

**IN THE ENVIRONMENT COURT
AT CHRISTCHURCH
I TE KŌTI TAIAO O AOTEAROA
KI ŌTAUTAHI**

Decision No. [2022] NZEnvC 6

IN THE MATTER

of the Resource Management Act 1991

AND

of a notice of motion under s149T(2) to decide proposed Plan Change 8 to the Regional Plan: Water for Otago (referred to the Environment Court by the Minister for the Environment under s142(2)(b) of the Act)

BETWEEN

OTAGO REGIONAL COUNCIL

(ENV-2020-CHC-128)

Applicant

Court: Environment Judge P A Steven
Environment Commissioner K A Edmonds
Environment Commissioner J A Hodges

Hearing: in Dunedin on 8 and 9 November 2021

Last case event: 17 November 2021

Date of Decision: 31 January 2022

Date of Issue: 31 January 2022

DECISION OF THE ENVIRONMENT COURT

A: Amend Plan Change 8 as set out in ‘Annexure: Final Plan Change 8 Provisions’ attached to and forming part of this decision.



ORC PC8 – DECISION

REASONS

Introduction

[1] The Regional Plan: Water for Otago ('Water Plan') was notified in 1998 and made operative on 1 January 2004, predating all versions of the National Policy Statement for Freshwater Management ('NPS-FM'). It has not been subject to a full review since it was notified.

[2] The entirety of the Water Plan is intended to be reviewed in the preparation of a new Land and Water Regional Plan ('Land and Water Plan') which is to be notified by 31 December 2023.¹ PC8 was notified on 6 July 2020² and introduces a range of new provisions and amendments to existing provisions to strengthen the Water Plan's management of certain rural discharges.³ PC8 works alongside PC1 to the Regional Plan: Waste for Otago (Urban Discharges) and PC7 to the Water Plan (Water Permits) to ensure both water quantity and quality issues are addressed in the interim period before a new regional planning framework is in place.⁴

[3] PC8 and PC1 were developed together and notified at the same time. They were intended to be progressed in combination to ensure an efficient Schedule 1 process.⁵ The scope of the two plan changes changed over time, with the scope of PC8 on which our decision is based, now being limited to rural discharges. Other matters originally included in PC8 relating to urban discharges will be addressed as part of PC1.

¹ Letter from Hon David Parker (Minister for the Environment) to Hon Marian Hobbs and Councillors (Chair and Councillors of ORC) regarding Section 24A Report: Investigation of Freshwater Management and Allocation Functions at Otago Regional Council under section 24A of the Resource Management Act 1991, included in Ms Boyd's Statement of Evidence ('SOE') dated 3 September 2021, Appendix B.

² Boyd SOE dated 3 September 2021 at [12].

³ Section 32 report dated 9 April 2020 at sections 1.4 and 1.5.

⁴ Section 32 report dated 9 April 2020 at section 1.4.

⁵ Section 32 report dated 9 April 2020 at section 1.5.

[4] PC8 (now) includes six parts as follows:

Part A: Discharge policies;

Part B: Animal waste storage and application;

Part C: Good farming practices;

Part D: Intensive grazing;

Part E: Stock access to water;

Part F: Sediment traps.

[5] The Minister for the Environment directed that PC8 be referred to the Environment Court under s142(2)(b) of the Resource Management Act 1991 ('RMA' or 'the Act') to give a decision on the provisions and matters raised in submissions.

[6] A total of 96 submissions and 12 further submissions were made on PC8.⁶

[7] Following court-directed expert conferencing and mediation,⁷ by July 2021 the parties had settled their differences in relation to PC8. A process was put in place whereby the parties would assist the court in the presentation of the agreed amendments to the plan change.⁸

The hearing

[8] Evidence was presented by the following witnesses:

- (a) Mr I W Barugh, technical manager for the New Zealand Pork Industry Board. He gave evidence on behalf of it and Otago Regional Council ('ORC');

⁶ Boyd SOE dated 3 September 2021 at [12].

⁷ Court Minute dated 21 April 2021.

⁸ Memorandum of counsel on behalf of ORC dated 9 July 2021 and court Minute dated 9 July 2021. At that time, there was one outstanding matter in relation to a submission that was subsequently withdrawn, recorded in a joint memorandum of counsel on behalf of the Otago Regional Council and Wise Response Incorporated dated 4 August 2021.

- (b) Dr L E Fung, environmental stewardship manager of Deer Industry New Zealand. He gave evidence on behalf of ORC and the New Zealand Deer Farmers Association;
- (c) Mr M J Korteweg who, with his wife, has a dairy farming business near Kaitangata. He gave evidence on behalf of ORC and Federated Farmers New Zealand – Otago and North Otago Provinces;
- (d) Mr C R Duncan, Otago/Southland sustainable dairying manager for Fonterra Co-operative Group Ltd. He gave evidence on behalf of ORC and Fonterra Co-operative Group Ltd;
- (e) Mr L K Bowler, a director of Agblution Solutions Ltd and an environmental extension specialist at DairyNZ Ltd. He gave evidence on behalf of ORC and DairyNZ Ltd;
- (f) Mr N R N Watson, a part-time advisor to the Otago Fish and Game Council and previously its chief executive. He gave evidence on behalf of ORC and the Otago Fish and Game Council and the Central South Island Fish and Game Council;
- (g) Ms K J Johnston, a director and principal of Irricon Resource Solutions Ltd with expertise in managing water resources. She gave evidence on behalf of ORC and Lower Waitaki Irrigation Company Ltd;
- (h) Mrs E Clarkson farms a dry land property in East Otago. She gave evidence on her own behalf;
- (i) Ms F A Boyd, an Associate with planning consultancy Incite. She gave evidence on behalf of ORC;
- (j) Ms K Strauss, consents planner at ORC. She gave evidence on behalf of ORC;
- (k) Ms D L Lee, senior analyst freshwater and land at ORC. She gave evidence on behalf of ORC;
- (l) Mr E W Ellison, Chair of Aukaha, Chairperson of the New Zealand Conservation Authority and who represents Kāi Tahu ki Otago Rūnaka on the ORC Strategy and Planning Committee and the Land and Water Regional Plan Governance Group. He was a former

manager iwi liaison at ORC and a former deputy kaiwhakahaere for Te Rūnanga o Ngāi Tahu. He gave evidence on behalf of ORC and Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākau and Hokonui Rūnanga (collectively Kāi Tahu ki Otago);

- (m) Mr D Whaanga, Kaupapa Taiao manager at Te Ao Marama Inc and Kaiwhakahaere for Te Rūnanga o Awarua. He gave evidence on behalf of ORC and Ngāi Tahu Ki Murihiku;
- (n) Ms A M Gillespie who, with her husband, owns and runs a 394 ha farm finishing beef and dairy grazing just out of Omakau. She gave evidence on behalf of ORC and Federated Farmers New Zealand – Otago and North Otago Provinces;
- (o) Ms N O McGrouther, owner and director of Creekside Consulting, who participated in mediation as a representative for New Zealand Deer Farmers Association – Otago Branch and Beef + Lamb New Zealand Ltd, in relation to sediment traps. She gave evidence on behalf of ORC.

[9] The evidence as a whole explained the architecture of PC8 and led us through what is a complex interim policy and rule framework. The collaborative approach adopted by all parties was evident from the way in which evidence was presented, in many cases on behalf of both ORC and a submitting party. We compliment the parties on working together so effectively and commend the approach for use in other Resource Management Act processes.

Coverage of PC8

[10] As noted, PC8 addresses a variety of related topics concerning the primary sector, and is divided into six parts.

[11] The evidence of Ms Boyd provides a summary description of Parts A-C:⁹

Policies 7.D.5 and 7.D.6 in Part A of PC8 provide policy direction for decision-makers on resource consent applications for discharges of contaminants to land and to water. The amendments agreed through mediation are focused on clarifying the matters required to be considered and aligning the content of the policies with the National Policy Statement for Freshwater Management 2020 (**NPSFM**). The policies as amended will provide clearer guidance to decision-makers, particularly on appropriate consent terms for certain discharges of nitrogen which have the potential to undermine the new land and water regional plan under development.

Part B is the largest part of PC8 and has been extensively amended. This reflects the highly technical nature of the provisions, which relate to the design, construction, operation, and maintenance requirements for animal effluent systems as well as practices for applying effluent to land (and associated regulation of the discharges). In many cases, the notified provisions were difficult (or impossible) to implement, which would have resulted in additional costs for users and potentially affected the ability of the objectives of PC8 to be achieved.

...

Part C introduces one policy related to farming activities and a definition of “critical source area”. As with Part A, the amendments agreed through mediation were relatively minor and focused on aligning the provisions with higher order documents, particularly the National Environmental Standard for Freshwater 2020 (**NESF**) and the Resource Management (Stock Exclusion) Regulations 2020 (the **Stock Exclusion Regulations**) which came into force after PC8 was notified.

[12] In her evidence, Ms Lee provides a summary description of Parts D-F:¹⁰

Part D introduced land use rules for intensive grazing, an activity that has been identified as having the potential to cause issues for water quality. The NES-F regulates intensive winter grazing and amendments to Rules 14.6.1.1 and 14.6.2.1

⁹ Boyd SOE dated 15 October 2021 at [8]-[9] and [11].

