Plan Change 4 (Omnibus) to the Partially Operative Canterbury Land and Water Regional Plan

Section 42A Report

Report Number R15/148

Including Errata of 15 January 2016

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18 December 2015





Report Number R15/148

ISBN 978-0-947507-02-2 Print

978-0-947507-03-9 Web

978-0-947507-04-6 CD

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Introduction

1.1 This part of the section 42A report provides the statutory framework for assessing Plan Change 4. This section evaluates Plan Change 4 in the context of the planning framework, and considers how the provisions of Plan Change 4 give effect to superior instruments. This section also addresses jurisdictional issues relating to the lodging of submissions.

Statutory Framework – General Requirements

1.2 The following section of this report sets out the general requirements with respect to the preparation of regional plans, including regional rules. These requirements are set out in summary form, with specific consideration then given to those issues that warrant closer attention in separate sections below.

Contents and preparation of regional plans

- 1.3 The purpose of the preparation, implementation, and administration of regional plans is to assist a regional council to carry out its functions in order to achieve the purpose of the Resource Management Act 1991 (RMA).²
- 1.4 A regional council may prepare a regional plan for the whole or part of its region for any function specified in section 30(1)(c), (ca), (e), (f), (fa), (fb), (g), or (ga).³ A plan must be prepared in accordance with Schedule 1.⁴
- 1.5 A regional plan must be prepared in accordance with a council's functions under section 30, Part 2 and its obligation to prepare an evaluation report under section 32 and to have particular regard to the evaluation report and any regulations.⁵
- 1.6 The regulations made under the RMA of relevance to the Council's duties (and considered elsewhere in this report) are:
 - Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007
 - Resource Management (Measurement and Reporting of Water Takes) Regulations 2010
 - Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
- 1.7 When preparing a regional plan, a regional council:

¹ This section has been prepared by Philip Maw

² Section 63(1).

³ Section 65(1).

⁴ Section 65(3).

⁵ Section 66.

- a. Is to have regard to management plans and strategies prepared under other Acts to the extent to which their content has a bearing on resource management issues of the region.⁶
- b. Is to have regard to the extent to which the plan needs to be consistent with regional policy statements, plan, proposed regional policy statement and proposed plans of adjacent regional councils.⁷
- c. Is to take into account any relevant planning document recognised by an iwi authority, if it is lodged with the council, to the extent that its contents has a bearing on the resource management issues of the region.⁸
- d. Must not have regard to trade competition.9
- 1.8 Section 67 directs the contents of regional plans:
 - a. A regional plan must state the objectives for the region, the policies to implement the objectives and the rules (if any) to implement the policies.¹⁰
 - b. A regional plan may also state the matters provided for in section 67(2).
 - c. A regional plan must give effect to any national policy statement, any New Zealand coastal policy statement and any regional policy statement.¹¹
 - d. A regional plan is not to be inconsistent with a water conservation order, or any other regional plan for the region.¹²
- 1.9 If a regional council has allocated a natural resource under section 30(1)(fa) or (fb) and (4) it must record how it has done so.¹³
- 1.10 The policy statements of particular relevance to Plan Change 4 (and considered elsewhere in this report) are:
 - New Zealand Coastal Policy Statement 2010:¹⁴
 - National Policy Statement for Freshwater Management 2014. 15

Regional rules

Sections 9, 13 to 15

1.11 Section 9 of the RMA contains restrictions on the use of land that contravenes a national environmental standard, a regional rule or a district rule unless expressly authorised by applicable provisions in the RMA (sections 10, 10A or 20A) or by resource consent. Plan

⁶ Section 66(2)(c)(i).

⁷ Section 66(2)(d).

⁸ Section 66(2A).

⁹ Section 66(3).

¹⁰ Section 67(1).

¹¹ Section 67(3).

¹² Section 67(4)

¹³ Section 67(5)

¹⁴ NZ Gazette, 4 November 2010.

¹⁵ NZ Gazette, 4 July 2014.

Change 4 refines and clarifies the operation of the region wide provisions in the LWRP, which uses land use rules (under section 9) to control the cumulative effects of land use on water quality.

- 1.12 Section 13 of the RMA contains restrictions on certain uses of beds of lakes and rivers (but does not apply to any use of land in the coastal marine area) unless expressly allowed by a regional rule or a resource consent.
- 1.13 Section 14 contains similar restrictions in relation to the taking, use and damming of water such that no person may take, use, dam, or divert water unless the taking, using, damming, or diverting is expressly allowed by a national environmental standard, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent, or is otherwise allowed in accordance with section 14(3).¹⁶
- 1.14 Section 15 restricts activities relating to the discharge of contaminants into water, onto or into land in circumstances which may result in the contaminant entering water, or into air (including those from industrial and trade premises). "Contaminant" is defined in the RMA as:
 - "...includes any substance (including gases, odorous compounds, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy or heat—
 - (a) When discharged into water, changes or is likely to change the physical, chemical, or biological condition of water; or
 - (b) When discharged onto or into land or into air, changes or is likely to change the physical, chemical or biological condition of the land or air onto or into which it is discharged."

Section 68

- 1.15 A regional council may include rules in a regional plan, for the purposes of carrying out its functions under the RMA (other than those described under section 30(1)(a) and (b)) and achieving the objectives and policies of the plan.¹⁷
- 1.16 In making a rule, the Council must have regard to the actual and potential effect of activities on the environment.¹⁸
- 1.17 A rule may:¹⁹
 - a. Apply throughout the region or part of the region;
 - b. Make different provision for different parts of the region, or different classes of effects arising from an activity;
 - c. Apply all the time, or for stated periods or seasons;
 - d. Be specific or general in its application; and

¹⁶ Section 14(2) and (3).

¹⁷ Section 68.

¹⁸ Section 68(3).

¹⁹ Section 68(5).

- e. Require resource consent to be obtained for an activity causing, or likely to cause, adverse effects not covered by the plan.
- 1.18 Where a regional plan includes a rule relating to maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality, or ranges of temperature or pressure of geothermal water, the plan may state:
 - a. Whether the rule shall affect, under section 130, the exercise of existing resource consents for activities which contravene the rule; and
 - b. That the holders of resource consents may comply with the terms of the rule (or rules) in stages or over specified periods.²⁰

Section 69

- 1.19 Section 69 applies to rules relating to water quality, including circumstances in which standards are inadequate and setting standards that are more stringent or specific.
- 1.20 A regional council is able to manage water quality for purposes described in the classes specified in Schedule 3, by reference to standards contained in that Schedule, or more appropriate standards.²¹ Section 69(3) also sets circumstances in which a regional council is not to set standards that may result in a reduction of the quality of water unless it is consistent with the purpose of the RMA.
- 1.21 The LWRP, and Plan Change 4, do not use the Schedule 3 approach.

Section 70

- 1.22 Section 70(1) specifies certain standards relating to permitted activity rules for discharges. Before a regional council includes in a regional plan, a rule that allows as a permitted activity:
 - a. a discharge of a contaminant or water into water; or
 - b. a discharge of a contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water -
 - c. the regional council shall be satisfied that none of the following effects is likely to arise in the receiving waters, after reasonable mixing, as a result of the discharge of the contaminant (either by itself or in combination with the same, similar, or other contaminants): the production of conspicuous oil or grease films, scums or foams, or floatable or suspended material; any conspicuous change in the colour or visual clarity; any emission of objectionable odour; the rendering of fresh water unsuitable for consumption by farm animals; or any significant adverse effects on aquatic life.

²⁰ Section 68(7).

²¹ Section 69.

- 1.23 Before the regional council includes a rule in a regional plan requiring the adoption of the best practicable option to prevent or minimise any actual or likely adverse effect on the environment of any discharge of a contaminant, the regional council must be satisfied that having regard to:
 - a. The nature of the discharge and the receiving environment; and
 - b. Other alternatives, including a rule requiring the observance of minimum standards of quality of the environment,
 - c. That the inclusion of the rule in the plan is the most efficient and effective means of preventing or minimising those adverse effects on the environment.²²

National Environmental Standards

1.24 Section 43B(3) of the RMA provides that a rule may not be more lenient than a national environmental standard (NES).

Part 2

- 1.25 The following part of the report considers specific matters relating to the application of the statutory framework.
- 1.26 Other statutes that have a bearing on the preparation of Plan Change 4 are also addressed below
- 1.27 As set out above, a regional plan must be prepared in accordance with a council's functions under section 30, Part 2, and its obligation to prepare an evaluation report under section 32, any further evaluation required by section 32AA, and to have particular regard to the evaluation reports and any regulations.²³

General requirements

- 1.28 Part 2 of the RMA sets out the purpose and principles of general application in giving effect to the Act. As is set out below, the application of Part 2 when giving effect to higher order directions has recently been the subject of the Supreme Court's decision in *Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited*.²⁴
- 1.29 For the reasons described more fully below, it is considered that the previously accepted "overall judgment" approach and Part 2 still has validity in considering how a Council promoted change to a regional plan should give effect to the New Zealand Coastal Policy Statement 2010 (NZPCS), national policy statements and Canterbury Regional Policy Statement 2013 (RPS) provisions and also the CRC's duties under section 32, where those

²³ Section 66.

²² Section 70(2)

²⁴ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38.

- higher order documents do not "cover the field", or where there is uncertainty as to the meaning of particular policies.
- 1.30 Amendments introduced by Plan Change 4 are for the most part considered to be administrative in nature, rather than changing the way the effects of an activity are ultimately managed. The administrative changes are considered to already give effect to higher order statutory documents as they are no different to existing LWRP controls.

The Supreme Court decision in King Salmon

- 1.31 The role of Part 2 in the assessment of planning documents (particularly the requirement to give effect to higher order planning documents under section 67) has been the subject of the recent Supreme Court decision in *Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited.*²⁵
- 1.32 The Supreme Court's decision has cast doubt on the previously accepted approach of applying an "overall broad judgment" under Part 2 when assessing a planning document and whether it gives effect to higher order documents and also when assessing objectives and policies that compete or "pull in different directions".²⁶
- 1.33 The Court found that there was no basis to refer back to section 5 or to undertake an overall judgement when assessing whether specific, directive, policies in the NZCPS had been given effect to by the provisions of a proposed plan change.²⁷ In particular, the Supreme Court found by majority that:
 - a. The requirement for the regional plan to "give effect to" the NZCPS was a strong direction;²⁸
 - b. There was no basis to refer back to section 5 or an overall judgment when addressing whether the NZCPS has been given effect to as it is the "mechanism by which Part 2 is given effect to in relation to the coastal environment".²⁹
 - c. The use of the word "avoid" in policies 13 and 15 of the NZCPS, has its ordinary meaning of "not allow" or "prevent the occurrence of", and while a policy in the NZCPS "cannot be a 'rule' within the special definition in the RMA, it may nevertheless have the effect of what in ordinary speech would be a rule."³⁰

²⁵ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38.

²⁶ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [36].

²⁷ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [152].

²⁸ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [77].

²⁹ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [83].

³⁰ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [96].

- 1.34 In the particular case, which involved a site specific private plan change, the Court found that because of the Board of Inquiry did not give effect to policies 13 and 15 in allowing the plan change it had failed to "give effect to" the NZCPS as required under the RMA, and the plan change should not have been granted.
- 1.35 In the case of Plan Change 4, as described more fully below, the Council considers that the relevant higher order statutory directions have been given effect to as required applying the approach in *King Salmon*. Most relevant are the directions within the RPS and the National Policy Statement for Freshwater Management 2014(NPSFM).³¹ The NZCPS is also relevant to controls relating to inanga spawning habitat.
- 1.36 The Environment Court has recently considered *King Salmon* in the context of a district plan change, stating:³²

"[18] We adopt the tests set out in the Monk decision with one qualification as a result of the Supreme Court's decision in Environmental Defence Society Inc. v The New Zealand King Salmon Co Ltd. Because this is a plan change it now seems that resort should be had to Part 2 of the Act only if there is a problem with any of the statutory documents we have to consider. As the Supreme Court stated in that decision (about the NZCPS, rather than a district plan):

... it is difficult to see that resort to pt. 2 is either necessary or helpful in order to interpret the policies, or the NZCPS more generally, absent any allegation of invalidity, incomplete coverage or uncertainty of meaning. The notion that decision-makers are entitled to decline to implement aspects of the NZCPS if they consider that appropriate in the circumstances does not fit readily into the hierarchical scheme of the RMA."

- 1.37 The Council agrees that resort should not be had to Part 2 in interpreting objectives and policies in higher order directions unless they fall within one of the categories recognised by the Supreme Court. The Supreme Court was quite clear that there will still be situations where it is necessary to "go back to" Part 2, including: ³³
 - a. if the policies in question do not "cover the field and a decision-maker will have to consider whether Part 2 provides assistance in dealing with the matter(s) not covered"; or
 - b. where there is any uncertainty as to the meaning of particular policies (of the NZCPS).
- 1.38 However, the Council considers that the decision in *King Salmon* did not "do away" with Part 2 considerations being relevant to the overall assessment of Plan Change 4, bearing in mind the statutory considerations set out in sections 32, 66, 68 and 67. Rather, the implication of

³¹ The National Policy Statement for Freshwater Management 2014 came into force on 1 August 2014 and the National Policy Statement for Freshwater Management 2011 was revoked from that date. The implications of the NPSFM 2014 are addressed elsewhere in this report.

³² Cook Adam Trustees Limited & R Monk v Queenstown Lakes District Council, [2014] NZEnvC 117

³³ Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [88] and [90].

the Supreme Court decision is that in assessing Plan Change 4, an overall judgement approach cannot be relied on to justify a departure from directive policies, particularly in the NZCPS (or by analogy from setting limits and targets as required under the NPSFM). The following matters are relevant in reaching this position:

- a. The case before the Supreme Court concerned specific policies in the NZCPS in relation to a site specific private plan change request. This is an entirely different context to the assessment of a region wide plan change that must "give effect" to multiple provisions in the NPSFM, the NZCPS and the RPS.
- b. The purpose of a NZCPS in section 65 of the RMA requires that it state policies" *in order to achieve the purpose of this Act*" in relation to the coastal environment of New Zealand.
- c. This can be contrasted to the purpose of a national policy statement under section 45 to state objectives and policies for matters of national significance that are "relevant to achieving the purpose of this Act."
- d. This distinction is important as it confirms that national policy statements are not ends in themselves, but rather that they contain relevant matters to be had regard to (along with other Part 2 matters).
- e. This is reflected in the NPSFM itself:
- f. The preamble states that "The national policy statement is a first step to improve freshwater management at a national level."
- g. The objectives and policies recognise that *sustainable management* must be referred to. For example, Objective A1 refers to safeguarding the life-supporting capacity, ecosystem processes and indigenous species in *sustainably managing* the use and development of land and of discharges of contaminants.
- h. As discussed further below, section 32 of the Act, requires the objectives of a plan to be evaluated as to whether they are the most appropriate way to achieve the purpose of the Act. Part 2 is an implicit part of the section 32 analysis.
- 1.39 In terms of whether the NPSFM "covers the field", unlike the NZCPS (which includes a range of enabling policies, for example Policy 6) the NPSFM is not concerned with enabling activities that require water. This is left to other policy statements (notably the National Policy Statement for Renewable Electricity Generation 2010), and other superior documents such as the RPS. In this case, it is submitted that the NPSFM does not "cover the field".
- 1.40 It is also relevant that in the case of Plan Change 4 (as opposed to a site specific private plan change application) the Council is required to give effect to the NZCPS, NPS and RPS provisions across a wide geographical spectrum. These provisions sometimes compete or pull in different directions depending on the geographical location and cannot be reconciled to ensure strict compliance with all statutory directions in all locations within the catchment.
- 1.41 For example, the RPS directs the maintenance and enhancement of natural and physical resources contributing to Canterbury's overall rural productive economy in areas which are valued for existing or foreseeable future primary production by ensuring that rural land use intensification does not contribute to significant cumulative adverse effects on water quality

and quantity (Policy 5.3.12). The explanation to the policy confirms that "The rural productive base of Canterbury is essential to the economic, cultural and social well-being of its people and communities. Enabling the use of natural and physical resources to maintain the rural productive base is a foreseeable need of future generations."

- 1.42 The RPS also contains a range of objectives and policies relating to water quality. For example, it directs that changes in land use are controlled to ensure water quality standards are maintained or improved (Policy 7.3.7(2)) and that where the effects on freshwater bodies, singularly or cumulatively, are unknown or uncertain, take a precautionary approach to the intensification of land use or discharge of contaminants (Policy 7.3.12).
- 1.43 While the NPSFM does not "cover the field", it is considered that the RPS does and that where no direction is found in applicable policies of the NPSFM and NZCPS, the Council still has guidance from the more extensive policies contained in the RPS.

Functions

- 1.44 The Council's functions under section 30 as they relate to Plan Change 4 are:
 - Establishing, implementing and reviewing objectives, policies and methods to achieve integrated management of the natural and physical resources of the region (section 30(1)(a)).
 - b. Preparing objectives and policies in relation to any actual or potential effects of the use, development or protection of land which are of regional significance (section 30(1)(b)).
 - c. The control of the use of land for the purpose of soil conservation; the maintenance and enhancement of the quality of water in water bodies; the maintenance and enhancement of the quantity of water in water bodies and the maintenance and enhancement of ecosystems in water bodies (section 30(1)(c)).
 - d. The control of the taking, use, damming and diversion of water, and the control of the quantity, level, and flow of water in any water body, including
 - a. the setting of any maximum or minimum levels or flows of water (section 30(1)(e)(i)); and
 - b. The control of discharges of contaminants into or onto land, air, or water and discharges of water into water (section 30(1)(f)).
 - e. If appropriate, the establishment of rules in a regional plan to allocate:
 - a. the taking or use of water (other than open coastal water) (section 30(1)(fa)(i)); and
 - b. the capacity of water to assimilate a discharge of a contaminant (section 30(1)(fa)(iv)).
 - f. The control of the introduction or planting of any plan in, on, or under that the bed of a water body, for the purpose of the maintenance and enhancement of the quality of water in that waterbody (section 30(1)(g)(ii)).
 - g. The establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity (section 30(1)(ga)).

- 1.45 It is a mandatory function of every regional council to control the use of land to maintain and enhance the quality of water in water bodies, and to control the discharges of contaminants into water.³⁴ Plan Change 4 refines and clarifies the operation of LWRP controls, which use land use rules (under section 9) to control the cumulative effects of land use on water quality.
- 1.46 This approach is supported by section 30(1)(c)(ii) which expressly enables a regional council to control the use of land for the purpose of the maintenance and enhancement of the quality of water in a water body. This approach has been used in other catchments in New Zealand and it is also supported by Objective A1 of the NPSFM.

Section 32

- 1.47 Section 32, as amended by the Resource Management Amendment Act 2013 applies to Plan Change 4, an amending proposal to a plan.
- 1.48 Plan Change 4 contains one minor amendment to Objective 3.14 in the LWRP. The evaluation must examine the extent to which the changed objective is the most appropriate way to achieve the purpose of the Act.³⁵
- 1.49 In all other respects, the objectives of the LWRP remain unaltered. Accordingly, Plan Change 4 must be assessed in the following terms. The evaluation must:
 - a. Examine whether the provisions (the policies, rules or other methods to implement the objectives) are the most appropriate way to achieve the objectives by:³⁶
 - i identifying other reasonably practicable options for achieving the objectives;
 - ii assessing the efficiency and effectiveness of the provisions in achieving the objectives (the efficiency and effectiveness assessment); and
 - iii summarising the reasons for deciding on the provisions;
 - b. Contain a level of detail that corresponds to the scale and significance of the environmental, economic, social and cultural effects that are anticipated from the implementation of Plan Change 4^{37}
- 1.50 The efficiency and effectiveness assessment must:³⁸
 - a. Identify and assess the benefits and costs of the environmental, economic, social and cultural effects that are anticipated from the implementation of the provisions, including opportunities for economic growth (that are anticipated to be provided or reduced); and employment (that are anticipated to be provided or reduced);
 - b. If practicable, quantify the benefits and costs; and
 - c. Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

³⁴ Ngati Kahungunu lwi Inc v The Hawkes Bay Regional Council [2015] NZEnvC 50 at [29]

³⁵ Section 32(1)(a)

³⁶ Section 32(1)(b)

³⁷ Section 32(1) (c)

³⁸ Section 32(2)

- 1.51 Under section 32(3) where the proposal amends an existing plan (as is the case here) the examination of whether the provisions in Plan Change 4 are the most appropriate way to achieve the objectives must relate to:
 - a. The provisions and objectives (being the purpose of the proposal) of Plan Change 4 and
 - b. The relevant and continuing objectives of the LWRP.³⁹
- 1.52 Section 32(6) defines objectives, proposal and provisions as follows:

"Objectives means-

- (a) for a proposal that contains or states objectives, those objectives;
- (b) for all other proposals, the purpose of the proposal

Proposal means a proposed standard, statement, regulation, plan or change for which an evaluation report must be prepared under this Act

Provisions means-

- (a) for a proposed plan or change, the policies, rules, or other methods that implement, or give effect to, the objectives of the proposed plan or change;
- (b) For all other proposals, the policies or provisions of the proposal that implement, or give effect to, the objectives of the proposal"
- 1.53 Under Schedule 1 of the RMA, particular regard must be had to the section 32 report when the decision is made as to whether or not to notify Plan Change 4.
- 1.54 The section 32 report for Plan Change 4 was made available at the time of notification.
- 1.55 Section 32A provides that a challenge to an objective, policy, rule or other method on the grounds that the section 32 report has not been prepared or regarded, or the requirements of section 32 have not been complied with, may only be made in a submission (rather than, for example, judicial review proceedings). Section 32A(2) makes it clear that in considering Plan Change 4 the Hearing Commissioners may have regard to the matters stated in section 32 and as set out below in reaching a decision on Variation a further evaluation will be required.
- 1.56 Section 32 requires a value judgment as to what, on balance, is the most appropriate option when measured against the relevant objectives. The High Court rejected the submission that in order to be the "most appropriate", a plan change must be the superior method; the Court found that "appropriate" meant suitable, and there was no need to place any gloss upon that word by incorporating that it be superior. Further, the Court did not agree that section 32(3)(b) mandated that each individual objective had to be "the most appropriate" way to achieve the RMA's purpose. Each object was required to be examined in the process of

³⁹ Section 32(3).

evaluation. Objectives could not be looked at in isolation because the extent of each objective's relationship in achieving the purpose of the Act may depend on inter relationships.⁴⁰

1.57 In *Art Deco Soc (Auckland) Inc v Auckland Council* [2012] NZEnvC 125, [2012] NZRMA 451 the Court held that, in that case, an "holistic" approach should be taken rather than a more focused, vertical or "silo" approach to objectives, policies and methods.

Section 32AA

- 1.58 Section 32AA was inserted into the RMA by the Resource Management Amendment Act 2013. It introduces an additional requirement for undertaking and publishing further evaluations for any changes that have been made to, or are proposed for, Plan Change 4 since the evaluation report for Plan Change 4 was completed under section 32.
- 1.59 Under section 32AA the same evaluation of the changes must be undertaken in accordance with sections 32(1) to (4) at a level of detail that corresponds to the scale and significance of the changes.
- 1.60 It also must either:
 - a. be published in an evaluation report that is made available at the same time the decision on Plan Change 4 is made; or
 - b. be referred to in the decision-making record in sufficient detail to demonstrate that the further evaluation was undertaken.
- 1.61 It is anticipated that any changes that Council officers recommend be made to Plan Change 4 (in the Council's Section 42A Report in reply) will be accompanied by a further section 32 evaluation of those changes for the purposes of section 32AA.

