed the relevant limits given in Schedule 16A, when, at the representative flow monitoring site, the water flow is at or below the reference flow indicated in Schedule 16B; and
    - (2) Does not contain sediment that results in:
      - a. A visual change in colour or clarity; or
      - b. Noticeable local sedimentation, in the receiving water; and
    - (3) Does not have an odour, oil or grease film, scum or foam; and
    - (4) Does not have floatable or suspended materials, other than inorganic sediment; and
  - (e) Any discharge of nitrogen also complies with Rule 12.C.1.3.

12.C.1.2 Notwithstanding Rule 12.C.1.1, the discharge of water or any contaminant from:

- (i) A water race that does not convey irrigation runoff; or
- (ii) A dam:
  - (1) Permitted under Rule 13.2.1.3; and
  - (2) Not for the purpose of the storage of contaminants, to any lake, river, wetland, or any water race that flows to a lake, river or wetland, is a *permitted* activity, providing:
    - (a) The race or dam operator has not caused the contaminant to be discharged into the race or dam from which it is discharged; and
    - (b) There is no discharge of water from one catchment to water in another catchment; and
    - (c) There is no change to the water level range or hydrological function of any Regionally Significant Wetland; and
    - (d) The discharge does not:
      - (1) Result in flooding, erosion, land instability or property damage; and
      - (2) Result in a conspicuous change in colour or clarity; and
      - (3) Have floatable or suspended materials.

12.C.1.3 The discharge of nitrogen<sup>1</sup> onto or into land in circumstances which may result in nitrogen entering groundwater, is a *permitted* activity, providing:

- (a) From 01 April 2020, the nitrogen leaching rate does not exceed:
  - (i) 10 kgN/ha/year on that area of the landholding located over the relevant Nitrogen Sensitive Zone identified in Maps H5 and H6; and
  - (ii) 20 kgN/ha/year on that area of the landholding located over the relevant Nitrogen Sensitive Zone identified in Maps H1 to H4; and
  - (iii) 30 kgN/ha/year on that area of the landholding located outside any Nitrogen Sensitive Zone identified in Maps H1 to H6,  
as calculated using OVERSEER<sup>®</sup> version 6.0; and
- (b) From 1 May 2014, the landholder will:
  - (i) Maintain a record of all necessary data to run OVERSEER<sup>®</sup> version 6.0; and
  - (ii) Provide Council upon request with:
    - 1) An OVERSEER<sup>®</sup> version 6.0 output and input parameter report prepared by an accredited OVERSEER<sup>®</sup> version 6.0 user; or
    - 2) All necessary data to run OVERSEER<sup>®</sup> version 6.0.

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<sup>1</sup> For the purpose of Rule 12.C.1.3, nitrogen comprises of organic nitrogen, ammoniacal nitrogen, nitrite nitrogen and nitrate nitrogen forms.

**12.C.2 Restricted discretionary activities: Resource consent required**

12.C.2.1 The discharge of water or any contaminant:

- (i) To water; or
- (ii) Onto or into land in circumstances which may result in that contaminant entering water,  
is a **restricted discretionary** activity, unless the discharge:
  - (a) Is prohibited by a rule in 12.C.0; or
  - (b) Is permitted by Rules 12.C.1.1 or 12.C.1.2; or
  - (c) Will result in flooding, erosion, land instability or property damage; or
  - (d) Is of water from one catchment to water in another catchment; or
  - (e) Will change the water level range or hydrological function of any Regionally Significant Wetland; or
  - (f) Has previously been authorised by resource consent granted under this rule.

The matters to which the Council has restricted the exercise of its discretion are set out in Rule 12.C.2.4.

The Consent Authority is precluded from giving public notification of an application for a resource consent under this rule.

12.C.2.2 The discharge of water or any contaminant:

- (i) To water; or
- (ii) Onto or into land in circumstances which may result in that contaminant entering water,  
from a short-term activity with a short-term effect, is a **restricted discretionary** activity, unless the discharge:
  - (a) Is prohibited by a rule in 12.C.0; or
  - (b) Is permitted by Rules 12.C.1.1 or 12.C.1.2; or
  - (c) Will result in flooding, erosion, land instability or property damage; or
  - (d) Is of water from one catchment to water in another catchment; or
  - (e) Will change the water level range or hydrological function of any Regionally Significant Wetland.

The matters to which the Council has restricted the exercise of its discretion are set out in Rule 12.C.2.4.

The Consent Authority is precluded from giving public notification of an application for a resource consent under this rule.

12.C.2.3 The discharge of nitrogen onto or into land in circumstances which may result in nitrogen entering groundwater is a **restricted discretionary** activity, unless the discharge:

- (a) Is prohibited by a rule in 12.C.0; or
- (b) Is permitted by Rule 12.C.1.3, or

(c) Has previously been authorised by a resource consent granted under this rule.

The matters to which the Council has restricted the exercise of its discretion are set out in Rule 12.C.2.4.

The Consent Authority is precluded from giving public notification of an application for a resource consent under this rule.

#### 12.C.2.4 Restricted discretionary activity discretions

In considering any resource consent in terms of Rules 12.C.2.1 to 12.C.2.3, the Council will restrict the exercise of its discretion to:

- (a) The nature, type, volume, frequency of the discharge; and
- (b) The concentration and loading of contaminants in the discharge; and
- (c) In the case of an application under Rules 12.C.2.1 and 12.C.2.3, the staged timeframe for achieving the permitted activity conditions in Rules 12.C.1.1 or 12.C.1.3; and
- (d) In the case of an application under 12.C.2.2, the staged timeframe to address adverse effects on water quality; and
- (e) In the case of an application previously consented under Rule 12.C.2.2, compliance with conditions of the previous resource consent; and
- (f) Any changes to infrastructure and the staging of implementation of those changes; and
- (g) Any adverse effects on water quality, including cumulative effects; and
- (h) Any adverse effect of the discharge on any natural or human use values; and
- (i) The extent to which the contaminant results from the activities of the applicant; and
- (j) Any effect on any Regionally Significant Wetland or on any regionally significant wetland value; and
- (k) Any erosion, land instability, sedimentation or property damage resulting from the discharge; and
- (l) Any financial contribution for any Regionally Significant Wetland or on any regionally significant wetland value; and
- (m) The information and monitoring requirements; and
- (n) The duration of the resource consent; and
- (o) The review of conditions of the resource consent.