¹⁰ Lee SOE dated 15 October 2021 at [15]-[17].

were agreed at mediation which provide that the rules will only apply until Regulations 26 and 27 of the NES-F or equivalent regulations come into force. It was also agreed that the PC8 rule should apply to intensive *winter* grazing and the definition of intensive grazing has been amended to reflect that.

Part E amended an existing rule to require dairy cattle and pigs to be excluded from certain water bodies from 2022. The Stock Exclusion Regulations were gazetted on 5 August 2020 and at mediation the parties agreed that the changes made to Rule 13.5.1.8A by PC8 should be deleted, along with the definition of dairy cattle, and stock exclusion be managed by the Stock Exclusion Regulations.

Part F introduced a new rule which provides for the construction of sediment traps in ephemeral or intermittently flowing rivers, subject to conditions, as a permitted activity. Some minor amendments are proposed to this rule.

Outstanding issues

[13] The court agreed with the majority of the changes proposed by PC8. Clarification was sought on a number of matters arising from the evidence, which was provided generally to our satisfaction, with only the following matters needing to be addressed individually in this decision:

- (a) the lack of policy guidance on the term of consents authorised by proposed Rule 12.C.2.5, which applies to discharges from effluent storage facilities;
- (b) some minor changes to Policy 7.D.7;
- (c) a proposed permitted activity Rule 12.C.1.4B to cover small discharges of effluent; and
- (d) matters raised by Mrs Clarkson.

Purpose of PC8

[14] Before discussing these matters, we record that "... the purpose of PC8 is to improve the management of specific activities likely to be adversely affecting water quality in Otago while a new land and water regional plan is prepared that

gives full effect to the NPSFM 2020”.¹¹ The Land and Water Plan is to be notified no later than 31 December 2023, following which the proposed discharge rules in that plan will have legal effect,¹² approximately two years after the date of this decision.

[15] PC8 does not and cannot give full effect to the National Policy Statement-Freshwater Management 2020 (‘NPS-FM 2020’), nor to the proposed Regional Policy Statement 2021, but it will have a limited life. Nevertheless, the provisions of PC8 must not compromise the ability of the Land and Water Plan to give effect to both of these higher order provisions as soon as reasonably practicable. This is a primary reason why we consider a limited term must be applied to resource consents granted in accordance with proposed Rule 12.C.2.5.

[16] Ms Boyd describes the relationship of PC8 with other relevant planning instruments.¹³ She considers that Parts A-F of PC8 achieve the purpose of the Act while recognising that, on their own, they do not give full effect to the NPS-FM 2020. She considers that the plan change is an appropriate and necessary response to the need for an interim planning regime. Taking into account the high level of agreement to the provisions of PC8 by all parties, we accept her evidence, subject to the amendments set out below.

[17] We have considered matters raised in submissions as well. The only outstanding matter was raised by Mrs Clarkson and we address that in paragraphs [28] to [30] and [37] to [41] below.

Policy guidance on term – Policy 7.D.6

[18] Returning to the term of consent, Policy 7.D.6. was proposed to provide

¹¹ Boyd SOE dated 3 September 2021 at [10].

¹² RMA, s86B(3)(a).

¹³ Boyd SOE dated 3 September 2021 at [66] and following.

clearer guidance on appropriate consent terms, as follows:

When considering applications for resource consent for discharges of nitrogen onto or into land in circumstances where it may enter water under Rule 12.C.3.2:

- (a) Restrict the duration of resource consents to a term of no more than 10 years;

[19] Policy 7.D.6 applies only to Rule 12.C.3.2. It does not apply to proposed Rule 12.C.2.5, which makes the discharge of liquid animal effluent or water containing liquid animal effluent from an animal effluent system onto or into land a restricted discretionary activity. There is no specific policy for the duration of consents granted under Rule 12.C.2.5,¹⁴ meaning that consents could be granted for up to 35 years.¹⁵ This was not appreciated by a number of parties when signing the mediation agreement and the court was concerned that it could adversely affect ORC's ability to implement the NPS-FM and be consistent with the PRPS 2021.

[20] The court raised the matter with parties during the hearing and directed ORC to consult with the parties to the Part B effluent provisions' mediation agreement regarding proposed amendments to Policy 7.D.6. In view of the need to consult, the Council elected to have Ms Boyd prepare an affidavit explaining in further detail the changes to the proposed policy.¹⁶

Proposed changes to Policy 7.D.7

[21] During the hearing, the court raised two queries in relation to the alignment between the policy and other provisions in the Water Plan:

- (a) in relation to the requirement in Policy 7.D.7(b)(ii) which requires contingency measures to prevent discharges occurring in the case of

¹⁴ Boyd and Strauss joint statement of supplementary evidence dated 8 November 2021 at [16].

¹⁵ Boyd and Strauss joint statement of supplementary evidence dated 8 November 2021 at [22].

¹⁶ Boyd affidavit in support of amendments to the provisions as agreed at mediation for Part B of Proposed Plan Change 8 to the Regional Plan; Water for Otago, Primary Sector Provisions, dated 17 November 2021.

equipment or system failure, whereas the corresponding requirement in Clause (i) of Schedule 21 did not limit the use of contingency measures in the same way; and

- (b) as to the reason why the description of the management plan in Policy 7.D.7(b)(iii) differed from that in the corresponding rules in sections 12 and 14.

[22] The evidence of Ms Boyd filed in closing for the ORC satisfactorily addressed each of these, in turn:

- (a) as to the wording of Policy 7.D.7(b)(ii), Ms Boyd agreed that the policy should not limit the adoption of contingency measures to situations where there is an equipment or system failure and agreed to the deletion of these words; and
- (b) as to the wording of Policy 7.D.7(b)(iii), Ms Boyd explained that it was not a deliberate deviation and recommended a change to align the wording of the policy with that contained in the rules.

[23] To address matters [22](a) and (b), ORC proposed the following amendments to proposed Policy 7.D.7:

- (a) to subclause (b)(ii) to remove “in the case of equipment or system failure” in relation to contingency measures to prevent discharges. This amendment was to ensure that contingency measures are considered in all scenarios to prevent discharges of effluent, not only those related to equipment or system failure.
- (b) to subclause (b)(iii), which is in relation to the operation of animal effluent systems in accordance with a management plan, to reflect the purpose and objective of management plans set out in Schedule 21. Animal systems are to be operated in accordance with a management plan for the “purpose of preventing the unauthorised discharge of liquid or solid effluent to water”.

- (c) to include a new subclause (e) which provides policy direction that resource consents for the discharge of animal effluent are to be granted for a maximum duration of up to 10 years in order to facilitate an efficient and effective transition from the operative freshwater planning framework towards a new integrated regional planning framework.

[24] All parties to the mediated agreement confirmed that they either supported the proposed amendments to Policy 7.D.7 or agreed to abide by the court's decision.¹⁷

Small-scale discharges

[25] Dr Fung's evidence¹⁸ was that liquid effluent from deer shed wash down is generally of small volumes and is mostly contained to a few months in the year for velvet removal (typically three times a week during peak months of November and December). At other times, deer waste is mostly solid and is disposed of by sweeping waste material out of the shed or collecting the dry material and redistributing it onto a paddock. He considered there is little environmental risk posed by liquid effluent generated from deer shed activities. He sought permitted activity status for these discharges.

[26] Ms Boyd considered that it would be appropriate to provide for a new permitted activity rule for these small-scale discharges (not only for deer effluent, but other types of very small-scale liquid effluent that might be generated by washdown or other on-farm activities). She drafted a rule to this effect as follows:¹⁹

¹⁷ Memorandum of counsel and closing legal submissions of counsel on behalf of ORC.

¹⁸ Fung SOE dated 17 September 2021 at [42]-[44].

¹⁹ Supplementary statement of evidence dated 8 November 2021 at [6].

New Rule 12.C.1.4B Permitted Activity

- 12.C.1.4B The discharge of liquid animal effluent, or water containing liquid animal effluent, onto or into land is a *permitted* activity providing:
- (a) The volume of the discharge is not more than 35 m³ per landholding in any consecutive 12 month period; and
 - (b) The discharge is not prohibited under Rule 12.C.0.4;
 - (c) The discharge does not occur within 20 metres of the boundary of the landholding on which the liquid animal effluent is being discharged, or beyond that boundary; and
 - (d) There is no discharge to land when the soil moisture exceeds field capacity.

[27] Ms Boyd circulated the proposed rule to the parties shortly before the hearing commenced. No opposition to the draft rule had been received at the time of the hearing, but there were still a number of parties who had not specifically responded to the drafting. ORC's closing submissions did not indicate any change to this situation, which we take to be an indication that no party objects to the proposed new rule.

Matters raised by Mrs Clarkson

[28] Mrs Clarkson made a submission dated 16 August 2020 and referred to it at the hearing.²⁰ She had participated in mediation. She stated in her evidence that winter grazing is a critical and essential part of the feed management for stock on her property and explained the reasons and the management processes followed.

[29] Rainfall over the winter grazing period is low at her property, meaning sediment loss and pugging is less of an issue, but Mrs Clarkson appreciated that in higher rainfall areas, management practices do need to be more considered. She remained concerned about the formula for determining the area to be winter grazed as proposed in the regulations, including whether there is irrigation or not.

²⁰ As recorded in NOE.

