Regional Plan: Water for Otago

Proposed Plan Change 8 (Discharge management)

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6 July 2020

Introduction

The Otago Regional Council has prepared Proposed Plan Change 8 (Discharge management) to the Regional Plan: Water for Otago. Proposed Plan Change 8 amends existing, and introduces new provisions for:

- Managing, through enhanced policy direction, decision-making on stormwater, wastewater and rural discharges;
- o Effluent storage and application to land through new minimum standards;
- Promoting good farming practices, including better managing contaminant loss from intensive grazing and stock access to water bodies as well as incentivising the use of small in-stream sediment traps;
- Improving management of sediment loss from earthworks for residential development, and
- Clarifying provision for nationally and regionally significant infrastructure in wetlands.

This document should be read in conjunction with:

- Section 32 Evaluation Report; and
- Regional Plan: Water for Otago (operative as at 1 January 2004).

Amendments to the Regional Plan: Water for Otago as a result of Proposed Plan Change 8 are shown as follows:

- additions underlined
- deletions struck out

Any person may make comments on this proposed plan change. You may do so by filling out the submission form either online or in hardcopy via the EPA website.

Submissions will be received until 5pm on 17 August 2020.

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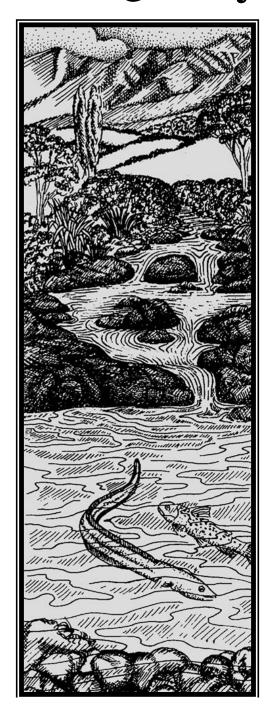
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Part A: Discharge policies

Relevant provisions:

Amended Policy 7.C.5	4
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7 Water Quality



- 7.1 Introduction [Unchanged]
- 7.2 Issues in general [Repealed 1 May 2014]
- 7.3 Issues related to point source discharges to water [Repealed 1 May 2014]
- 7.4 Issues related to non-point source discharges to water [Repealed 1 May 2014]
- **7.5 Objective** [*Repealed* 1 *May* 2014]
- **7.A** Objectives [Unchanged]
- **7.B** Policies general [Unchanged]
- 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.C.1 7.C.4** [*Unchanged*]
 - 7.C.5 <u>Minimise the adverse environmental effects of discharges</u> With respect to discharges from any new stormwater reticulation system, or any extension to an existing stormwater reticulation system, to require: by requiring:
 - (a) The separation of sewage and stormwater; and
 - (b) Measures to prevent contamination of the receiving environment by industrial or trade waste; and
 - (c) The use of techniques to trap debris, sediments and nutrients present in runoff.

Explanation

In terms of the Plan's rules for permitted and discretionary activities for new discharges, or extensions to the catchment area of existing discharges from reticulated stormwater systems, the requirements of (a) to (c) will apply, as required.

Principal reasons for adopting

This policy is adopted to reduce the potential for contaminants to be present in new stormwater discharges. This is intended to mitigate the impact on the water quality of receiving water bodies in urbanised areas or other areas served by a stormwater reticulation system.

Rules: 12.B.3.1

Other methods: 15.2.5.1, 15.4.2.1, 15.4.2.2.

- 7.C.6 Reduce the adverse environmental effects from existing stormwater reticulation systems by:
 - (a) Requiring the progressive upgrade of stormwater reticulation systems to minimise the volume of sewage entering the system and the frequency and volume of sewage overflows; and
 - (b) <u>To promote Promoting</u> the progressive upgrading of the quality of water discharged from existing stormwater reticulation systems, <u>including through:</u>
 - (i) The separation of sewage and stormwater; and
 - (ii) Measures to prevent contamination of the receiving environment by industrial or trade waste; and
 - (iii) The use of techniques to trap debris, sediments and nutrients present in runoff.

Explanation

The Otago Regional Council will encourage require the operator of any existing stormwater reticulation system to improve the quality of stormwater discharged from the system. Measures that can be taken to achieve this improvement include:

- (a) The separation of sewage and stormwater;
- (b) Measures to prevent contamination of the receiving environment by industrial or trade waste; and
- (c) The use of techniques to trap debris, sediments and nutrients present in runoff.

Priority will be given to improving discharges to those water bodies where natural and human use values are adversely affected. Such measures may not be necessary where an existing discharge is having no more than a minor adverse effect on any natural or human use value supported by an affected water body.

Principal reasons for adopting

This policy is adopted to reduce the level of contaminants present in existing stormwater discharges. This is intended to mitigate the impact on the water quality of receiving water bodies in urbanised areas or other areas served by a stormwater reticulation system.

Rules: 12.B.3.1

Other methods: 15.2.5.1, 15.4.2.1, 15.4.2.2.