Giving Effect to the NZCPS, National Policy Statements and the RPS

- 1.62 Plan Change 4 is required to give effect to the NZCPS along with the following national policy statements:
 - a. National Policy Statement for Freshwater Management 2014 (NPSFM 2014);⁴¹
 - b. National Policy Statement on Electricity Transmission 2011 (NPSET);
 - c. National Policy Statement for Renewable Electricity Generation 2011 (NPSREG)

⁴⁰ See [30] and [44]–[46], *Rational Transport Soc Inc v New Zealand Transport Agency* HC Wellington CIV-2011-485-2259, 15 December 2011; applied by the Environment Court in the context of a plan change in *Black v Waimakariri District Council* [2014] NZEnvC 119 at [16].

⁴¹ See below regarding the National Policy Statement for Freshwater Management 2014.

1.63 The Council is also required to give effect to the RPS. The phrase "give effect to" is a strong direction and requires full compliance and positive implementation of the superior instrument.⁴²

NZCPS

- 1.64 The NZCPS deals with matters relating to both the coastal marine area and also the coastal environment. It recognises that activities on land can have impacts on coastal water quality as a consequence of point and non-point sources of contamination.
- 1.65 Plan Change 4 refines and clarifies the operation of region-wide controls within the LWRP, which already give effect to the relevant objectives and policies of the NZCPS. To the extent that Plan Change 4 builds on the LWRP, namely, with respect to the explicit identification of inanga spawning habitat, Plan Change 4 must give effect to the NZCPS.
- 1.66 In light of *King Salmon* it is necessary to consider the objectives and policies in the NZCPS.
- 1.67 The following objectives are the most relevant to the development of Plan Change 4:

Objective 1 - To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes and land, by:

- maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex and interdependent nature;
- protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and
- maintaining coastal water quality and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.

Objective 3 – To take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment by:

- recognising the ongoing and enduring relationship of tangata whenua over their lands, rohe and resources;
- promoting meaningful relationships and interactions between tangata whenua and persons exercising functions and powers under the Act;

⁴² Environmental Defence Society Incorporated v New Zealand King Salmon Company Limited [2014] NZSC 38 at [80]; Clevedon Cares Inc v Manukau City Council [2010] NZEnvC 211.

- incorporating matauranga Maori into sustainable management practices; and
- recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua.

Objective 6 - To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:

- the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;
- some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities;
- functionally some uses and developments can only be located on the coast or in the coastal marine area;
- the coastal environment contains renewable energy resources of significant value;
- the protection of habitats of living marine resources contributes to the social, economic and cultural wellbeing of people and communities;
- the potential to protect, use, and develop natural and physical resources in the coastal marine area should not be compromised by activities on land;
- the proportion of the coastal marine area under any formal protection is small and therefore management under the Act is an important means by which the natural resources of the coastal marine area can be protected; and
- historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development.
- 1.68 Objective 1 requires water quality to be maintained and enhanced. This is also consistent with the requirement in section 7(f), the maintenance and enhancement of the quality of the environment.
- 1.69 Objective 3 highlights the importance of the coastal marine area to tangata whenua. This is relevant to the protection of inanga spawning habitat as a traditional and continuing source of mahinga kai.
- 1.70 Objective 6 of the NZCPS is important insofar that parts of the catchment are in the coastal environment, as it refers to some of the enabling aspects of use and development occurring in the coastal environment. Objective 6 is to enable people and communities to provide for their social, economic and cultural wellbeing and their health and safety through use and development. Relevantly, this objective includes recognising:
 - that protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits.

- that protection of habitats of living marine organisms contributes to the social, economic and cultural wellbeing of people and communities.
- 1.71 The following policies are the most relevant to Plan Change 4.

Policy 2: The Treaty of Waitangi, tangata whenua and Maori heritage – In taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and kaitiakitanga, in relation to the coastal environment:

a. recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations.

...

- f. provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands, and fisheries in the coastal environment through such measures as:
 - i. bringing cultural understanding to monitoring of natural resources;
 - ii. providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua;
 - iii. having regard to regulations, rules or bylaws relating to ensuring sustainability of fisheries resources such as taiapure, mahinga mataitai or other non commercial Maori customary fishing;

Policy 3: Precautionary approach

 Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.

...

Policy 11: Indigenous biological diversity (biodiversity) – To protect indigenous biodiversity in the coastal environment:

•••

b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on:

•••

- ii. habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;
- iii. indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;
- iv. habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;
- v. habitats, including areas and routes, important to migratory species; and

vi. ecological corridors, and areas important for linking or maintaining biological values identified under this policy.

Policy 21: Enhancement of water quality - Where the quality of water in the coastal environment has deteriorated so that it is having a significant adverse effect on ecosystems, natural habitats, or water-based recreational activities, or is restricting existing uses, such as aquaculture, shellfish gathering, and cultural activities, give priority to improving that quality by:

- a. identifying such areas of coastal water and water bodies and including them in plans;
- b. including provisions in plans to address improving water quality in the areas identified above;
- c. where practicable, restoring water quality to at least a state that can support such activities and ecosystems and natural habitats;
- d. requiring that stock are excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment, within a prescribed time frame; and
- e. engaging with tangata whenua to identify areas of coastal waters where they have particular interest, for example in cultural sites, wāhi tapu, other taonga, and values such as mauri, and remedying, or, where remediation is not practicable, mitigating adverse effects on these areas and values.

Policy 23: Discharge of contaminants

- 1. In managing discharges to water in the coastal environment, have particular regard to:
 - a. the sensitivity of the receiving environment;
 - b. the nature of the contaminants to be discharged, the particular concentration of contaminants needed to achieve the required water quality in the receiving environment, and the risks if that concentration of contaminants is exceeded; and
 - c. the capacity of the receiving environment to assimilate the contaminants; and:
 - d. avoid significant adverse effects on ecosystems and habitats after reasonable mixing;
 - e. use the smallest mixing zone necessary to achieve the required water quality in the receiving environment; and
 - f. minimise adverse effects on the life-supporting capacity of water within a mixing zone.
- 2. In managing discharge of human sewage, do not allow:
 - a. discharge of human sewage directly to water in the coastal environment without treatment; and
 - b. the discharge of treated human sewage to water in the coastal environment, unless:
 - i. there has been adequate consideration of alternative methods, sites and routes for undertaking the discharge; and

- ii. informed by an understanding of tangata whenua values and the effects on them.
- 3. Objectives, policies and rules in plans which provide for the discharge of treated human sewage into waters of the coastal environment must have been subject to early and meaningful consultation with tangata whenua.
- 4. In managing discharges of stormwater take steps to avoid adverse effects of stormwater discharge to water in the coastal environment, on a catchment by catchment basis, by:
 - a. avoiding where practicable and otherwise remedying cross contamination of sewage and stormwater systems;
 - b. reducing contaminant and sediment loadings in stormwater at source, through contaminant treatment and by controls on land use activities;
 - c. promoting integrated management of catchments and stormwater networks; and
 - d. promoting design options that reduce flows to stormwater reticulation systems at source.
- 1.72 Inanga are an important traditional source of mahinga kai. Policy 2 is relevant to the recognition of the traditional and continuing cultural relationship that tangata whenua have with the coastal environment, including the resources it contains.
- 1.73 Policy 3 requires a precautionary approach in the management of activities within the coastal environment. As the information relating to known inanga spawning sites is incomplete, Policy 3 is relevant to the methods used to manage those sites.
- 1.74 Policy 11 provides strong direction on the protection of indigenous biological diversity in the coastal environment and is relevant to the protection of inanga spawning habitat.
- 1.75 Policy 21 is also relevant to Plan Change 4 and requires that where the quality of water in the coastal environment has deteriorated so that it is having a significant adverse effect on ecosystems, natural habitats, or water based recreational activities give priority to improving that quality, including by requiring that stock are excluded from water bodies and riparian margins in the coastal environment. Plan Change 4 builds on LWRP provisions to achieve protection of inanga spawning habitat, including amendment of existing LWRP stock exclusion rules to prohibit stock access to inanga spawning habitat during specified times of the year.
- 1.76 Policy 23 of the NZCPS is for managing discharges to water in the coastal environment having regard to (inter alia) the sensitivity of the receiving environment, the nature of contaminants and the capacity of the receiving environment to assimilate contaminants.
- 1.77 In respect of Policies 13 and 15 of the NZCPS, which formed much of the discussion in *King* Salmon, as Plan Change 4 is only refining and clarifying the operation of existing controls within the LWRP, it is not enabling development or activities over and above the status quo. Accordingly, Plan Change 4 is considered to be preserving the natural character of the coastal

environment and protecting the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use and development.

NPSFM 2014

- 1.78 The NPSFM was *gazetted* on 4 July 2014 and came into force on 1 August 2014. From 1 August 2014 the National Policy Statement for Freshwater Management 2011 ("NPSFM 2011") was revoked.
- 1.79 The LWRP gives effect to the NPSFM 2011. Plan Change 4 refines and clarifies the operation of existing controls in the LWRP and was developed to give effect to the NPSFM. Plan Change 4 does not address limits which should be prepared under the National Objectives Framework required by the NPSFM.
- 1.80 Catchment specific limits that are required to give effect to the National Objectives Framework are addressed in other Plan Changes pursuant to the progressive implementation programme notified on 19 December 2015.
- 1.81 No submissions or further submissions on Plan Change 4 have sought changes to better give effect to the NPSFM.
- 1.82 Accordingly, this report briefly addresses:
 - 1. The legal framework;
 - 2. The preamble to the NPSFM 2014;
 - 3. Water quality provisions;
 - 4. Water quantity provisions;
 - 5. Integrated management provisions; and
 - 6. Tāngata whenua roles and interests;

The legal framework

- 1.83 As provided for in section 67(3) of the RMA, Plan Change 4 must give effect to any national policy statement. As set out above, the requirement to "give effect to" is a strong one and requires positive implementation of the superior instrument. Plan Change 4 must give effect to both the water quality and water quantity provisions in the NPSFM.
- 1.84 Section 55 of the RMA is the relevant section dealing with local authority recognition of national policy statements. A national policy statement must be recognised by the local authority by it:
 - a. Amending its plans to either (a) include specific objectives and policies set out in the national policy statement, or (b) give effect to objectives and policies, without using a Schedule 1 process if the national policy statement directs; and

- b. For all other amendments to a document needed to give effect to a national policy statement the local authority must use a Schedule 1 process (i.e. a process of notification, submissions, further submissions, hearings and decisions).
- 1.85 The only two policies in the NPSFM that are required to be given effect to "directly" without using a Schedule 1 process are Policies A4 and B7. All other objectives and policies must be given effect to using the process in Schedule 1 of the Act.

The preamble to the NPSFM

1.86 The preamble,⁴³ details the importance of fresh water to New Zealand's economic, environmental, cultural and social well-being. Given this importance, and in order to achieve the purpose of the RMA, the Crown has recognised the particular need for national direction for the management of the freshwater resource. This direction is also intended to reflect catchment-level variation between freshwater bodies and demands across regions, manage land use and development activities that affect fresh water whilst lowering their environment impact.

1.87 The NPSFM provides:

- objectives and policies that direct local government management of freshwater;
- b. freshwater accounting requirements;
- c. a National Objectives Framework;
- d. national bottom lines; and
- e. recognition of the significance of Te Mana o te Wai; and
- f. the overall maintenance or improvement of freshwater quality within a region.

Water quality provisions

Objective A1

To safeguard:

- a) The life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water; and
- The health of people and communities, at least as affected by secondary contact with fresh water;
 - in sustainably managing the use and development of land, and of discharges of contaminants.

Objective A2

The overall quality of fresh water within a region is maintained or improved while:

- a) Protecting the significant values of outstanding freshwater bodies;
- b) Protecting the significant values of wetlands; and
- c) Improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.

⁴³ The preamble may assist the interpretation of the NPSFM 2014.

- 1.88 Objective A1 seeks to safeguard life supporting capacity of fresh water and the health of people and communities in sustainably managing land use. Objective A2 of the NPSFM14 seeks to protect the quality of outstanding freshwater bodies and the significant values of wetlands, and improve the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.
- 1.89 The most significant changes in Plan Change 4 relate to sediment in waterways, vegetation on riparian margins, stormwater discharges, drinking water supplies and inanga habitat. All the significant changes listed build on existing LWRP controls in relation to water quality. Other changes in Plan Change 4 are administrative in nature and cannot be said to differ in effect from the LWRP.
- 1.90 There are four policies in this section of the NPSFM which contain directions to regional councils for their regional plans to implement these objectives. Policy A1 directs regional councils to ensure plans establish freshwater objectives in accordance with Policies CA1-CA4 and freshwater quality limits for all freshwater management units, having regard to reasonably foreseeable impacts of climate change, the connection between water bodies, and the connections between freshwater bodies and coastal water.
- 1.91 If freshwater management units do not meet the objectives made under Policy A1, Policy A2 directs regional councils to specify targets and implement methods, in a way that considers the sources of contaminants recorded under Policy CC1, to assist improvement of water quality to meet the targets within a defined timeframe.
- 1.92 Plan Change 4 does not address limits which should be prepared under the NPSFM National Objectives Framework. Catchment specific limits that are required to give effect to the Policy A1 and A2 are addressed in other plan changes pursuant to the progressive implementation programme notified on 19 December 2015.
- 1.93 Policy A3 directs regional councils to impose conditions on discharge permits to ensure the limits and targets made under Policies A1 and A2 can be met. It also directs that where permissible, regional councils are to make rules requiring the adoption of the best practicable option to prevent or minimise any actual or likely effect on the environment as a result of discharges entering freshwater.
- 1.94 The application of Policy A4 is dependent on when consent applications are lodged, and relates to matters the regional council is to consider when processing applications for discharges.

Water quantity provisions

Objective B1

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.

Objective B2

To avoid any further over-allocation of fresh water and phase out existing over-allocation.

Objective B3

To improve and maximise the efficient allocation and efficient use of water.

Objective B4

To protect significant values of wetlands and of outstanding freshwater bodies

- 1.95 The policies in this section direct regional councils to address the use, allocations and value of freshwater. Policy B1 requires the Council to ensure that its plans establish freshwater objectives in accordance with Policies CA1-CA4, and set environmental flows/levels for water bodies to give effect to the objectives of the NPSFM. Policy B2 directs regional councils to provide for efficient allocation of freshwater to give effect to Policy B1.
- 1.96 Policy B3 requires plans to state criteria by which applications for approval of transfers of water take permits are to be decided.
- 1.97 Policy B4 requires Councils to identify methods in regional plans to encourage the efficient use of water.
- 1.98 Policy B5 of the NPSFM seeks to avoid any further over-allocation of fresh water and phase out existing over-allocation.
- 1.99 Policy B7 directs regional councils to ensure that plans contain a policy for considering certain consent applications until changes are made operative that will give effect to Policies B1, B2 and B6.
- 1.100 Changes to water quantity provisions in Plan Change 4 are administrative in nature and intended to refine and clarify the application of the LWRP. In terms of management of the water resource, they do not differ in effect from the existing provisions of the LWRP.

Integrated management provisions

Objective C1

To improve integrated management of fresh water and the use and development of land in whole catchments, including the interactions between fresh water, land, associated ecosystems and the coastal environment.

1.101 Policy C1 directs regional councils to manage freshwater, land use and development in an integrated and sustainable way so as to avoid, remedy, or mitigate adverse effects, including

cumulative effects. Policy C2 relates to regional policy statements so is not applicable to Plan Change 4.

1.102 Plan Change 4 refines and clarifies the operation of controls within the LWRP and is intended to improve its application to the region as an integrated whole.

National Objectives Framework provisions

1.103 As discussed above, Plan Change 4 does not address limits which should be prepared under the National Objectives Framework required by the NPSFM. Catchment specific limits that are required to give effect to the National Objectives Framework are addressed in other Plan Changes, pursuant to the progressive implementation programme notified on 19 December 2015.

Monitoring and Accounting provisions

1.104 Sections CB and CC relate to the monitoring and accounting of freshwater. Objectives CB1 and CC1 require the Council to develop a monitoring plan, and also to establish a freshwater quality accounting system and a freshwater quantity accounting system. These are not directly relevant to Plan Change 4 and how it gives effect to the NPSFM 2014.

Tāngata whenua roles and interests

Objective D1

To provide for the involvement of iwi and hapū, and to ensure that tāngata whenua values and interests are identified and reflected in the management of fresh water including associated ecosystems, and decision-making regarding freshwater planning, including on how all other objectives of this national policy statement are given effect to.

- 1.105 Policy D1 directs Councils to take reasonable steps to involve and work with iwi and hapū in managing freshwater and freshwater ecosystems. It also directs Councils to reflect tāngata whenua values and interests in the management of and decision-making regarding freshwater and freshwater ecosystems.
- 1.106 Consultation has taken place with iwi, particularly in relation to proposed changes to the protection of inanga habitat. Support for the proposed changes was recorded and the consultation resulted in some small changes to the mapped inanga spawning habitat. Further details of consultation with iwi can be found in the section 32 report.⁴⁴

Canterbury Regional Policy Statement 2013

⁴⁴ Section 32 report, Part B, page 1

1.107 Plan Change 4 is also required to give effect to the RPS, but this does not require the plan to simply "mimic" the RPS.⁴⁵ The section 32 report describes the key aspects of the RPS with respect to Plan Change 4 in more detail.⁴⁶

Other NPS's - NPSET and NPSREG

- 1.108 The NPSET and NPSREG must also be given effect to by Plan Change 4.
- 1.109 No submissions or further submissions on Plan Change 4 have sought changes to better give effect to either policy statement. Accordingly, the relevant objectives and policies are not repeated here for the purposes of the section 42A report.

National Environmental Standards, Other Plans and WCOS

National environmental standards

- 1.110 Section 43B(3) of the RMA provides that a rule may not be more lenient than a national environmental standard (NES).
- 1.111 The only national environmental standards directly relevant to Plan Change 4 are the Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007 (Drinking Water NES).
- 1.112 Regulation 13 of the Drinking Water NES enables a local authority to make or amend rules in a regional plan that is more stringent than the requirements of the Drinking Water NES.
- 1.113 Regulation 10 of the Drinking Water NES prevents regional councils from including permitted activity rules in regional plans in certain circumstances, where the activities have the potential to affect a registered drinking-water supply that provides no fewer than 501 people with drinking water for not less than 60 calendar days each year.⁴⁷
- 1.114 Regulation 10(1) states that a regional council must not include a rule in its regional plan to allow a permitted activity, under section 9, 13, 14 or 15 of the Act, upstream of an abstraction point where the drinking water concerned meets the health quality criteria, unless satisfied that the activity is not likely to introduce or increase the concentration of any determinants in the drinking water so that, after existing treatment
 - a. it no longer meets the health quality criteria; or
 - b. it contains aesthetic determinants at values exceeding the guideline values.

 $^{^{45}}$ Ngati Kahungunu Iwi Inc v The Hawkes Bay Regional Council [2015] NZEnvC 50 at [14].

⁴⁶ Section 32 report, Part A, page 4

⁴⁷ Regulation 9 of the Drinking Water NES.

- 1.115 Regulation 10(2) states that a regional council must not include a rule in its regional plan to allow a permitted activity, under section 9, 13, 14 or 15 of the Act, upstream of an abstraction point where the drinking water concerned is not tested in accordance with the compliance monitoring procedures in the Drinking-water Standards for New Zealand 2005 ("Drinking-water Standard"), unless satisfied that the activity is not likely to
 - a. increase the concentration of any determinants in the drinking water at the abstraction point by more than a minor amount; or
 - introduce or increase the concentration of any aesthetic determinants in the drinking water so that, after existing treatment, it contains aesthetic determinants at values exceeding the guideline values.
- 1.116 Regulation 10(3) states that a regional council must not include a rule in its regional plan to allow a permitted activity, under section 9, 13, 14 or 15 of the Act, upstream of an abstraction point where the drinking water concerned does not meet the health quality criteria, unless satisfied that the activity is not likely to
 - increase, by more than a minor amount, the concentration of any determinands in the drinking water at the abstraction point that already exceed the maximum acceptable values for more than the allowable number of times as set out in the Drinking-water Standard; or
 - b. increase the concentration of any determinands in the drinking water at the abstraction point that do not exceed the maximum acceptable values for more than the allowable number of times as set out in the Drinking-water Standard to the extent that the drinking water after existing treatment, exceeds the maximum acceptable values for more than the allowable number of times as set out in the Drinking-water Standard; or
 - c. Introduce or increase the concentration of any aesthetic determinands in the drinking water so that, after existing treatment, it contains aesthetic determinants at values exceeding the guideline values.
- 1.117 As set out in the section 32 report, Plan Change 4 has been drafted to ensure that requirements of the Drinking Water NES have been complied with.⁴⁸
- 1.118 The proposed National Environmental Standard on ecological flows and water levels has not been made operative and therefore it is not directly relevant at this time and section 43B does not apply to proposed national environmental standards.
- 1.119 For completeness, we record that the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 apply to the taking of water and contain certain regulations regarding measuring and taking water. The regulations do not prescribe matters in relation to the contents of regional plans (although the regulations will override the requirements of regional plans, for example in relation to the provision of information) and are not directly relevant to the preparation of Plan Change 4.

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⁴⁸ Section 32 Report for further details, pages 59, 65 and 66.

Other plans and planning documents recognised by iwi

- 1.120 Plan Change 4 must not be inconsistent with any other regional plan for the region.⁴⁹ At the time Plan Change 4 was prepared, these were:
 - a. Canterbury Natural Resources Regional Plan 2011
 - b. Regional Coastal Environment Plan 2005
 - c. Hurunui Waiau River Regional Plan 2013
 - d. Waipara Catchment Environmental Flow and Water Allocation Regional Plan 2012
 - e. Waimakariri River Regional Plan 2004
 - f. Opihi River Regional Plan 2001
 - g. Pareora Catchment Environmental Flow and Water Allocation Regional Plan 2012
 - h. Waitaki Catchment Water Allocation Regional Plan 2006
- 1.121 The section 32 report describes the consistency of the above plans with respect to Plan Change 4 in more detail.⁵⁰
- 1.122 When preparing Plan Change 4, the Council was required to take into account any relevant planning document recognised by an iwi authority⁵¹ and to have regard to management plans or strategies prepared under other Acts to the extent that these have a bearing on resource management issues in the region.⁵²
- 1.123 The following planning documents are recognised by Ngāi Tahu iwi and are relevant to Plan Change 4:
 - a. Kati Huirapa lwi Management Plan 1992.
 - b. Te Rūnanga o Ngāi Tahu Freshwater Policy 1999.
 - c. Te Taumutu Rūnanga Natural Resource Management Plan (2002).
 - d. Kāi Tahu Ki Otago Natural Resource Management Plan (2005).
 - e. Te Waihora Joint Management Plan Mahere Tukutahi o Te Waihora (2005)
 - f. Te Poha o Tohu Raumati, Te Rūnanga o Kaikōura Environmental Management Plan (2007, second edition)
 - g. Te Rūnanga o Ngāi Tahu Hazardous Substances and New Organisms Statement (2008)
 - h. Mahaanui Iwi Management Plan (2013)
- 1.124 Each of these plans has been considered during the preparation of Plan Change 4.
- 1.125 The Te Whakatau Kaupapa Ngāi Tahu Resource Management Strategy for the Canterbury Region 1990 (reprinted 1992), which is a statement of Ngāi Tahu beliefs and values and contains a schedule of Māori Reserved lands and other resources of importance to tangata whenua, has also been considered.