[30] She considered that critical source areas can be successfully grazed with good management practices, noting that, on extensive high country properties, gullies provide an important animal welfare function. She did not want to see them permanently fenced off. Going forward with freshwater farm plans, she hopes decision-makers will allow some flexibility, discretion and common sense regarding stock exclusion and slope requirements.

Our evaluation of outstanding issues

[31] The proposed amendments to Policy 7.D.7 address the concerns raised by the court in relation to the more focused direction limiting the term of discharge consents, in particular, and were accepted by all parties to the Part B effluent provisions' mediation agreement.

[32] We note that the language used in the amended policy deliberately adopts the wording used in Objective 10A.1.1 of PC7 in that it refers to the "... efficient and effective transition from the operative freshwater planning framework towards a new integrated regional planning framework".

[33] As to that wording, we agree with Ms Boyd's evidence that the similarity of language is appropriate given the shared common purpose between PC8 and PC7; both plan changes seek to support a transition from the deficient Water Plan to a fully NPS-FM-compliant Land and Water Plan.

[34] The other wording changes to Policy 7.D.7, which are of minor effect, achieve much improved clarity and coherence between the policy and its implementing rules. These were also agreed to by all parties and address the concerns of the court.

[35] Proposed permitted activity Rule 12.C.1.4B addresses an issue raised in evidence by Dr Fung and was not opposed by any party. The court considers it to be an appropriate resource management response.

[36] Accordingly, we confirm the proposed amendments to Policy 7.D.7 and the addition of permitted activity Rule 12.C.1.4B.

[37] As indicated at the hearing, we were assisted by and appreciated the clarity of Mrs Clarkson's evidence on the practical realities of farming operations in the conditions that exist on her property and, no doubt, other properties in similar environments. The matters of concern to Mrs Clarkson were addressed during mediation and an outcome agreed. While she agrees that mediation requires compromise, it must be workable and some of the matters agreed do not reflect her own views.

[38] Mrs Clarkson's primary concern relates to winter grazing. This was addressed in Ms Lee's evidence. It was agreed at mediation that proposed Rules 14.6.1.1 and 14.6.2.1 in PC8 will only apply until regs 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 ('NES-F') or equivalent regulations come into force. It was also agreed that the PC8 rule should apply to intensive *winter* grazing and the definition of intensive grazing has been amended to reflect that.

[39] ORC must enforce the observance of the NES-F to the extent to which their powers enable them to do so.²¹ Based on currently available information, the intensive grazing regulations are due to come into force on 1 May 2022,²² meaning the rules in PC8 will only apply to the next winter grazing season. The mediated PC8 outcome provides:²³

- (a) intensive winter grazing is a permitted activity subject to conditions or is a discretionary activity under Rule 14.6.2.1 if farmers wish to graze new paddocks or increase the area of intensive winter grazing; and

²¹ RMA, s44A(8).

²² Although there is a possibility that this will be delayed until 1 November 2022.

²³ Lee SOE dated 15 October 2021 at [35].

- (b) intensive winter grazing is permitted in critical source areas if they are managed so that contaminants are prevented from entering a surface water body.

[40] Ms Lee outlined other changes to the intensive winter grazing rules agreed at mediation, and that as part of the agreed outcome, ORC has committed to further work being undertaken on the issue of intensive winter grazing through the development of the Land and Water Plan.

[41] Based on Ms Lee's evidence, it appears to us that Mrs Clarkson's main concerns have been addressed through mediation in a way that provides a workable way forward. The way in which freshwater farm plans are addressed by decision-makers in the future will fall to ORC.

Requirement to prepare and publish evaluation reports

[42] The proposed policies and rules must be examined in accordance with s32 RMA as to whether they are the most appropriate way to achieve the objectives by identifying other reasonably practicable options for achieving the objective and assessing their efficiency and effectiveness. That requires identifying benefits and costs and assessing the risk of acting or not acting if there is insufficient information.

[43] In the context of PC8, which is an amending proposal, the examination must relate to the provisions and objectives of PC8 and objectives of the Water Plan to the extent that those objectives are relevant to the objectives of the plan change (PC8) and would remain if PC8 were to take effect.²⁴

[44] An evaluation under s32AA RMA of the changes agreed at mediation was attached to the evidence of Ms Lee (in relation to the amended provisions in Parts D, E and F). She considers that the amended provisions of PC8 continue to

²⁴ RMA, s32(3).

achieve the purpose of the RMA and other higher order documents by improving management of activities that are known to be contributing to degradation in water quality in Otago.

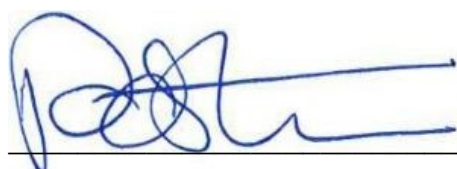
[45] Similar statements appeared in the evidence of Ms Boyd in relation to the changes proposed to the amended provisions in Part A, B and C.

[46] With the further changes required by the court, we concur with the evaluation of Ms Lee and Ms Boyd. While PC8 does not yet give full effect to the NPSM 2020, or to Te Mana o te Wai, as an interim measure, the changes approved by this decision are a further step in the right direction in giving effect to the NPS-FM 2020 and the PRPS 2021.²⁵

Outcome

[47] Pursuant to s149U(6) and cl10(1) to (3) of Schedule 1 RMA, the court's decision on PC8 is to amend it as set out in 'Annexure: Final Plan Change 8 Provisions' attached to and forming part of this decision.

For the court



P A Steven
Environment Judge



²⁵ Alongside those changes approved in earlier decisions of the court in relation to PC7 (*Re Otago Regional Council* [2021] NZEnvC 164 and PC1 (*Re Otago Regional Council* [2021] NZEnvC 185).

Annexure: Final Plan Change 8 Provisions

OTAGO REGIONAL COUNCIL

Plan Change 8 – Primary Sector Provisions

Tracked Changed Version – Chapters 7, 12, 13, 14, 20 and 21

Chapter
Chapter 7 Water Quality
Chapter 12 Water Take, Use and Management
Chapter 13 Rules: Land Use on Lake or River Beds or Regionally Significant Wetlands
Chapter 14 Rules: Land Use other than in Lake or River Beds
Chapter 20 Schedules
Chapter 21 Glossary
Key Red text shows changes to the planning provisions proposed in the notified version of proposed Plan Change 8 that relate to the primary sector (underline shows new wording and strikethrough showing deleted wording). Green Text indicates further changes agreed to by the parties at mediation (underline shows new wording and strike-through showing deleted wording). Blue text indicates further changes recommended during the hearing process to the version of provisions agreed by the parties at mediation (underline shows new wording and strike-through showing deleted wording).

7

Water Quality



7D5

Part A:
Discharge
policies

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, ecosystem health and natural and human use values, including Kāi Tahu cultural and spiritual beliefs, values and uses; and
- (b) The physical characteristics ~~and any particular sensitivity~~ of the land and the sensitivity of the any receiving water; and
- (c) The quality and performance of the discharge management system ~~used, or proposed~~ to be used, and in particular,
 - (i) options to be employed to reduce any adverse environmental effects of the activity discharge; and
 - (ii) monitoring of the performance 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 for the duration of the consent; or
 - (ii) The demonstrable ongoing reduction of adverse environmental effects of the discharge over the duration of the consent, ~~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 relative to any national bottom lines specified in Appendix 2A and 2B of the NPS-FM; 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~~ The social, cultural and economic value of the use of land and water that gives rise to the discharge.

Part A:
Discharge
policies

7.D.6 When considering applications for resource consent for discharges of nitrogen onto or into land in circumstances where it may enter water 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~~ Any measures proposed to reduction in nitrogen discharged over the term of the resource consent, ~~particularly from including any 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.

7.D.7 Ensure the appropriate management and operation of animal waste effluent systems and management of the application of animal effluent to land by:

Part B:
Animal waste
storage and
discharge

- (a) Requiring animal waste effluent systems to be designed, constructed and located appropriately and in accordance with ~~good management practice best practice; and~~
- (b) Ensuring that all animal waste effluent systems:
- (i) Have sufficient storage capacity to ensure that the disposal of effluent to land does not occur under conditions that will result in contaminants entering into water ~~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 of effluent to a water body, an artificial watercourse, or the coastal marine area, either directly or indirectly, ~~to water in the case of equipment or system failure; and~~
 - (iii) Are operated in accordance with an ~~operational~~ management plan for the ~~purpose of preventing the unauthorised discharge of liquid or solid effluent to water~~ system that is based on ~~best good management practice guidelines and are inspected regularly; and~~

- (c) Avoiding the discharge of liquid and solid animal waste effluent to:
 - (i) water bodies, artificial watercourses, bores and soak holes, and the coastal marine area; and
 - (ii) to saturated land in a manner that results in ponding or overland flow to water; and
 - (iii) land when the soil moisture exceeds field capacity; and
- (d) Requiring low-rate effluent application to be in accordance with good management practice 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; and
- (e) Granting resource consents for discharges of animal effluent for a maximum duration of up to 10 years in order to facilitate an efficient and effective transition from the operative freshwater planning framework towards a new integrated regional planning framework.

7.D.8 Provide for the upgrading of existing animal waste effluent storage facilities systems that do not meet the standards in of Rule 14.7.1.1 by:

Part B:
Animal waste
storage and
discharge

- (a) Granting resource consents only where consent applications contain a timebound action plan for upgrading the existing animal waste effluent storage facility system so that it meets the standards in of Rule 14.7.1.1 as soon as possible; and
- (b) Staging implementation of performance standards based on risk in accordance with Rule 14.7.1.2 and Schedule 19.