### **12.C.3 Discretionary activities: Resource consent required**

12.C.3.1 The discharge of water from one catchment to water in another catchment is a *discretionary* activity.

12.C.3.2 The discharge of water or any contaminant:

- (i) To water; or
- (ii) Onto or into land in circumstances which may result in that contaminant entering water

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is a *discretionary* activity, unless it is:

(a) Prohibited by a rule in 12.C.0; or

(b) Permitted by a rule in 12.C.1; or

(c) Provided for by a rule in 12.C.2.



# 13

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



## 13.1 The use of a structure

### 13.1.1 Permitted activities: No resource consent required

13.1.1.1 The use of any 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) The structure is lawfully established; and
- (b) In the case of a change in use, the effects of the new use of the structure are the same or similar in character, intensity and scale as the preceding use; and
- (ba) Measures are taken to avoid animal waste entering the lake, river or Regionally Significant Wetland; and
- (c) The structure is maintained in good repair.

### 13.1.2 Restricted discretionary activities: Resource consent required

13.1.2.1 Except as provided for by Rule 13.1.1.1, the use 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 use 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 effect on the function or structural integrity of the structure; and
- (ab) Any measures to avoid animal waste entering the lake, river, or Regionally Significant Wetland; and
- (b) The duration of the resource consent; and
- (c) The information and monitoring requirements; and
- (d) Any insurance or other appropriate means of remedying the effects of failure; and
- (e) Any bond; and
- (f) 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.~~

The Consent Authority is precluded from giving public notification of an application for a resource consent under this rule.

## 13.2 The erection or placement of a structure

### 13.2.1 Permitted activities: No resource consent required

13.2.1.1 – 13.2.1.6 [no change]

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- 13.2.1.7 The erection or placement of any single span bridge or culvert in, on or over the bed of a lake or river, or any Regionally Significant Wetland, 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 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, or Regionally Significant Wetland, or property damage; and~~
  - ~~(c) The site is left tidy following the erection or placement.~~
  - ~~(d) There is no reduction in the flood conveyance of the lake, river or Regionally Significant Wetland; and~~
  - ~~(e) The bridge soffit is no lower than the top of the higher river bank; and~~
  - ~~(f) The bridge and its abutments are secured against bed erosion, flood water and debris loading; and~~
  - ~~(g) Where the bridge is intended for use by stock, measures are taken to avoid animal waste entering the lake, river or Regionally Significant Wetland.~~
- 13.2.1.7A The erection or placement of any boardwalk in, on or over a Regionally Significant Wetland, is a **permitted** activity, providing the erection or placement, or the boardwalk, does not cause any flooding, nor any erosion.
- 13.2.1.7B Unless covered by Rule 13.2.1.7 or 13.2.1.7A, the erection or placement of any crossing in or on the bed of a lake or river, or any Regionally Significant Wetland, is a **permitted** activity, providing:
- (a) The crossing, or its erection or placement, does not cause any flooding, nor cause erosion of the bed or banks of the lake, river or Regionally Significant Wetland, or property damage; and
  - (b) The top of the crossing is no higher than 2 metres above the lowest part of the bed where it is located; and
  - (c) The crossing does not exceed 12 metres along the length of the lake or river; and
  - (ca) No more than 24 metres of crossing occurs on any 250 metre stretch of any lake or river, with a minimum separation distance between any two crossings in or on the same lake or river of 12 metres; and
  - (d) There is no reduction in the flood conveyance of the lake, river or Regionally Significant Wetland; and
  - (e) The crossing and any ancillary structures are secured against bed erosion, flood water and debris loading; and
  - (f) Fish passage is not impeded; and
  - (g) Movement of bed material is not impeded; and
  - (h) Where the crossing is intended for use by stock, measures are taken to avoid animal waste entering the lake, river or Regionally Significant Wetland.

13.2.1.8 [no change]

### 13.2.2 Restricted discretionary activities: Resource consent required

13.2.2.1 Except as provided for by Rules 13.2.1.1, 13.2.1.2 and 13.2.1.5 to 13.2.1.7B, the erection or placement of any fence, pipe, line, cable, whitebait stand, eel trap, maimai, jetty, single span bridge or *crossing* 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, crossing 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, single span bridge or *crossing* 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
- (fa) Any measures to avoid animal waste entering the lake, river, or Regionally Significant Wetland; 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; and
- (l) *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.~~

The Consent Authority is precluded from giving public notification of an application for a resource consent under this rule.

13.2.3 [no change]

**13.3 The repair, maintenance, extension, alteration, replacement or reconstruction of a structure**

13.3.1 [no change]

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

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 for regionally significant wetland values or Regionally Significant Wetlands that are adversely affected; and*
- (l) The review of conditions of the resource consent; and
- (m) Any measures to avoid animal waste entering the lake, river, or 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.~~

The Consent Authority is precluded from giving public notification of an application for a resource consent under this rule.

#### 13.4 Demolition or removal of a structure [no change]

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

##### 13.5.A General rules for section 13.5

13.5.A.1 Discharges of bed material resulting from the alteration of the bed of a lake or river, or a Regionally Significant Wetland, are addressed only through rules in section 13.5.