⁴⁹ Section 67(4)(b)

⁵⁰ Section 32 report, Part A, pages 6-7

⁵¹ Section 66(2A).

⁵² Section 66(2)(c)(ii).

1.126 The Sports Fish and Game Birds Management Plans for North Canterbury and for the Central South Island under the Conservation Act 1987 is a management plan relevant to Plan Change 4 and have been considered in the drafting of Plan Change 4.

Water conservation orders

- 1.127 Plan Change 4 must not be inconsistent with a water conservation order.⁵³ The water conservation orders that apply within the Canterbury region are:
 - a. National Water Conservation (Rakaia River) Order 1988
 - b. National Water Conservation (Lake Ellesmere) Order 1990
 - c. National Water Conservation (Ahuriri River) Order 1990
 - d. Water Conservation (Rangitata River) Order 2006
- 1.128 Plan Change 4 makes some minor adjustments that may affect waterbodies subject to water conservation orders. However, the changes do not alter the way in which effects are managed pursuant to the LWRP, which is consistent with the relevant water conservation orders.

Other Statutes

1.129 The following section of this report considers the statutory directions contained in statutes other than the RMA.

The Canterbury Earthquake Recovery Act

1.130 The Canterbury Earthquake Recovery Act requires that a regional plan cannot be interpreted or applied in a way that is inconsistent with the Recovery Strategy.⁵⁴ In addition, the preparation and decision on the proposed regional plan cannot be inconsistent with any recovery plan gazetted under the Canterbury Earthquake Recovery Act 2011.⁵⁵

Ngāi Tahu Claims Settlement Act 1998

- 1.131 The Te Rūnanga o Ngāi Tahu Act 1996 and the Ngāi Tahu Claims Settlement Act 1998 recognise Ngāi Tahu Whānui as tāngata whenua for Canterbury. This is particularly relevant in applying sections 6(e), 7(a) and 8 of the RMA.
- 1.132 The RPS also identifies issues of importance to Ngāi Tahu and describes processes for enhancing the relationship of Ngāi Tahu and the Council (Chapters 2 and 4). Therefore, compliance with those Acts is also relevant to giving effect to the RPS.

⁵³ Section 67(4).

⁵⁴ Canterbury Earthquake Recovery Act 2011, section 15(1)

⁵⁵ section 23

Environment Canterbury Act – CWMS and the Zone Committee process

- 1.133 The Environment Canterbury (Temporary Commissioners and Improved Water Management)
 Act 2010 (ECan Act) was passed in 2010 to provide CRC with certain powers that it does not
 otherwise have to address issues relevant to the efficient, effective, and sustainable
 management of fresh water in the Canterbury region (amongst other matters).
- 1.134 Section 63 of the Environment Canterbury Act (ECan Act) requires, in considering Plan Change 4, particular regard to be given to the vision and principles of the CWMS, which are set out in Part 1 of Schedule 1 of the ECan Act, in addition to the matters relevant under the RMA to its decisions made under clause 10(1) of Schedule 1 of the RMA. Section 4(2) states that the inclusion of the vision and principles of the CWMS in Part 1 of Schedule 1 does not accord to the CWMS or its vision and principles any status in law other than as provided in that Act.

1.135 The vision of the CWMS is:

"To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework."

- 1.136 The primary principles of the CWMS are sustainable management, a regional approach, and kaitiakitanga. The supporting principles are natural character, indigenous biodiversity, access, quality drinking water, recreational and amenity opportunities, and community and commercial use.
- 1.137 While section 63 of the ECan Act requires particular regard to be had to the vision and principles of the CWMS, the vision and principles of the CWMS are also being given effect to in Canterbury through the wider auspices of the CWMS as a whole. The CWMS ushered in a collaborative and integrated management approach to freshwater management, seeking to maximise opportunities for the region's environment, economy and community.
- 1.138 The CWMS is the outcome of extensive consultation and community participation aimed at reaching a consensus as to how to best manage the freshwater resources in Canterbury. The CWMS has been endorsed by the Council and all of the territorial authorities in the Canterbury region. As such, it provides valuable guidance about how the people and communities of Canterbury wish to see provision for their wellbeing and health and safety, through the management of the use, development and protection of resources, including water and land. In addition, the CWMS and the Zone Committee process established under it, is one way that the Council has sought to involve the community, including iwi and hapū, in how best to give effect to the NPSFM 2014.
- 1.139 Although there is no statutory requirement for Plan Change 4 to incorporate or give effect to the entire content of the CWMS, the document as a whole is an important component in determining the most appropriate way of achieving the purpose of the RMA. A decision maker may also have regard to the CWMS as a whole as a relevant consideration. The CWMS is not a "strategy prepared under other Acts", in terms of section 66(2)(c)(i) of the RMA, and so is

not a mandatory consideration under that section. However, section 66(2)(c) does not create an exhaustive list of considerations. The High Court has held that regard may be had to non-binding national policy documents, as relevant background material, even if those documents do not have any status under the RMA.⁵⁶ Further, it is submitted, that in having particular regard to the vision and principles of the CWMS, it is necessary to have regard to the CWMS as a whole and the Zone Committee process established under the CWMS in order to give effect to the vision and principles of the CWMS (and the NPSFM).

Jurisdictional Issues

- 1.140 Plan Change 4 raises jurisdictional issues in relation to potentially invalid submissions, because they are not "on" Plan Change 4.
- 1.141 Several submissions on Plan Change 4 appear to be invalid as they are not "on" Plan Change 4.
- 1.142 Clause 6(1) of Schedule 1 of the RMA provides that once a proposed plan (including a variation) is publicly notified under clause 5, a person described in sub-clauses (2) to (4) may make a submission "on it" to the relevant local authority.
- 1.143 A submission on a plan or plan change must be in the prescribed form. ⁵⁷ Use of a form is not invalid only because it contains minor differences from a form prescribed by these regulations as long as the form that is used has the same effect as the prescribed form and is not misleading. ⁵⁸
- 1.144 In terms of scope, the right to make a submission is limited to submissions that are "on" Plan Change 4.⁵⁹ If a submission is not "on" Plan Change 4, the Council has no jurisdiction to consider it.
- 1.145 The Courts have endorsed a bipartite approach to deciding whether a submission is "on" a plan change. 60
- 1.146 First, it must reasonably fall within the ambit of the plan change by addressing a change to the pre-existing status quo advanced by Plan Change 4 ⁶¹ For example, if a management regime in a plan for a particular resource is unaltered by the plan change, a submission seeking a new management regime for that resource is unlikely to be "on" the plan change, unless the change is merely incidental or consequential. Another indication that a submission is not on

⁵⁶ West Coast Regional Council v The Friends of Shearer Swamp [2012] NZRMA 45.

⁵⁷ Clause 6(5) of Schedule 1. Regulation 6 of the Resource Management (Forms, Fees, and Procedures) Regulations 2003 provides that Form 5 is to be used for a submission on a publicly notified plan change.

⁵⁸ Resource Management (Forms, Fees, and Procedures) Regulations 2003, Regulation 4.

⁵⁹ Clause 6(1) of Schedule 1.

⁶⁰ Palmerston North City Council v Motor Machinists Ltd [2013] NZHC 1290 at [90].

⁶¹ Palmerston North City Council v Motor Machinists Ltd [2013] NZHC 1290 at [80] and Clearwater Resort Ltd v Christchurch City Council HC Christchurch AP34/02, 14 March 2003.

the plan change is when the matters addressed by the submission are not adequately assessed in the section 32 evaluation. ⁶²

- 1.147 Secondly, whether there is a real risk that persons directly or potentially directly affected by the additional changes proposed in the submission have been denied an effective opportunity to respond to those additional changes in the plan change process. ⁶³
- 1.148 If the effect of regarding a submission as "on" a plan change would be to permit a planning instrument to be appreciably amended without real opportunity for participation by those potentially affected, that will be a "powerful consideration" against finding that the submission was truly "on" the plan change. Where a submission is not "on" the plan change, the submitter has other options: to submit an application for resource consent; to seek a further public plan change; or to seek a private plan change.
- 1.149 A cautious approach must be taken when considering whether to reject a submission point because it is not "on" the variation.
- 1.150 Several submitters on PC4 attempt to introduce new or expand existing management regimes for resources within the region, beyond the scope of PC4. In particular:
 - a. Ngāi Tahu, DoC and Working Waters Trust propose that PC4 be used to introduce explicit protection of freshwater species in addition to inanga, either by expansion of Schedule 17 or the introduction of new policies and rules.
 - b. Whitewater New Zealand request the inclusion of a new schedule and associated rules and policies in relation to 'Key White Water Recreation Reaches on rivers in Canterbury'.
 - c. PC4 proposes minor changes to Tables 1a and 1b and the tables within Schedule 5 of the LWRP. The changes do not encompass alterations to the values listed within the tables, or the criteria by which the values may alter. The Department of Conservation and the Christchurch City Council have requested changes to the values within Table 1b and 5B that are not 'on' PC4.
- 1.151 In its submission in relation to its processing interests, Fonterra requests specific relief set out in 'Table 1' attached to its submission. In addition, Fonterra states:
 - "3.4 It is emphasised that Table 1 is not intended to limit the scope of Fonterra's submissions on PC4. Fonterra seeks such relief as is necessary to give effect to the on-going implementation of its existing consents and the possible expansion of its sites (the example provided being Studholme) as is discussed generally in paragraphs 2.1 to 2.12.

⁶² Palmerston North City Council v Motor Machinists Ltd [2013] NZHC 1290 at [81].

⁶³ General Distributors Ltd v Waipa District Council (2008) 15 ELRNZ 59 at [62]; Palmerston North City Council v Motor Machinists Ltd [2013] NZHC 1290 at [82].

⁶⁴ Clearwater Resort Ltd v Christchurch City Council HC Christchurch AP34/02, 14 March 2003 at [69].

- 3.5 In particular, this includes clear and workable definitions, objectives, policies and rules that capture and enable all the discharges that arise from a dairy processing site."
- 1.152 While the relief sought in 'Table 1' is specific and within scope, it is questionable whether the potential additional relief sought by Fonterra in paragraphs 3.4 and 3.5 of its submission is sufficiently detailed or within scope. To the extent that Fonterra intends to rely on this aspect of its submission for any relief that is not consequential to its 'Table 1', it should be required to demonstrate how the changes sought are within the Councils jurisdiction.

Summary regarding scope of submissions

- 1.153 In reaching a decision on Plan Change 4 the Council will have to consider the following matters.
- 1.154 First, the Hearing Commissioners will need to consider whether each submission is a valid submission and is "on" Plan Change 4 applying the tests in *Motor Machinists Ltd*.
- 1.155 Secondly, in order to establish whether there is jurisdiction to make an amendment to Plan Change 4 , the Council must ask itself:⁶⁵
 - a. Has a submitter raised a relevant 'resource management issue' in its submission?
 This may be in a specific or a general way.
 - b. Is the change contemplated by the Hearing Commissioners fairly and reasonably within the general scope of:
 - i An original submission; or
 - ii Plan Change 4 as notified; or
 - iii Somewhere in between.
 - c. Was the summary of the relevant submissions fair and accurate and not misleading?
- 1.156 Whether an amendment goes beyond what is reasonably and fairly raised in submissions will usually be a question of degree to be judged by the terms of the plan and the content of submissions. As set out above:
 - a. This should be approached in a realistic workable fashion rather than from the perspective of legal nicety, and requires that the whole relief package detailed in submissions be considered.⁶⁶
 - b. This approach requires that the whole relief package detailed in submissions be considered when determining whether or not the relief sought is reasonably and fairly raised in the submissions.⁶⁷

⁶⁵ Re Vivid Holdings Ltd (1999) 5 ELRNZ 264 at [19].

⁶⁶ General Distributors Ltd v Waipa District Council (2008) 15 ELRNZ 59 at [58]-[60].

⁶⁷ Shaw v Selwyn District Council [2001] 2 NZLR 277 at para 44, General Distributors Ltd v Waipa District Council (2008) 15 ELRNZ 59, Wylie J at [60].

- 1.157 The Courts have endorsed a precautionary approach to jurisdiction of amendments on the basis of people being denied an opportunity to effectively respond to additional changes in the plan changes process. 68
- 1.158 An amendment can be anywhere on the line between the proposed plan and the submission. Consequential changes can flow downwards from whatever point on the first line is chosen.⁶⁹
- 1.159 Alterations to a plan change or variation that would not broaden the plan change beyond the limits of what was originally requested, nor extends it beyond what is reasonably and fairly to be understood from the content of submissions, or prejudice anyone who failed to lodge a submission on the original request, is within jurisdiction. Amendments required for clarity and refinement of detail are allowed on the basis that such alterations are considered to be minor and un-prejudicial.⁷⁰
- 1.160 A further submission cannot be used to extent the scope of an original submission on Plan Change 4.
- 1.161 To the extent that any submissions are potentially beyond the scope of Plan Change 4, or are without jurisdiction (including those that seek to reserve the right to bring alternative relief to the hearing), then those submitters will need to demonstrate how the changes they seek are within the Council's jurisdiction.

⁶⁸ General Distributors Ltd v Waipa District Council (2008) 15 ELRNZ 59 at [62]; Palmerston North City Council v Motor Machinists Ltd [2013] NZHC 1290 at [82].

⁶⁹ Campbell v Christchurch City Council [2002] NZRMA 352 (EnvC) at [20].

⁷⁰ Oyster Bay Developments Limited v Marlborough District Council EnvC Blenheim C081/2009, 22 September 2009 at [22]-[23] and [46]; General Distributors Ltd v Waipa District Council (2008) 15 ELRNZ 59 (HC).

Planning Analysis⁷¹

Format and Assumptions

- 2.1 The following parts of this Section 42A Report summarises and analyses the submissions made in respect of Plan Change 4 (PC4) (Omnibus) to the Canterbury Land and Water Regional Plan (LWRP).
- 2.2 This section details the assumptions made in respect to the s42A reporting and the format of this Section 42A Report.

Report Structure

2.3 This section of the report is set out by topic area. The topic areas are defined in PC4 (Omnibus), in "Table 1 – Key to Understanding the Amendments". This table divides the plan change into 16 topic areas, labelled A to P. This topic division and labelling system has been used in the following sections of this report, with a new section "Q – Miscellaneous" added. Table 1 from PC4 (Omnibus) is included on Page 4 of this section.

Submissions and Analysis

- 2.4 In all, 38 submissions were made on PC4 (Omnibus) to the LWRP, and 19 further submissions.
- 2.5 "Objective" is a software package that the Canterbury Regional Council (CRC) has utilised for the recording and management of submissions. The software provides a forum for online submissions and the entry of hard-copy submissions. The use of this software also constrains how submissions and further submissions are recorded and published.
- 2.6 There were no submissions on a number of provisions:

Definition of 'Diversion'

Definition of 'Sewage sludge'

5.83 - Cemeteries

5.84 - Sewerage Systems

5.107 - Bores

5.108 - Bores

5.113 - Small and Community Water Takes

5.129 - Take and Use Groundwater

5.130 - Take and Use Groundwater

The deletion of 5.143 and 5.144 - Floodwaters

5.146 - Refuelling in Lakes and Riverbeds

5.176 - Earthworks over Aquifers

⁷¹ This section completed by Matthew McCallum-Clark

5.177 - Earthworks over Aquifers

5.178 - Earthworks over Aguifers

Section 6 - Kaikoura amendments

Section 7 - Hurunui-Waiau amendments

- 2.7 There are also a number of provisions which are supported in submissions, with no further submission in opposition. Both the provisions with no submissions and the provisions with submissions only in support are listed in the analysis sections below, as the some are inherently related to other provisions (policies or rules) to which there are submissions, and could be subject to consequential changes.
- 2.8 For the avoidance of doubt, the following provisions are considered not to have submissions in opposition, in accordance with s86F:

Definition of 'Diversion' - The definition sits alone.

Definition of 'Sewage sludge' – The definition sits alone.

- 5.84 Sewerage Systems Standalone rule. No policies amended by PC4 apply to the rule.
- 5.107 Bores The rules are part of a group of rules. However only 5.107 and 5.108 relate to each other.
- 5.108 Bores The rules are part of a group of rules. However, only 5.107 and 5.108 relate to each other.
- 5.176 Earthworks over Aquifers No submissions were received on all provisions for earthworks over aquifers.
- 5.177 Earthworks over Aquifers No submissions were received on all provisions for earthworks over aquifers.
- 5.178 Earthworks over Aquifers No submissions were received on all provisions for earthworks over aquifers.
- Section 6 Kaikoura amendments Standalone amendment to Section 6
- Section 7 Hurunui-Waiau amendments Standalone amendment to Section 7

Reporting assumptions and disclaimers

- 2.9 In preparing the evaluation of the submissions and further submissions lodged on PC4 (Omnibus), a number of assumptions have been made.
- 2.10 Individual provisions of PC4 (Omnibus) received a number of the submissions and to avoid identifying every submitter these have been grouped in the discussion of individual policies or rules. This means that individual submitters are sometimes not identified. The reporting on submissions is also often generalised e.g. "a number of submissions were made on Policy...".
- 2.11 There are further submissions on the majority of submission points. The further submissions have been reviewed and entered into Objective against the relevant submission point. Again, because further submissions were received on the majority of primary submission points the

- reporting only identifies further submissions when a number of submitters identify their opposition or support of submission points or raise particular issues.
- 2.12 PC4 (Omnibus) proposes changes to a number of existing policies and rules. These are shown as 'tracked changes' in PC4 (Omnibus). Submitters have sought further changes, and some of these have been incorporated into recommendations in this Report. These additional changes are shown in bold, as follows:
 - The insertion of words is shown by way of the text being **bold underlining** (compared to the PC4 (Omnibus) amendments just being underlined)
 - The deleted of words is shown by way of applying bold strikethrough to the text.
- 2.13 It is acknowledged that the PC4 (Omnibus) changes to policies and rules are presently 'proposed'. To avoid unnecessary and repetitious words, PC4 (Omnibus) policies and rules are simply referred to as policies and rules, rather than 'proposed policies' and 'proposed rules'.

Abbreviations used

2.14 Generally, submitters' names have been used in full. However, the following abbreviations are used.

| Full submitter Name | Abbreviated Name | |
|--|---------------------|--|
| ANZCO Foods Limited, CMP Canterbury Limited and Five Star | ANZCO | |
| Beef Limited | ANZCO | |
| Beef+Lamb New Zealand | Beef + Lamb NZ | |
| BP Oil New Zealand Limited, Z Energy Limited and Mobil Oil | Oil Companies | |
| New Zealand Limited | Oil Companies | |
| Canterbury District Health Board | CDHB | |
| Christchurch City Council | Christchurch CC | |
| Combined Canterbury Provinces of Federated Farmers New | Federated Farmers | |
| Zealand | rederated railliers | |
| Director General of Conservation | DoC | |
| Egg Producers Federation of New Zealand and Poultry | EPFNZ & PIANZ | |
| Industry Association of New Zealand | EPFINZ & PIAINZ | |
| Ellesmere Sustainable Agriculture Incorporated | ESAI | |
| Fonterra Co-operative Group Limited | Fonterra | |
| Fonterra Co-operative Group Limited and DairyNZ | Fonterra & DairyNZ | |
| Genesis Energy Limited | Genesis | |
| Horticulture New Zealand | Horticulture NZ | |
| Hurunui Water Project Limited | Hurunui Water | |
| Kaikoura District Council | Kaikoura DC | |
| Mackenzie District Council | Mackenzie DC | |
| Meridian Energy Limited | Meridian | |

| North Canterbury Fish and Game Council | Fish and Game |
|--|-----------------|
| Rangitata Diversion Race Management Limited | RDRML |
| Royal New Zealand Forest and Bird Protection Society | Forest and Bird |
| Te Rūnanga o Ngāi Tahu | Ngāi Tahu |
| Waimakariri District Council | Waimakariri DC |

2.15 Abbreviations used in the text generally:

| Full title/text | Abbreviations |
|---|---------------|
| Resource Management Act 1991 | RMA |
| Plan Change 4 (Omnibus) | PC4 (Omnibus) |
| Canterbury Natural Resource Regional Plan | NRRP |
| Partially operative Canterbury Land and Water Regional Plan | LWRP |
| National Policy Statement for Freshwater Management 2014 | NPSFM |
| Canterbury Regional Policy Statement 2013 | RPS |
| Canterbury Regional Council | CRC |
| Environment Canterbury (Temporary Commissioners and | ECan Act |
| Improved Water Management) Act 2010 | |
| Environment Canterbury | ECan |

2.16 Table 1 from PC4 (Omnibus), showing the structure and content of the following sections of this report:

| Category | Issue or Activity | Provisions Amended, Added or Deleted | | | |
|----------|--|--------------------------------------|----------------------|--|---|
| | | Obj. | Policy | Rule | Other |
| Α | Inanga Spawning | - | 4.31, 4.86A | 5.71, 5.136, 5.137 5.138, 5.139, 5.140 | Schedule 17 |
| | Sites and Inanga Spawning Habitat | | 4.86B | 5.141, 5.148, 5.151, 5.152A, 5.163, 5.167, 5.168, 5.169, 5.171 | Section 2.9 |
| В | Stormwater Discharges | - | 4.15, 4.16A | 5.93, 5.93A, 5.94B, 5.94C, 5.95, 5.95A, 5.96, 5.97 5.96, 5.97 | Section 2.9 |
| С | Tangata Whenua Values | - | 4.14B | - | - |
| D | Group and Community Drinking Water Supplies | - | 4.5, 4.23A, 4.23B | 5.7, 5.8, 5.71, 5.75, 5.77, 5.82, 5.91, 5.119 | Schedule 1 Schedule 5 Section 2.9 |
| Е | Dewatering and Drainage Water | - | - | 5.75, 5.76, 5.77, 5.78, 5.79, 5.80 | Section 2.9 |
| F | Bores | - | - | 5.103, 5.104, 5.104A, 5.107, 5.108, 5.109 | Section 2.9 |
| G | Surface Water Sampling and Monitoring | - | - | 5.140A | |
| Н | Vegetation and | - | 4.85A, | 5.142, 5.146A, 5.146B, 5.163, 5.164, | Section 2.9 |

| _ | | T | | T | | 1 |
|---|---|---------------------|------|-------------|--|----------------|
| | | Earthworks in Beds | | 4.92A | 5.167, 5.168 | |
| | | of Lakes and Rivers | | | | |
| | | and Riparian | | | | |
| | | Margins, Discharge | | | | |
| | | of Floodwaters, | | | | |
| | | and Fine Sediment | | | | |
| | | Removal from | | | | |
| | | Rivers | | | | |
| | l | Gravel Extraction | - | 4.18, 4.95A | 5.148, 5.149, 5.150 | - |
| | J | Sediment-laden | - | 4.76A | 5.109, 5.119, 5.163, 5.164, 5.165 5.166 | Section 2.9 |
| | | water discharges | | | 5.167, 5.168, 5.169, 5.170, 5.171 | |
| | K | Contaminated Land | - | 4.19 | 5.82, 5.119, 5.187, 5.188 | - |
| | L | Stock Exclusion | - | | 5.68A, 5.68 | - |
| | M | Minor Correction | 3.14 | 4.5, 4.86 | 5.75, 5.77, 5.79, 5.80, 5.81, 5.82, 5.83, | Interpretation |
| | | | | | 5.84, 5.91, 5.95, 5.97, 5.111, 5.116, 5.119, | Note -(Small |
| | | | | | 5.123, 5.129, 5.130, 5.135, 5.136, 5.137, | and |
| | | | | | 5.138, 5.139, 5.141, 5.141A, 5.141B, | Community |
| | | | | | 5.142A, 5.143, 5.144, 5.145, 5.146, 5.148, | Water Takes) |
| | | | | | 5.149, 5.150, 5.154, 5.155, 5.156, 5.163, | Section 2 |
| | | | | | 5.167, 5.168, 5.169, 5.171, 5.174, 5.176, | Section 2.9 |
| | | | | | 5.177, 5.178, 5.187 | Section 6 |
| | | | | | | Section 7 |
| | | | | | | Schedule 9 |
| | N | Sewage, | - | 4.28 | 5.7, 5.8, 5.9, 5.84, 5.91, 5.92 | Section 2.9 |
| | | Wastewater and | | | | |
| | | Industrial and | | | | |
| | | Trade Wastes | | | | |
| | 0 | Water Takes and | - | 4.49 | 5.111, 5.113, 5.114, 5.114A 5.115, 5.123, | Schedule 25 |
| | | Water Supply | | | 5.128, 5.133 | |
| | | Strategies | | | | |
| | Р | Groundwater and | - | 4.13 | - | Schedule 5 |
| | | Surface Water | | | | Schedule 8 |
| | | Limits | | | | Table 1a and |
| | | | | | | 1b |
| _ | | | | | | |

A Inanga Spawning Sites and Inanga Spawning Habitat

- A.1 PC4 (Omnibus) modifies the LWRP provisions relating to inanga spawning sites and inanga spawning habitat. The inanga whitebait fishery is important in New Zealand, both commercially and culturally. Inanga are under pressure from multiple sources, and the species is now classified as 'declining'. The biggest threat to the species is considered to be the reduction of spawning habitats.⁷²
- A.2 Through the existing LWRP, the CRC aims to provide protection for inanga spawning via a schedule of known inanga spawning sites, and rules managing activities in these locations.
- A.3 The issue with the operative Schedule 17, and the policy and rules of the LWRP, is that only four identified inanga spawning sites are protected as inanga spawning sites. The majority of potential spawning areas are not currently listed.
- A.4 PC4 (Omnibus) introduces a new definition, new and amended policies, rules and maps, and an update to Schedule 17 to protect 86 known inanga spawning sites and areas modelled as showing as having the potential to be used as spawning habitat.