7.C.7 – 7.C.11 [*Unchanged*]

- 7.C.12 Reduce the adverse effects of discharges of human sewage from reticulated wastewater systems by:
 - (a) Requiring reticulated wastewater systems to be designed, operated, maintained and monitored in accordance with recognised industry standards; and
 - (b) Requiring the implementation of measures to:
 - (i) Progressively reduce the frequency and volume of wet weather overflows; and
 - (ii) Minimise the likelihood of dry weather overflows occurring; and
 - (c) Preferring discharges to land over discharges to water, unless adverse effects associated with a discharge to land are greater than a discharge to water; and
 - (d) Having particular regard to any adverse effects on cultural values.
- 7.D Policies for discharges of water and contaminants, excluding those discharges provided for in 7.C
 - **7.D.1 7.D.4** [*Unchanged*]
 - 7.D.5 When considering any discharge under section 12.C, including the duration of any consent, have regard to:
 - (a) The effects, including cumulative effects, of the discharge on water quality and natural and human use values, including Kāi Tahu cultural and spiritual beliefs, values and uses; and
 - (b) The physical characteristics <u>and any particular sensitivity</u> of the land <u>and any receiving water</u>; and
 - (c) The <u>quality and performance of the discharge</u> management system <u>used</u>, <u>or proposed</u> to be used, <u>and</u> in particular, options to be employed to reduce any adverse environmental effects of the <u>activity</u> <u>discharge</u> and <u>monitoring</u> of the <u>performance</u> of the discharge management system; and
 - (d) Any staged timeframe and any environmental management plan to achieve:
 - (i) Compliance with the permitted activity rules and Schedule 16 discharge thresholds during the duration of the consent; or
 - (ii) The <u>ongoing</u> reduction of adverse environmental effects of the discharge, where the permitted activity rules and Schedule 16 discharge thresholds cannot be met; and
 - (e) Trends in the quality of the receiving water relative to the Schedule 15 freshwater characteristics, limits, and targets; and
 - (f) The extent to which the risk of potentially significant, adverse effects arising from the discharge activity may be adequately managed through review conditions are avoided; and

- (g) The value of the existing investment in infrastructure; and
- (h) The current state of technical knowledge and the use of industry best practice for managing environmental effects; and
- (i) The extent to which co-ordinating the discharges across multiple landholdings enables water quality objectives to be more effectively met; and
- (j) Recognising t The social, cultural and economic value of the use of land and water that gives rise to the discharge.
- 7.D.6 When considering applications for resource consent for discharges of nitrogen under Rule 12.C.3.2:
 - (a) Restrict the duration of resource consents to a term of no more than 10 years; and
 - (b) Have particular regard to:
 - (i) The water quality of the receiving water body; and
 - (ii) Any adverse effects on the natural or human use values of the receiving water body as set out in Schedule 1; and
 - (iii) Any adverse effects on Kāi Tahu cultural and spiritual beliefs, values and uses; and
 - (iv) The expected reduction in nitrogen discharged over the term of the resource consent, particularly from changes to land management practices or infrastructure; and
 - (iv) The administrative benefits of aligning the expiry date with other resource consents for the same activity in the surrounding area or catchment.

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7.D.7 – 7.D.8 [New Part – Part B]
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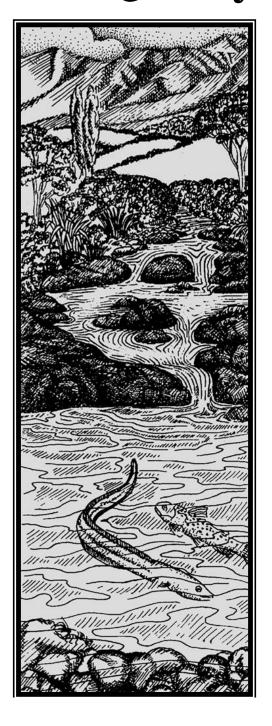
- 7.6 Policies for the enhancement of water quality [Repealed 1 May 2014]
- 7.7 Policies for point source discharges [Repealed 1 May 2014]
- 7.8 Policies for non-point source discharges [Repealed 1 May 2014]
- 7.9 Anticipated environmental results [Repealed 1 May 2014]

Part B: Animal waste storage and application

Relevant provisions:

New Policy 7.D.7	12
New Policy 7.D.8.	13
Amended Rule 12.C.0.2.	16
New Rule 12.C.0.4 (discharge – prohibited)	17
New Rule 12.C.1.4 (discharge – short term permitted)	17
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7 Water Quality

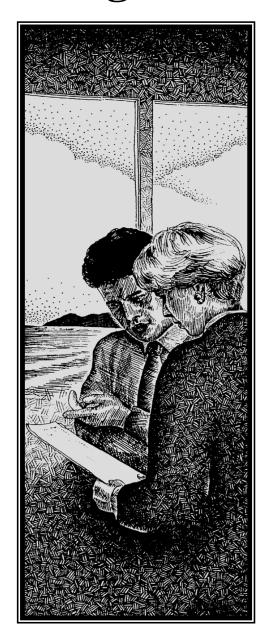


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 - **7.C.1 7.C.4** [*Unchanged*]
 - **7.C.5 7.C.6** [Amended Part A]
 - **7.C.7 7.C.11** [*Unchanged*]
 - **7.C.12** [New Part A]
- 7.D Policies for discharges of water and contaminants, excluding those discharges provided for in 7.C
 - **7.D.1 7.D.4** [*Unchanged*]
 - **7.D.5** [Amended Part A]
 - **7.D.6** [New Part A]
 - 7.D.7 Ensure the appropriate management and operation of animal waste systems by:
 - (a) Requiring animal waste systems to be designed, constructed and located appropriately and in accordance with best practice; and
 - (b) Ensuring that all animal waste systems:
 - (i) Have sufficient storage capacity to avoid the need to dispose of effluent when soil moisture or weather conditions may result in run-off entering water; and
 - (ii) Include contingency measures to prevent discharges to water in the case of equipment or system failure; and