7.D.9 Enable farming activities while reducing their adverse environmental effects by:

Part C:
Good farming
practices

- (a) Promoting the implementation of good management practices (or better) to reduce sediment and contaminant loss to water bodies; and
- ~~(d)~~(b) Managing the risk of sediment and contaminants in run off entering water as a result of from farming activities by:
 - (i) Implementing setbacks from water bodies rivers, lakes, drains (excluding sub-surface drains), natural wetlands or the coastal marine area and establishing or maintaining riparian vegetation margins, and
 - (ii) Limiting areas and duration of exposed soil; and
 - ~~(b)~~(iii) 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 cultural and spiritual

beliefs, values and uses, and river and riparian ecosystems and habitats, and

(e)(iv) Setting interim minimum standards for intensive winter grazing; and

(e)(v) Promoting the identification and management of Managing critical source areas within individual properties, to reduce the risk of nutrient or microbial contamination and sediment run-off.

12

Rules: Water Take, Use and Management



12.C Other discharges

Note: Resource consent may also be required under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 which contains additional restrictions in relation to activities within, or within a 100m setback of, a natural wetland.

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

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

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Animal waste
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- (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
 - (vii) To saturated land; or
 - (viii) That results in ponding,
- is a *prohibited* activity.

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

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Animal waste
storage and
Application

- (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) To land when the soil moisture exceeds field capacity; or~~
 - ~~(viii) Where liquid animal effluent is distributed through the same infrastructure as water from a bore with no back flow prevention installed,~~
 - ~~(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.

Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4 and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1 and 14.7.3.1.

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

12.C.1.4A The discharge of solid animal effluent (excluding any discharge directly from an animal to land), ~~sludge~~, or vegetative material containing solid or liquid animal effluent, into or onto land including in circumstances where a contaminant may enter water is a permitted activity provided:

- (a) the material does not contain any hazardous substance or hazardous waste,
- (b) the material does not include any waste from a human effluent treatment process,
- (c) the material is not discharged:
 - (i) onto the same area of land more frequently than once every two months; or
 - (ii) onto land where solid animal effluent, or vegetative material containing liquid or solid animal effluent, from a previous application is still visible on the land surface; or
 - (iii) onto land when the soil moisture exceeds field capacity;

or

(iv) within 20 metres of the bed of a lake, river, the coastal marine area, Regionally Significant Wetland, water supply used for human consumption, bore, soak hole, or a landholding boundary.

12.C.1.4B The discharge of liquid animal effluent, or water containing liquid animal effluent, onto or into land is a permitted activity providing:

- a) The volume of the discharge is not more than 35m³ per landholding in any consecutive 12 month period; and
- b) The discharge is not prohibited under Rule 12.C.0.4; and
- c) The discharge does not occur within 20 metres of the boundary of the landholding on which the liquid animal effluent is being discharged, or beyond that boundary; and
- d) There is no discharge to land when the soil moisture exceeds field capacity.

12.C.1.4 Notwithstanding any other rule in this Plan, the discharge of liquid animal effluent waste, or water containing liquid animal effluent waste, from an animal waste effluent system onto or into land is a **permitted** activity providing:

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Animal waste
storage and
Application

- (a) The animal effluent waste storage facility 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 20 ~~50~~ metres of the boundary of the ~~property~~ landholding on which the liquid animal effluent waste is ~~generated~~ being discharged, or beyond that boundary; and
- (d) There is no discharge to land when the soil moisture exceeds field capacity.

Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4, and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1, and 14.7.3.1.

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

12.C.2.5 The discharge of liquid animal effluent waste, or water containing liquid animal effluent animal waste, from an animal effluent waste system onto or into land is a **restricted discretionary** activity provided:

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Animal waste
storage and
Application

- (a) The discharge is not prohibited under Rule 12.C.0.2A4; 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 extent to which the application depth and rate is consistent with industry agreed good management practice;
- (ii) Size and location of the disposal area, including separation distances from lakes, rivers, Regionally Significant natural Wetlands, bores, soak holes, the coastal marine area, water supply for human consumption and dwellings;
- (iii) Measures to avoid, remedy or mitigate aAdverse effects on water quality, taking into account the nature and sensitivity of the receiving environment, and any measures to avoid, remedy or mitigate these adverse effects;
- (iv) Measures to avoid, remedy or mitigate aAdverse effects on Kāi Tahu cultural and spiritual beliefs, values and uses, and any measures to avoid, remedy or mitigate these adverse effects;
- (v) Duration of consent and any review conditions;
- (vi) Quality and content of, and compliance with, a management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water that is prepared in accordance with Schedule 21 for the animal waste system; and
- (vii) Any information and monitoring requirements; and
- (viii) The value of existing investment in the animal effluent system.

Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4, and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1, and 14.7.3.1.

13

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



13.5.1 Permitted activities: No resource consent required

Part E
Stock access
to water

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 ~~it does not~~:

- (a) ~~It does not~~
- ~~(i)~~ Involve feeding out on that bed or wetland; or
 - ~~(b)(ii)~~ Cause or induce noticeable slumping, pugging or erosion; or
 - ~~(c)(iii)~~ Result in a visual change in colour or clarity of water; or
 - ~~(d)(iv)~~ 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.~~

Advice Note: For regulations on stock exclusion from waterways refer to the Resource Management (Stock Exclusion) Regulations 2020.

Advice Note: The proposed Land and Water Regional Plan, when notified in December 2023, may introduce provisions regulating stock exclusion in a Freshwater Management Unit, or any part of a Freshwater Management Unit in addition to Resource Management (Stock Exclusion) Regulations 2020.

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.

Part F
Sediment
traps

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 and any associated deposition of bed material 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 No works do not occur in flowing water; and~~

~~(d) The sediment trap cannot be accessed by livestock; and~~

~~(de) Any build-up of sediment and other debris (including vegetation) within the sediment trap is removed as soon as practicable to maintain the effectiveness of the sediment trap; and~~

~~(ef) 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~~

~~(fg) No lawful take of water is adversely affected as a result of the disturbance; and~~

~~(gh) There is no change to the water level range or hydrological function of any Regionally Significant Wetland; and~~

~~(hi) There is no damage to fauna or New Zealand native flora in or on any Regionally Significant Wetland.~~

14

Rules: Land Use other than in Lake or River Beds



14.6 Rural land uses

14.6.1 Permitted activities: No resource consent required

Part D
Intensive
Grazing

14.6.1.1 Until Regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 or equivalent regulations come into force, ~~the use of land for intensive winter 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.~~~~
- ~~(a) Land on the farm was used for intensive winter grazing between 1 July 2014 and 30 June 2019 (inclusive); and~~
- ~~(b) At all times, the area of the farm that is used for intensive winter grazing is no greater than the maximum area of the farm that was used for intensive winter grazing between 1 July 2014 and 30 June 2019 (inclusive); and~~
- ~~(c) Stock are progressively grazed (break fed or block fed) from the top of a slope to the bottom of a slope; and~~
- ~~(~~c~~) A vegetated strip of at least 405 metres is maintained between the intensively grazed area and any water body river, lake, wetland or drain (excluding sub-surface drains), and all stock are excluded from this strip during intensive winter grazing; and~~
- ~~(d) The intensive winter grazing does not occur in a natural wetland; and~~
- ~~(~~b~~e) There is no intensive winter grazing in any critical source area unless contaminants are prevented from entering a surface water body.~~

Advice Note: when regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 come into force, for rules applying to the use of land on a farm for intensive winter grazing refer to Subpart 3 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

14.6.2 Discretionary activities: Resource consent required

Part D
Intensive
Grazing

14.6.2.1 Until Regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 or equivalent regulations come into force, ~~except as provided by Rule 14.6.1.1, the use of land for intensive winter grazing is a *discretionary* activity.~~

Advice Note: when regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 come into force, for rules applying to the use of land on a farm for intensive winter grazing refer to Subpart 3 of the

Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

Advice Note: Resource consent may also be required under Regulation 30 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020. A resource consent may only be granted under Regulation 30 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 if the consent authority is satisfied that granting the consent will not result in an increase in—

- (a) contaminant loads in the catchment, compared with the loads as at the close of 2 September 2020; or
- (b) concentrations of contaminants in freshwater or other receiving environments (including the coastal marine area and geothermal water), compared with the concentrations as at the close of 2 September 2020.

Any resource consent granted under Regulation 30 must be for a term that ends before 1 January 2031.

14.7 Animal Waste Systems

Note: Resource consent may also be required under the Resource Management (National Environmental Standards for Freshwater) Regulations which contains additional restrictions in relation to activities within, or within a 100 metre setback of, a natural wetland.