Definition of 'Inanga Spawning Habitat'

A.5 The new definition of 'inanga spawning habitat' is:

Means that part of the bed and banks of a lake, river, artificial watercourse, coastal lagoon or wetland that is between mean high water springs and mean low water neaps and is within the area identified as 'inanga spawning habitat' on the Planning Maps.

Submissions

- A.6 The definition of inanga spawning habitat received eight submissions. One submitter supports the definition, six submitters seek amendment and one submitter seeks to have the new definition deleted.
- A.7 DoC seeks retention of the definition, as the submitter states it gives effect to the RMA, NPSFM, RPS and the CWMS.
- A.8 Ngāi Tahu is "supportive of ECan's desire to protect more inanga spawning sites but is concerned the proposed table in Schedule 17 may not be the best mechanism for identifying all inanga sites in the region". Ngāi Tahu therefore seeks to make amendments to Schedule 17 or alternatively make amendments to the definition of inanga spawning habitat, the planning maps and include other locations in Schedule 17. The amendments to the definition

⁷² See Summary of research in Greer, M, D Gray, K Duff, J Sykes. Predicting inanga/whitebait spawning habitat in Canterbury. Environment Canterbury Technical Report No. R15/100 ISBN 978-0-947490-30-0, 2015.

- that Ngāi Tahu seek is to include both "the area upstream of the coast on all surface waterways and the area upstream of all surface waterways that flow into Te Waihora".
- A.9 Forest and Bird support the proposed amendments; however, the submitter states, "Plan Change 4 treats inanga spawning sites and inanga spawning habitat differently", and therefore seeks to include a definition for inanga spawning site, as well as inanga spawning habitat. The submitter does not include any recommended wording for the new definition of 'inanga spawning site'.
- A.10 ESAI seeks to delete the definition of inanga spawning habitat and the provisions relating to them, "especially where there might be restriction on crucial stakeholder activities such as crop planting and harvesting etc." The submitter states that consultation with directly affected parties was not undertaken to assist in the determination of the appropriate location of the inanga spawning habitats and sites. The submitter states "that the s32 Report has not listed any farming or commercial entities that have been consulted as part of this plan change process".
- A.11 ESAI has made submissions on all provisions that relate to inanga spawning habitat and has stated that "until such time as this consultation is done there should be no insertion of provisions relating to them".
- A.12 Fonterra, Fonterra and DairyNZ and Federated Farmers seek amendments to the definition of inanga spawning habitat to "better reflect that the CRC are referring to habitat that is suitable for inanga spawning (in contrast to known spawning sites)". The submitters suggest that a case-by-case assessment be undertaken to identify which water bodies within the identified areas on the planning maps actually contain habitat suitable for inanga spawning. The submitters did not include alternative wording to give effect to their request. The Federated Farmers submission received three further submissions. Two submissions from Ngāi Tahu and ESAI in opposition and one from Forest and Bird opposing the decision requested in part.
- A.13 Fonterra and DairyNZ and Federated Farmers, in addition to their submissions above, seek amendment to the definition by adding the word 'natural' in front of the word 'lake'; however, no reason is provided for this.
- A.14 Trustpower seeks to include a definition of 'inanga spawning sites' as follows:
 - Inanga Spawning Site means that part of the bed and banks of a lake, river, artificial watercourse, coastal lagoon or wetland that is between mean high water springs and mean low water neaps and is within the area identified as a 'inanga spawning site' in Schedule 17 and on the Planning Maps.
- A.15 Trustpower is concerned that there is no definition of 'inanga spawning site'. The term inanga spawning site is referred to in Policy 4.86A where activities within these sites should be avoided as a first priority. Trustpower states that including this definition will ensure the relevant provisions will be limited to the sites listed in Schedule 17 and on the planning maps.

- A.16 The submissions on the definition of inanga spawning habitat are generally only peripherally related to the definition itself. The wider issue of the opposition to controls on activities within inanga spawning sites and inanga spawning habitat, and alternatively the preference of some submitters for greater protection, dominate over specific issues with the definition. These wider issues are discussed further below in relation to the relevant policies.
- A.17 In relation to the definition, and as a result of submissions received on the wider framework (particularly from Federated Farmers) it is recommended that a change is made to recognise that ephemeral streams do not provide recognised inanga spawning habitat, and the definition should exclude these areas.
- A.18 I also recommend acceptance of the Trustpower and Forest and Bird requests for a specific definition of "inanga spawning site", to aid with the clarity of the policies and rules, in relation to the difference between inanga spawning sites and inanga spawning habitat. Accepting this point will also largely address Trustpower's concerns relating to the policies below.

Policy 4.31

- A.19 The change to Policy 4.31 reads:
 - 4.31 Damage to the bed or banks of water bodies, sedimentation and disturbance of the waterbody, direct discharge of contaminants, and degradation of aquatic ecosystems and inanga and salmon spawning habitat is avoided by:
 - (a) excluding intensively farmed stock from lakes, rivers and wetlands; and
 - (b) excluding stock from swimming freshwater bathing sites listed in Schedule 6, inanga and salmon spawning sites listed in Schedule 17, and other sensitive waterbody areas and the waterbody bed and banks closely adjacent to upstream of these areas; and
 - (ba) excluding stock from inanga spawning habitat during the period of 1 January to 1 June inclusive; and
 - (c) limiting access to wetlands, and the banks or beds of lakes and river
- A.20 Ten submissions were received on Policy 4.31. ESAI seeks to delete the proposed amendments, the reasons are detailed above at paragraph A.10 and A.11, J Demeter seeks to have the proposed retained and eight submitters seek further amendments to Policy 4.31.
- A.21 Forest and Bird, Ngāi Tahu, and Fish and Game seek to amend Policy 4.31(b) as follows:
 - (b) excluding stock from swimming freshwater bathing sites listed in Schedule 6, inanga and salmon spawning sites listed in Schedule 17, and other sensitive waterbody areas

and the waterbody bed and banks closely <u>adjacent to</u> upstream of <u>and upstream of</u> these areas; and

- A.22 Forest and Bird states that the amendments made to the Policy so that it now applies to the waterbody bed and banks "closely adjacent to", rather than "closely upstream" of various sensitive activities is helpful. However, the submitter states that the removal of the 'upstream' component may lessen the impact of the Policy. Ngāi Tahu simply requests that stock are to be excluded from 'closely upstream' areas as well as closely 'adjacent' areas. Fish and Game seeks the same amendments to Policy 4.13 as "any disturbance in the bed of a waterway upstream of a salmon spawning site dislodges sediment and negatively impacts spawning".
- A.23 Whitewater NZ seeks to amend Policy 4.31 to include rivers with identified recreational values.
- A.24 Whitewater NZ states that Policy 4.31 "sets out to prevent and minimise damage to natural features and values of water bodies by controlling livestock access in such areas". The submitter seeks that this Policy and many other provisions within PC4 (Omnibus) need to include reference to degradation at recreation sites. The submitter states that the provisions within PC4 (Omnibus) need to recognise recreation and amenity values provided by the region's waterbodies by adding a schedule and making amendments to provisions to recognise the requirements in a new schedule. The Whitewater NZ submission received numerous further submissions on each of their decisions requested. Generally seven further submissions were received. Six in opposition and one in support.
- A.25 The CDHB seeks to amend Policy 4.31(b) as follows:
 - (b) excluding stock from the waterbody bed and banks within 1000m upstream and 100m downstream of swimming freshwater bathing sites listed in Schedule 6, within community drinking water supply protection zones, as set out in Schedule 1, inanga and salmon spawning sites listed in Schedule 17 and other sensitive waterbody areas and the waterbody bed and banks closely adjacent to upstream of these areas; and

The submitter states that these amendments are needed "to exclude stock from close proximity of community drinking supply intake sites". In addition, the submitter states that the CRC "should apply an approach consistent with other policies in the LWRP (such as the approach for discharge of drainage water) and to prohibit the discharge of contaminants caused by stock access, within community water supply protection zones".

A.26 H Rennie states that the sentence referring to 'sensitive water body areas' needs to be deleted because there is no clarity as to what a 'sensitive water body area' is. The submitter states that this could lead to "unintended consequences". The submitter also seeks to have (ba) deleted and to delete all references to 'inanga spawning habitat' in the policies, rules and maps. H Rennie states that the scientific basis for determining these habitats is 'fatally flawed'

- and that exclusion of stock from these areas is not needed to meet the purpose of the RMA, also that the Section 32 Report did not consider the economic effects of the proposal.
- A.27 Fonterra and DairyNZ seek to amend Policy 4.31 to restrict areas, which are protected due to inanga spawning habitat to "those specific sites that are identified as having habitat that is suitable for inanga spawning". The submitter states that protecting inanga spawning areas which are "broadly defined and broadly mapped may lead to stock exclusion from productive land with potentially little or no benefit to inanga spawning". The submitter did not recommend any specific wording to amend this Policy.
- A.28 Federated Farmers seeks to amend Policy 4.31(ba) as follows:
 - (ba) excluding stock from permanently flowing waterways located within areas identified

 as inanga spawning habitat on the planning maps during the period of 1 January to 1

 June inclusive; and
- A.29 The submitter, like Fonterra and DairyNZ, seeks to restrict stock from those areas which are known inanga spawning sites, by including the reference to 'planning maps' and that stock only be excluded from areas that are likely to be a suitable habitat for spawning, by including the reference to 'permanently flowing waterways'.

New Policies 4.86A and 4.86B

- A.30 New Policies 4.86A and 4.86B read:
 - 4.86A Inanga spawning sites are protected through, as a first priority, avoiding activities within the beds and margins of lakes, rivers, hāpua, wetlands, coastal lakes and lagoons that may damage inanga spawning sites, and where these activities cannot be avoided, the use of best practicable options to minimise all impacts.
 - 4.86B Within the beds and margins of lakes, rivers, hāpua, wetlands, coastal lakes and lagoons, damage to inanga spawning habitat is minimised by scheduling works to occur outside the inanga spawning period of 1 March to 1 June inclusive where it is practicable to do so, and by extending this period to 1 January to 1 June inclusive, where the works involve vegetation clearance or earthworks, so as to allow sufficient time for regeneration of the habitat.

Submissions

- A.31 Policy 4.86A received nine submissions and Policy 4.86B received ten. As these Policies are inherently related and in need of consistent decision-making, they are considered together.
- A.32 ESAI seeks to have both Policies deleted, for reasons given at paragraph A.10 and A.11, and Ngāi Tahu, Whitewater NZ and Federated Farmers seek to retain the policies.
- A.33 Fulton Hogan seeks to delete both Policy 4.86A and 4.86B. The submitter opposes Policy 4.86A because "the policy relies directly on the identification of inanga spawning sites on the planning maps" and the submitter states that because the planning maps lack clarity, this uncertainty affects the policy.
- A.34 Fulton Hogan seeks to delete Policy 4.86B for two reasons. Firstly, the submitter is concerned that because there is no link between identified inanga spawning habitat, then the Policy assumingly applies to all rivers, which creates an "onerous framework". The submitter states that even if these areas were identified on the planning maps, "the limited factors used in the model to determine habitat areas remains an issue". Secondly, Fulton Hogan strongly opposes the restriction placed on works within beds of lakes and rivers between certain times and states that, despite the restriction being prefaced with 'where practicable', the submitter feels that the expectation of what may be achieved through the policy is unrealistic.
- A.35 As detailed at paragraph A.14 above, Trustpower seeks to include a definition for 'inanga spawning sites' to limit the application of the provisions which use the term to those sites identified in Schedule 17 and on the planning maps. In addition, Trustpower seeks to amend Policy 4.86A to restate the limited application of 'inanga spawning sites' to those identified in Schedule 17. In regards to Policy 4.68B, Trustpower seeks to limit the application of this Policy to only those inanga spawning habitat that are 'identified on the planning maps'.
- A.36 Fonterra and DairyNZ seeks to amend Policy 4.86B to ensure that the sites that are protected are identified as having habitat that is suitable for inanga spawning as discussed at paragraph A.12.
- A.37 The Fonterra submission is largely consistent with the submission made by Fonterra and DairyNZ. However, the submitter wishes to further ensure that the recognition made in both policies that it may not always be possible to avoid activities within inanga spawning sites and therefore supports the use of the 'best practicable option' in these circumstances.
- A.38 J Demeter seeks to amend both Policies to "include more protections".
- A.39 Forest and Bird seeks to delete the words 'as a first priority' because it "effectively undermines the protection given by the policy". In addition, Forest and Bird seeks to delete the 'best practicable option' in Policy 4.86A as the submitter states that term 'Best Practicable Option' is defined in the LWRP and only relates to emissions of noise and contaminants. Therefore, the submitter is concerned that there will not be guidance as to effects on inanga spawning

sites caused by disturbance activities. The submitter seeks the same relief concerning the words 'where it is practicable' used in Policy 4.86B and states that as it is "currently written it is meaningless".

Discussion

- A.40 The changes to Policy 4.31 and new Policies 4.86A and 4.86B were introduced by PC4 (Omnibus) to improve the management of the effects of activities in beds of lakes and rivers that may damage inanga spawning sites or minimise the effects by restricting these activities to times that are outside the spawning period.
- A.41 The submissions on the policies broadly fall into three groups. Firstly, those that seek removal of protection for either inanga spawning habitat, or both inanga spawning habitat and known inanga spawning sites. Secondly, those that request additional protections for inanga spawning sites and habitat. Thirdly, some submissions request protection of additional values of waterbodies, such as recreational reaches or habitat for other ecosystems⁷³.
- A.42 The first, generally opposing group, seeks restriction on the inanga spawning habitat or sites and removal or reduction in levels of protection. The reasons for the protection of inanga spawning sites are set out in the Section 32 Report. In my opinion there are good technical reasons to provide protection to inanga spawning sites and inanga spawning habitat, and in recognition that the definition of these areas are limited to between high water spring tide marks and low tide marks, the actual imposition on farming activities and other activities adjacent to the beds of lakes and rivers is relatively limited, particularly in the context of existing stock exclusion requirements for these areas, particularly for cattle, pigs and deer.
- A.43 On this basis, I am recommending to continue with the protection of inanga spawning habitat and inanga spawning sites, subject to a number of amendments to clarify the policies and the area to which the provisions apply.
- A.44 The second group of submitters, who generally seek greater levels of protection, seek either greater geographic areas be covered by the inanga spawning habitat protections, or greater certainty in the policy and rule framework. The changes to the policy framework that are sought are generally to move towards a more directive policy, with less ability to consider individual circumstances.
- A.45 In my opinion, the current provisions strike a reasonable balance between the protection of inanga spawning sites and habitat, the ability to consider applications to disturb these areas on a case by case basis, and recognise that a range of activities occur adjacent to and within these sites. On this basis, I recommend the rejection of the submissions that seek a greater level of protection.

Plan Change 4 (Omnibus) – Section 42A Report

⁷³ This general reference includes submissions by DoC and the Working Waters Trust in relation to mudfish.

- A.46 The third group of submissions, seeking protection of areas for other values, are specifically addressed in the legal section of this report, and it is considered that these submissions are outside of the scope of PC4 (Omnibus). Even if the submissions were considered to be in scope, I would not recommend the submission points be accepted as:
 - Engagement with stakeholder groups would be advisable, as well as the general ability of the public to more closely consider the issue through the public notification process, including through section 32 reporting.
 - Appropriate technical reporting and analysis of the values and any associated policy and rule frameworks is necessary, as the implications are potentially significant and it is important to consider an apply the most appropriate provisions.

Rules

- A.47 The proposed amendments to the rules relating to the management of activities that may damage inanga spawning habitat and sites include changes to restrict activities in the beds of lakes and rivers that may damage inanga spawning sites to times that are outside the spawning period.
- A.48 Rules 5.136-5.141, and Rules 5.148, 5.151 and 5.152 include proposed amendments to prohibit activities from being undertaken in any inanga spawning habitat during the period of 1 March to 1 June inclusive.
- A.49 This period is extended in Rules 5.71, 5.163, 5.167 and Rule 5.168 to between 1 January and 1 June inclusive, where the works involve vegetation clearance or earthworks, to allow sufficient time for regeneration of the habitat.

Submissions on Rules 5.136-5.141, Rule 5.148, and 5.151

- A.50 ESAI seek to delete the proposed amendments in Rules 5.136-5.141, Rules 5.148, and 5.151 that prohibit activities occurring in inanga spawning habitat during the spawning period of 1 March to 1 June. The reasons are stated above at paragraphs A.10 and A.11.
- A.51 H Rennie seeks to delete the use of the term 'inanga spawning habitat' in Rules 5.136-5.141, Rule 5.148, and 5.151. The reasons are as stated above at A.26.
- A.52 Fonterra seeks amendment to Rules 5.136, 5.139, 5.167 and 5.168 to "give effect to the Policy direction". The submitter asserts that the intent of Policies 4.86A and 4.86B, to avoid or minimise activities that may damage inanga spawning habitat at certain times of the year, only where it is practicable to do so, is not "carried through into the corresponding rules". Activities subject to these rules are prohibited, with no option to use the best practicable option if it is not possible or practicable to halt or schedule activities. Fonterra has not included a specific amendment to these rules.

- A.53 Fulton Hogan seeks that the reference to inanga spawning habitat is removed from Rule 5.148.

 The submitter opposes the use of the planning maps to identify these inanga spawning sites and habitats, stating the level of uncertainty is unacceptable.
- A.54 Ngāi Tahu and Forest and Bird seek to apply the extended restriction period (1 January 1 June), which applies to works that involve vegetation clearance and earthworks within inanga spawning habitats, to all activities in inanga spawning habitat. Forest and Bird states that all activities are likely to result in a disturbance of the habitat, and therefore the extended restriction period should apply to all activities in order to allow for recovery of the habitat before the spawning period occurs. Ngāi Tahu, as an alternative form of relief, seeks that it is "made clear which relate to the spawning period and which relate to the habitat."
- A.55 Whitewater NZ seeks to amend Rules 5.138, 5.140, 5.148, 5.151 and 5.152 to prohibit activities from occurring in "a key river recreation reach listed in Schedule 24", "any key river recreation sites listed in Schedule 24", or "in any freshwater bathing sites listed in Schedule 6". The reasons for seeking these amendments and the insertion of a new schedule is addressed above at paragraphs A.23 and A.24.
- A.56 Transpower seeks amendment to a single Rule within this group, Rule 5.139(4), as follows:
 - Rule 5.139(4) Except for support structures for pipes, ducts, cables and wires, #the maintenance of that part of the structure within the bed of a lake or river is not within an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the inanga spawning season of 1 March to 1 June inclusive.
- A.57 The submitter states that the proposed amendments made in PC4 (Omnibus) create inconsistencies in the management of activities relating to the establishment of support structures on the one hand, and the maintenance of support structures, on the other. The submitter states that even though support structures for pipes, ducts, cables and wires may be constructed throughout the year, support structures for pipes, ducts, cables and wires cannot be maintained between 1 March and 1 June.

Submissions on Rules 5.71, 5.163, 5.167 and 5.168

- A.58 ESAI seeks to delete the proposed amendments to these Rules.
- A.59 Waitaki Irrigators Collective seeks to amend the activity status in Rule 5.71 from prohibited to discretionary. The submitter states that the activity status is too restrictive and that this rule will have detrimental effects on productive land such that it "significantly reduces or removes the productive potential of up to hundreds of hectares of land".
- A.60 Federated Farmers seeks to amend Rule 5.71 as follows:

- 5.71 The use and disturbance of the bed (including the banks) of a lake or river by any farmed cattle, farmed deer or farmed pigs and any associated discharge to water is a **prohibited-discretionary** activity in the following areas:
 - (1) In an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive; or
 - (2) ...
 - (x) farmed cattle, deer or pigs grazing the bed or banks of permanently flowing streams within the areas identified as inanga spawning habitat on the planning maps between 1 January and 1 June inclusive.
- A.61 The submitter seeks the above amendments so that stock are excluded from areas that are known to be suitable for inanga spawning such as 'permanently flowing streams' and those areas which have been 'identified' as inanga spawning habitats on the planning maps by examining the habitats on a case-by-case basis. The submitter also seeks to amend the activity status in Rule 5.71 from prohibited to discretionary, to enable site-specific assessment to determine whether or not there is inanga spawning habitat.
- A.62 Fonterra and Dairy NZ seek to delete the proposed amendments made to Rule 5.71(1) and to amend the activity status in Rule 5.71 from prohibited to discretionary. The submitter states that the prohibited activity status is too restrictive and that activities that may impact potential inanga sites be discretionary so that the rule allows for a case-by-case assessment to decide whether the habitat offers potential inanga spawning habitat.
- A.63 Federated Farmers also seeks amendments the Rules 5.163 and 5.167 so that the areas in which vegetation clearance is prohibited is limited to areas which have been 'identified' as inanga spawning habitat on the planning maps; the same amendment is sought by the submitter for Rule 5.71. In addition, the submitter seeks to limit the constraints of vegetation clearance within these areas modelled as being inanga spawning habitat to the 'bed or on the banks of any waterway' only.
- A.64 Fulton Hogan seeks the same amendments to Rule 5.167(4) and Rule 5.168(3), as follows:
 - Rule 5.167(4), 5.168(3) The vegetation clearance does not occur adjacent to <u>a</u> salmon or an inanga spawning site listed in Schedule 17, <u>or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive</u>; and
- A.65 Fulton Hogan opposes the restriction of activities within inanga spawning habitats during the spawning season, due to the uncertainties surrounding the mapping of these sites. Detail of the submitter's position on inanga spawning is provided in paragraph A.35 and A.37.
- A.66 H Rennie seeks to delete the use of the term 'inanga spawning habitat' in Rules 5.71, 5.163, 5.167 and 5.168.