Note: Alteration includes any disturbance, <u>and the associated remobilisation (discharge) and redeposition (deposit) of bed material already present, and</u> reclamation or deposition <u>of cleanfill associated with works in the bed.</u>
---

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

13.5.1.1 The disturbance of the bed of any lake or river, *or any Regionally Significant Wetland*, and any resulting discharge or deposition of bed material 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 *or wetland* disturbance is limited to the extent necessary to undertake the work; and
- (d) The bed *or wetland* disturbance does not cause any flooding or erosion; and
- (e) The time necessary to carry out and complete the whole of the work within the wetted bed of the lake or river 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



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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 range or hydrological function of any Regionally Significant Wetland; and*
- (j) *Except for activities covered by Rules 13.2.1.5, 13.2.1.6, or 13.2.1.8, there is no damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.*

13.5.1.2 The disturbance of the bed of any river for the purpose of clearing any material that has accumulated as a result of a storm event, excluding alluvium, in order to maintain the flood carrying capacity of the bed of the river, and any resulting discharge or deposition of bed material, is a **permitted** activity, providing:

- (a) The bed disturbance is limited to the extent necessary to clear the debris; and
- (b) The bed disturbance does not cause any flooding or erosion; and
- (c) The time necessary to carry out and complete the whole of the work within the wetted bed 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 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 disturbance; and
- (e) No lawful take of water is adversely affected as a result of the bed disturbance; and
- (f) The site is left tidy following completion of the activity.

13.5.1.3 The disturbance or reclamation of, or the deposition of any substance in, on or under, *either* the bed of any lake or river, *or any Regionally Significant Wetland*, and any resulting discharge of bed material, 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 13.2.1.7B, 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

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- (c) The time necessary to carry out and complete the whole of the work within the wetted bed of the lake or river does not exceed 10 ~~consecutive~~ hours in duration; and
- (d) All reasonable steps are taken to minimise the release of sediment to the lake, 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; *and*
- (h) *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 range or hydrological function of any Regionally Significant Wetland; and*
- (i) *Except for activities covered by Rules 13.2.1.5, 13.2.1.6, or 13.2.1.8, there is no damage to fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.*

13.5.1.4 The disturbance or reclamation of, or the deposition of any substance in, on or under, the bed of any lake or river, for the purpose of the reinstatement of any bank of a lake or river which has been eroded by a flood event, and any resulting discharge of bed material, is a **permitted** activity providing:

- (a) There is no change to the scale of the bank existing before the flood event; and
- (b) The activity is carried out within twelve months of the flood event that caused the erosion; and
- (c) The time necessary to carry out and complete the whole of the work within the wetted bed 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 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 repair or maintenance; 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.

13.5.1.5 The disturbance of the bed of any lake or river associated with the control of aquatic pest plants, and any resulting discharge or deposition of bed material, is a permitted activity providing:

- (a) The control is carried out under Rule 13.7.1.1, or under a resource consent; and
- (b) The bed disturbance is limited to that which is necessary for the removal of the plant material.



13.5.1.5A [no change]

13.5.1.5B *The disturbance of any Regionally Significant Wetland, for the purpose of drain maintenance, and any resulting discharge or deposition of bed material, is a **permitted** activity, providing:*

- (a) The disturbance is limited to that necessary to address water accumulating on land outside of any Regionally Significant Wetland; and*
- (b) The drain was lawfully constructed on or before 2 July 2011; and*
- (c) The drain has been maintained within the preceding 15 years; and*
- (d) There is no increase in the drain dimensions from the last maintenance; and*
- (e) All reasonable measures are taken to minimise the release of sediment to any water body during the disturbance, and there is no conspicuous change in the colour or visual clarity of any water body beyond a distance of 100 metres downstream of the disturbance; and*
- (f) All reasonable steps are taken to minimise damage to fauna and New Zealand native flora; and*
- (g) At least ten working days prior to commencing the maintenance, the Otago Regional Council is given notice of the location and date of the drain maintenance; and*
- (h) Within ten working days after the drain maintenance is carried out, the Otago Regional Council is provided with:
  - (i) Photographs of:
    - (a) The drain immediately before and after maintenance; and*
    - (b) The wetland adjoining the drain being maintained, showing vegetation cover; and**
  - (ii) Dimensions (longitude and cross-section) of the drain immediately before and after maintenance.**

13.5.1.6 – 13.5.1.7 [no change]

~~13.5.1.8 The disturbance of the bed of any lake or river 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; and*~~
- ~~*(d) The activity does not adversely affect any Type A or B values 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; and*~~

~~(f) No feeding out occurs on the bed of any lake or river.~~

13.5.1.8A The disturbance of the bed of any lake or river, or any Regionally Significant Wetland by livestock, excluding intentional driving of livestock, and any resulting discharge or deposition of bed material, is a *permitted* activity, providing it does not:

- (a) Involve feeding out; or
- (b) Cause or induce noticeable slumping, pugging or erosion; or
- (c) Result in a visual change in colour or clarity of water; or
- (d) Damage fauna, or New Zealand native flora, in or on any Regionally Significant Wetland.

<p><del>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.</del></p>
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13.5.1.8B The disturbance of the bed of any lake or river, or any Regionally Significant Wetland, by livestock where they are being intentionally driven, and any resulting discharge or deposition of bed material, is a *permitted* activity, providing there is no:

- (a) Existing structure available for use, and there is no suitable site for the erection or placement of a structure, to avoid bed disturbance; or
- (b) Visual change in colour or clarity of water, after the disturbance ceases; or
- (c) Noticeable slumping, pugging or erosion.

13.5.1.9 The drilling of land on the bed of any lake or river, other than for the purpose of creating a bore, and any disturbance of the bed associated with that drilling, and any resulting discharge or deposition of bed material, is a *permitted* activity providing:

- (a) The bed disturbance is limited to the extent necessary for the drilling; and
- (b) The drill hole is filled or sealed on completion of the work so that contaminants are prevented from entering the hole at any level; and
- (c) The activity does not occur in the wet bed; and
- (d) The site is left tidy following completion of the activity.

**13.5.2** – [no change]

**13.5.3 Discretionary activities: Resource consent required**

13.5.3.1 [unchanged]

*13.5.3.2 Unless covered by Rules 13.5.1.1, 31.5.1.3, 13.5.1.5A, or 13.5.1.5B 13.5.1.8A, 13.5.1.8B or 13.5.2.1, the alteration of any Regionally Significant Wetland, is a discretionary activity.*

**Principal reasons for adopting**

The alteration of the bed of a lake or river 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 13(1) of the Resource Management Act).