14.7.1 Permitted activities: No resource consent required

Part B
Animal
waste
storage and
application

14.7.1.1A The use of land for the construction, use and maintenance of a component of an animal effluent system that is not an animal effluent storage facility is a *permitted* activity providing:

- (a) for a component with a volume of less than 35,000 litres, the component does not have any visible cracks, holes or defects that would allow effluent to leak from the component;
- (b) for a component with a volume of 35,000 litres or above, the component is certified by a Suitably Qualified Person, as defined in Schedule 20, within the last five years as having no visible cracks, holes or defects that would allow effluent to leak from the component;
- (c) the component (excluding conveyance pipes) is not located:
 - (i) within 20 metres of any lake, river, Regionally Significant Wetland, water supply used for human consumption, bore or soak hole; or
 - (ii) above subsurface drainage (excluding a leak detection system); and

- ~~(d) where the total volume of the animal effluent system exceeds 35,000 litres, a management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is prepared and implemented in accordance with Schedule 21.~~

14.7.1.1 The use of land for the use and maintenance of an animal effluent storage facility 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 animal effluent storage facility storage pond is sized in accordance with the 90th percentile as calculated by the Dairy Effluent Storage Calculator, and where relevant using a conversion factor for animals other than dairy cows determined by a Suitably Qualified Person as defined in Schedule 20;~~

- ~~(b) The animal effluent storage facility 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 as defined in Schedule 20, within the last five years as:~~

~~(1i) having no visible cracks, holes or defects that would allow effluent to leak from the animal effluent storage facility; Structurally sound and without any visual defects; and~~

~~(2ii) Meeting the relevant pond drop test criteria in Schedule 18 (excluding above-ground tanks, bladders, and solid animal effluent storage facilities); and~~

- ~~(c) A management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is prepared and implemented in accordance with Schedule 21.~~

- ~~(e) 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). Any certifications under (a) and (b) are provided to the Otago Regional Council upon written request.~~

~~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.~~

~~Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4 and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1, and 14.7.3.1.~~

~~Note Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1 and 14.7.3.1 do not manage discharges of liquid or solid animal effluent to land. Discharges of liquid and solid animal effluent are managed under the following rules: 12.C.0.4, 12.C.1.4A, 12.C.1.4, and 12.C.2.5.~~

Part B
Animal
waste
storage and
application

~~14.7.1.2 The use of land for the use and maintenance of an animal effluent storage facility 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

Part B
Animal
waste
storage and
application

~~14.7.2.1 The use of land for the construction, use and maintenance of an animal effluent storage facility 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 animal effluent storage facility storage pond is sized in accordance with the 90th percentile as calculated by the Dairy Effluent Storage Calculator, and where relevant using a conversion factor for animals other than dairy cows determined by a Suitably Qualified Person as defined in Schedule 20; and~~
- ~~(b) The animal effluent storage facility storage pond is either:~~
- ~~(i) Fully lined with an impermeable synthetic liner and has an effective leak detection system that underlies the animal effluent storage facility storage pond; or~~
 - ~~(ii) Of concrete construction; or~~
 - ~~(iii) Is aAn above-ground tank; or and~~

- (iv) Sealed with a clay liner; and
- (c) The design of the animal effluent storage facility, and any leak detection system ~~animal waste system~~ has been certified by a Chartered Professional Engineer as being in accordance with the relevant parts of IPENZ Practice Note 21¹ and IPENZ Practice Note 27;² and
- (d) The animal effluent storage facility ~~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 purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is prepared and implemented in accordance with Schedule 21.
- ~~(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 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~~

¹ Available from Otago Regional Council's website at <http://www.orc.govt.nz> <https://www.dairynz.co.nz/publications/environment/ipenz-21-farm-dairy-effluent-pond-design-and-construction/>

² Available from Otago Regional Council's website at <http://www.orc.govt.nz> <https://www.dairynz.co.nz/publications/environment/ipenz-practice-note-27-dairy-farm-infrastructure/>

~~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 animal effluent storage facility system, including storage capacity, nature of the animal waste solid or liquid animal effluent and the anticipated life of the animal effluent storage facility system; and~~
- ~~(b) The design, construction and adequacy of ancillary structures that are components of the animal waste system; and~~
- ~~(eb) The height of embankments and the placement and orientation relative to flood flows and stormwater run-off; and~~
- ~~(dc) Methods to protect the animal effluent storage facility system from damage by animals and machinery; and~~
- ~~(ed) Quality and content of, and implementation of, a the management plan prepared in accordance with Schedule 21 for the animal waste system which requires pond drop tests of the system's storage pond(s) every three years; and~~
- ~~(fe) 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~~
- ~~(gf) Location of the animal waste system animal effluent storage facility; and~~
- ~~(hg) Measures to avoid, remedy or mitigate adverse effects on Kāi Tahu cultural and spiritual beliefs, values and uses.~~

14.7.3 Discretionary activities: Resource consent required

Part B
Animal
waste
storage and
application

14.7.3.1 ~~The use of land for the construction, upgrade, use or maintenance of an animal effluent storage facility or a component of an animal effluent system that is not an animal effluent storage facility animal waste system (including storage pond(s) and ancillary structures) is a **discretionary** activity provided it is not:~~

- ~~(a) Permitted under Rules 14.7.1.1A, 14.7.1.1 or 14.7.1.2; or~~
- ~~(b) Provided for by Rule 14.7.2.1.~~

20

Schedules



18. Schedule of storage pond drop test requirements and criteria

Part B:
Animal
waste
storage and
application

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

Requirements

- Testing is undertaken over a minimum period of 48 hours. A minimum of 24 hours of accurate data within a single test period.
- Testing recording equipment is to be accurate to 0.8 mm or less. Total test error of less than ± 1 mm.
- 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 (excluding freeboard) 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 level of sludge or crust on the pond during the test should be minimal so that it does not impact on test results.
- The pond surface is not frozen during any part of the testing.
- An anemometer is installed for the duration of the test and only data obtained when the wind speed does not exceed 50 kilometres per hour (14 m per second) at the test site is used in the test results. wind speed is at 10 metres per second or less for at least 24 hours during the test.

Criteria Table 18.1 Maximum allowable pond level change

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

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

19. Schedule of progressive implementation of animal waste effluent storage requirements

Part B:
Animal
waste
storage and
application

Many animal waste effluent storage facilities 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 animal effluent storage facilities 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.

For clarity, this calculation under Schedule 19A does not determine the volume of the storage facility under section 14.7, it only determines the date that applications must be received.

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:

$$\text{Daily waste volume (m}^3\text{)} \equiv \frac{\text{Maximum number of cows milked per day}}{\text{Maximum number of times per day that cows are milked during milking season}} \times 0.05^{\wedge} \times$$

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

For example:

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

$$\text{Daily waste volume (m}^3\text{)} \equiv 500 \times 0.05 \times 2$$

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

Step Two:

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

$$\frac{\text{Days of storage available}}{\text{available}} = \frac{\text{Actual storage volume (m}^3\text{)}^\wedge}{\text{Daily waste volume (m}^3\text{)}}$$

^ 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:

$$\frac{\text{Days of storage available}}{\text{available}} = \frac{1000}{50}$$

$$\frac{\text{Days of storage available}}{\text{available}} = \frac{20}{1}$$

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.

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.

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

20. Schedule defining Suitably Qualified Persons

A suitably qualified person for the purposes of this schedule is a person who has been certified by the Otago Regional Council as being appropriately qualified and experienced in accordance with the requirements below.

Requirements – Animal Effluent systems

For the purposes of Rules 14.7.1.1A(b), 14.7.1.1(b) and Schedule 210(j)(4), a Suitably Qualified Person has either:

- (a) A relevant tertiary qualification in agricultural engineering, natural resources engineering or civil engineering and at least five years' professional experience in designing and constructing effluent management systems; or
- (b) A relevant equivalent qualification (for example, international qualifications) and at least five years' professional experience in designing and constructing effluent management systems; or
- (c) At least ten years' professional experience in designing and constructing effluent management systems.

Requirements – Calculations using the Dairy Effluent Storage Calculator

For the purposes of Rules 14.7.1.1(a) and Rule 14.7.2.1(a), a Suitably Qualified Person has:

- (a) For undertaking a calculation using the Dairy Effluent Storage Calculator, at least five years' relevant professional experience in designing effluent management systems, and
- (b) For determining a conversion factor for animals that are not dairy cows, a relevant scientific tertiary qualification or relevant research experience.

21. Schedule of management plan requirements

- (1) A management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is:
 - (a) prepared by the landholding owner or their agent and retained on the landholding, identifying the matters set out in clause 2 below;
 - (b) reviewed at least once every 12 months by the landholding owner or their agent, and the outcome of the review documented; and
 - (c) provided to the Otago Regional Council upon request, and
- (2) The management plan must contain the following:
 - (a) physical address of where the animal effluent system is located, and the land where liquid or solid animal effluent is to be applied,
 - (b) a description of the landholding ownership, and the contact details of the owner and the person in charge,
 - (c) legal description(s) of the landholding,
 - (d) a list of all the relevant resource consents held for the landholding and their expiry dates,
 - (e) a map(s) or aerial or satellite photograph(s) showing the locations of:

- (i) the boundaries of the landholding,
- (ii) the location of any dairy shed, animal effluent storage facilities, and any other components of an animal effluent system,
- (iii) lakes, rivers, natural wetlands, bores, soak holes, the coastal marine area, water supply for human consumption and dwellings within the landholding,
- (iv) the area of land where liquid or solid animal effluent is to be applied, and in relation to this area:
 - soil types and their risk profile¹,
 - any critical source areas and the locations of known subsurface drains.
- (f) Operational procedures for using and maintaining the animal effluent system and for managing the discharge of animal effluent,
- (g) Inspection, monitoring and reporting requirements and timeframes,
- (h) The records of pond drop tests of the animal effluent storage facility undertaken at least every five years (excluding above-ground tanks, bladders, solid animal effluent storage facilities and an animal effluent storage facility with a leak detection system),
- (i) Contingency measures to prevent the discharge of liquid or solid animal effluent to a water body, an artificial watercourse, or the coastal marine area, either directly or indirectly,
- (j) Identification of measures to be taken to respond to a leak and the timeframe for response; including, for animal effluent storage facilities with a leak detection system where a leak is detected, a requirement for an assessment by a Suitably Qualified Person to be undertaken as soon as practicable and no later than two months of the detection to determine whether the leak is within the normal operating parameters of the pond, and
- (k) Responses to any other system failures or emergencies, including timeframes for response.