- (ii) Are operated in accordance with an operational management plan for the system that is based on best practice guidelines and inspected regularly; and
- (c) Avoiding the discharge of animal waste to water bodies, artificial watercourses, the coastal marine area and to saturated land; and
- (d) Requiring low-rate effluent application for any new discharge of animal waste to land and encouraging the transition to low-rate effluent application for existing discharges of animal waste to land.
- 7.D.8 Provide for the upgrading of existing animal waste systems that do not meet the standards of Rule 14.7.1.1 by:
 - (a) Granting resource consents only where consent applications contain a timebound action plan for upgrading the existing animal waste system so that it meets the standards of Rule 14.7.1.1 as soon as possible; and
 - (b) Staging implementation of performance standards based on risk.
- **7.D.9** [*New Part Part C*]
- **7.D.10** [*New Part Part G*]
- 7.6 Policies for the enhancement of water quality [Repealed 1 May 2014]
- 7.7 Policies for point source discharges [Repealed 1 May 2014]
- 7.8 Policies for non-point source discharges [Repealed 1 May 2014]
- 7.9 Anticipated environmental results [Repealed 1 May 2014]

12

Rules: Water Take, Use and Management



12.0 - 12.B[*Unchanged*]

12.C Other discharges

- 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.

Note: Rules applying to plantation forestry:

- Refer to the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017: http://www.legislation.govt.nz/regulation/public/2017/0174/latest/whole.html
- Refer to Schedule 17: Rules applying to plantation forestry in Otago.
- Rules that apply: 12.C.1.1 (d) (e) (f), excluding (iii); 12.C.2.1; 12.C.2.2; 12.C.2.4; 12.C.3.2.

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

- 12.C.0.1 [Unchanged]
- 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 goes to a lake, river, Regionally Significant Wetland or coastal marine area; or
 - (iii) To the bed of any lake, river or Regionally Significant Wetland; or
 - (iv) To any bore or soak hole; or
 - (v) To land in a manner that results in overland flow entering any:
 - (a) Lake, river, Regionally Significant Wetland or coastal marine area that is not permitted under Rule 12.C.1.1 or 12.C.1.1A; or
 - (b) Drain or water race that goes to any lake, river, Regionally Significant Wetland or coastal marine area that is not permitted under Rule 12.C.1.1 or 12.C.1.1A; or
 - (vi) To land within 50 metres of:
 - (a) Any lake, river or Regionally Significant Wetland; or
 - (b) Any bore or soak hole; or

RULES: LAND USE ON LAKE OR RIVER BEDS OR REGIONALLY SIGNIFICANT WETLANDS

- (vii) To saturated land; or
- (viii) That results in ponding,

is a *prohibited* activity.

12.C.0.3 [Unchanged]

12.C.0.4 The discharge of animal waste from an animal waste system:

- (i) To any lake, river or Regionally Significant Wetland; or
- (ii) To any drain or water race that goes to a lake, river, Regionally Significant Wetland or coastal marine area; or
- (iii) To the bed of any lake, river or Regionally Significant Wetland; or
- (iv) To any bore or soak hole; or
- (v) To land within 50 metres of:
 - (a) Any lake, river or Regionally Significant Wetland; or
 - (b) Any bore or soak hole; or
- (vi) To land in a manner that results in ponding or overland flow to water, including to frozen land; or
- (vii) That results in any of the following effects in receiving waters, after reasonable mixing:
 - (a) the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) any conspicuous change in the colour or visual clarity; or
 - (c) any emission of objectionable odour; or
 - (d) the rendering of fresh water unsuitable for consumption by farm animals; or
 - (e) any significant adverse effects on aquatic life;

is a *prohibited* activity.

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

12.C.1.1 - 12.C.1.3 [Unchanged]

- 12.C.1.4 Notwithstanding any other rule in this Plan, the discharge of animal waste, or water containing animal waste, from an animal waste system onto or into land is a *permitted* activity providing:
 - (a) The animal waste system is permitted under Rule 14.7.1.2; and
 - (b) The discharge is not prohibited under Rule 12.C.0.4; and
 - (c) The discharge does not occur within 50 metres of the boundary of the property on which the animal waste is generated, or beyond that boundary.

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

12.C.2.1 – 12.C.2.4 [*Unchanged*]

- 12.C.2.5 The discharge of animal waste, or water containing animal waste, from an animal waste system onto or into land is a *restricted discretionary* activity provided:
 - (a) The discharge is not prohibited under Rule 12.C.0.2A; and
 - (b) The discharge is not permitted under Rule 12.C.1.4;

In considering any resource consent under this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (i) The application depth and rate;
- (ii) Size and location of the disposal area, including separation distances from lakes, rivers, Regionally Significant Wetlands, bores, soak holes, water supply for human consumption and dwellings;
- (iii) Measures to avoid, remedy or mitigate adverse effects on water quality, taking into account the nature and sensitivity of the receiving environment;
- (iv) Measures to avoid, remedy or mitigate adverse effects on Kāi
 Tahu cultural and spiritual beliefs, values and uses;
- (v) Duration of consent and any review conditions;
- (vi) Quality of, and compliance with, a management plan for the animal waste system; and
- (vii) Any information and monitoring requirements.