- A.67 Fonterra seeks to amend Rules 5.167 and 5.168, as discussed above.
- A.68 Forest and Bird and Ngāi Tahu seek that Rules 5.71, 5.163, 5.167 and 5.168 be retained as they provide appropriate protection of inanga spawning habitat.
- A.69 J Demeter seeks to add a 10m 'buffer zone' beyond the inanga spawning site.
- A.70 Fish and Game seeks amendment to Rule 5.168 to include the word "upstream" as Rule 5.168(3) identifies that the activity must not occur adjacent to a significant spawning reach for salmon. The submitter states that there is not adequate protection by using the word "adjacent" on its own.

- A.71 The rule framework has been criticised by a number of submitters for either being too restrictive, or not providing adequate protection. The broader issues relating to this are discussed above in relation to the changes to the policies.
- A.72 There are a number of submissions that have raised the lack of clarity between the treatment of inanga spawning habitat and known inanga spawning sites. I have recommended some minor adjustment to the rule framework to clarify this issue.
- A.73 The Transpower request for the exclusion of utility crossings from the maintenance limitations is recommended to be adopted for inanga spawning habitat, recognising that there is occasionally a need for maintenance and repair within the spawning periods and timeframe of the protections set out in the rules. Seeking a resource consent for such activities is not considered to be efficient, when such activities are likely to have only limited impact upon habitat, be generally limited to areas where there is existing substantial modification of habitats, and are likely to occur over only short durations.
- A.74 The Fulton Hogan submission points which seek a reduction in the restrictions relating to activities for gravel removal, are unlikely to give rise to an appropriate outcome. In my opinion the potential adverse effects of these activities on inanga spawning habitat could be significant, and ought to be assessed through the resource consent framework.

Schedule 17 and Mapping

- A.75 Changes are proposed to update Schedule 17 to protect 86 known inanga spawning sites, and modelled areas where inanga spawning has the potential to exist.
- A.76 Ten submissions were received on the proposed amendments to Schedule 17.

- A.77 Forest and Bird and Fish and Game seek to retain the proposed amendments to Schedule 17. Fish and Game states that it provides "better protection to both potential and known inanga spawning sites".
- A.78 DoC supports the proposed amendments to Schedule 17 because it gives effect to the RPS Policy 10.3.2(7), section 6(ab) of the Conservation Act and "Identifies Inanga/Whitebait Habitats to be sustainably managed by being excluded from a range of permitted activity rules 1 March to 1 June inclusive". The submitter also seeks to add three threatened fish species the Canterbury mudfish, the lowland longjaw galaxias and the bignose galaxias into Schedule 17.
- A.79 Waitaki Irrigators Collective seeks amendment to Schedule 17 in relation to the salmon spawning sites. The submitter seeks clarification of the "classification of the entire Lower Waitaki and Hakataramea Rivers as sensitive sites". The submitter states that the listed sites "appears to have been carried over from the Natural Resources Regional Plan" and states that these amendments "represent a significant change for landowners, which has not been adequately assessed".
- A.80 Ngāi Tahu seeks to amend the inanga spawning sites in Schedule 17 to also include "the area upstream of the coast on all surface waterways" and "the area upstream of all surface waterways that flow into Te Waihora". Where the preferred relief is not accepted, the submitter seeks an alternative and less preferred relief, which is to include waterways that have been missed. The waterways the submitter seeks to include are: "Conway, Oaro, Kahutara, Kowhai, Lyell Creek, Hapuka, Clarence and Waikekewai Creek (the stretch from the marae downstream to the lagoon)." The Ngāi Tahu submission received four further submissions in opposition from RDRML, Fonterra, ESAI, and Fulton Hogan and one further submission opposing the decision requested in part from Trustpower.
- A.81 Christchurch City Council states that there are inconsistencies between the inanga spawning sites listed in Schedule 17 and Council data that was collated in a survey of inanga and trout as part of the Council's global consent application for works within waterways. The submitter seeks that, if after further investigation, these 'anomalies' still exist between the data, that the "significant inanga spawning sites within Christchurch and Banks Peninsula are identified correctly and consistently."
- A.82 ESAI seeks to have the proposed amendments to Schedule 17 deleted "until such time as the appropriate consultation has been undertaken with the affected stakeholders and necessary amendments made". Refer to Paragraph A.10 and A.11 for more detail on ESAI's overall position on these amendments.
- A.83 Federated Farmers is concerned that the note above the Known Spawning Sites table, which reads 'Note the protection zone does not extend to any land that is outside the bed or banks of a lake, river or wetland' has not been "incorporated into the rule framework". The submitter seeks that the relevant rules are amended to "ensure that it is clear that the 20m

- protection zone does not extend to any land that is outside the bed or banks of a lake, river or wetland".
- A.84 Federated Farmers also seeks to amend the table including the inanga spawning sites in Schedule 17 to remove the duplication of sites.
- A.85 DoC support the proposed amendments made to Map B005. The submitter has also sought to have three species of threatened fish to be added into Schedule 17.
- A.86 A number of submitters submit on the inanga spawning habitat shown in the planning maps. H Rennie seeks to have all areas identified as 'Inanga Spawning Habitat' removed as part of his general opposition of the term and the implications it carries. ESAI, also as part of their general opposition to the term 'inanga spawning habitat', seek to have the "inanga spawning habitats" removed from Map B066 and B076. Fonterra has made reference to Maps B109 and B113 and have stated that they are "concerned that the maps and associated identification of spawning habitat are too general and could lead to exclusion from undertaking certain works on land for up to six months with potentially little to no benefit to inanga spawning". Fulton Hogan state that the inanga spawning habitats should be deleted from the planning maps, until there is a comprehensive review of the sites, as currently, they are uncertain.
- A.87 Fulton Hogan seek to make to general amendments to the planning maps. The submitter seeks that planning maps are amended to improve the quality of the maps themselves, the submitter complains that the maps are difficult to read because of "similarity in colours used, the size of the spawning sites marker" and also to indicate more clearly which inanga spawning sites include a buffer protection zone and which do not.

- A.88 The issues with additions to the schedules and mapping of areas that are related to species other than inanga have been discussed earlier, and are not recommended to be advanced as part of PC4. In addition, the submission from the Waitaki Irrigators Collective, with respect to salmon spawning sites, is addressed in *Unwin, M.J. (2006)*. Assessment of significant salmon spawning sites in the Canterbury region. NIWA Client Report, which does indicate that an assessment has occurred, and this was included in the Natural Resources Regional Plan and the LWRP. No change to salmon spawning sites is included in PC4.
- A.89 Some submitters have suggested that other areas be included in the mapping, or deleted from the schedule and mapping. These are addressed in the attached memoranda from Greer and Tompkins. Changes to the schedule and mapping are recommended, in accordance with this technical advice.
- A.90 Federated farmers concern relating to the note regarding the extent of the protection areas not being incorporated into the rule framework is, I consider, addressed adequately through

the definition of inanga spawning site and inanga spawning habitat. Through this definition, the limitation on the are covered by the rules and schedule it is incorporated into the rule framework.

Recommendation

Amend the definition of inanga spawning habitat to read:

Means that part of the bed and banks of a lake, permanently or intermittently flowing river or artificial watercourse, coastal lagoon or wetland that is between mean high water springs and mean low water neaps and is within the area identified as 'inanga spawning habitat' on the Planning Maps.⁷⁴

Add a definition of inanga spawning site:

Means that part of the bed and banks of a lake, permanently or intermittently flowing river or artificial watercourse, coastal lagoon or wetland that is between mean high water springs and mean low water neaps and is within the area identified as an 'inanga spawning site' in Schedule 17 and on the Planning Maps.⁷⁵

Retain changes to Policy 4.31 and new Policies 4.86A and 4.86B.

Retain changes to Rules 5.71, 5.136-5.138, 5.140-141, Rule 5.148, and 5.151 Submissions on Rules, 5.163, 5.167 and 5.168

Amend Rule 5.139(4) to read:

(4) Except for bridges, culverts, pipes, ducts, cables and wires and their support structures⁷⁶ The maintenance of that part of the structure within the bed of a lake or river is not within an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the inanga spawning season of 1 March to 1 June inclusive.

Amend Schedule 17 by deleting the row that is 5th to the bottom of the table of Known Spawning Sites⁷⁷, which reads:

| Waitaki River 140m north of the bo | x 1453515 | 5021878 | |
|------------------------------------|-----------|---------|--|
|------------------------------------|-----------|---------|--|

⁷⁶ Transpower – PC4 LWRP-160

⁷⁴ Federated Farmers – PC4 LWRP-390

⁷⁵ Trustpower – PC4 LWRP-78

⁷⁷ Waitaki Irrigators Collective – PC4 LWRP-258

B. Stormwater Discharges

- B.1 PC4 (Omnibus) modifies a number of LWRP stormwater provisions. Firstly, PC4 (omnibus) amends the definition for "reticulated stormwater system" so that it only applies to stormwater conveyed by network utility operators within urban areas and removing the phrase 'more than one property' from the definition. The changes would result in the provisions relating to 'reticulated stormwater systems' not applying to rural drains and drainage systems or properties which share a stormwater systems.
- B.2 Policy 4.15(a) is amended to prevent, as a permitted activity, the discharge of stormwater to land, surface water or groundwater where an available reticulated stormwater system exists; and adding a definition for "available reticulated stormwater system". A new policy (4.16A) is added, which relates to reticulated stormwater system operators managing all discharges into these systems by 2025. Associated with this policy are consequential amendments to Rules 5.95A, 5.95, 5.96 & 5.97.

Definition of "available reticulated stormwater system" and "reticulated stormwater system"

B.3 The new definition of "available reticulated stormwater system" reads:

means a reticulated stormwater system where:

- 1. a conveyance structure that forms part of the reticulated stormwater system passes within 50m of the property boundary; and
- 2. stormwater is able to be conveyed into the reticulated system under gravity; and
- 3. the network operator will accept the stormwater from the property; and
- 4. the distance between the conveyance structure and the source of the stormwater is less than 100m.
- B.2 The changes to the definition of "Reticulated stormwater system" read:

means a network of pipes, swales, drains kerbs and channels owned or operated by a network utility operator which convey that collects stormwater within urban areas and conveys that stormwater to any device, wetlands retention or detention pond or and infiltration basins and treatment devices, which may include detention ponds, for the treatment of stormwater, prior to a discharge to land, groundwater, or surface water or another reticulated stormwater system and that serves more than one property. It excludes any drainage system that has been constructed for the primary purpose of collection, conveyance or discharge of drainage water.

Submissions

- B.3 Three submissions were received on the definition of 'available reticulated stormwater system' and four submissions on the definition of 'reticulated stormwater system'.
- B.4 Transpower supports the new definition of 'available reticulated stormwater system' and particularly clauses (1) to (4) as these clauses appropriately limit the obligations where a permitted discharge must be to such a system including limits in relation to distance, gravity and acceptability.
- B.5 Selwyn DC's seek to retain the definition of 'available reticulated stormwater system', particularly clause (3).
- B.6 Waimakariri DC seeks to amend the definition of 'available reticulated stormwater system'(2) as follows: "2. stormwater is able to be conveyed into the reticulated system under gravity where practicable; and". The submitter states that the requirement implied in this definition is not likely to be practical.
- B.7 Waimakariri DC and Selwyn DC also seek to further amend the definition of reticulated stormwater system because "the term urban creates some difficulties if it is applied to smaller settlements that would not otherwise be regarded as "urban" in the context of a dictionary definition". The amendment sought is as follows: "means a network of pipes, swales, kerbsdrains and channels owned or operated by a network utility operator which conveys that collects stormwater within urban areas zoned residential, commercial or business use in a district plan and conveys that stormwater to any device...". Selwyn DC submission mirrors Waimakariri DC's submission. Selwyn DC are concerned that the term urban creates difficulties for smaller settlements that would not be regarded as 'urban'.
- B.8 Similarly, Ngāi Tahu is concerned that the use of the word 'urban' is too limiting in the definition 'reticulated stormwater system' and seek to delete 'within urban areas' from the definition.
- B.9 Christchurch CC seek to amend the definition of reticulated stormwater system to clarify what is excluded from the system. The amendment sought is as follows:

"means a network of pipes, swales, <u>kerbs</u>... I<u>t excludes any drainage system that has been</u> constructed for the primary purpose of collection, conveyance or discharge of drainage water <u>originating from soil or groundwater</u>".

Discussion

B.10 The submissions on 'available reticulated stormwater system' are generally in support. The intent of the definition is to provide a framework where stormwater management must be to a reticulated network, where it is "available".

- B.11 One of the criteria for this is that the stormwater from a site will be able to enter the reticulated system under gravity. This means that the owner or occupier of a site is not required to pump stormwater uphill to a reticulated network. The Waimakariri DC submission appears to seek a weakening of this position. However, the reasoning for it is not entirely clear. On this basis, if the submitter has some further information justifying the position, the submitter is invited to bring that at the hearing. In the interim, I recommend rejecting the Waimakariri DC amendment.
- B.12 The definition of 'reticulated stormwater system' has some overlaps with the proposed changes to the definition and rules relating to drainage water. As stated in the discussion in Section E of the report, the intention is to recognise that 'stormwater' in the predominant issue in urban areas and drainage water in rural areas.
- B.13 The Waimakariri DC submission, providing additional clarity on the term "urban" is recommended to be accepted, as it is a phrase used elsewhere in the LWRP and is more specific.
- B.14 As stated, the changes to this definition are related to the changes to the definition and rules relating to drainage water, discussed below in Section E of this report, and accordingly the Ngāi Tahu submission point is recommended to be rejected.
- B.15 The Christchurch CC submission point is adequately covered by the definition of drainage water, discussed below in Section E of this report.

Definition of "construction-phase stormwater" and "stormwater"

B.16 The new definition of 'construction-phase stormwater' reads:

means water, sediment and entrained contaminants resulting from precipitation on exposed or unstabilised land and which arises from construction or demolition activities, or the development of a building site.

B.17 The changes to the definition of 'stormwater' read:

means runoff water and entrained contaminants arising from precipitation on the external surface of any structure or any land modified by human action, and that has been channelled, diverted, intensified or accelerated by human intervention. Modification of the land surface or runoff from the external surface of any structure as a result of precipitation and includes entrained contaminants and sediment including that generated during construction or earthworks. It excludes construction-phase stormwater, sediment-laden water and drainage water which are separately defined.

Submissions

- B.18 Three submissions were received on the definition of 'construction-phase stormwater', all are in support of the definition and seek to retain it.
- B.19 Four submissions in support were received on the changes to the definition of 'stormwater'. The Oil Companies and Selwyn DC seek to retain the definition as it provides additional clarity. The Oil Companies seek to retain as they agree with separately defining construction phase stormwater. Transpower supports the new definition of 'construction phase stormwater' to the extent that it appropriately distinguishes discharges associated with construction in a manner that supports the subsequent rule framework.
- B.20 Fonterra supports this new definition, as several proposed rules relate to 'construction phase stormwater'. Fonterra considers that a specific suite of provisions relating to construction-phase stormwater which provide a different management approach for these types of discharges is appropriate.
- B.21 Fonterra supports the exclusion of construction-phase stormwater, sediment-laden water and drainage water from this definition as this improves clarity and avoids duplication. However, Fonterra considers that the inclusion of reference to "land modified by human action" is potentially unclear. Overall the submitter seeks to retain the definition as notified subject to clarification.

Discussion

B.22 As the submissions support the definition, and seek its retention, no further changes are recommended.

Policy 4.15 and New Policy 4.16A

- B.23 The change to Policy 4.15 reads:
 - 4.15 In urban areas, the adverse effects on water quality, aquatic ecosystems, existing uses and values of water and public health from the cumulative effects of sewage, wastewater, industrial or trade waste or stormwater discharges are avoided by:
 - (a) all sewage, industrial or trade waste <u>or stormwater</u> being discharged into a reticulated system, where available;
 - (b) all stormwater being discharged in accordance with a stormwater management plan, where one has been consented;
 - (c) the implementation of contingency measures to minimise the risk of a discharge from a wastewater reticulation system to surface water in the event of a system failure or overloading of the system beyond its design capacity; and

- (d) any reticulated stormwater or wastewater system installed after 11 August 2012 is designed and managed to avoid sewage discharge into surface water.
- B.24 New Policy 4.16A reads:
 - 4.16A Operators of reticulated stormwater systems implement methods to manage the quantity and quality of all stormwater directed to and conveyed by the reticulated stormwater system, and from 1 January 2025 network operators account for and are responsible for the quality and quantity of all stormwater discharged from that system, and the Canterbury Regional Council shall not issue any permit to discharge stormwater into a reticulated stormwater system.

Submissions

- B.25 Two submissions were received on Policy 4.15. Christchurch CC submits in opposition of all stormwater policies and rules in PC4 (Omnibus) (refer to Policy 4.16A for Christchurch CC reasoning). Christchurch CC seeks to retain the LWRP provisions without PC4 amendments. Selwyn DC seek to delete the PC4 amendment because the addition of 'stormwater' is "unnecessarily limiting" as it is feasible to discharge water to ground in some areas.
- B.26 Six submissions were received on Policy 4.16A. Two submissions seek to retain the Policy. J Demeter seeks to retain Policy 4.16A because the submitter supports any measures to maintain water quality. Fonterra seek to retain the policy on the basis that this policy only applies to network operators and reticulated stormwater networks.
- B.27 Three submissions were received seeking to delete the Policy. Waimakariri DC are "concerned about the requirement for operators of reticulated stormwater systems to manage the quality and quantity of all storm water directed to its system and discharges from its system from 1 January 2025". Selwyn DC have similar concerns to Waimakariri DC and seek to delete the rule because "... it is not appropriate, nor effective or efficient for Council to be held responsible for all stormwater discharges."
- B.28 The Oil Companies oppose the Policy until ECan addresses its stormwater provisions through a comprehensive plan change. The submitter states that the majority of regional authorities around the country place the responsibility for discharges to the reticulated network with the network operators. It is unclear why Council considers that in Canterbury this should only apply from 1 January 2025. The submitter states that if Council maintains this approach an additional policy should support permitted discharges to the reticulated network from 1 January 2025 to ensure they are appropriately sanctioned having regard to Section 15(1) of the Act.
- B.29 Christchurch CC seek to delete Policy 4.16A because it places the responsibility of reducing sediment load and other contaminant levels on the Council and ultimately all ratepayers, rather than on owners of properties highly vulnerable to erosion or contaminated by Hazardous Activities and Industries (HAIL). Further to deleting Policy 4.16A Christchurch CC

has "very significant concerns" with some of the proposed changes to the policy and rules in relation to the stormwater provisions because of the transfer of management of discharges into the reticulated system.

Discussion

- B.30 The Selwyn DC submission with respect to Policy 4.15, noting the potential limitation with respect to the discharge of stormwater is acknowledged, and a refinement to the wording is recommended to avoid this problem. It is likely that in many circumstances where a reticulated system is available, there will be some discharge of stormwater direct to land. This may be incidental, in the nature of runoff from sealed areas into adjacent gardens, or collection of roof rainwater and application of it to gardens. In many cases, environmentally sensitive design of stormwater systems involves an element of direct discharge to land, even if reticulated networks are available. In my opinion, this ought to be encouraged.
- B.31 Policy 4.16A notes a change to the overall position for the management of stormwater directed to and discharged from reticulated systems. Essentially, ECan is seeking to place responsibility for the inputs into reticulated systems in the hands of the operators of the systems, who are also the holders of the discharge permits for the resulting discharged stormwater. This policy position is carried forward to various rules discussed below, which are addressed in this discussion.
- B.32 The support for the position from some submitters is noted. The three major submitters in opposition, Selwyn DC, Waimakariri DC and Christchurch CC, oppose the changes, as they will be made responsible for management of inputs into their systems, particularly from sites that may have potential for contamination or high sediment loads.
- B.33 Under the existing framework, the territorial authorities generally hold discharge permits for the reticulated stormwater system, but those permits exclude the discharges from some specified sites or categories of sites. Persons or organisations that wish to discharge stormwater into a reticulated network from one of those sites is required to seek a resource consent from ECan, unless the relevant network operator gives written approval for the discharge. In the past, it is noted that the Christchurch CC at times gives written approval for the quantity of the discharge, but not for the quality of the discharge. This is particularly so with respect to discharges from potentially contaminated land or sites storing hazardous substances. In these circumstances, a resource consent from ECan is triggered, with the assessment limited to the quality aspects. ECan have advanced a policy framework in PC4 (Omnibus), for the transfer of responsibilities by 2025.
- B.34 The reasons for this are set out in the Section 32 report, and the opposition from some territorial authorities is acknowledged in that report. Essentially, the issue rests with resourcing, enforcement and expertise.

- B.35 That said, in line with the Oil Companies submission, the situation around the remainder of the country appears to be that the management of discharges into reticulated systems is the responsibility of the system operator, and not the relevant regional council.
- B.36 It is acknowledged that there are ongoing discussions between ECan and the territorial authorities as to the best method to manage stormwater. In the absence of any agreement between the territorial authorities and Environment Canterbury on this matter, the general policy provision position of PC4 (Omnibus) is recommended to be continued.

Rules 5.93 and 5.94

- B.37 The changes to Rules 5.93 and 5.94 read:
 - 5.93 The discharge of stormwater <u>or construction-phase stormwater</u> from a reticulated stormwater system onto or into land or into or onto land in circumstances where a contaminant may enter water, or into groundwater or a surface waterbody is a restricted discretionary activity, provided the following conditions are met:
 - 1. For a discharge that existed at 11 August 2012, an application for a discharge permit is lodged prior to 30 June 2018, or at a later date as agreed between the reticulated stormwater system operator and the CRC; and
 - A stormwater management plan has been prepared to address the management of stormwater in the catchment and is lodged with the application; and
 - 3. The discharge will not cause a limit in Schedule 8 to be exceeded.

[No changes to the exercise of discretion]

5.94 The discharge of stormwater <u>or construction-phase stormwater</u> from a reticulated stormwater system onto or into land or into or onto land in circumstances where a contaminant may enter water, or into groundwater or a surface waterbody that does not meet the conditions of Rule 5.93 is a non-complying activity.