No person may disturb, remove, damage, or destroy any plant or part of any plant (whether exotic or indigenous) or the habitats of any such plants or of animals in, on, or under the bed of any lake or river in a manner that contravenes a rule in a regional plan or proposed regional plan, unless that activity is expressly allowed by a resource consent or is an existing lawful use allowed by Section 20A of the Act (Resource Management Act Section 13(2)(b)).

~~In relation to Rule 13.5.1.8, Conditions (a) to (d) of the rule address Section 13(1) of the Resource Management Act and Conditions (d) and (e) address Section 13(2)(b) of the Resource Management Act. Rules 13.5.2.1 and 13.5.3.1 provide for the preservation of the natural state of the shoreline of Lake Wanaka, consistent with Section 4 (c) of the Lake Wanaka Preservation Act 1973.~~

The alteration of the bed of a lake or river under Rules 13.5.1.1 to 13.5.1.9 will have no more than minor adverse effects on the natural and human use values supported by water bodies, or on any other person, since the activities involve minimal disturbance of the bed. Any other activity involving the alteration of the bed of a lake or river is either a restricted discretionary or a discretionary activity in order that any adverse effects can be assessed.

**13.6 The introduction or planting of vegetation [no change]**

**13.7 The removal of vegetation [no change]**



# 15

## Methods other than Rules



15.1 to 15.4 [unchanged]

**15.5 Codes of practice and environmental management systems**

**15.5.1 Development and implementation of codes of practice and environmental management systems**

15.5.1.1 The Otago Regional Council ~~will encourage~~ and supports the development and use of ~~assist agricultural, recreational and industry groups to prepare~~ codes of practice and environmental management systems that ~~for various land use activities, in order to~~ reduce adverse effects on water resources.

~~15.5.1.2 The Otago Regional Council will encourage landholders and industry groups to implement codes of practice, environmental management systems and management guidelines that assist to avoid, remedy or mitigate any adverse effects of activities on Otago's water resources and any adverse effects of land discharges on soil or land stability.~~

~~Land use activities of particular concern include:~~

- ~~(a) Fertiliser application;~~
- ~~(b) Use and storage of hazardous substances;~~
- ~~(c) Agricultural and horticultural spraying;~~
- ~~(d) Intensive livestock activities, including dairy farming, pig farming and silage production;~~
- ~~(e) Land use and disturbance in the margins of lakes and rivers;~~
- ~~(f) Extraction of bed material from Otago's lakes and rivers;~~
- ~~(g) Forestry operations; and~~
- ~~(h) Other activities which can involve land disturbance.~~

~~The Council will support codes of practice and management guidelines that reduce the adverse effects of land use activities on water quality. This will involve:~~

- ~~(i) Working with landholders and relevant industry and community groups to identify how the identified land use activities can be carried out in ways which minimise non-point source contamination;~~
- ~~(ii) Encouraging industry and landholders to implement, where appropriate, existing codes of practice or management guidelines; and~~
- ~~(iii) Maintaining a register of codes of practice and guidelines, supplied by industries that, if adhered to, would assist with compliance with specified rules in this Plan.~~

**Principal reasons for adopting**

~~Codes of practice and environmental management systems set guidelines or standards, and practical mechanisms to influence the use and development of land and the effects of activities on water. Although generally voluntary, codes of practice and environmental management systems are recognised as one of the~~

~~options that are at the Otago Regional Council's disposal, to achieve desirable outcomes for water bodies. An environmental management system may be developed which is applicable to the specific needs of a single business, while a code of practice may be developed for use throughout an industry.~~

~~The first method is adopted to encourage the development of codes of practice and environmental management systems, while the second method is adopted to ensure ongoing support is provided once guidelines are in place.~~

**15.6to 15.9** *[unchanged]*





# 16

## Information Requirements



## 16.1 Introduction *[no change]*

## 16.2 General information required *[no change]*

## 16.3 Specific information requirements

### 16.3.1 to 16.3.2 *[no change]*

### ~~16.3.3 The discharge of water or contaminants~~

- ~~1. A description of the nature, method, volume, contents, rate and frequency of the proposed discharge.~~
- ~~2. A description of the treatment, if any, of the water or contaminant prior to the proposed discharge.~~
- ~~3. A description of any measures that may be in place to contain an emergency spill or discharge, should any occur.~~
- ~~4. An assessment of the ability of the receiving water or land to assimilate the discharge, in terms of both quantity and quality.~~
- ~~5. An assessment of the effects of the activity on:
  - ~~(a) The natural and human use values set out in Schedule 1 for any affected water body; and~~
  - ~~(b) The natural character of any affected water body; and~~
  - ~~(c) The amenity values supported by any affected water body.~~~~
- ~~6. An assessment of the likely effect of the discharge on groundwater quality.~~
- ~~7. An assessment of the effect of the activity on any natural hazard, and the extent to which it is likely to create or exacerbate a natural hazard.~~
- ~~8. An assessment of the effects of the activity on heritage values, including those identified in Schedule 1C or in any district plan, any archaeological site, or any place with interim historic place registration.~~
- ~~9. In the case of stormwater or drainage water discharge:
  - ~~(a) A description of the nature of activities served by the system; and~~
  - ~~(b) Details of the design of the system, in particular its capacity, its specifications and its maintenance regime.~~~~
- ~~10. In the case of human sewage or animal waste discharge, details of the design of the system, in particular its capacity, its specifications and its maintenance regime.~~
- ~~11. In the case of pesticide or fertiliser discharge, details of any manufacturer's directions for handling or application.~~