12.C.3 Discretionary activities: Resource consent required

12.C.3.1 & 12.C.3.2 [Unchanged]

14

Rules: Land Use other than in Lake or River Beds



- **14.1 14.4** [*Unchanged*]
- **14.5** *[New Part G]*
- **14.6** [New Part D]

14.7 Animal Waste Systems

14.7.1 Permitted activities: No resource consent required

- 14.7.1.1 The use of land for the use and maintenance of an animal waste system (including storage pond(s) and ancillary structures) that was constructed prior to 25 March 2020 is a *permitted* activity providing:
 - (a) The storage pond is sized in accordance with the Dairy Effluent Storage Calculator; and
 - (b) The storage pond is either:
 - (i) Fully lined with an impermeable synthetic liner and has a leak detection system underlying the storage pond which is inspected not less than monthly, there is no evidence of any leakage, and a written record is kept recording the results of each inspection; or
 - (ii) Of impervious concrete construction; or
 - (iii) An above-ground tank; or
 - (iv) Certified by a Suitably Qualified Person within the last five years as:
 - (1) Structurally sound and without any visual defects; and
 - (2) Meeting the relevant pond drop test criteria in Schedule 18; and
 - (c) A management plan for the animal waste system is prepared and implemented that requires:
 - (i) Pond drop tests of the storage pond(s) every three years; and
 - (ii) Implementation of contingency measures to prevent the discharge of animal waste to a surface water body, an artificial watercourse, or the coastal marine area, either directly or indirectly, in the event of power outage or the failure of equipment; and
 - (d) Upon written request by the Regional Council a written statement or certificate from a Suitably Qualified Person is provided to show compliance with Conditions (a) to (c).

Note:	Rule 14.7.1.1 does not manage discharges of animal waste to land. Animal
	waste systems that comply with Rule 14.7.1.1 will require resource consent
	under Rule 12.C.2.5 for the discharge of animal waste to land.

14.7.1.2 The use of land for the use and maintenance of an animal waste system (including storage pond(s) and ancillary structures) that was constructed prior to 25 March 2020 and does not comply with the conditions of Rule 14.7.1.1 is a *permitted* activity until the application date specified in Schedule 19.

14.7.2 Controlled activities: Resource consent required

- 14.7.2.1 The use of land for the construction, use and maintenance of an animal waste system (including storage pond(s) and ancillary structures) constructed after 25 March 2020 is a *controlled* activity provided the following conditions are met:
 - (a) The storage pond is sized in accordance with the Dairy Effluent Storage Calculator; and
 - (b) The storage pond is either:
 - (i) Fully lined with an impermeable synthetic liner and has an effective leak detection system that underlies the storage pond; or
 - (ii) Of concrete construction; or
 - (iii) Is an above-ground tank; and
 - (c) The design of the animal waste system has been certified as being in accordance with IPENZ Practice Note 21¹ and IPENZ Practice Note 27;² and
 - (d) The animal waste system is not located:
 - (i) Within 50 metres of any lake, river or regionally significant wetland; or
 - (ii) Within 90 metres of any water supply used for human consumption; or
 - (iii) Within 50 metres of any bore or soak hole; or
 - (iv) Within 50 metres of the property boundary; or
 - (v) Above subsurface drainage (other than a leak detection system); and
 - (e) A management plan for the animal waste system is prepared and implemented that requires:
 - (i) For ponds that are fully lined with an impermeable synthetic liner and has an effective leak detection system that underlies the storage pond, inspections not

¹ Available from Otago Regional Council's website at http://www.orc.govt.nz

² Available from Otago Regional Council's website at http://www.orc.govt.nz

- less than monthly with a requirement to keep a written record of the results of each inspection; and
- (ii) Pond drop tests of the storage pond(s) every three years; and
- (iii) Implementation of contingency measures to prevent the discharge of animal waste to a surface water body, an artificial watercourse, or the coastal marine area, either directly to water or onto or into land in circumstances which may result in these contaminants entering water, in the event of power outage or the failure of equipment; and
- (iv) If a leak is detected by the leak detection system, an assessment is undertaken by a Suitably Qualified Person within two months of the detection to determine whether the leak is within the normal operating parameters of the pond.

In granting any resource consent under this rule, the Otago Regional Council will restrict the exercise of its control to the following:

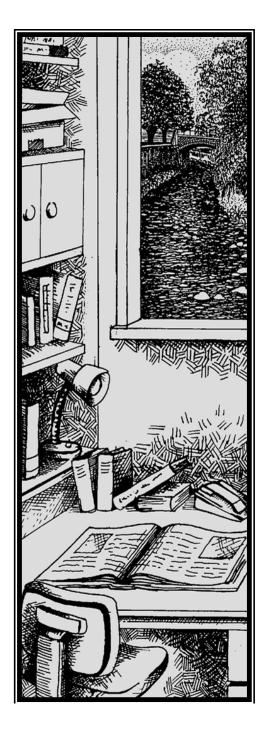
- (a) The design and construction of the system, including storage capacity, nature of the animal waste and the anticipated life of the system; and
- (b) The design, construction and adequacy of ancillary structures that are components of the animal waste system; and
- (c) The height of embankments and the placement and orientation relative to flood flows and stormwater run-off; and
- (d) Methods to protect the system from damage by animals and machinery; and
- (e) Quality of, and implementation of, a management plan for the animal waste system which requires pond drop tests of the system's storage pond(s) every three years; and
- (f) Potential adverse effects of construction, maintenance and use on water bodies, drains, groundwater, bores, drinking water supplies, the coastal marine area, stop banks, dwellings, places of assembly and urban areas; and
- (g) Location of the animal waste system; and
- (h) Measures to avoid, remedy or mitigate adverse effects on Kāi