Submissions

- B.38 Rule 5.93 received three submissions including the Christchurch CC submission in general opposition to all stormwater policies and rules in PC4 (Omnibus).
- B.39 The Oil Companies seek to retain Rule 5.93 as, although the submitter considers that it will have implications for the discharge from reticulated networks, it will not unduly fetter the operations of the Oil Companies.
- B.40 Ngāi Tahu seeks to retain the matters of discretion.

B.41 Aside from the Christchurch CC submission, which is addressed elsewhere, the submissions are generally in support, and accordingly the changes are recommended to be adopted.

New Rules 5.94A - 5.94C, 5.95A and Changes to Rule 5.97

- B.42 New Rules 5.94A to 5.94C, 5.95A and changes to Rule 5.97 read:
 - 5.94A The discharge of construction-phase stormwater to a surface waterbody, or onto or into land in circumstances where a contaminant may enter groundwater or surface water, is a permitted activity, provided the following conditions are met:
 - 1. The area of disturbed land from which the discharge is generated is less than:
 - (1) 1000 m² for any construction-phase stormwater generated as a result of work carried in out in an area shown as High Soil Erosion Risk on the Planning Maps; or
 - (2) two hectares in any other location; and
 - 2. The concentration of total suspended solids in the discharge shall not exceed;
 - (1) 50g/m³ where the discharge is to any spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50g/m3 in which case the Schedule 5 visual clarity standards shall apply; or
 - (2) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply; and
 - 3. The discharge does not result in an increase in the flow in the receiving waterbody at the point of discharge of more than 1% of a flood event with an Annual Exceedance Probability of 20% (one in five year event); and
 - 4. The discharge is not from, into or onto contaminated or potentially contaminated land; and
 - 5. The discharge does not contain any hazardous substance.
 - 5.94B Prior to 1 January 2025, the discharge of construction-phase stormwater into a reticulated stormwater system is a permitted activity, provided the following condition is met:
 - 1. A written permission has been obtained from the owner of the reticulated stormwater system that allows the entry of stormwater into the network.
 - 5.94C The discharge of construction-phase stormwater into a surface waterbody, or onto or into land in circumstances where a contaminant may enter groundwater or surface water, or into a reticulated stormwater system, that does not meet one or more of the conditions of Rule 5.94A or Rule 5.94B is a restricted discretionary activity.

The exercise of discretion is restricted to the following matters:

- 1. The actual and potential effects of the discharge on the quality of the surface water, aquatic ecosystems, Ngāi Tahu cultural values; and
- 2. <u>The actual and potential effects of the discharge on the quality and safety of human and animal drinking water; and</u>
- 3. The actual and potential adverse environmental effects of the quantity of water to be discharged on the banks or bed of a waterbody or on its flood carrying capacity, and on the capacity of the network to convey that discharge; and
- 4. The potential benefits of the activity to the applicant, the community and the environment.
- <u>5.95A</u> Prior to 1 January 2025, the discharge of stormwater into a reticulated stormwater system is a permitted activity, provided the following condition is met:
 - 1. A written permission has been obtained from the owner of the reticulated stormwater system that allows the entry of stormwater into the network.
- 5.97 The discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter water that does not meet one or more of the conditions of Rule 5.95, 5.95A and or Rule 5.96 is a discretionary activity except that within the boundaries of Christchurch City it is a non-complying activity.

Submissions

- B.43 New Rule 5.94A received eight submissions including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Omnibus).
- B.44 Three submissions were received seeking to retain the Rule including Transpower, Hurunui Water, and Fonterra. Transpower states that the Rule appropriately provides for works associated with the development of the National Grid.
- B.45 One submission from the Oil Companies was received seeking to delete Rule 5.94A. Given the specific reference to reticulated systems at 5.94B, the Oil Companies seek clarification that 5.94A does not apply to discharges to a reticulated network. Of particular concern to the submitter is condition 4 as it may result in a requirement for resource consent as a discretionary activity for all stormwater discharges to water and land (excluding discharges to the reticulated network) from construction activities at service stations or on contaminated land.
- B.46 Ngāi Tahu is opposed to direct discharges of construction phase stormwater into surface waterbodies as a permitted activity and seeks the following amendments:

The discharge of construction phase stormwater **to a surface water body, or** onto or into land in circumstances where a contaminant may enter groundwater or surface water,....

B.47 CDHB recommends that the setback distances as described in Schedule 1 are invoked for any water supply intake which may be in the region of such a discharge and seek to add the following condition:

The discharge does not occur within the stated set back distances of a drinking water supply intake as specified in Schedule 1.

- B.48 Trustpower seek to delete condition 1(2). The submitter states that "it is unclear why clause 1(2) of Rule 5.94A seeks to limit the area of disturbed land outside of High Soil Erosion Risk Areas and considers that clauses 2 and 3 of Rule 5.94A provide suitable controls over the quality and quantity of any stormwater being discharged to a waterbody via the limits on the concentration of total suspended solids and the increase in flow in the receiving waterbody.
- B.49 Rule 5.94B received four submissions including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Omnibus).
- B.50 Two submissions were received in support. Transpower seek to retain the general approach to distinguishing stormwater discharges associated with construction activities, including the proposed activity status and matter of discretion (4). Hurunui Water supports the permitted activity status of the rule.
- B.51 The Oil Companies seek to delete Rule 5.94B because of the reasons set out in 5.94A.
- B.52 Rule 5.94C received seven submissions including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Ominbus).
- B.53 Five submission were received supporting Rule 5.94C including Trustpower, Hurunui Water, Transpower, Oil Companies and Fonterra. The submitters generally state support for the restricted discretionary status of the proposed rule.
- B.54 Ngāi Tahu seek to retain the matters of discretion no reasoning is specified.
- B.55 Rule 5.95A received two submissions, including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Omnibus).
- B.56 The other submission was in opposition, from the Oil Companies. The submitter states that "'post construction-phase stormwater' is a problematic phrase in this Rule as there is potential that it will be considered that written permission of the owner of the reticulated stormwater system is required following any construction activity" no matter the scale of the activity. The submitter further requests that the Council should only address stormwater discharges from the reticulated network, with stormwater conveyed to the network being the responsibility of network operators.

- B.57 Two submissions were received on Rule 5.97, including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Omnibus).
- B.58 The Oil Companies highlight their concern for the non-complying activity status of this rule, however support the scope of changes made by PC4 (Omnibus).

- B.59 It is noted that new Rule 5.94A is generally supported in submissions, with a number of submitters seeking adjustments.
- B.60 The Ngāi Tahu concern with respect to direct discharges to surface waterbodies is a common theme throughout the Ngāi Tahu submission. For the discharges dealt with as permitted activities, there are performance standards that manage the effects, such that the discharges meet the section 70 requirements and individually and cumulatively are environmentally sustainable. The Ngāi Tahu submission simply states that Ngāi Tahu is opposed to such direct discharges. In the absence of any information regarding the values to be protected by such a change, I am unable to determine if such a change is appropriate, particularly in the light of the significant implications it would have for existing infrastructure.
- B.61 The Oil Companies concern with respect to discharges from contaminated or potentially contaminated land requiring resource consent is acknowledged. However, it is also acknowledged that these sites are generally relatively high risk for the construction phase stormwater containing contaminants that may require additional management and monitoring.
- B.62 The CDHB request with respect to water supply intakes is not recommended to be added, as the suspended solids concentration is comparatively low, and the discharge is not able to be from a contaminated or potentially contaminated site, or contain any hazardous substance. These thresholds are considered to provide adequate protection for community drinking water supplies.
- B.63 The Trustpower concern in relation to the area of disturbed land from which the discharge is generated is acknowledged. However, it is generally considered that a large area of earthworks has a high risk of excess sedimentation and other contaminants entering surface waterbodies. On this basis, the threshold is recommended to be continued as larger earthwork areas are likely to require additional management and monitoring, beyond that appropriate through a permitted activity framework.
- B.64 Some of the submissions on these new rules (and changes to other stormwater rules) generally relate to which authority manages inputs into reticulated stormwater networks. This issue is discussed above with respect to new Policy 4.16A. As no new issues have arisen that needs particular submissions, please refer to the earlier discussion.

- B.65 The changes to Rules 5.95 and 5.96 read:
 - 5.95 The discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter a river, lake, wetland, or artificial watercourse is a permitted activity, provided the following conditions are met:
 - The discharge is into a reticulated stormwater system and the discharger has
 obtained written permission from the system owner to discharge into the
 system; or
 - 2. The discharge is not into a reticulated stormwater system, and
 - (a)1. The discharge is not from, into or onto contaminated or potentially contaminated land; and
 - (b)2. The discharge is not into:
 - (i)(a) a water race, as defined in Section 5 of the Local Government Act 2002; or and
 - (ii)(b) a wetland, unless the wetland is part of a lawfully established stormwater or wastewater treatment system; or and
 - (iii)(c) a waterbody that is Natural State, unless the discharge was lawfully established before 1 November 2013; and
 - (c)3. The discharge does not result in an increase in the flow in the receiving waterbody at the point of discharge of more than 1% of a flood event with an Annual Exceedance Probability of 20% (one in five year event); and
 - (d)4. The discharge meets the water quality standards in Schedule 5 after reasonable mixing with the receiving waters, in accordance with Schedule 5; and
 - (e)5. The concentration of total suspended solids in the discharge shall not exceed:
 - (i)(a) 50 g/m³, where the discharge is to any spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50 g/m³ in which case the Schedule 5 visual clarity standards shall apply; or
 - (ii)(b) 100 g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100 g/m³ in which case the Schedule 5 visual clarity standards shall apply; and
 - (f)6. The discharge to water is not within a Group or Community Drinking-water Protection Zone as set out in Schedule 1;and
 - 7. The discharge does not occur where there is an available reticulated stormwater system.
 - 5.96 The discharge of stormwater onto or into land where contaminants may enter groundwater is a permitted activity, provided the following conditions are met:

- The discharge is into a reticulated stormwater system and the discharger has
 obtained written permission from the system owner to discharge into the
 system; or
- 2. The discharge is not into a reticulated stormwater system, and
- (a)1. The discharge is not from, into or onto contaminated or potentially contaminated land
- (b)2. The discharge:
 - (i)(a) does not cause stormwater from up to and including a 24 hour duration 2% 10% Annual Exceedance Probability rainfall event to enter any other property; and
 - (ii)(b) does not result in the ponding of stormwater on the ground for more than 48 hours, unless the pond is part of the stormwater treatment system; and
 - (iii)(c) is located at least 1 m above the seasonal high water table that can be reasonably inferred for the site at the time the discharge system is constructed; and
 - (iv)(d) is only from residentially zoned land land used for residential or rural activities; and
 - (e) does not occur where there is an available reticulated stormwater system; and
 - (f) is not from a system that collects and discharges stormwater from more than five sites.

Submissions

5.95

- B.66 Eight submissions were received on Rule 5.95 including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Omnibus).
- B.67 Two submissions seek to retain Rule 5.95. The Oil Companies support the amendments as they "improve clarity". Fonterra supports the amendments to this Rule "which relate to the requirement that a discharge of stormwater to land not occur where there is an available reticulated wastewater system."
- B.68 Waimakariri DC seeks to amend the Rule to clarify that it addresses discharges of stormwater that are not into a reticulated system. The amendment sought is as follows:
 - The discharge of storm water <u>directly</u> into a river......
- B.69 Ngāi Tahu are opposed to direct discharges of stormwater into water as a permitted activity. Ngāi Tahu seek to amend Rule 5.95 as follows:

The discharge of stormwater **into a river, lake, wetland or artificial watercourse or** onto or into land in circumstances where a contaminant may enter a river, lake, wetland, or artificial watercourse is a permitted activity, provided the following conditions are met:.....

- B.70 P Ainsworth is concerned that the Rule will require connection to an available reticulated system even though the submitter has a lawfully established discharge consent. The submitter seeks to amend Condition 7 to read:
 - 7. The discharge does not occur where there is an available reticulated stormwater system, unless the discharge was lawfully established before 1 November 2013.
- B.71 Selwyn DC seeks to add a new condition requiring written permission from the network operator that allows the entry of discharges into the network, to "ensure the integrity of the system".

5.96

- B.72 Six submissions were received on Rule 5.96 including the Christchurch CC submission in general opposition of all stormwater policies and rules in PC4 (Omnibus).
- B.73 Federated Farmers support the permitted activity status for stormwater discharge to land used for rural activities
- B.74 Waimakariri DC seek to reinstate conditions 1 and 2 and amend the condition (c) and (f) to read "property" instead of "site". The submitter is concerned that the PC4 (Omnibus) amendments are designed to fit a particular set of circumstances in residential areas that do not have reticulated stormwater systems.
- B.75 Selwyn DC seek to retain condition (2)(a), delete 2(f), and delete (2)(e) or clarify "that to be available the network operator must accept the discharge".
- B.76 The Ministry of Education states that 5.96 is 'overly restrictive' and seeks to amend the rule to allow for the discharge of stormwater to land to include school sites, and a consequential definition of educational activities.
- B.77 The Oil Companies seek to delete condition 2(f). The submitter states that "the five site threshold is arbitrary and should be deleted or as a minimum amended to include a specific quantity threshold".
- B.78 Similarly, Fonterra also oppose condition 2(f) as the term "site" has specific meaning in the LWRP, and as such does not account for a scenario in which multiple titles or lots may make up a single property owned and operated by a single person. Fonterra's processing plants are considered to be 'rural activities'. However, they cover large areas of land with potentially multiple titles or 'sites' from which stormwater is collected and discharge. Alternatively, Fonterra seek an amendment as follows:

(f) not from a system that collects and discharges stormwater from more than five sites where those sites are held in different ownership.

Discussion

- B.79 A number of the submission points in relation to Rules 5.95 and 5.96 have been addressed in earlier discussion. That discussion is not repeated here.
- B.80 The amendments to these sections are part of a package of policy and rule changes aimed at shifting responsibility for the management of reticulated systems. When viewed as a package, I do not consider that the further changes requested by Waimakariri DC are, other than as discussed below, necessary or appropriate.
- B.81 P Ainsworth addresses a relevant point with respect to the making of existing stormwater discharges no longer permitted where there is an available reticulated stormwater system. In the case of Mr Ainsworth, nothing in the change to the Rule will negate an existing discharge permit. However, there are a many small stormwater discharges to surface water that may be in an area with a reticulated system and do not have a discharge permit. Such discharges will no longer be permitted, which may be a significant imposition.
- B.82 The Ministry of Education submission, in relation to educational activities being added to the list of residential and rural activities is recommended to be accepted. Discharges from educational facilities are considered to be low risk, and of a similar nature to discharges from residential activities.
- B.83 The Oil Companies seek a specific volume limitation, instead of the requirement that there is an upper threshold of no more than five sites. While five sites is arbitrary, I consider that a volume threshold is also likely to be relatively arbitrary, and considerably more difficult to administer.
- B.84 Two submitters have suggested that "site" is inappropriate, given the definition in the LWRP.

 I tend to agree with this, and recommend acceptance of part of the Waimakariri DC and Fonterra submissions that reference "property" instead of "site".

Recommendation

Retain the new definitions of 'available reticulated stormwater system', 'construction-phase stormwater' and the changes to the definition of 'stormwater'.

Amend the definition of 'reticulated stormwater system' to read:

means a network of pipes, swales, <u>drains</u> <u>kerbs</u> and channels <u>owned or operated by a network</u> <u>utility operator</u> <u>which convey</u> <u>that collects</u> stormwater <u>within urban areas **or zones identified**</u>

in a proposed or operative district plan for residential, commercial or industrial purposes⁷⁸ and conveys that stormwater to any device, wetlands retention or detention pond or and infiltration basins and treatment devices, which may include detention ponds, for the treatment of stormwater, prior to a discharge to land, groundwater, or surface water or another reticulated stormwater system and that serves more than one property. It excludes any drainage system that has been constructed for the primary purpose of collection, conveyance or discharge of drainage water.

Amend Policy 4.15 to read:

- 4.15 In urban areas, the adverse effects on water quality, aquatic ecosystems, existing uses and values of water and public health from the cumulative effects of sewage, wastewater, industrial or tradewaste or stormwater discharges are avoided by:
 - (a) all sewage, industrial or trade waste <u>or stormwater</u> being discharged into a reticulated system, where available;
 - (ab) all stormwater being discharged into land or into a reticulated system, where available;⁷⁹
 - (b) all stormwater being discharged in accordance with a stormwater management plan, where one has been consented;
 - (c) the implementation of contingency measures to minimise the risk of a discharge from a wastewater reticulation system to surface water in the event of a system failure or overloading of the system beyond its design capacity; and
 - (d) any reticulated stormwater or wastewater system installed after 11 August 2012 is designed and managed to avoid sewage discharge into surface water.

Retain new Policy 4.16A.

Retain the changes to Rules 5.93 and 5.94.

Retain new Rules 5.94A - 5.94C, 5.95A and changes to Rules 5.95 and 5.97.

Amend Rule 5.96 to read:

- 5.96 The discharge of stormwater onto or into land where a contaminant may enter groundwater is a permitted activity, provided the following conditions are met:
 - The discharge is into a reticulated stormwater system and the discharger has
 obtained written permission from the system owner to discharge into the
 system; or
 - 2. The discharge is not into a reticulated stormwater system, and

⁷⁸ Waimakariri DC – PC4 LWRP-205 and Selwyn DC – PC4 LWRP-670

⁷⁹ Selwyn DC – PC4 LWRP-673

- (a)1. The discharge is not from, into or onto contaminated or potentially contaminated land; and⁸⁰
- (b)2. The discharge:
 - (i)(a) does not cause stormwater from up to and including a 24 hour duration 2% 10% Annual Exceedance Probability rainfall event to enter any other property; and
 - (ii)(b) does not result in the ponding of stormwater on the ground for more than 48 hours, unless the pond is part of the stormwater treatment system; and
 - (iii)(c) is located at least 1 m above the seasonal high water table that can be reasonably inferred for the site at the time the discharge system is constructed; and
 - (iv)(d) is only from residentially zoned land used for residential, educational⁸¹ or rural activities; and
 - (e) does not occur where there is an available reticulated stormwater system; and 82
 - (f) is not from a system that collects and discharges stormwater from more than five sites properties⁸³.

⁸⁰ C1 16 minor correction

⁸¹ Ministry of Education – PC4 LWRP-353

⁸² Consequential to recommended amendment to Policy 4.15

⁸³ Fonterra – PC4 LWRP-455 and Waimakariri DC – PC4 LWRP-214

C Tāngata Whenua Values

C.1 The insertion of one policy, relating to tangata whenua values in the LWRP, has been proposed in PC4 (Omnibus).

New Policy 4.14B

- C.2 New Policy 4.14B reads:
 - 4.14B Have regard to Ngāi Tahu values, and in particular those expressed within an iwi management plan, when considering applications for discharges which may adversely affect statutory acknowledgement areas, nohoanga sites, and cultural landscapes identified in this plan or in any iwi management plan.

Submissions

- C.3 Three submissions were received on Policy 4.14B. J Demeter seeks to have Policy 4.14B retained as the submitter supports "any measure that maintains water quality". Ngāi Tahu seeks to have the new policy amended and the Waimakariri DC seeks to have the policy deleted.
- C.4 The Waimakariri DC seeks to have Policy 4.14B deleted as the submitter states that it raises two issues. Firstly, the submitter states that Policy 4.14B should not refer to 'discharges' in general because "it is unlikely that Council would be considering resource consents for non-point source discharges". Secondly, the submitter states that the Policy 4.14B should not include reference to cultural landscapes because, firstly, there are no cultural landscapes identified in the LWRP, secondly, cultural landscapes will be defined in district plans and lastly, that landscape protection is dealt with at a regional level through policy statements.
- C.5 Ngāi Tahu has requested several amendments to Policy 4.14B to strengthen the wording and to expand the detail on where culturally significant sites and areas may be identified. Ngāi Tahu's requested amendments to the Policy are:

Have regard to Protect Ngāi Tahu values, and in particular those expressed within an iwi management plan, when considering applications for discharges which may adversely affect statutory acknowledgement areas, nohoanga sites, surface waterbodies, silent file areas, culturally significant sites and cultural landscapes identified in this plan, any relevant district plan, any listed archaeological sites, Heritage New Zealand sites, the Kaikōura (Te Tai o Marokura) Marine Management Act 2014 or in any iwi management plan.

- C.6 The Waimakariri DC submission relies on a number of assumptions and statements that are not necessarily correct. ECan is seeking to manage non-point source discharges and there are Cultural Landscapes identified in the LWRP, particularly through Plan Change 1 in the Selwyn-Te Waihora sub-region. For the reasons set out in the Section 32 Report, I recommend the policy be retained.
- C.7 The Ngāi Tahu submission seeks to both strengthen and broaden the policy. The strengthening relates to the first words of the policy, where Ngāi Tahu has sought to change the emphasis of the policy from "Have regard to..." to "Protect...". This change is significant in terms of the expectations on applicants, ECan and in terms of likely outcomes. In my opinion, 'protection' is inappropriate, particularly when the Ngāi Tahu values may be uncertain or general. On this basis, I recommend continuing with "Have regard to..." which is well defined in terms of RMA usage.
- C.8 The broadening of the policy relates to a range of additional identified Ngāi Tahu values in other documents. I support the extension of the policy to these listed items. In my opinion the policy could benefit from restructuring in order to make the lists of identified areas and source documents clearer, and I have recommended this below.

Recommendation

Amend New Policy 4.14B to read:

4.14B Have regard to Ngāi Tahu values, and in particular those expressed within an iwi management plan, when considering applications for discharges which may adversely affect statutory acknowledgement areas, nohoanga sites, surface waterbodies, silent file areas, culturally significant sites, Heritage New Zealand sites, any listed archaeological sites, and cultural landscapes, identified in this plan, any relevant district plan, the Kaikōura (Te Tai o Marokura) Marine Management Act 2014⁸⁴ or in any iwi management plan.

⁸⁴ Ngāi Tahu – PC4 LWRP-308

D Group and Community Drinking Water Supplies

- D.1 PC4 (Omnibus) makes changes to several provisions relating to the protection of drinking water supplies in the LWRP.
- D.2 Firstly, the amendments improve the consistency between the LWRP definitions and other statutory documents that also manage the protection of human drinking water, particularly in terms of population thresholds for protection.
- D.3 Secondly, PC4 (Omnibus) addresses an issue in the LWRP whereby the definitions in the LWRP differentiate between a 'community drinking water supply' and a 'group drinking water supply' but the polices and rules provide a similar level of protection. PC4 (Omnibus) addresses this matter by removing the definition of 'group drinking water supply' and amending the definition of 'community drinking water supply' to ensure protection of 'mid-sized' drinking water sources. A key part of this change relates to the threshold used to define a community drinking water supply; with a proposed decrease in the minimum population size from 501 persons to 25 persons. With the removal of the separate 'group drinking water supply' terminology, 25 persons will be the minimum population automatically being protected.
- D.4 Thirdly, PC4 (Omnibus) amends several policies and rules to better link Schedule 1, which establishes drinking water protection zones, to the policies and rules of the LWRP.