### 16.3.4 to 16.3.13 *[no change]*

## 16.4 Provision of further information *[no change]*

# Schedules



**15 Schedule of characteristics and numerical standards for good quality water in Otago lakes and rivers**

**Table 15.1 Characteristics indicative of good quality water**

<b><u>Characteristic</u></b>	<b><u>Description</u></b>	<b><u>Contaminant effect</u></b>
<b><u>Clarity</u></b>	<u>When standing in knee-deep water, the bed is easily and clearly seen.</u>	<u>Sediment reduces the clarity of water, and has an adverse effect on aquatic habitats.</u>
<b><u>Colour</u></b>	<u>Water-colour is not altered by contamination.</u> <u>Some rivers have natural colour such as tannin-stain.</u>	<u>A change in colour can be indicative of contamination by sediment or organic matter, linked to potentially high concentrations of DRP, NNN, ammoniacal nitrogen or <i>E coli</i>.</u>
<b><u>Sediment</u></b>	<u>Riffles and runs are free of obvious clay and silt deposits.</u> <u>Walking across a riffle or run should not produce an obvious plume.</u> <u>Some rivers are naturally high in sediment.</u>	<u>Sediment affects the colour of water, and has an adverse effect on aquatic habitats, and can result in high concentrations of phosphorus, and allow <i>E coli</i> to persist.</u>
<b><u>Smell</u></b>	<u>Water is odourless.</u>	<u>Smell can be indicative of contamination from a source high in ammoniacal nitrogen or <i>E coli</i> or the decay of excessive amounts of algae which limits people's opportunity to appreciate water.</u>
<b><u>Algae</u></b>	<u>Healthy levels of algae:</u> <ul style="list-style-type: none"> <li>▪ <u>Do not cover more than 30% of the bed.</u></li> <li>▪ <u>Strands are less than 20 mm in length.</u></li> <li>▪ <u>No slime on the surface of the water.</u></li> </ul>	<u>Excessive nitrogen and phosphorus contribute to algal growth which has an adverse effect on native fish habitat, amenity and recreation values, and angling opportunities.</u>
<b><u>Bank appearance</u></b>	<u>Functioning riparian margins:</u> <ul style="list-style-type: none"> <li>▪ <u>Vegetation is healthy.</u></li> <li>▪ <u>Banks are stable.</u></li> <li>▪ <u>No obvious livestock disturbance.</u></li> </ul>	<u>Healthy riparian margins mitigate sediment and nutrient discharges.</u>

**Table 15.2 Receiving water numerical standards and catchment timeframes for achieving good quality water**

The standards for Group 1, 2 and 3 are 5-year 80<sup>th</sup> percentile values when water flow is at or below median.

**Table 15.2.1: Receiving Water Group 1**

	<u>Nitrate-nitrite nitrogen</u>	<u>Dissolved reactive phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u>	<u>Turbidity</u>
	<u>0.444 mg/l</u>	<u>0.026 mg/l</u>	<u>0.1 mg/l</u>	<u>260 cfu/100 ml</u>	<u>5 NTU</u>
<u>Catlins</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2025</u>
<u>Carey's Creek</u>	<u>31 March 2012</u>				
<u>Kaikorai</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Leith</u>	<u>31 March 2025</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Mokoreta (within Otago)</u>	<u>31 March 2025</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Owaka</u>	<u>31 March 2025</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2025</u>
<u>Pomahaka, downstream of Glenken</u>	<u>31 March 2025</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2025</u>
<u>Tahakopa</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2025</u>
<u>Tokomairiro</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Tuapeka</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>
<u>Waitahuna</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Waitati</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Waiwera</u>	<u>31 March 2025</u>	<u>31 March 2025</u>	<u>31 March 2012</u>	<u>31 March 2025</u>	<u>31 March 2012</u>
<u>Any unlisted tributary on the true right bank of the Clutha/Mata-Au, south of Judge Creek</u>	<u>31 March 2012</u>				
<u>Any unlisted tributary on the true left bank of the Clutha/Mata-Au, south of the Tuapeka catchment</u>					
<u>Any unlisted catchment that discharges to the coast, south of Taieri Mouth</u>					

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**Table 15.2.2: Receiving Water Group 2**

	<u>Nitrate-nitrite nitrogen</u>	<u>Dissolved reactive phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u>	<u>Turbidity</u>
	<u>0.075 mg/l</u>	<u>0.01 mg/l</u>	<u>0.1 mg/l</u>	<u>260 cfu/100 ml</u>	<u>5 NTU</u>
<u>Cardrona</u>	31 March 2012				
<u>Clutha/Mata-Au and any unlisted tributary (Luggate to mouth, including Lake Roxburgh, and excluding tributaries described in Group 1)</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2012	31 March 2025
<u>Fraser</u>	31 March 2012				
<u>Kakanui</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2012	31 March 2012
<u>Kawarau downstream of the Shotover confluence</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2012	31 March 2012
<u>Lake Dunstan</u>	31 March 2012				
<u>Lindis</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2012	31 March 2012
<u>Luggate</u>	31 March 2012				
<u>Manuherikia</u>	31 March 2012	31 March 2025	31 March 2012	31 March 2012	31 March 2012
<u>Mill Creek (tributary to Lake Hayes)</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2012	31 March 2012
<u>Pomahaka, upstream of Glenken</u>	31 March 2012				
<u>Shag</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2012	31 March 2012
<u>Shotover</u>	31 March 2012	31 March 2012	31 March 2012	31 March 2012	Exempt
<u>Taieri</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2025	31 March 2025
<u>Trotters</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2012	31 March 2012
<u>Waianakarua</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2012	31 March 2012
<u>Waikouaiti</u>	31 March 2012				
<u>Waipori</u>	31 March 2012				
<u>Waitaki tributaries within Otago</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2025	31 March 2012
<u>Any unlisted catchment that discharges to the coast, north of Taieri Mouth</u>	31 March 2012				

**Table 15.2.3: Receiving Water Group 3**

	<u>Nitrate-nitrite nitrogen</u>	<u>Dissolved reactive phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u>	<u>Turbidity</u>
	<b>0.03 mg/l</b>	<b>0.005 mg/l</b>	<b>0.01 mg/l</b>	<b>10 cfu/100 ml</b>	<b>3 NTU</b>
<u>Clutha/Mata-Au, above Luggate</u>	31 March 2012				
<u>Dart</u>	31 March 2012	31 March 2012	31 March 2012	31 March 2012	Exempt
<u>Kawarau, upstream of the Shotover confluence</u>	31 March 2012				
<u>Matukituki</u>	31 March 2025	31 March 2012	31 March 2012	31 March 2025	Exempt
<u>Tributaries to Lakes Hawea, Wakatipu, &amp; Wanaka</u>	31 March 2012				

The standards for Groups 4 and 5 are 5-year 80<sup>th</sup> percentile values at all times.