 <u>Tahu cultural and spiritual beliefs, values and uses.</u>

14.7.3 Discretionary activities: Resource consent required

- 14.7.3.1 The use of land for the construction, upgrade, use or maintenance of an animal waste system (including storage pond(s) and ancillary structures) is a *discretionary* activity provided it is not:
 - (a) Permitted under Rules 14.7.1.1 or 14.7.1.2; or

20 Schedules



Schedules 1 - 17 [Unchanged]

18. Schedule of storage pond drop test requirements and criteria

This schedule outlines the requirements for undertaking pond drop tests on storage ponds that are part of an animal waste system and the pass criteria for drop test results.

Requirements

- Testing is undertaken over a minimum period of 48 hours.
- <u>Testing recording equipment is to be accurate to 0.8 mm or less.</u>
- Continuous readings are to be taken over the entire test period at not more than 10 second intervals.
- Any change in pond fluid level over the test period needs to be accounted for.
- Ponds must be at or over 75% design depth before a test can be undertaken.
- The pond has been de-sludged in the 12 months prior to the test being undertaken and there is no sludge or crust on the pond surface during the test.
- The pond surface is not frozen during any part of the testing.
- An anemometer is installed for the duration of the test and wind speed is at 10 metres per second or less for at least 24 hours during the test.

Criteria

When tested in accordance with the requirements above, the pond is considered to meet the pond drop test criteria if the maximum pond level drop does not exceed the following:

Maximum depth of pond (m)	Maximum allowable pond level
excluding freeboard	drop (mm per 24 hours)
<u><0.5</u>	<u>1.2</u>
0.5 to 1.0	<u>1.4</u>
1.0 to 1.5	<u>1.6</u>
<u>1.5 to 2.0</u>	<u>1.8</u>
>2.0	2.0

19. Schedule of progressive implementation of animal waste storage requirements

Many animal waste systems in Otago will need to be upgraded to meet the requirements of this Plan. The intent of this Schedule is to stage implementation of the Plan's requirements according to the environmental risk posed by existing systems. To assess this risk, Schedule 19 provides two calculations that will determine the current storage volume available on a landholding (in days) as follows:

- Schedule 19A sets out the calculations required to determine days of storage available on a landholding.
- Schedule 19B sets out the date by which a complete resource consent application must be lodged with the Otago Regional Council under Rule 14.7.3.1 (and correspondingly Rule 14.7.1.2 ceases to apply). A complete application is one that is not determined as being incomplete by the Otago Regional Council pursuant to section 88 of the Resource Management Act 1991.

19A Storage calculation

Two calculations are required to determine the current minimum number of days of animal waste storage available on a landholding. These are set out below.

Step One: Daily waste volume

To calculate the daily waste volume per farm, use the following formula:

					<u>Maximum</u>
	Maximum				number of times
<u>Daily waste</u> volume (m ³)	 number of cows milked per day	<u>X</u>	0.05^	<u>X</u>	per day that
					cows are milked
					during milking
					season

^ being 0.05 cubic metres (50 litres per cow per day)

For example:

<u>During milking season, Farm A milks 500 cows twice per day. Using the formula above:</u>

$$\frac{\text{Daily waste}}{\text{volume (m}^3)} \equiv \frac{500}{\text{volume (m}^3)} \equiv \frac{500}{\text{volume (m}^3)} = \frac{50}{\text{volume (m}^3)}$$

Step Two:

To calculate the minimum number of days of storage available, use the following formula:

 $\frac{\text{Days of storage}}{\text{available}} \equiv \frac{\text{Actual storage volume } (m^3)^{\land} \div \text{Daily waste volume } (m^3)}{\text{Actual storage volume } (m^3)^{\land} \div \text{Daily waste volume } (m^3)}$

^ determined assuming that the storage facility is empty.

For example:

As calculated above, Farm A has a daily waste volume of 50 m³. The farm has a storage pond with a storage volume of 1000 m³. Using the formula above:

 $\frac{\text{Days of storage}}{\text{available}} \equiv \frac{1000 \div 50}{\text{Days of storage}}$ $\frac{\text{Days of storage}}{\text{available}} \equiv \frac{20}{\text{Days of storage}}$

<u>Using the table in Schedule 19B, Otago Regional Council must receive a complete resource consent application under Rule 14.7.3.1 from Farm A no later than two years from the date Plan Change 8 is made operative.</u>

19B Application dates

The following table sets out the dates by which complete resource consent applications must be received under Rule 14.7.3.1 (and correspondingly Rule 14.7.1.2 ceases to apply). The "application date" is the date Plan Change 8 is made operative, plus the number of years in the "year" column below.

Days of storage available as calculated in accordance with Schedule 19B	<u>Year</u>
0 - 10	<u>0.5</u>
11 - 40	<u>2</u>
<u>41+</u>	<u>3</u>

21 Glossary

The table below only contains the Plan's definitions which are particularly relevant for this plan change

Agricultural waste Waste from an agricultural process or premises that is derived from

primary agricultural production. This includes animal waste and

animal dip material.

Animal waste Faeces or urine from any animal.