Footnote 1: A digital soil map for New Zealand can be found online at <https://smap.landcareresearch.co.nz/>

21

Glossary

<u>Agricultural waste</u>	Waste from an agricultural process or premises that is derived from primary agricultural production. This includes animal waste and animal dip material.
<u>Animal waste effluent system</u>	Includes <u>Means the collection, storage, or treatment, disposal or application of liquid or solid animal effluent waste.</u>
<u>Animal effluent storage facility</u>	<u>A pond, tank, or structure primarily used for the containment or storage of animal effluent, but excludes any ancillary structures for the collection, conveyance or treatment of liquid or solid animal effluent, such as sumps, stone traps and weeping walls.</u>
<u>Critical source area</u>	<u>Means a landscape feature such as a gully, swale, or depression that accumulates runoff from adjacent flats and slopes and delivers contaminants to surface water bodies such as rivers, and lakes, and artificial watercourses waterways, and field tiles (excluding subsurface drains, and artificial watercourses that do not connect to natural water bodies).</u>
<u>Dairy cattle</u>	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.
<u>Dairy Effluent Storage Calculator</u>	<u>Means the Dairy Effluent Storage Calculator available from Otago Regional Council's website at http://www.ore.govt.nz the Dairy NZ website http://www.dairynz.co.nz http://www.dairynzdesc.co.nz</u>
<u>Feed pad</u>	Any confined, uncovered structure, located on production land, which is designed for the purpose of controlled intensive feeding of stock with supplementary feed.
<u>Intensive winter grazing</u>	<u>Means grazing of stock on forage crops (including brassica, beet and root vegetable crops), excluding pasture and cereal crops. has the same meaning as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.</u>
<u>Liquid animal effluent</u>	<u>Faeces and urine from land-based animals, including associated process water, wash-down water, contaminants and sludge but excluding solid animal effluent. For the purposes of this definition, it does not include incidental animal effluent present in livestock processing waste streams.</u>
<u>Sacrifice paddock</u>	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.
<u>Sediment trap</u>	<u>An excavated or bunded area in the bed of an ephemeral or intermittently flowing river designed and constructed solely for the purpose of slowing water velocity to allowing sediments to drop from the water column.</u>

Solid animal effluent

Solid excreta from land-based animals that cannot be pumped and sprayed, including bedding material and manure, but does not include dead animals or animal parts.

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.~~

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.~~

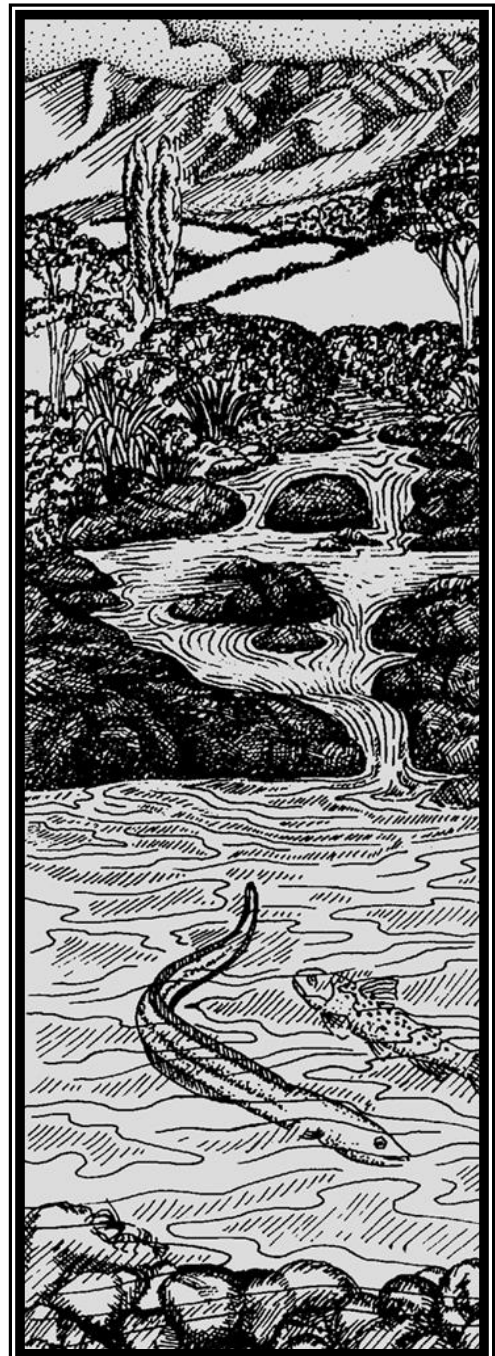
Has the meanings set out in Schedule 20.

OTAGO REGIONAL COUNCIL
Plan Change 8 – Primary Sector Provisions
Clean Version – Chapters 7, 12, 13, 14, 20 and 21

DOCUMENT
Chapter 7 Water Quality
Chapter 12 Water Take, Use and Management
Chapter 13 Rules: Land Use on Lake or River Beds or Regionally Significant Wetlands
Chapter 14 Rules: Land Use other than in Lake or River Beds
Chapter 20 Schedules
Chapter 21 Glossary

7

Water Quality



7.D5 When considering any discharge under section 12.C, have regard to:

**Part A:
Discharge
policies**

- (a) The effects, including cumulative effects, of the discharge on water quality, ecosystem health and natural and human use values, including Kāi Tahu cultural and spiritual beliefs, values and uses; and
- (b) The physical characteristics of the land and the sensitivity of the receiving water; and
- (c) The quality and performance of the discharge management system to be used, and in particular,
 - (i) options to be employed to reduce any adverse environmental effects of the discharge; and
 - (ii) monitoring of the performance 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 for the duration of the consent; or
 - (ii) The demonstrable reduction of adverse environmental effects of the discharge over the duration of the consent; and
- (e) Trends in the quality of the receiving water relative to the Schedule 15 freshwater characteristics, limits, and targets and relative to any national bottom lines specified in Appendix 2A and 2B of the NPS-FM; and
- (f) The extent to which potentially significant adverse effects arising from the discharge 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) 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 onto or into land in circumstances where it may enter water under Rule 12.C.3.2:

Part A:
Discharge
policies

- (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) **Any measures proposed to reduce nitrogen discharged over the term of the resource consent, including any changes to land management practices or infrastructure; and**
 - (iv) **The benefits of aligning the expiry date with other resource consents for the same activity in the surrounding area or catchment.**

7.D.7

Ensure the appropriate management and operation of animal effluent systems and management of the application of animal effluent to land by:

Part B:
Animal waste
storage and
discharge

- (a) **Requiring animal effluent systems to be designed, constructed and located appropriately and in accordance with good management practice; and**
- (b) **Ensuring that all animal effluent systems:**
 - (i) **Have sufficient storage capacity to ensure that the disposal of effluent to land does not occur under conditions that will result in contaminants entering into water; and**
 - (ii) **Include contingency measures to prevent discharges of effluent to a water body, an artificial watercourse, or the coastal marine area, either directly or indirectly; and**
 - (iii) **Are operated in accordance with a management plan for the purpose of preventing the unauthorised discharge of liquid or solid effluent to water; and**
- (c) **Avoiding the discharge of liquid and solid animal effluent to:**
 - (i) **water bodies, artificial watercourses, bores and soak holes, and the coastal marine area; and**
 - (ii) **land in a manner that results in ponding or overland flow to water; and**
 - (iii) **land when the soil moisture exceeds field capacity;**
- (d) **Requiring effluent application to be in accordance with good management practice; and**
- (e) **Granting resource consents for discharges of animal effluent for a maximum duration of up to 10 years in order to facilitate an efficient and effective transition from the operative freshwater planning framework towards a new integrated regional planning framework.**

7.D.8

Provide for the upgrading of existing animal effluent storage facilities that do not meet the standards in Rule 14.7.1.1 by:

Part B:
Animal waste
storage and
discharge

- (a) **Granting resource consents only where consent applications contain a timebound action plan for upgrading the existing animal effluent storage facility so that it meets the standards in Rule 14.7.1.1 as soon as possible; and**
- (b) **Staging implementation of performance standards based on risk in accordance with Rule 14.7.1.2 and Schedule 19.**

7.D.9

Enable farming activities while reducing their adverse environmental effects by:

Part C:
Good farming
practices

- (a) **Promoting the implementation of good management practices (or better) to reduce sediment and contaminant loss to water bodies; and**
- (b) **Managing the risk of sediment and contaminants in run off entering water as a result of farming activities by:**
 - (i) **Implementing setbacks from rivers, lakes, drains (excluding sub-surface drains), natural wetlands or the coastal marine area and establishing or maintaining riparian vegetation,**
 - (ii) **Limiting areas and duration of exposed soil,**
 - (iii) **Managing stock access to water bodies to avoid significant adverse effects on water quality, bed and bank integrity and stability, Kai Tahu cultural and spiritual beliefs, values and uses, and river and riparian ecosystems and habitats,**
 - (iv) **Setting interim minimum standards for intensive winter grazing; and**
 - (v) **Managing critical source areas.**

12

Rules: Water Take, Use and Management



12.C Other discharges

Note: Resource consent may also be required under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 which contains additional restrictions in relation to activities within, or within a 100m setback of, a natural wetland.