**Table 15.2.4: Receiving Water Group 4**

	<u>Total nitrogen</u>	<u>Total phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u>	<u>Turbidity</u>
	<b>0.55 mg/l</b>	<b>0.033 mg/l</b>	<b>0.1 mg/l</b>	<b>126 cfu/100 ml</b>	<b>5 NTU</b>
<u>Lake Hayes</u>	31 March 2012	31 March 2025	31 March 2012	31 March 2012	31 March 2012
<u>Lake Johnson</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2012	31 March 2012
<u>Lake Onslow</u>	31 March 2012	31 March 2025	31 March 2012	31 March 2012	31 March 2025
<u>Lake Tuakitoto</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2025	31 March 2025
<u>Lake Waipori &amp; Waihola</u>	31 March 2025	31 March 2025	31 March 2012	31 March 2012	31 March 2025

**Table 15.2.5: Receiving Water Group 5**

	<u>Total Nitrogen</u>	<u>Total Phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u> <sup>3</sup>	<u>Turbidity</u>
	<b>0.1 mg/l</b>	<b>0.005mg/l</b>	<b>0.01 mg/l</b>	<b>10 cfu/100 ml</b>	<b>3 NTU</b>
<u>Lake Hawea</u>	31 March 2012				
<u>Lake Wakatipu</u>	31 March 2012	31 March 2025	31 March 2012	31 March 2012	31 March 2012
<u>Lake Wanaka</u>	31 March 2012				

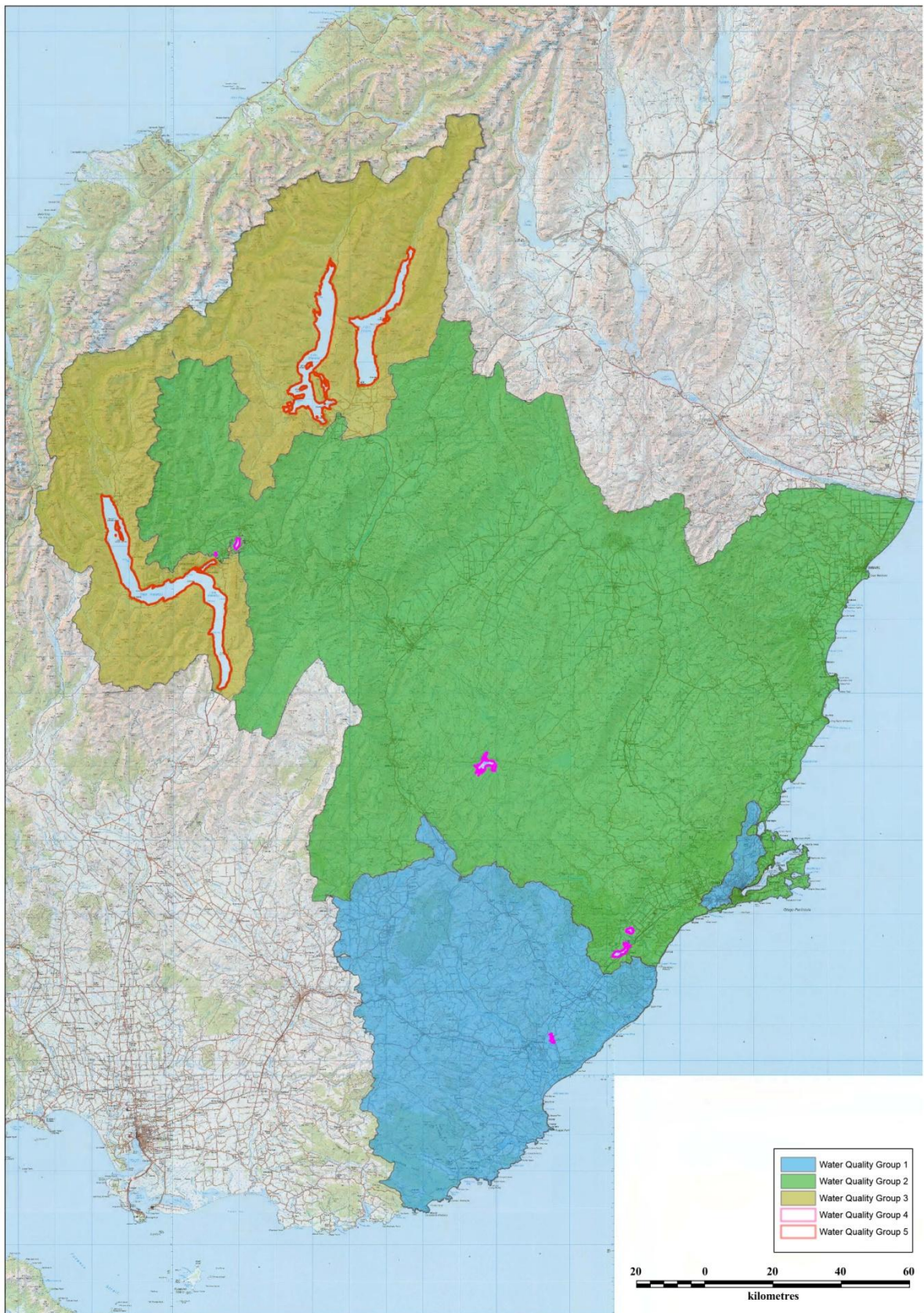
mg/l = milligrams per litre

cfu/100 ml = colony-forming units per 100 millilitres

NTU = nephelometric turbidity units



**Map 15.1 Receiving Water Groups**





**Schedule 16 Schedule of discharge limits for water quality**

Schedule 16 describes the contaminant concentration limits that are applicable to discharges to the lakes, rivers, wetlands and drains or races flowing to the lakes, rivers or wetlands, in the catchments of each discharge limit area. Discharge Limit Areas 1 and 2 catchments are shown on the J-series Maps. Discharges of contaminants described in this Schedule are permitted under Rule 12.C.1.1(d)(1) as long as the concentration limits are not exceeded when, at the representative monitoring site, the water flow is at or below reference flow.