Animal waste

system

Includes Means the collection, conveyance, storage, treatment,

disposal or application of liquid or solid animal waste.

Dairy Effluent

Storage Calculator Means the Dairy Effluent Storage Calculator available from Otago

Regional Council's website at http://www.orc.govt.nz/

Suitably Qualified

Person

A person that has been assessed and approved by the Otago Regional Council as being appropriately qualified, experienced and competent

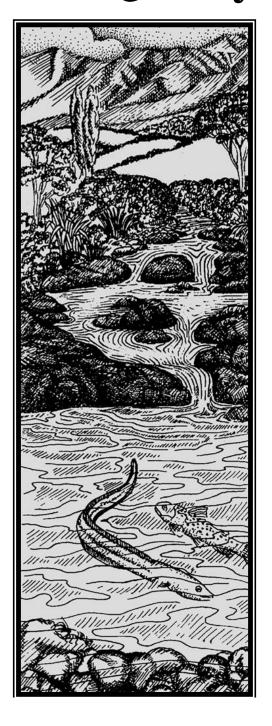
in the relevant field of expertise.

Part C: Good farming practices

Relevant provisions:

New Policy 7.D.9.	33
New Definition: Critical source area.	37
Deleted Definitions: Feed pad, Sacrifice paddock, Stand off pad	37

7 Water Quality



- 7.1 Introduction [Unchanged]
- 7.2 Issues in general [Repealed 1 May 2014]
- 7.3 Issues related to point source discharges to water [Repealed 1 May 2014]
- 7.4 Issues related to non-point source discharges to water [Repealed 1 May 2014]
- **7.5 Objective** [*Repealed* 1 *May* 2014]
- **7.A Objectives** [Unchanged]
- **7.B** Policies general [Unchanged]
- 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

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7.C.1 – 7.C.4 [Unchanged]
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7.C.5 – **7.C.6** [Amended - Part A]

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

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7.D.1 – 7.D.4 [Unchanged]
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- 7.D.9 Enable farming activities while reducing their adverse environmental effects by:
 - (a) Promoting the implementation of good management practices (or better) to reduce sediment and contaminant loss to water bodies; and
 - (b) Managing stock access to water bodies to:
 - (i) Progressively exclude stock from lakes, wetlands, and continually flowing rivers; and

- (ii) Avoid significant adverse effects on water quality, bed and bank integrity and stability, Kai Tahu values, and river and riparian ecosystems and habitats; and
- (c) Setting minimum standards for intensive grazing; and
- (d) Managing the risk of sediment run off from farming activities by:
 - (i) Implementing setbacks from water bodies and establishing riparian margins, and
 - (ii) Limiting areas and duration of exposed soil; and
- (e) Promoting the identification and management of critical source areas within individual properties, to reduce the risk of nutrient or microbial contamination and sediment run-off.
- **7.D.10** [*New Part Part G*]
- 7.6 Policies for the enhancement of water quality [Repealed 1 May 2014]
- 7.7 Policies for point source discharges [Repealed 1 May 2014]
- 7.8 Policies for non-point source discharges [Repealed 1 May 2014]
- 7.9 Anticipated environmental results [Repealed 1 May 2014]

21 Glossary

The table below only contains the Plan's definitions which are particularly relevant for this plan change

Critical source

<u>area</u>

Means a landscape feature such as a gully, swale, or depression that accumulates runoff from adjacent flats and slopes and delivers it to

surface water body such as rivers and lakes, artificial waterways, and

field tiles.

Feed pad Any confined, uncovered structure, located on production land,

which is designed for the purpose of controlled intensive feeding of

stock with supplementary feed.

Sacrifice paddock Any paddock which is set aside for the prolonged confinement and

the controlled, intensive feeding of stock with supplementary feed, in

order to avoid damage to their usual pasture.

Stand-off pad Any purpose built uncovered area, located on production land, for the

confinement of stock in order to avoid damage to their usual pasture.

Part D: Intensive grazing

Relevant provisions:

New Rule 14.6.1.1 (land use – permitted)	41
New Rule 14.6.2.1 (land use – discretionary)	.41
New Definition – Intensive grazing	.43

14

Rules: Land Use other than in Lake or River Beds



14.1 - 14.4 [Unchanged]

14.5 *[New – Part G]*

14.6 Rural land uses

14.6.1 Permitted activities: No resource consent required

- 14.6.1.1 The use of land for intensive grazing is a *permitted* activity providing:
 - (a) The total cumulative area of the landholding used for intensive grazing is the lesser of:
 - (i) 100 hectares; or
 - (ii) 10% of the total cumulative area of the landholding.
 - (b) There is no intensive grazing in any critical source area; and
 - (c) Stock are progressively grazed (break-fed or block-fed) from the top of a slope to the bottom of a slope; and
 - (d) A vegetated strip of at least 10 metres is maintained between the intensively grazed area and any water body, and all stock are excluded from this strip during intensive grazing.

14.6.2 Discretionary activities: Resource consent required

14.6.2.1 Except as provided by Rule 14.6.1.1, the use of land for intensive grazing is a *discretionary* activity.

14.7 [New – Part B]

21 Glossary

The table below only contains the Plan's definitions which are particularly relevant for this plan change

<u>Intensive grazing</u> Means grazing of stock on forage crops (including brassica, beet and root vegetable crops), excluding pasture and cereal crops.