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

12.C.0.2 The discharge of any contaminant from silage storage or a composting process:

Part B
Animal waste
storage and
Application

- (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
 - (vii) To saturated land; or
 - (viii) That results in ponding,
- is a **prohibited** activity.

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

Part B
Animal waste
storage and
Application

- (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; or
 - (vii) To land when the soil moisture exceeds field capacity; or
 - (viii) Where liquid animal effluent is distributed through the same infrastructure as water from a bore with no back flow prevention installed,
- is a *prohibited* activity.

Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4 and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1 and 14.7.3.1.

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

12.C.1.4A The discharge of solid animal effluent (excluding any discharge directly from an animal to land), or vegetative material containing solid or liquid animal effluent, into or onto land including in circumstances where a contaminant may enter water is a permitted activity provided:

- (a) the material does not contain any hazardous substance or hazardous waste,
- (b) the material does not include any waste from a human effluent treatment process,
- (c) the material is not discharged:
 - (i) onto the same area of land more frequently than once every two months; or
 - (ii) onto land where solid animal effluent, or vegetative material containing liquid or solid animal effluent, from a previous application is still visible on the land surface; or
 - (iii) onto land when the soil moisture exceeds field capacity; or
 - (iv) within 20 metres of the bed of a lake, river, the coastal marine area, Regionally Significant Wetland, water supply used for human consumption, bore, soak hole, or a landholding boundary.

12.C.1.4B The discharge of liquid animal effluent, or water containing liquid animal effluent, onto or into land is a permitted activity providing:

- a) The volume of the discharge is not more than 35m³ per landholding in any consecutive 12 month period; and
- b) The discharge is not prohibited under Rule 12.C.0.4; and

- c) The discharge does not occur within 20 metres of the boundary of the landholding on which the liquid animal effluent is being discharged, or beyond that boundary; and
- d) There is no discharge to land when the soil moisture exceeds field capacity.

12.C.1.4 Notwithstanding any other rule in this Plan, the discharge of liquid animal effluent or water containing liquid animal effluent, from an animal effluent system onto or into land is a *permitted* activity providing:

Part B
Animal waste
storage and
Application

- (a) The animal effluent storage facility 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 20 metres of the boundary of the landholding on which the liquid animal effluent is being discharged, or beyond that boundary; and
- (d) There is no discharge to land when the soil moisture exceeds field capacity.

Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4, and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1, and 14.7.3.1.

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

12.C.2.5 The discharge of liquid animal effluent, or water containing liquid animal effluent from an animal effluent system onto or into land is a *restricted discretionary* activity provided:

Part B
Animal waste
storage and
Application

- (a) The discharge is not prohibited under Rule 12.C.0.4; 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 extent to which the application depth and rate is consistent with industry agreed good management practice;
- (ii) Size and location of the disposal area, including separation distances from lakes, rivers, natural wetlands, bores, soak holes, the coastal marine area, water supply for human consumption and dwellings;
- (iii) Adverse effects on water quality, taking into account the nature and sensitivity of the receiving environment, and any measures to avoid, remedy or mitigate these adverse effects;
- (iv) Adverse effects on Kāi Tahu cultural and spiritual beliefs,

values and uses, and any measures to avoid, remedy or mitigate these adverse effects;

- (v) Duration of consent and any review conditions;
- (vi) Quality and content of, and compliance with, a management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water that is prepared in accordance with Schedule 21;
- (vii) Any information and monitoring requirements; and
- (viii) The value of existing investment in the animal effluent system.

Note: Rules 12.C.0.4, 12.C.1.4A, 12.C.1.4, and 12.C.2.5 manage discharges of animal effluent to land. They do not regulate the land use for the construction, use and maintenance of an animal effluent system. The construction, use and maintenance of animal effluent systems is managed by Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1, and 14.7.3.1.

13

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



13.5.1 Permitted activities: No resource consent required

Part E
Stock access
to water

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 on that bed or wetland; 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.

Advice Note: For regulations on stock exclusion from waterways refer to the Resource Management (Stock Exclusion) Regulations 2020.

Advice Note: The proposed Land and Water Regional Plan, when notified in December 2023, may introduce provisions regulating stock exclusion in a Freshwater Management Unit, or any part of a Freshwater Management Unit in addition to Resource Management (Stock Exclusion) Regulations 2020.

Part F
Sediment
traps

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 and any associated deposition of bed material 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) No works occur in flowing water; and
- (d) Any build-up of sediment and other debris (including vegetation) within the sediment trap is removed to maintain the effectiveness of the sediment trap; and
- (e) All reasonable steps are taken to minimise the release of sediment 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
- (f) No lawful take of water is adversely affected as a result of the disturbance; 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.

14

Rules: Land Use other than in Lake or River Beds



14.6 Rural land uses

14.6.1 Permitted activities: No resource consent required

Part D
Intensive
Grazing

- 14.6.1.1 Until Regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 or equivalent regulations come into force, the use of land for intensive winter grazing is a *permitted* activity providing:
- (a) Land on the farm was used for intensive winter grazing between 1 July 2014 and 30 June 2019 (inclusive); and
 - (b) At all times, the area of the farm that is used for intensive winter grazing is no greater than the maximum area of the farm that was used for intensive winter grazing between 1 July 2014 and 30 June 2019 (inclusive); and
 - (c) A vegetated strip of at least 5 metres is maintained between the intensively grazed area and any river, lake, wetland or drain (excluding sub-surface drains), and all stock are excluded from this strip during intensive winter grazing; and
 - (d) The intensive winter grazing does not occur in a natural wetland; and
 - (e) There is no intensive winter grazing in any critical source area unless contaminants are prevented from entering a surface water body.

Advice Note: when regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 come into force, for rules applying to the use of land on a farm for intensive winter grazing refer to Subpart 3 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

14.6.2 Discretionary activities: Resource consent required

Part D
Intensive
Grazing

- 14.6.2.1 Until Regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 or equivalent regulations come into force, except as provided by Rule 14.6.1.1, the use of land for intensive winter grazing is a *discretionary* activity.

Advice Note: when regulations 26 and 27 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 come into force, for rules applying to the use of land on a farm for intensive winter grazing refer to Subpart 3 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

Advice Note: Resource consent may also be required under Regulation 30 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020. A resource consent may only be granted under Regulation 30 of the Resource

Management (National Environmental Standards for Freshwater) Regulations 2020 if the consent authority is satisfied that granting the consent will not result in an increase in—

- (a) contaminant loads in the catchment, compared with the loads as at the close of 2 September 2020; or
- (b) concentrations of contaminants in freshwater or other receiving environments (including the coastal marine area and geothermal water), compared with the concentrations as at the close of 2 September 2020.

Any resource consent granted under Regulation 30 must be for a term that ends before 1 January 2031.

14.7 Animal Waste Systems

Note: Resource consent may also be required under the Resource Management (National Environmental Standards for Freshwater) Regulations which contains additional restrictions in relation to activities within, or within a 100 metre setback of, a natural wetland.

14.7.1 Permitted activities: No resource consent required

Part B
Animal
waste
storage and
application

14.7.1.1A The use of land for the construction, use and maintenance of a component of an animal effluent system that is not an animal effluent storage facility is a *permitted* activity providing:

- (a) for a component with a volume of less than 35,000 litres, the component does not have any visible cracks, holes or defects that would allow effluent to leak from the component;
- (b) for a component with a volume of 35,000 litres or above, the component is certified by a Suitably Qualified Person, as defined in Schedule 20, within the last five years as having no visible cracks, holes or defects that would allow effluent to leak from the component;
- (c) the component (excluding conveyance pipes) is not located:
 - (i) within 20 metres of any lake, river, Regionally Significant Wetland, water supply used for human consumption, bore or soak hole; or
 - (ii) above subsurface drainage (excluding a leak detection system); and
- (d) where the total volume of the animal effluent system exceeds 35,000 litres, a management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is prepared and implemented in accordance with Schedule 21.

14.7.1.1 The use of land for the use and maintenance of an animal effluent storage facility that was constructed prior to 25 March 2020 is a **permitted** activity providing:

- (a) The animal effluent storage facility is sized in accordance with the 90th percentile as calculated by the Dairy Effluent Storage Calculator, and where relevant using a conversion factor for animals other than dairy cows determined by a Suitably Qualified Person as defined in Schedule 20;
- (b) The animal effluent storage facility is certified by a Suitably Qualified Person as defined in Schedule 20, within the last five years as:
 - (i) having no visible cracks, holes or defects that would allow effluent to leak from the animal effluent storage facility; and
 - (ii) Meeting the relevant pond drop test criteria in Schedule 18 (excluding above-ground tanks, bladders, and solid animal effluent storage facilities); and
- (c) A management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is prepared and implemented in accordance with Schedule 21.
- (d) Any certifications under (a) and (b) are provided to the Otago Regional Council upon written request.