**16A Discharge limits for water quality by discharge limit area**

<u>Discharge Limit Area 1 Catchments</u>	<u>Nitrate-nitrite nitrogen</u>	<u>Dissolved reactive phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u>
<u>Timeframe</u>	<u>1 April 2020</u>			
<ul style="list-style-type: none"> <li>▪ <u>Catlins</u></li> <li>▪ <u>Carey’s Creek</u></li> <li>▪ <u>Kaikorai</u></li> <li>▪ <u>Leith</u></li> <li>▪ <u>Mokoreta (within Otago)</u></li> <li>▪ <u>Owaka</u></li> <li>▪ <u>Pomahaka, downstream of Glenken</u></li> <li>▪ <u>Tahakopa</u></li> <li>▪ <u>Tokomairiro</u></li> <li>▪ <u>Tuapeka</u></li> <li>▪ <u>Waitahuna</u></li> <li>▪ <u>Waitati</u></li> <li>▪ <u>Waiwera</u></li> <li>▪ <u>Any unlisted tributary on the true right bank of the Clutha/Mata-Au, south of Judge Creek</u></li> <li>▪ <u>Any unlisted tributary on the true left bank of the Clutha/Mata-Au, south of the Tuapeka</u></li> <li>▪ <u>Any unlisted catchment that discharges to the coast, south of Taieri Mouth</u></li> </ul>	<u>3.6 mg/l</u>	<u>0.045 mg/l</u>	<u>0.2 mg/l</u>	<u>550 cfu/100 ml</u>

SCHEDULE 16: DISCHARGE LIMITS

<u>Discharge Limit Area 2 Catchments</u>	<u>Nitrate-nitrite nitrogen</u>	<u>Dissolved reactive phosphorus</u>	<u>Ammoniacal nitrogen</u>	<u>Escherichia coli</u>
<b><u>Timeframe</u></b>	<u>1 April 2020</u>			
<ul style="list-style-type: none"> <li>▪ <b><u>Cardrona</u></b></li> <li>▪ <b><u>Clutha/Mata-Au</u></b> (above <u>Luggate</u>)</li> <li>▪ <b><u>Clutha/Mata-Au</u></b> and any unlisted tributary (<u>Luggate to mouth, including Lake Roxburgh, and excluding tributaries described in Discharge Limit Catchment Area 1</u>)</li> <li>▪ <b><u>Fraser</u></b></li> <li>▪ <b><u>Kakanui</u></b></li> <li>▪ <b><u>Kawarau</u></b></li> <li>▪ <b><u>Lake Dunstan</u></b></li> <li>▪ <b><u>Lake Hayes</u></b></li> <li>▪ <b><u>Lake Hawea</u></b> and any tributary</li> <li>▪ <b><u>Lake Johnson</u></b></li> <li>▪ <b><u>Lake Onslow</u></b></li> <li>▪ <b><u>Lake Tuakitoto</u></b></li> <li>▪ <b><u>Lake Waipori &amp; Waihola</u></b></li> <li>▪ <b><u>Lake Wakatipu</u></b> and any tributary</li> <li>▪ <b><u>Lake Wanaka</u></b> and any tributary</li> <li>▪ <b><u>Lindis</u></b></li> <li>▪ <b><u>Luggate</u></b></li> <li>▪ <b><u>Manuherikia</u></b></li> <li>▪ <b><u>Mill Creek</u></b> (tributary to <u>Lake Hayes</u>)</li> <li>▪ <b><u>Pomahaka</u></b>, upstream of <u>Glenken</u></li> <li>▪ <b><u>Shag</u></b></li> <li>▪ <b><u>Shotover</u></b></li> <li>▪ <b><u>Taieri</u></b></li> <li>▪ <b><u>Trotters</u></b></li> <li>▪ <b><u>Waianakarua</u></b></li> <li>▪ <b><u>Waikouaiti</u></b></li> <li>▪ <b><u>Waipori</u></b></li> <li>▪ <b><u>Waitaki</u></b> tributaries within <u>Otago</u></li> <li>▪ <b><u>Any unlisted catchment that discharges to the coast, north Taieri Mouth</u></b></li> </ul>	1.0 mg/l	0.035 mg/l	0.2 mg/l	550 cfu/100 ml