Part E: Stock access to water

Relevant provisions:

Amended Rule 13.5.1.8A.	47
New Definition – Dairy cattle	50

13

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



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

 2. A wetland may include open water which is part of a lake.
- **13.1 13.4** [*Unchanged*]

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 [Unchanged]
- 13.5.1 Permitted activities: No resource consent required

13.5.1.1 - 13.5.1.7 [Unchanged]

13.5.1.8 [Repealed – 1 May 2014]

- 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) It does not
 - (i) Involve feeding out on that bed or wetland; or
 - (bii) Cause or induce noticeable slumping, pugging or erosion; or
 - (eiii) Result in a visual change in colour or clarity of water; or
 - (div) Damage fauna, or New Zealand native flora, in or on any Regionally Significant Wetland; and
 - (b) From 2022:
 - (i) All dairy cattle and pigs are excluded from the beds of lakes, continually flowing rivers wider than 1 metre and Regionally Significant Wetlands; and
 - (ii) where stock are excluded under (i), a setback of five metres from the beds of lakes, continually flowing rivers wider than 1 metre and Regionally Significant Wetlands is implemented.

RULES: LAND USE ON LAKE OR RIVER BEDS OR REGIONALLY SIGNIFICANT WETLANDS

- Note: 1. For the purposes of Rule 13.5.1.8A(b), a continually flowing river is considered to be wider than 1 metre if the river is wider than 1 metre at any point within the boundary of a landholding at its annual fullest flow without overtopping its banks.
 - 2. For the purposes of Rule 13.5.1.8A(b)(ii), setbacks are measured from the edge of the wetted bed of a lake or river wider than 1 metre or Regionally Significant Wetland and are averaged across the landholding.

13.5.1.8B [*Unchanged*]

13.5.1.9 *[Unchanged]*

13.5.1.10 [*New Part F*]

13.5.2 & 13.5.3 [Unchanged]

13.6 & 13.7 [Unchanged]

21 Glossary

The table below only contains the Plan's definitions which are particularly relevant for this plan change

Dairy cattle

Means cattle farmed for milk production and includes dairy cows, weaned and unweaned calves of dairy cows, and non-milking dairy cattle such as youngstock and bulls.

Part F: Sediment traps

Relevant pro	visions:
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New Rule .5.1.10	53
New Definition – Sediment trap	57

13

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



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

13.1 - 13.4 [*Unchanged*]

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 [Unchanged]
- 13.5.1 Permitted activities: No resource consent required

13.5.1.1 - 13.5.1.7 [*Unchanged*]

13.5.1.8 [Repealed – 1 May 2014]

13.5.1.8A [*Amended – Part E*]

13.5.1.8B [*Unchanged*]

13.5.1.9 *[Unchanged]*

- 13.5.1.10 The disturbance of the bed of any ephemeral or intermittently flowing river for the purpose of constructing or maintaining a sediment trap is a *permitted* activity providing:
 - (a) The construction or maintenance of the sediment trap is undertaken solely for sediment control purposes or to maintain the capacity and effective functioning of the sediment trap; and
 - (b) The construction or maintenance does not result in destabilisation of any lawfully established structure or cause increased risk of flooding or erosion; and
 - (c) The works do not occur in flowing water; and
 - (d) The sediment trap cannot be accessed by livestock; and
 - (e) Any build-up of sediment and other debris (including vegetation) within the sediment trap is removed as soon as practicable; and
 - (f) All reasonable steps are taken to minimise the release of sediment to the ephemeral or intermittently flowing river during the disturbance and there is no conspicuous change in the colour or clarity of the water body beyond a distance of 200 metres downstream of the disturbance; and

RULES: LAND USE ON LAKE OR RIVER BEDS OR REGIONALLY SIGNIFICANT WETLANDS

- (g) No lawful take of water is adversely affected as a result of the disturbance; and
- (h) There is no change to the water level range or hydrological function of any Regionally Significant Wetland; and
- (i) There is no damage to fauna or New Zealand native flora in or on any Regionally Significant Wetland.

21 Glossary

The table below only contains the Plan's definitions which are particularly relevant for this plan change

Sediment trap

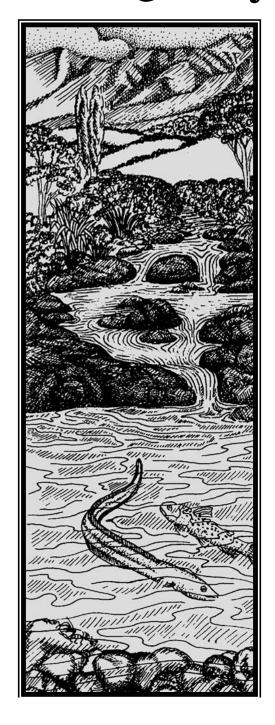
An excavated area in the bed of an ephemeral or intermittently flowing river designed and constructed solely for the purpose of slowing water velocity to allow sediments to drop from the water column.