Note	Rules 14.7.1.1A, 14.7.1.1, 14.7.1.2, 14.7.2.1 and 14.7.3.1 do not manage discharges of liquid or solid animal effluent to land. Discharges of liquid and solid animal effluent are managed under the following rules: 12.C.0.4, 12.C.1.4A, 12.C.1.4, and 12.C.2.5.
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Part B
Animal
waste
storage and
application

14.7.1.2 The use of land for the use and maintenance of an animal effluent storage facility 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

Part B
Animal
waste
storage and
application

14.7.2.1 The use of land for the construction, use and maintenance of an animal effluent storage facility constructed after 25 March 2020 is a **controlled** activity provided the following conditions are met:

- (a) The animal effluent storage facility is sized in accordance with the 90th percentile as calculated by the Dairy Effluent

Storage Calculator, and where relevant using a conversion factor for animals other than dairy cows determined by a Suitably Qualified Person as defined in Schedule 20; and

- (b) The animal effluent storage facility is either:
 - (i) Fully lined with an impermeable synthetic liner and has a leak detection system that underlies the animal effluent storage facility; or
 - (ii) Of concrete construction; or
 - (iii) An above-ground tank; or
 - (iv) Sealed with a clay liner; and
- (c) The design of the animal effluent storage facility, and any leak detection system has been certified by a Chartered Professional Engineer as being in accordance with the relevant parts of IPENZ Practice Note 21¹ and IPENZ Practice Note 27;² and
- (d) The animal effluent storage facility 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) Above subsurface drainage (other than a leak detection system); and
- (e) A management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is prepared and implemented in accordance with Schedule 21.

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 animal effluent storage facility, including storage capacity, nature of the solid or liquid animal effluent and the anticipated life of the animal effluent storage facility; and
- (b) The height of embankments and the placement and orientation relative to flood flows and stormwater run-off; and
- (c) Methods to protect the animal effluent storage facility from damage by animals and machinery; and

¹ Available from <https://www.dairynz.co.nz/publications/environment/ipenz-21-farm-dairy-effluent-pond-design-and-construction/>

² Available from <https://www.dairynz.co.nz/publications/environment/ipenz-practice-note-27-dairy-farm-infrastructure/>

- (d) Quality and content of, and implementation of, the management plan prepared in accordance with Schedule 21; and
- (e) 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
- (f) Location of the animal effluent storage facility; and
- (g) Measures to avoid, remedy or mitigate adverse effects on Kāi Tahu cultural and spiritual beliefs, values and uses.

14.7.3 Discretionary activities: Resource consent required

Part B
Animal
waste
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- 14.7.3.1 The use of land for the construction, upgrade, use or maintenance of an animal effluent storage facility or a component of an animal effluent system that is not an animal effluent storage facility is a *discretionary* activity provided it is not:
- (a) Permitted under Rules 14.7.1.1A, 14.7.1.1 or 14.7.1.2; or
 - (b) Provided for by Rule 14.7.2.1.

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Schedules



18. Schedule of pond drop test requirements and criteria

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application

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

Requirements

- A minimum of 24 hours of accurate data within a single test period.
- Total test error of less than ± 1 mm.
- 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 (excluding freeboard) before a test can be undertaken.
- The level of sludge or crust on the pond during the test should be minimal so that it does not impact on test results.
- The pond surface is not frozen during any part of the testing.
- An anemometer is installed for the duration of the test and only data obtained when the wind speed does not exceed 50 kilometres per hour (14 m per second) at the test site is used in the test results.

Table 18.1 Maximum allowable pond level change

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

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

19. Schedule of progressive implementation of animal effluent storage requirements

Part B:
Animal
waste
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Many animal effluent storage facilities 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 animal effluent storage facilities. 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.

For clarity, this calculation under Schedule 19A does not determine the volume of the storage facility under section 14.7, it only determines the date that applications must be received.

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:

$$\text{Daily waste volume (m}^3\text{)} = \text{Maximum number of cows milked per day} \times 0.05^{\wedge} \times \text{Maximum number of times per day that cows are milked during milking season}$$

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

For example:

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

$$\text{Daily waste volume (m}^3\text{)} = 500 \times 0.05 \times 2$$

Daily waste volume (m³) = 50

Step Two:

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

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

^ 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:

$$\text{Days of storage available} = 1000 \div 50$$

$$\text{Days of storage available} = 20$$

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.

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	Year
0 – 10	0.5
11 – 40	2
41+	3

20. Schedule defining Suitably Qualified Persons

A suitably qualified person for the purposes of this schedule is a person who has been certified by the Otago Regional Council as being appropriately qualified and experienced in accordance with the requirements below.

Requirements – Animal Effluent systems

For the purposes of Rules 14.7.1.1A(b), 14.7.1.1(b) and Schedule 21(j), a Suitably Qualified Person has either:

- (a) A relevant tertiary qualification in agricultural engineering, natural resources engineering or civil engineering and at least five years' professional experience in designing and constructing effluent management systems; or
- (b) A relevant equivalent qualification (for example, international qualifications) and at least five years' professional experience in designing and constructing effluent management systems; or
- (c) At least ten years' professional experience in designing and constructing effluent management systems.

Requirements – Calculations using the Dairy Effluent Storage Calculator

For the purposes of Rules 14.7.1.1(a) and Rule 14.7.2.1(a), a Suitably Qualified Person has:

- (a) For undertaking a calculation using the Dairy Effluent Storage Calculator, at least five years' relevant professional experience in designing effluent management systems, and
- (b) For determining a conversion factor for animals that are not dairy cows, a relevant scientific tertiary qualification or relevant research experience.

21. Schedule of management plan requirements

- (1) A management plan for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water is:
 - (a) prepared by the landholding owner or their agent and retained on the landholding, identifying the matters set out in clause 2 below;
 - (b) reviewed at least once every 12 months by the landholding owner or their agent, and the outcome of the review documented; and
 - (c) provided to the Otago Regional Council upon request, and
- (2) The management plan must contain the following:
 - (a) physical address of where the animal effluent system is located, and the land where liquid or solid animal effluent is to be applied,
 - (b) a description of the landholding ownership, and the contact details of the owner and the person in charge,
 - (c) legal description(s) of the landholding,
 - (d) a list of all the relevant resource consents held for the landholding and their expiry dates,
 - (e) a map(s) or aerial or satellite photograph(s) showing the locations of:

- (i) the boundaries of the landholding,
- (ii) the location of any dairy shed, animal effluent storage facilities, and any other components of an animal effluent system,
- (iii) lakes, rivers, natural wetlands, bores, soak holes, the coastal marine area, water supply for human consumption and dwellings within the landholding,
- (iv) the area of land where liquid or solid animal effluent is to be applied, and in relation to this area:
 - soil types and their risk profile¹,
 - any critical source areas and the locations of known subsurface drains.
- (f) Operational procedures for using and maintaining the animal effluent system and for managing the discharge of animal effluent,
- (g) Inspection, monitoring and reporting requirements and timeframes,
- (h) The records of pond drop tests of the animal effluent storage facility undertaken at least every five years (excluding above-ground tanks, bladders, solid animal effluent storage facilities and an animal effluent storage facility with a leak detection system),
- (i) Contingency measures to prevent the discharge of liquid or solid animal effluent to a water body, an artificial watercourse, or the coastal marine area, either directly or indirectly,
- (j) Identification of measures to be taken to respond to a leak and the timeframe for response; including, for animal effluent storage facilities with a leak detection system where a leak is detected, a requirement for an assessment by a Suitably Qualified Person to be undertaken as soon as practicable and no later than two months of the detection to determine whether the leak is within the normal operating parameters of the pond, and
- (k) Responses to any other system failures or emergencies, including timeframes for response.

Footnote 1: A digital soil map for New Zealand can be found online at <https://smap.landcareresearch.co.nz/>

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Glossary

Animal effluent storage facility	A pond, tank, or structure primarily used for the containment or storage of animal effluent, but excludes any ancillary structures for the collection, conveyance or treatment of liquid or solid animal effluent, such as sumps, stone traps and weeping walls.
Animal effluent system	Means the collection, storage, or treatment of liquid or solid animal effluent.
Critical source area	Means a landscape feature such as a gully, swale, or depression that accumulates runoff from adjacent flats and slopes and delivers contaminants to surface water bodies such as rivers, lakes, and artificial watercourses (excluding subsurface drains, and artificial watercourses that do not connect to natural water bodies).
Dairy Effluent Storage Calculator	Means the Dairy Effluent Storage Calculator available from the Dairy NZ website http://www.dairynzdesc.co.nz
Intensive winter grazing	Has the same meaning as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.
Liquid animal effluent	Faeces and urine from land-based animals, including associated process water, wash-down water, contaminants and sludge but excluding solid animal effluent. For the purposes of this definition, it does not include incidental animal effluent present in livestock processing waste streams.
Sediment trap	An excavated or bunded area in the bed of an ephemeral or intermittently flowing river designed and constructed solely for the purpose of allowing sediment to drop from the water column.
Solid animal effluent	Solid excreta from land-based animals that cannot be pumped and sprayed, including bedding material and manure, but does not include dead animals or animal parts.
Suitably Qualified Person	Has the meanings set out in Schedule 20.