Definitions of Community Drinking-water Supply and Group Drinking Water Supply

- D.5 It is proposed that the definition of 'Group Drinking Water Supply' be deleted and the definition of 'Community Drinking Water Supply' be amended. As these definitions are inherently related they are considered together below.
- D.6 The change to the definition of Community-Drinking Water Supply reads:

means a drinking-water supply that is recorded in the drinking-water register maintained by the Chief Executive of the Ministry of Health (the Director-General) under section 69J of the Health Act 1956 that provides no fewer than $\frac{501}{25}$ people with drinking-water for not less than 60 days each calendar year.

Submissions

- D.7 Five submissions were received on the two definitions. The Oil Companies support the change to the definition of Community Drinking-water Supply.
- D.8 Mackenzie DC seeks to delete all changes made to the definitions of Community Drinkingwater Supply and Group Drinking Water Supply.

- D.9 Mackenzie DC states that the removal of the reference to 'any group drinking water supplies' and deleting the definition of 'Group Drinking water supplies' means that current protection provided to drinking water supplies that service communities of less than 25 people would be removed, including several community supplies within the Mackenzie District.
- D.10 Additionally, the Mackenzie DC states that these amendments will not give effect to Policies 7.3.4, 7.3.6 and 18.3.1 in the Canterbury Regional Policy Statement (CRPS) and the Canterbury Water Management Strategy (CWMS).
- D.11 Mackenzie DC's alternative relief would be to insert a new Schedule which would include specific sites that would be excluded from the 25 person threshold (this is discussed below at paragraph D.25). However, the Mackenzie DC provided an alternative and less preferred relief, which is to amend the definition of Community drinking-water supply to read:

means a drinking-water supply that is recorded in the drinking-water register maintained by the Chief Executive of the Ministry of Health (the Director-General) under section 69J of the Health Act 1956 that provides no fewer than 501 25 people with drinking-water for not less than 60 days each calendar year, or is a drinking water supply operated by a local authority irrespective of the number of people it serves.

- D.12 As an alternative, Mackenzie DC suggests all Council operated schemes could be included. Selwyn DC seeks a similar relief.
- D.13 Ngāi Tahu seeks a general amendment to the definitions relating to Group and Community Drinking Water Supplies to ensure drinking water supplies that supply more than one household but fewer than 25 people are also protected under the LWRP.
- D.14 Ngāi Tahu states that these amendments, which will lead to the removal of protection zones around smaller water supplies, will not give effect to the CWMS and will result in costs associated with introducing water treatment systems or sinking deeper wells to tap groundwater with lower nitrate concentrations.

Strategic Policy 4.5, Rules and Schedule 5

- D.15 Strategic Policy 4.5 and a number of rules need to be changed to align with the changes to the definitions outlined above. For example, the change to Strategic Policy 4.5 reads:
 - 4.5 Water is managed through the setting of limits to safeguard the life-supporting capacity of ecosystems, support customary uses, and provide for group or community drinking-water supplies and stock water, as a first priority, and to meet the needs of people and communities for water for irrigation, hydro-electricity generation and other economic activities and to maintain river flows and lake levels needed for recreational activities, as a second priority.

D.16 The limited range of submissions tend to mirror the positions taken with respect to the definitions.

New Policies 4.23A and 4.23B

- D.17 Policy 4.23A and Policy 4.23B are two new policies proposed to be added by PC4 (Omnibus). Policy 4.23A is proposed to allow for, through a resource consent process, the replacement of a provisional protection zone with a specified protection zone. Changes to these policies are implemented through changes to Rule 5.115 and Schedule 1 of the LWRP.
- D.18 Policy 4.23B adds several matters of discretion that ECan may have regard to when considering an application for a resource consent to take or use water for a community drinking-water supply. As these Policies are inherently related they are considered together below.
- D.19 New Policies 4.23A and 4.23B read:
 - 4.23A The quality of water abstracted from community drinking-water supply sources is protected through:
 - (a) the application of a provisional protection zone around the source of any existing community drinking-water supply, unless a specific protection zone is included as a condition in the permit to take or use water; and
 - (b) requiring applications for new or replacement permits to take or use water for community drinking-water supply to include an assessment of the specific protection zone required, taking into account the factors set out in Schedule 1; and
 - (c) providing, by way of resource consent, for the replacement of provisional protection zones with specific protection zones which reflect the level of protection required for that supply.
 - 4.23B In considering resource consent applications to take or use water for a community drinking-water supply, the consent authority shall have regard to:
 - (a) the factors set out in Schedule 1; and
 - (b the extent to which the application reflects those factors set out in Schedule 1 when establishing the extent of the proposed protection zone; and
 - (c) the level of additional restriction the proposed protection zone will impose on land users within the proposed protection zone.
- D.20 J Demeter supports the addition and the wording of both Policies 4.23A and 4.23B. CDHB also supports these policies, however seeks to amend Policy 4.23B by deleting 4.23B(c). The CDHB states that this matter should be deleted as community water supplies are essential to public health and provision of water for community drinking water supply needs to be prioritised over all other uses.

- D.21 Ngāi Tahu seeks a general amendment to Policies 4.23A and 4.23B relating to Group and Community Drinking Water Supplies to ensure drinking water supplies that supply more than one household but fewer than 25 people are also protected under the Plan.
- D.22 Mackenzie DC and the Oil Companies seek to delete both Policies 4.23A and 4.23B.
- D.23 The Oil Companies oppose both Policy 4.23A and Policy 4.23B stating that these amendments will introduce a mechanism by which the "Council can introduce new protection zones and amend existing protection zones via a potentially non-notified resource consent process, rather than through a plan change or variation".

Schedule 1

- D.24 Schedule 1 has been changed to provide additional information in relation to how specific drinking water protection zones will be determined.
- D.25 Mackenzie DC seeks to delete the changes to Schedule 1 and Schedule 5 (reasoning at paragraphs A.9 and A.11) or as an alternative, to include a new Schedule X as follows:

<u>Schedule X - Community Drinking Water Supply Schedule</u>

- 1. Kimbell Rural supply
- 2. Burkes Pass
- 3. Pukaki Airport
- D.26 Ngāi Tahu seeks a general amendment to Schedule 1 and Schedule 5 relating to Group and Community Drinking Water Supplies, the reasoning for this is set out in paragraph A.13 and A.14.
- D.27 The Oil Companies seeks to remove the PC4 (Omnibus) amendments made to Schedule 1, only retaining the amendments that include the deletion of references to group drinking-water supplies. The submitter states that the amendments made to Schedule 1 are opposed due to the reasons which are set out with regard to Policy 4.23A and 4.23B, which allow "existing and new community drinking-water supplies to secure specific protection zones which may impact on existing lawful activities".

Discussion

D.28 The proposed amendments to the group and community drinking water supplies provisions are aimed at simplifying the provisions, enabling consistent administration and applying a level of protection that strikes an appropriate balance between applying a level of restriction to activities that is proportionate to the level of the effect arising from those activities. This is fully explained in the Section 32 report.

- D.29 A number of submissions have been lodged, primarily by territorial authorities and those with an interest in protecting drinking water supplies. The submissions are often concerned that drinking water supplies that may serve small communities or maybe operated for particular facilities may have their protection removed. This is considered by the submitters to be inappropriate and various solutions are recommended. The first solution is to reject the plan change and return to the operative provisions. For the reasons set out in the Section 32 report, I do not recommend this approach. The second option is to identify, within the definition, that all territorial authority water supplies and other specified water supplies are included within the "community" definition. Thirdly, there is the possibility of including a schedule that identifies specific drinking water supplies.
- D.30 Overall, I recommend adding an opportunity to schedule additional water supplies on request (Schedule 1A). Obviously these additions to the schedule will require inclusion through future plan changes. This is not a particularly efficient process, but will provide certainty and consistency for all parties.
- D.31 The submission from the Oil Companies is acknowledged, but goes against the philosophy of the community drinking water supply policies and possibly, if applied to a newly registered drinking water supply, clauses 10 or 12 of the National Environmental Standard for Sources of Human Drinking Water. The PC4 (Omnibus) framework provides for specific assessment of protection zones, as an alternative to the default protection zones, which will enable more targeted outcomes that are more risk-based the protections are applied where they appropriately balance the need for protection against the need to protect the drinking water supply. The normal section 95 assessment of resource consents will enable the consideration of effects on third parties, including changing the activity status of discharges in any protection zone.
- D.32 Similarly, the protection of drinking water supplies is the focus of these provisions not the protection of supplies primarily used for industry of other purposes. On this basis, the relief sought in the ANZCO submission in this regard is not sound planning as it may inappropriately broaden the kinds of supplies that may require protection.

Recommendations

Amend the definition of Community-Drinking Water Supply to:

means a drinking-water supply that is recorded in the drinking-water register maintained by the Chief Executive of the Ministry of Health (the Director-General) under section 69J of the Health Act 1956 that provides no fewer than 501 25 people with drinking-water for not less than 60 days each calendar year, or is listed in Schedule 1A⁸⁵.

Retain amendments to Strategic Policy 4.5, Rules 5.7, 5.8, 5.71, 5.75, 5.77, 5.82, and Schedule 5.

⁸⁵ Mackenzie DC – PC4 LWRP-329

Retain New Policies 4.23A and 4.23B.

Retain amendments to Schedule 1.

Add a new Schedule 1A:

<u>Schedule 1A - Community Drinking Water Supply Schedule</u>

- 1. Kimbell Rural supply
- 2. Burkes Pass
- 3. Pukaki Airport⁸⁶

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⁸⁶ Mackenzie DC – PC4 LWRP-351

E Dewatering and Drainage Water

- E.1 PC 4 (Omnibus) makes changes to provisions relating to dewatering and drainage water. Drainage systems can be a source of contamination to freshwater and, as explained in the Section 32 Report, the high concentration of sediment in sediment-laden discharges allowed for as a permitted activity under the current provisions does not adequately protect the receiving environment. In addition, the LWRP provisions do not clearly distinguish between drainage water and stormwater.
- E.2 Amendments are proposed for the three definitions 'Dewatering', 'Drainage System' and 'Drainage Water' and Rules 5.75-5.80.

Definition of "Dewatering", "Drainage System" and "Drainage Water"

E.3 The changes to the definition of 'Dewatering' are:

Means the abstraction of groundwater so as to lower the water table for the period of time required to enable excavation, construction, <u>maintenance</u> or geotechnical work to proceed in the dewatered area, or to sustain a lower localised water table.

E.4 The changes to the definition of 'Drainage System' are:

means a surface or subsurface pipe or channel or canal system for the collection, transfer and discharge elsewhere of surface or subsurface water. that has been constructed for the primary purpose of:

- 1 collecting or draining water and contaminants from agricultural or rural land; or
- 2 <u>controlling or permanently lowering the water table;</u> and which conveys and discharges that water and contaminants to land or surface water. It excludes any system that has been constructed for the primary purpose of collecting, conveying or discharging stormwater.
- E.5 The changes to the definition of 'Drainage Water' are:

means water and contaminants <u>arising from the drainage of water from the soil profile, or excess surface water from agricultural or rural land. It excludes stormwater and sediment-laden water which are separately defined.</u> <u>discharged Drainage water from a surface or subsurface pipe or channel or canal system for the collection, transfer and discharge elsewhere of surface or subsurface water. It excludes stormwater which is separately defined.</u>

Submissions

E.6 One submission was received on the definition of 'Dewatering. The Oil Companies seek to retain the amendments made to 'Dewatering'. The submitter states that this definition appropriately provides for dewatering, as dewatering activities are short term. The submitter

- adds that longer term dewatering activities should be dealt with differently because "they can have different effects".
- E.7 Five submissions were received on the definition of 'Drainage System'. Three submissions were received on the definition of 'Drainage Water'.
- E.8 Selwyn DC seeks to amend the definition of 'Drainage System' to 'Rural Drainage System' to provide further clarification of the distinction. Selwyn DC also seeks to amend the definition of 'Drainage Water' to 'Rural Drainage Water'.
- E.9 Horticulture NZ seeks to have the proposed amendments to the definition of 'Drainage System' deleted. The submitter is concerned that the proposed changes to the definition make the provisions activities based, rather than effects based, by changing the definition to relate only to agricultural or rural land. Horticulture NZ seeks to have the proposed amendments to 'Drainage Water' deleted for the same reasons.
- E.10 ESAI seeks to have the proposed amendments to the definition deleted due to the submitter's concerns that the proposed amendments to the definition "determines that drains are for the purpose of draining water and contaminants" and because of that "assumes that all agricultural and rural water is contaminated".
- E.11 The Oil Companies support the intent of the change. However, it seeks that matter 2 should be amended to specifically apply to agricultural and rural land "to avoid any suggestion that the definition may be applied to other land where controlling or permanently lowering the water table takes place".
- E.12 The Waimakariri DC generally supports the amendments made to the definition of 'Drainage System' to make a distinction between the stormwater and land drainage systems. However, the submitter seeks further clarification of this distinction by amending the definition to read "Rural Drainage Water and Rural Drainage System". In addition, the Waimakariri DC states that an amendment to the definition of 'Drainage System' to "1. Collecting or draining water and contaminants from agricultural or rural land and ancillary structures" will remove the issue with the definition of stormwater being so broad and that the run-off from farm dwellings and farm buildings can be dealt with under 'Rural Drainage system'.
- E.13 ESAI seeks to delete the amendments to the definition of 'Drainage Water'. The submitter states "there is no understanding in the definition that drains service an entire catchment which includes urban land in much of the region" and this concerns the submitter because the wording of the proposed amendments "assumes all blame to rural entities".
- E.14 The Oil Companies seek retention of the proposed amendments as "the definition specifically relates to agricultural or rural land" and that the activities related to the Oil Companies will be "appropriately addressed under other provisions".

Discussion

- E.15 As there is a single submission in support of the change to the definition of dewatering, and no submissions seeking any changes, it is recommended to be retained.
- E.16 The ESAI submissions to the definition of drainage system and Rules 5.75 to 5.80 generally oppose the changes made, due to some assumptions perceived to underpin the rules. The explanation of the need for the changes and the intent behind them is set out in the Section 32 Report. This does include an assumption that there are a range of contaminants likely to be present in drainage water from rural areas. In my opinion, the reasoning in the Section 32 report remains relevant, and the ESAI submission does not address these concerns.
- E.17 The issue of the application of the definition and rules to rural and urban land has been raised by a number of submitters. While there is an emphasis towards rural land, it is not exclusive, in that drainage water from urban areas is not specifically excluded. However, there is more of an emphasis toward water in urban areas being treated as stormwater. On this basis, I do not support the submissions of the Oil Companies seeking to further emphasise the rural nature of the definitions, along with the Waimakariri DC request for a change to the defined term. In addition, there are other changes in PC4 (Omnibus) that address the Waimakariri DC concerns in relation to stormwater from structures.

Rules 5.75 – 5.78

- E.18 The changes to Rules 5.75 5.78 read:
 - 5.75 The discharge of <u>drainage</u> water <u>from a drainage system</u> that may contain contaminants from sub-surface or surface drains into an artificial watercourse, constructed wetland or into or onto land is a permitted activity, provided the following conditions are met:
 - 1. The discharge into an artificial watercourse or constructed wetland, beyond the Mixing Zone as defined in Schedule 5, does not:
 - (a) produce conspicuous oil or grease films, scums or foams, or floatable or suspended materials; <u>and</u>
 - (b) produce any conspicuous change in the colour or visual clarity; and
 - 2. The discharge does not:
 - (a) occur within a Group or Community Drinking-water Protection Zone as set out in Schedule 1; <u>and</u>
 - (b) contain any hazardous substance; and
 - (c) originate from or enter contaminated or potentially contaminated land.
 - 5.76 The discharge of <u>drainage</u> water <u>from a drainage system</u> that <u>may contain</u> contaminants from sub-surface or surface drains into an artificial watercourse, constructed wetland or into or onto land that does not meet one or more of the conditions of Rule 5.75 is a discretionary activity.

- 5.77 The discharge of <u>drainage</u> water <u>from a drainage system</u> that <u>may contain</u> contaminants from sub-surface or surface drains into a river, lake or wetland is a permitted activity, provided the following conditions are met:
 - 1. The discharge of land drainage water is only from a drainage system, the full spatial extent of which existed at 3 July 2004; and
 - 2. The concentration of:
 - (a) total suspended solids in the discharge does not exceed 50 g/m³; and
 - (b) un-ionised hydrogen sulphide in the discharge does not exceed 0.005 q/m^3 ; and
 - 3. The discharge, beyond the Mixing Zone as defined in Schedule 5, does not <u>produce:</u>
 - (a) produce conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) produce any conspicuous change in the colour or visual clarity; and or
 - (c) produce any emission of objectionable odour; and
 - 4. The discharge does not:
 - (a) occur within a Group or Community Drinking-water Protection Zone as set out in Schedule 1; or
 - (b) contain any hazardous substance.
- 5.78 The discharge of <u>drainage</u> water <u>from a drainage system</u> that may contain contaminants from sub-surface or surface drains into a river, lake or wetland that does not meet the conditions of Rule 5.77 is a discretionary activity

Submissions

- E.19 ESAI opposes the proposed amendments to all six of Rules 5.75-5.80 and seeks that the amendments are deleted. The submitter's reasons are the same reasons for seeking to delete the definition of 'drainage water', set out in paragraph E.9.
- E.20 Ngāi Tahu is opposed to direct discharges of drainage water into artificial watercourses being a permitted activity. The submitter seeks to delete the reference to 'artificial watercourses' as the submitter states that methods to 'polish' the water, such as constructed wetlands and riparian planting, need to be established to protect these surface waterways. The submitter adds, "the plan already recognises that inanga spawning habitat can occur in both natural and artificial watercourses".
- E.21 Selwyn DC seeks to add a condition into Rule 5.75 to require the written permission of the network operator. The submitter states that if the local authority manages the receiving artificial watercourse or constructed wetland, then written approval from that authority should be required before any discharge is made. The submitter states that this will allow the council to manage the integrity of the system.

- E.22 Beef + Lamb NZ seeks to add the word 'or' into Rules 5.75(1) and 5.77(2) as the submitter states that both requirements should not have to be present to require action to be taken, one should be sufficient.
- E.23 Forest and Bird seeks to have the proposed amendments to Rule 5.77 retained.
- E.24 Ngāi Tahu seeks that amendments be made so that resource consent is required for direct discharges of drainage water into rivers, lakes and wetlands. Ngāi Tahu also encourages the use of constructed wetlands and planting in riparian margins to 'polish' the water before it enters surface waterways.
- E.25 DoC seeks to add three conditions to Rule 5.77(3), which impose stricter standards for the quality of the discharge in order to protect freshwater quality. These amendments are as follows:
 - 3. The discharge, beyond the Mixing Zone as defined in Schedule 5, does not produce:
 - (a) conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) any conspicuous change in the colour or visual clarity; and 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; and
 - 4. ..
 - 5. The location of the drain outlet position is mapped and provided to ECan by 31

 December 2020
- E.26 DoC states that drainage systems can be a major source of contamination to freshwater and that "any rule that allows a permitted activity discharge must meet the requirements of section 70(1)(c)-(g) requirements under the RMA". DoC also seeks that applicants must provide the outlet position so that "the mixing zone can be identified, and the cumulative effects of such discharges managed".
- E.27 Selwyn DC seeks to add a condition into Rule 5.77. This condition is the same 'written approval' condition requested by the submitter for Rule 5.75.
- E.28 DoC seeks to delete Rule 5.78 and replace it with Rule 5.78A and 5.78B, which read:
 - 5.78A The discharge of drainage water from a drainage system into a river, lake or wetland that does not meet the conditions of Rule 5.77 is a discretionary activity, provided the following condition is met:
 - where the location of the surface and sub-surface drains and outlet position is mapped and provided to ECan
 - 5.78B The discharge of drainage water from a drainage system into a river, lake or wetland that does not meet the conditions of Rule 5.78A is a non-complying activity

E.29 DoC's new rules state that if the conditions of 5.77 are not met, then the activity will only be classified as discretionary if further mapping and identification conditions are met, so that ECan can mitigate the effects. Further, if the mapping and identification condition is not met in 5.78A the activity will become non-complying.

Discussion

- E.30 Drainage systems in Canterbury tend to have been constructed many decades ago, and are operated by territorial authorities, ECan, NZTA and private individuals. Networks may have elements controlled by all of the above entities. They typically cross many property boundaries before ultimately discharging to some form of natural water body. From time to time they are extended or improved, particularly in response to natural hazard (flooding) events or development.
- E.31 This historic situation makes administration of drainage networks difficult, as assigning responsibility for the entry of contaminants into drainage networks and responsibility for the ultimate discharge is difficult. On this basis, submissions that seek the upgrade of existing systems, such as submissions from Ngāi Tahu, or some form of written approval to discharge into systems, such as from Selwyn DC, are recommended are not supported, as they are administratively difficult, will require expensive retrofit to existing systems and likely impose significant costs on the landowner at the end of the various systems, where they are not responsible for the contaminants entering the system.
- E.32 The DoC request for clarity regarding the section 70 requirements has merit. However, the amendments lack the necessary certainty for a permitted activity rule, particularly with respect to the level of adverse effects on aquatic life that would be permissible by such a rule.
- E.33 The DoC request for the mapping of drain outlet positions presumably is in response to a perceived lack of information about discharge locations. However, the request would render all discharges to a system after 2020 non-compliant if a person has not provided this mapping to ECan. Such a rule may also result in dozens of individuals providing the same map to ECan. I am unable to support this amendment, as I understand that the majority of discharge points are well known, the suggested rule is likely to be administratively problematic, and requiring mapping is unlikely to have any beneficial effect on water quality.

Rules 5.79 and 5.80

- E.30 The changes to Rules 5.79 and 5.80 read:
 - 5.79 The discharge of contaminants and water from an artificial watercourse the maintenance of artificial watercourses and associated structures into into an artificial watercourse, constructed wetland or into or onto land is a permitted activity, provided the following conditions are met:
 - 1. The discharge results from the maintenance of artificial watercourses and associated structures; and
 - 2. The discharge is only of water, sediment, and vegetative matter originating from within the banks of the artificial watercourse; and
 - 3. If the discharge subsequently enters a river, lake or wetland, the discharge, beyond the Mixing Zone as defined in Schedule 5, does not produce:
 - (a) produce conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) produce any conspicuous change in the colour or visual clarity.; or
 - (c) produce any emission of objectionable odour.
 - 5.80 The discharge of contaminants and water from an artificial watercourse the maintenance of artificial watercourses and associated structures into an artificial watercourse, constructed wetland or into or onto land that does not meet one or more of the conditions of Rule 5.79 is a discretionary activity.

Submissions

- E.34 Ngāi Tahu seeks additional conditions to be included in Rule 5.79 to "protect cultural and instream values associated with these waterbodies". The submitter did not provide the specific amendments sought in their submission, but instead provided a list as to what should be included as conditions. These suggested conditions are as follows:
 - requiring the planting of appropriate indigenous vegetation along waterways,
 - the use of best practice methods to collect vegetative matter and hence reduce the amount of vegetative matter being accidently discharged into the waterways,
 - limit the concentration of total suspended solids being discharged, and
 - prohibit maintenance from occurring in any inanga spawning habitat areas during the spawning season and during the tuna migration seasons.