Part G: Sediment from earthworks for residential development

Relevant provisions:

New Policy 7.D.10.	62
New Rule 14.5.1.1 (land use and discharge – permitted)	65
New Rule 14.5.2.1 (land use and discharge – restricted discretionary)	65
New Definition – earthworks	69

7 Water Quality



- 7.1 Introduction [Unchanged]
- 7.2 Issues in general [Repealed 1 May 2014]
- 7.3 Issues related to point source discharges to water [Repealed 1 May 2014]
- 7.4 Issues related to non-point source discharges to water [Repealed 1 May 2014]
- **7.5 Objective** [*Repealed* 1 *May* 2014]
- 7.A Objectives [Unchanged]
- **7.B** Policies general [Unchanged]
- 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

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    7.C.1 – 7.C.4 [Unchanged]
    7.C.5 – 7.C.6 [Amended - Part A]
    7.C.7 – 7.C.11 [Unchanged]
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7.C.12 [New - Part A]

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

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7.D.1 – 7.D.4 [Unchanged]
7.D.5 [Amended - Part A]
7.D.6 [New - Part A]
7.D.7 – 7.D.8 [New Part B]
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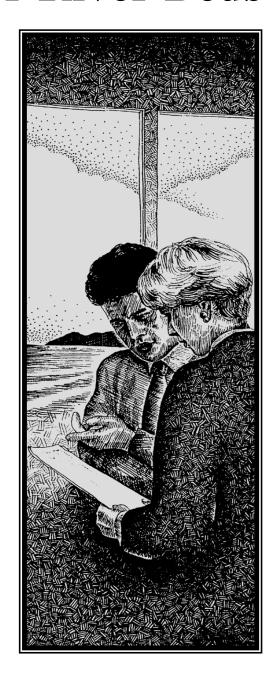
7.D.9 [New Part – Part C]

- 7.D.10 The loss or discharge of sediment from earthworks is avoided or, where avoidance is not achievable, best practice guidelines for minimising sediment loss are implemented.
- 7.6 Policies for the enhancement of water quality [Repealed 1 May 2014]
- 7.7 Policies for point source discharges [Repealed 1 May 2014]

- 7.8 Policies for non-point source discharges [Repealed 1 May 2014]
- **7.9** Anticipated environmental results [Repealed 1 May 2014]

14

Rules: Land Use other than in Lake or River Beds



14.1 - 14.4 [*Unchanged*]

14.5 Earthworks for residential development

- Note: 1. The rules in Section 14.5 do not apply to earthworks or soil disturbances covered by the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017.
 - 2. Discharges resulting from earthworks are addressed only through rules in section 14.5.

14.5.1 Permitted activities: No resource consent required

- 14.5.1.1 The use of land, and the associated discharge of sediment into water or onto or into land where it may enter water, for earthworks for residential development is a *permitted* activity providing:
 - (a) The area of exposed earth is no more than 2,500 m² in any 12-month period per landholding; and
 - (b) Earthworks do not occur within 10 metres of a water body, a drain, a water race, or the coastal marine area; and
 - (c) Exposed earth is stabilised upon completion of the earthworks to minimise erosion and avoid slope failure; and
 - (d) Earthworks do not occur on contaminated or potentially contaminated land; and
 - (e) Soil or debris from earthworks is not placed where it can enter a water body, a drain, a race or the coastal marine area; and
 - (f) Earthworks do not result in flooding, erosion, land instability, subsidence or property damage at or beyond the boundary of the property where the earthworks occur; and
 - (g) The discharge of sediment does not result in any of the following effects in receiving waters, after reasonable mixing:
 - (i) the production of 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.

14.5.2 Restricted discretionary activities: Resource consent required

14.5.2.1 Except as provided by Rule 14.5.1.1, the use of land, and the associated discharge of sediment into water or onto or into land

where it may enter water, for earthworks for residential development is a *restricted discretionary* activity.

In considering any resource consent under this rule, the Otago Regional Council will restrict the exercise of its discretion to the following:

- (a) Any erosion, land instability, sedimentation or property damage resulting from the activities; and
- (b) Effectiveness of the proposed erosion and sediment control measures in reducing discharges of sediment to water or to land where it may enter water; and
- (c) Compliance with the Erosion and Sediment Control

 Guidelines for Land Disturbing Activities in the Auckland

 Region 2016 (Auckland Council Guideline Document

 GD2016/005); and
- (d) Any adverse effect on water quality, including cumulative effects, and consideration of trends in the quality of the receiving water body; and
- (e) Any adverse effect on any natural or human use value, and on use of the coastal marine area for contact recreation and seafood gathering; and
- (f) Measures to avoid, remedy or mitigate adverse effects on Kāi Tahu cultural and spiritual beliefs, values and uses.

14.6 [New – Part D]

14.7 [New – Part B]

21 Glossary

The table below only contains the Plan's definitions which are particularly relevant for this plan change

Earthworks

Means the alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.

Part H: Nationally or regionally important infrastructure

Relevant provisions:	
Amended Policy 10.4.2	73

10 Wetlands



- **10.1 Introduction** [Repealed 1 October 2013]
- **10.2** Issues [Repealed 1 October 2013]
- **10.3** Objectives [Unchanged]
- 10.4 Policies

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10.4.1 & 10.4.1A [Unchanged]
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- 10.4.2 Avoid the adverse effects of an activity on a Regionally Significant Wetland or a regionally significant wetland value, but allow remediation or mitigation of an adverse effect only when the activity:
 - (a) Is lawfully established; or
 - (b) Is nationally or regionally <u>significant</u> important infrastructure, and has specific locational constraints; or
 - (c) Has the purpose of maintaining or enhancing a Regionally Significant Wetland or a regionally significant wetland value.

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10.4.2A [Unchanged]
10.4.3 - 10.4.5 [Repealed - 1 October 2013]
10.4.6 [Unchanged]
10.4.7 [Repealed - 1 October 2013]
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10.5 Anticipated Environmental Results [Repealed – 1 October 2013]