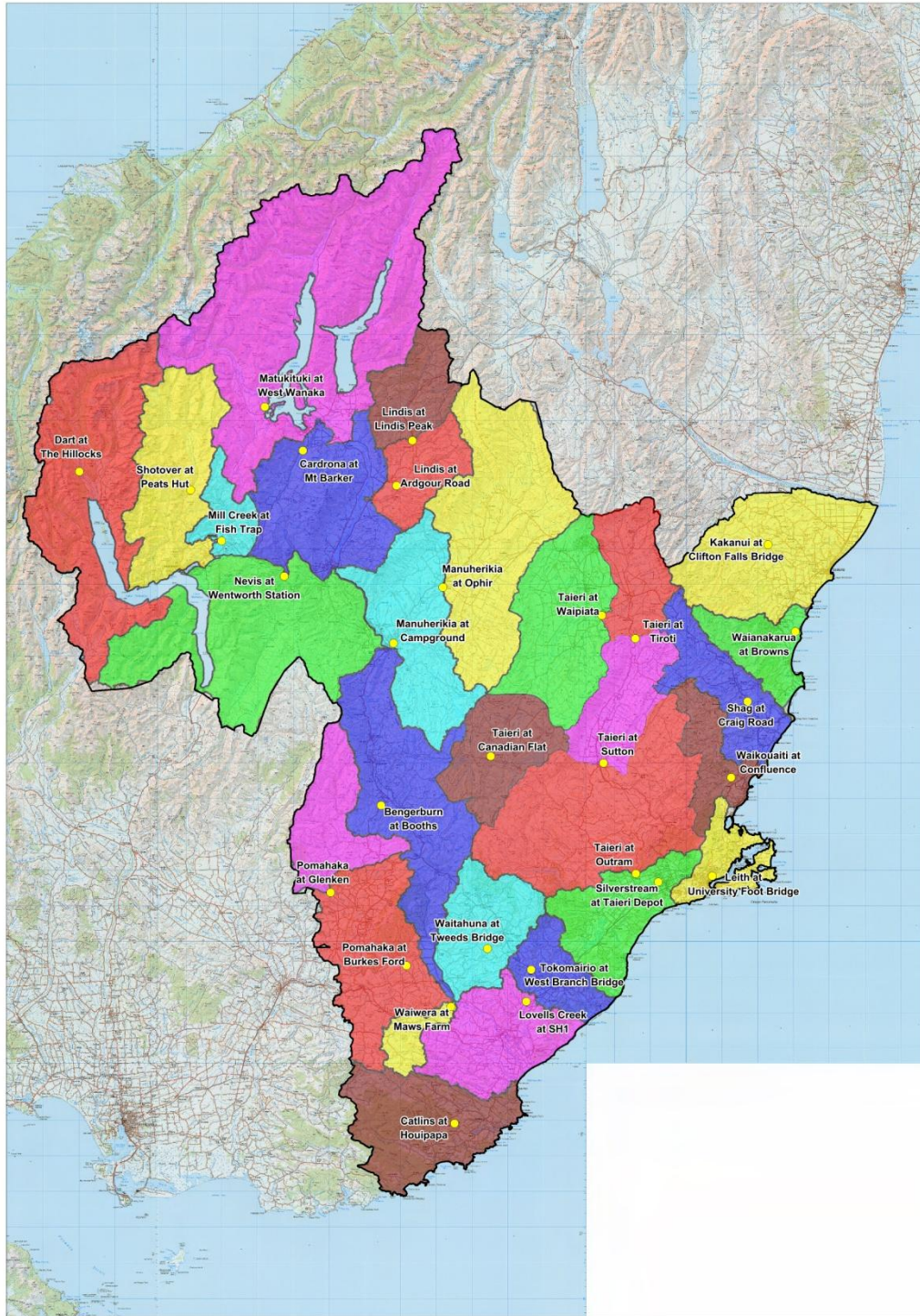
mg/l = milligrams per litre

cfu/100 ml = colony-forming units per 100 millilitres

**16B Representative flow monitoring sites and reference flows**

**Map 16B Representative flow monitoring sites for every part of Otago**

Representative flow monitoring sites are shown on the Water Info website (<http://water.orc.govt.nz/WaterInfo/Default.aspx>).



SCHEDULE 16: DISCHARGE LIMITS

**Table 16B Reference flows at each representative flow monitoring site**

Reference flows are fixed and have been calculated using median flow data from 01/01/2007 to 01/01/2013.

River flows for Otago are available on the Water Info website (<http://water.orc.govt.nz/WaterInfo/Default.aspx>).

<u>Monitoring Flow Site</u>	<u>Reference flow (cumecs)</u>
<u>Bengerburn at Booths</u>	<u>0.37</u>
<u>Cardrona at Mt Barker</u>	<u>1.95</u>
<u>Catlins at Houipapa</u>	<u>2.34</u>
<u>Dart at The Hillocks</u>	<u>51.49</u>
<u>Kakanui at Clifton Falls Bridge</u>	<u>1.29</u>
<u>Leith at University Foot Bridge</u>	<u>0.34</u>
<u>Lindis at Ardgour Road</u>	<u>3.50</u>
<u>Lindis at Lindis Peak</u>	<u>3.51</u>
<u>Lovells Creek at SH1</u>	<u>0.14</u>
<u>Manuherikia at Campground</u>	<u>11.60</u>
<u>Manuherikia at Ophir</u>	<u>8.01</u>
<u>Matukituki at West Wanaka</u>	<u>44.99</u>
<u>Mill Creek at Fish Trap</u>	<u>0.35</u>
<u>Nevis at Wentworth Station</u>	<u>7.25</u>
<u>Pomahaka at Burkes Ford</u>	<u>15.48</u>
<u>Pomahaka at Glenken</u>	<u>7.00</u>
<u>Shag at Craig Road</u>	<u>0.65</u>
<u>Shotover at Peats</u>	<u>18.12</u>
<u>Silverstream at Taieri Depot</u>	<u>0.30</u>
<u>Taieri at Canadian Flat</u>	<u>2.45</u>
<u>Taieri at Outram</u>	<u>15.86</u>
<u>Taieri at Sutton</u>	<u>10.52</u>
<u>Taieri at Tiroiti</u>	<u>7.88</u>
<u>Taieri at Waipiata</u>	<u>6.02</u>
<u>Tokomairiro at West Branch Bridge</u>	<u>0.44</u>
<u>Waianakarua at Browns</u>	<u>0.78</u>
<u>Waikouaiti at Confluence</u>	<u>1.34</u>
<u>Waitahuna at Tweeds Bridge</u>	<u>1.55</u>

SCHEDULE 16: DISCHARGE LIMITS

<u>Monitoring Flow Site</u>	<u>Reference flow (cumecs)</u>
<u>Waiwera at Maws Farm</u>	<u>1.58</u>



# **Glossary**

## G L O S S A R Y

*Add the following definitions to the glossary:*

**Animal waste system**                      Includes collection, storage, treatment, disposal or application of liquid or solid animal waste.

*Amend the following definition in the glossary:*

**Fertiliser**                              Any proprietary substance specifically manufactured for use in increasing the nutrient status of land. Excludes compost, effluent or seaweed.



**Regional Plan: Water for Otago**

# **Maps**