Discussion

- E.35 The Ngāi Tahu suggestions are likely to impose considerable constraints on the ability to maintain artificial water courses and associated structures.
- E.36 While there are acknowledged to be inanga spawning areas within artificial water courses, artificial water courses, and particularly land drainage networks, require regular maintenance

to maintain their function. Often, the inanga spawning season, generally being the autumn, is the only appropriate time to undertake this maintenance.

E.37 The subjective nature of the suggested conditions is also problematic and difficult to overcome in a permitted activity framework.

Recommendation

Retain changes to the definitions of "Dewatering", "Drainage System" and "Drainage Water".

Retain changes to Rules 5.75 to 5.78 and 5.80.

Amend Rule 5.79 to delete a repeated word in the second line:

- 5.79 The discharge of contaminants and water from an artificial watercourse the maintenance of artificial watercourses and associated structures into an artificial watercourse, constructed wetland or into or onto land is a permitted activity, provided the following conditions are met:
 - 1. The discharge results from the maintenance of artificial watercourses and associated structures; and
 - 2. The discharge is only of water, sediment, and vegetative matter originating from within the banks of the artificial watercourse; and
 - 3. If the discharge subsequently enters a river, lake or wetland, the discharge, beyond the Mixing Zone as defined in Schedule 5, does not <u>produce</u>:
 - (a) produce conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) produce any conspicuous change in the colour or visual clarity.; or
 - (c) produce any emission of objectionable odour.

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⁸⁷ Cl 16 – Correction of a typo (repeated word)

F Bores

F.1 The proposed amendments made to provisions related to bores include the definition of 'Bore' and Rules 5.103, 5.104, 5.104A, 5.107, and 5.108. PC4 (Omnibus) amends part of the definition so that it only applies to investigations which are for a geotechnical purpose, which better reflects the types of activities Rule 5.104 seeks to control. The amendments are proposed to avoid duplication within the rules, address inconsistencies with other rules in the LWRP, and between the definitions and rules.

Definition of "Bore"

F.2 The change to the definition of "Bore" reads:

means a structure or hole in the ground constructed for the purpose of:

- 1. qeotechnical investigatingons or monitoring conditions below the ground surface; or
- 2. abstracting liquid substances from the ground; or
- 3. discharging liquid substances into the ground;

but excludes <u>any</u> test pits, <u>trench</u>, and soak holes <u>or well-pointing device or other structure</u> <u>used to temporarily lower the groundwater table for the purpose of dewatering.</u>

Submissions

- F.3 The Oil Companies seek to retain the proposed amendments made to the definition of 'Bore". The submitter states that the Oil Companies "routinely undertake dewatering activities within pits excavated for underground tank excavation". The submitter states that the amendments mean that these excavations will not come under the definition of 'bore' and that these amendments are appropriate because "the potential effects of these short term activities do not warrant further controls".
- F.4 H Rennie seeks to amend the definition so that piezometers and lysimeters are not captured under this definition. The submitter states that it would add considerable cost to the monitoring mechanisms for applicants.
- F.5 ESAI seeks to extend the type of investigations that a bore is used for, by adding 'environmental and hydrological' to the definition. The submitter states "Geotechnical investigations are not the only type of investigations for which bores are constructed".

Discussion

F.6 The submissions on the definition of bore are generally in support, but seek additional clarification and certainty. On this basis, they are generally recommended to be adopted. The ESAI submission seeking inclusion of "environmental" is particularly broad, and I am unsure of what investigations may be undertaken that are not geotechnical or hydrological, or

monitoring. The submitter may wish to clarify this at the hearing. In the interim, such a broad term is not supported.

Rules 5.103, 5.104, and 5.104A

- F.7 The changes to Rules 5.103, 5.104 and 5.104A read:
 - 5.103 The use of land, including the bed of a lake or river, for the installation, maintenance and use of a water infiltration gallery (other than a water infiltration gallery used for emergency firefighting purposes), or a bore, other than a bore for geotechnical investigation or monitoring, or a water infiltration gallery is a permitted activity, provided the following conditions are met:
 - 1. The bore or gallery is installed by a bore driller or bore drilling company that holds a current accreditation under the CRC Bore Installers Programme; and
 - 2. The bore is not for hydrocarbon exploration or production; and
 - 3. The screening of any bore or gallery may only be into a single aquifer or water-permeable zone. During bore installation reasonable and practicable methods shall be used to minimise the risk of interconnection or movement of groundwater between aquifers or water-permeable zones; and
 - 4. Any bore constructed to abstract groundwater is screened to below any minimum water level for the groundwater zone as set out in Section 6 to 15 of this Plan; and
 - 5. Contaminants or water are prevented from entering the top of the bore or gallery or underlying groundwater by:
 - (a) covering or capping the bore or the above ground portion of the gallery pipe, when not in use; and
 - (b) sealing the exterior of the bore (the annulus) with bentonite or concrete grout from ground level to above the screen or 1 m below ground level, whichever is the lesser; and
 - (c) sealing the bore-head or above ground portion of the gallery pipe at ground or pumphouse floor level with a concrete pad of at least 0.3 m radius and 0.1 m thickness which is contoured to slope away from the bore or pipe; and
 - 6. Information on bore or gallery location, bore installation (including bore logs and intended uses), and other relevant information is submitted to the CRC within 20 working days of drilling the bore; and
 - 7. The bore or gallery is not installed on contaminated or potentially contaminated land.
 - 5.104 The use of land, including the bed of a lake or river, for the installation, maintenance and use of a bore for geotechnical investigation or monitoring is a permitted activity, provided the following conditions are met:

- For any non-permanent bore, itis decommissioned by filling with clean material and compacted or sealed at the surface to prevent contaminants entering the bore; and
- For any permanent bore, including monitoring bores, contaminants or water are prevented from entering the top of the bore or underlying groundwater by:
 - (a) covering or capping the bore when not in use; and
 - (b) sealing the exterior of the bore (the annulus) with bentonite or concrete grout from ground level to above the screen or 1 m below ground level, whichever is the lesser; and
 - (c) sealing the bore-head at ground or pumphouse floor level with a concrete pad of at least 0.3 m radius and 0.1 m thickness which is contoured to slope away from the bore or pipe; and
- 3. Information on bore location, bore installation (including bore logs and intended uses) is submitted to the CRC:
 - (a) within 20 working days of drilling the bore; or
 - (b) for test pits geotechnical investigations, within 40 working days of digging the test pit carrying out the geotechnical investigation.
- 5.104A The use of land, including the excavating of the bed of a lake or river, for the use of a water infiltration gallery for emergency rural fire fighting and the decommissioning of that water infiltration gallery is a permitted activity, provided the following conditions are met:
 - 1. The gallery is less than 5 metres square in area; and
 - 2. The gallery is decommissioned once the fire is formally declared out; and
 - 3. The gallery is rehabilitated by filling with clean material; and
 - 4. CRC is advised within 20 days of excavating the gallery
- F.8 No submissions were received on Rules 5.107 and 5.108.

Submissions

F.9 DoC seeks to have the proposed amendments to Rules 5.103, 5.104 and 5.104A retained as the submitter states the Rules give effect to the RMA, NPSFM 2014, RPS and the CWMS.

Discussion

F.10 As the only submission is in support of the changes, and no submission oppose the change or seek other amendments, the changes are recommended to be retained.

Recommendation

Amend the definition of "Bore" to read:

means a structure or hole in the ground constructed for the purpose of:

- 1. <u>hydrological or⁸⁸ geotechnical</u> investigatingons or monitoring conditions below the ground surface; or
- 2. abstracting liquid substances from the ground; or
- 3. discharging liquid substances into the ground;

but excludes <u>any</u> test pits, <u>trench</u>, and soak holes, <u>piezometers</u>, <u>lysimeters</u>⁸⁹ <u>or well-pointing</u> <u>device or other structure used to temporarily lower the groundwater table for the purpose of</u> dewatering.

Retain the changes to Rules 5.103, 5.104, 5.104A, 5.107, 5.108 and 5.109.

89 H Rennie – PC4 LWRP-278

⁸⁸ ESAI – PC4 LWRP-28

G Surface Water Sampling and Monitoring

G.1 Rule 5.140A has been included to enable, as a permitted activity, the installation of devices used for measuring or monitoring of waterbodies.

New Rule 5.140A

G.2 New Rule 5.140A reads:

- 5.140A The installation, alteration, extension or removal of any equipment or device on or in the bed of a lake or river, that is for the purpose of monitoring, measuring, or taking samples from any surface waterbody, and the associated excavation, disturbance and consequential deposition of substances on, in or under the bed of a lake or river is a permitted activity, provided the following conditions are met:
 - 1. The equipment or device and any associated support structures do not prevent any existing fish passage; and
 - 2. Any material deposited in, on, under or over the bed in order to maintain the structure does not contain any hazardous substance and is of inert materials of colour and material type that blends with the surrounding natural environment; and
 - 3. Any alteration, removal or extension of any monitoring, measuring or sampling equipment does not occur unless a written permission has been obtained from the owner of that equipment; and
 - 4. Upon completion of the activity any area of the bed of a lake or river that has been disturbed is returned to as near as practicable to its original state.

Submissions

- G.3 Five submissions were received on Rule 5.140A. Three submissions in support were received from Meridian, Genesis, and Ngāi Tahu. Meridian and Genesis seek to retain the Rule as both submitters install, operate and maintain devices that would be managed by this Rule. Ngāi Tahu seek to retain the Rule, and state that the Rule is supported as it enables surface water quality monitoring.
- G.4 Forest and Bird opposes the Rule. The submitter states that the Rule should include exceptions to protect inanga spawning sites and habitats.
- G.5 Fish and Game supports the rule in part and seeks to insert an additional condition as follows:
 - 5. The associated excavation, disturbance and deposition of substances on or in the bed of a lake or river does not result in the stranding of fish in pools or channels.
- G.6 The submitter states that "works in waterways have the potential to cause the stranding of fish in pools or channels".

Discussion

- G.7 The addition of a rule to specifically provide for surface water sampling and monitoring equipment is generally supported by the submitters. Fish and Game and Forest and Bird have sought additional constraints, to ensure that the activity does not have a more than minor effect on the environment.
- G.8 The Forest and Bird suggestion, with respect to inanga spawning sites is consistent with other rules, and is supported. The Fish and Game submission point, specifically relating to what would appear to be more significant alteration of the bed as a result of the installation of equipment, would appear to be already largely covered by condition 4. A minor change to this condition to relate it to installation and maintenance, rather than the "activity" may address the concern.

Recommendation

That Rule 5.140A be amended to read:

- 5.140A The installation, alteration, extension or removal of any equipment or device on or in the bed of a lake or river, that is for the purpose of monitoring, measuring, or taking samples from any surface waterbody, and the associated excavation, disturbance and consequential deposition of substances on, in or under the bed of a lake or river is a permitted activity, provided the following conditions are met:
 - 1. The equipment or device and any associated support structures do not prevent any existing fish passage; and
 - 2. Any material deposited in, on, under or over the bed in order to maintain the structure does not contain any hazardous substance and is of inert materials of colour and material type that blends with the surrounding natural environment; and
 - 3. Any alteration, removal or extension of any monitoring, measuring or sampling equipment does not occur unless **a** written permission has been obtained from the owner of that equipment; and
 - 4. Upon completion of the associated excavation, disturbance and consequential deposition of substances on, in or under the bed activity, 90 any area of the bed of a lake or river that has been disturbed is returned to as near as practicable to its original state: and
 - 5. The installation, alteration, extension or removal of any equipment or device is not undertaken in any inanga spawning habitat during the period of 1 March to 1 June inclusive. 91

⁹⁰ Fish and Game – PC4 LWRP-487

⁹¹ Forest and Bird – PC4 LWRP-106

H Vegetation and Earthworks

- H.1 PC4 (Omnibus) makes changes to a number of vegetation and earthworks rules.
- H.2 The intention behind the changes to the vegetation and earthworks provisions is to actively manage, and discourage, encroachment into the riparian areas of braided rivers and, over time, constraining the braided rivers to a rather narrower extent than they would naturally have. In the past, this has primarily occurred through clearance of riparian vegetation and conversion to farmland.
- H.3 Braided rivers have significant biodiversity functions, and this includes areas of woody vegetation, whether indigenous or exotic, running alongside the clear riverbed. The intent of the provisions is to protect these areas, as well as limiting the natural hazard risk caused by the highly variable flows and meandering nature of braided river systems.
- H.4 The intent of the provisions is not to curtail existing farming operations that have encroached into these areas. These activities have occurred, the biodiversity loss is existing and the reversing of this activity is not the intent behind the provisions. That said, during drafting there was a desire to keep the provisions relatively general, and not to identify specific activities. That may have led to some uncertainty regarding the status of existing activities.

Definitions of "Earthworks" and "Vegetation Clearance"

H.5 The changes to the definition of 'earthworks' read:

means the excavation of, and/or filling with topsoil, subsoil, sediments, rock and/or other underlying materials on which the soil is formed. Earthworks include, but are not limited to, the construction and maintenance of roads, tracks, firebreaks and landings, and ground shaping (recontouring), root raking and blading. Earthworks excludes:

- a. cultivation of the soil for the establishment of crops or pasture on production land established prior to 5 September 2015;
- b. digging of postholes for the construction of fences;
- works for research and monitoring such as coring, water bores and the use of piezometers;
- d. ripping in of water pipes or cables; and
- e. establishment, maintenance and/or enhancement of wetlands, domestic gardens or amenity planting.
- f. harvesting of horticultural crops.
- H.6 The changes to the definition of 'vegetation clearance' read:

means removal of vegetation by physical, mechanical, chemical or other means but excludes:

a. cultivation <u>or harvesting</u> for the establishment of crops or pasture <u>on production land</u> established prior to 5 September 2015;

- b. clearance for the establishment or maintenance of utilities or structures;
- c. removal of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy;
- d. clearance for the purposes of maintaining existing fence lines, vehicle tracks, firebreaks, drains, ponds, dams or crossings; or
- e. domestic gardening and the maintenance of amenity planting;
- f. clearance by, or on behalf of, the Canterbury Regional Council for the purposes of maintaining the flood-carrying capacity of a river; or
- g. exotic vegetation clearance by the Department of Conservation or Land Information
 New Zealand for the purposes of pest management and maintenance of public access.

Submissions

'Earthworks'

- H.7 There are nine submissions on the definition of 'earthworks'. One submission in support is from the Oil Companies. The Oil Companies seek to retain the definition as the amendments relate to cultivation and will not "unduly fetter" the activities of the Oil Companies.
- H.8 Four submissions were received seeking to the delete the definition of 'earthworks'. RDRML seeks to delete the changes to the definition. RDRML state that the rationale behind the proposed change is not readily apparent within PC4 (Omnibus), or within the supporting Section 32 Report. Horticulture NZ also seek to delete the PC4 (Omnibus) amendments and identifies that the Section 32 Report does not appear to have any reasons for the proposed change. Horticulture NZ are concerned that cultivation activities will be caught by the definition.
- H.9 Erralyn Farms seeks to delete the PC4 (Omnibus) amendments to the definition of 'earthworks' as an unintended consequence may be requiring a resource consent to be obtained for any new cultivation of soil on production land (i.e. after 5 September 2015) under the rules in the LWRP for earthworks over aquifers (Rules 5.176 to 5.178). Federated Farmers also seek to delete the PC4 (Omnibus) amendments as they consider crops and pasture should not be included within the definition of earthworks.
- H.10 A number of submitters, including Waimakariri DC and RDRML seek a definition of 'production land' as a result of this amendment to the definition. Federated Farmers are concerned that the reference to 'production land' has potential to create confusion and inadvertently capture farmland.
- H.11 Waimakariri DC seeks to "standardise" the commencement date. The submitter questions the requirement for a date and states that this date differs from the consultation document.
- H.12 Beef + Lamb NZ seeks to amend the definition of 'earthworks' to remove the date "established prior to 5 September 2015". Beef + Lamb NZ state "inclusion of a date effectively means that there can be no land use change that would allow good quality production land not currently

being used for primary production to be used for this purpose in the future without triggering a non-compliance with the definition". The amendments sought by Beef + Lamb NZ received four further submissions with ANZCO, Hurunui Water, and Horticulture NZ seek to retain the amendment. ESAI support the Beef + Lamb amendments in part.

- H.13 Similarly, NZ Deer Farmers' Association seeks to delete the date stating that land use changes should be based on risk analysis of individual cases.
- H.14 Forest and Bird support the definition of 'earthworks' in part and seeks to amend part (a) of the definition so that the effects of cultivation on water quality and biodiversity are addressed. However, no specific wording is requested. Forest and Bird consider that the definition is too broad and may have adverse effects on biodiversity. Forest and Bird further state that the definition "ignores the fact that land used for production may still retain very high natural values". The Forest and Bird submission received four further submissions in opposition from Hurunui Water, ESAI, Horticulture NZ and Federated Farmers.

'Vegetation Clearance'

- H.15 There are eight submissions on the definition of 'vegetation clearance'. DoC seeks to retain the definition as it gives effect to the RMA, NPSFM, RPS and CWMS.
- H.16 RDRML seeks to delete the proposed amendment. RDRML are concerned with the proposal to make cultivation or harvesting of pasture or crops a 'vegetation clearance' activity, where the production land was established after the 5th of September 2015. As with the definition of 'earthworks', RDRML state that the rationale behind the change is not readily apparent within PC4 (Omnibus), or within the supporting Section 32 Report. This submission received three further submissions, two in support (Genesis and Transpower) and one supporting in part (Trustpower).
- H.17 Waimakariri DC raise the same issues with the definition of 'vegetation clearance' as are raised with the definition of 'earthworks'.
- H.18 Horticulture NZ also seeks to delete the PC4 (Omnibus) amendments, identifying that the Section 32 Report does not appear to have any reasons for the change. Horticulture NZ are particularly concerned that cultivation activities will be caught by the definition.
- H.19 ESAI supports the inclusion of harvesting to this definition. However, ESAI seeks to delete the date. ESAI question the relevance of the date as the cultivation and harvesting on land that might be created as productive land after 5 September 2015 would be minimal and potentially contentious when considering what is 'productive land'.
- H.20 Waitaki Irrigators Collective also seeks to delete the date and replace with <u>that has been</u> <u>lawfully established</u> as it is unclear whether the definition would apply to areas where there has been pasture for many years but has not been re-grassed since the specified date.

- H.21 Federated Farmers support the cultivation of crops and pasture not being included in the definition and the inclusion of harvesting. However, they are opposed to the date threshold and seek amendment because of the potential to create confusion, and inadvertently capture farmland. Federated Farmers seeks a corresponding definition of "production land". Overall, Federated Farmers seek to amend the definition to simply exclude: "<u>Cultivation for the establishment of or harvesting of crops or pasture;"</u>.
- H.22 Transpower supports the definition of 'vegetation clearance'. However, Transpower seeks to amend the exclusion in the definition of 'vegetation clearance' to include: b. clearance for the establishment or maintenance of utilities or structures including any associated discharge of sediment or sediment-laden water. The Transpower decision requested received four further submissions. Hurunui Water and RDRML support the decision requested, and Ngāi Tahu and Fish and Game oppose the Transpower decision requested.
- H.23 Beef + Lamb NZ seek to amend the definition of 'vegetation clearance'. Firstly, as the reference to Biosecurity NZ is incorrect as it is an organisation that no longer exists. Secondly, Beef and Lamb NZ seeks reference to 'exotic' be deleted as "Department of Conservation and Land Information New Zealand land management activities extend beyond the clearance of 'pest plants' which have a very specific definition, and include non-pest plants and indigenous species that need to be removed to meet conservation management objectives". The specific amendments are as follows:

....

c. removal of a species listed in the Biosecurity NZ Register of Unwanted Organisms as
defined by the Biosecurity Act 1993 and listed on the Unwanted Organisms Register
by the Ministry for Primary Industries or the Canterbury Pest Management Strategy

...

g. <u>exotic-vegetation clearance by the Department of Conservation or Land Information</u>

New Zealand for the purposes of pest management, ecosystem management or habitat restoration orand-maintenance of public access.

Discussion

- H.24 The definition of cultivation has attracted submissions from a number of parties. These submissions fall into three broad categories. Firstly, there are those that oppose the changes, on the basis of uncertainty regarding the wider implications for farming activities. Secondly, there are those that identify uncertainty with respect to the term "production land", and thirdly there are those that take issue with the threshold date within the rule.
- H.25 Those submissions on the definition that relate to the wider issue of the appropriateness of the definitions and potential for wider implications are addressed below in relation to the relevant policy. As a result, some changes are recommended to more closely align the definition with the intention behind the changes.

- H.26 A number of submitters have concerns about the use of the term "production land" and whether or not it includes farmland, or land that could be converted to farmland, along with other questions as to its extent.
- H.27 Production land is defined in the RMA as:
 - (a) means any land and auxiliary buildings used for the production (but not processing) of primary products (including agricultural, pastoral, horticultural, and forestry products):
 - does not include land or auxiliary buildings used or associated with prospecting, exploration, or mining for minerals, —
 and production has a corresponding meaning.
- H.28 On this basis, it is considered that the definition is sufficiently certain, and definitely includes land used for farming activities, but in the context of the definition of 'earthworks' and 'vegetation clearance', not land that could potentially be used with further development.
- H.29 As an alternative, some district plans have identified that historic use of land for farming activities, that may not be presently being used because of woody vegetation growth, can still be considered as farmland. An example is the proposed Hurunui District Plan which includes a definition of "improved pasture" as "means an area of pasture where species composition and growth has been modified and enhanced for livestock grazing within the previous 20 years, by clearance, cultivation, or topdressing and over-sowing, or direct drilling, and where exotic pasture species have been deliberately introduced."
- H.30 If the hearing commissioners were not satisfied with the definition of production land, or considered that historically used farmland should be included within the cultivation exclusion, then such a wording could read:
 - (a) cultivation of the soil for the establishment of crops or pasture on production land established prior to 5 September 2015 or land where species composition and growth has been modified and enhanced for livestock grazing between 5 September 1995 and 5 September 2015, by clearance, cultivation, or topdressing and over-sowing, or direct drilling, and where exotic pasture species have been deliberately introduced;
- H.31 However, the difficulties of administering such a provision, in terms of trying to identify what was or was not pasture 20 years ago, may lead to unacceptable uncertainty. On this basis, such a provision is advanced as an option, but not recommended.
- H.32 The submissions on the definition of vegetation clearance again identify the potential for unintended consequences, particularly the capturing of ordinary farming activities. This is not the intention of the change to the definition, and a small range of adjustments are recommended, in response to these submissions.

H.33 It is also apparent that the vegetation clearance definition would also capture the harvesting of forest. It is not the intention that such an activity should require a resource consent. On this basis, adjustments are also recommended to clarify that forestry is not included.

New Policy 4.85A

- H.34 New Policy 4.85A reads:
 - 4.85A Indigenous biodiversity, habitats of indigenous fauna and flora, and the natural character of Canterbury's braided river systems is preserved through:
 - (a) preventing encroachment of activities into the beds and margins of lakes and rivers; and
 - (b) limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons

unless the vegetation clearance is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures or network utilities, or maintenance of public access.

Submissions

- H.35 There are twelve submissions on Policy 4.85A. Two submissions seek to retain the policy Ngāi Tahu and J Demeter. Ngāi Tahu supports preventing encroachment of activities into the beds and margins of lakes and rivers and limiting vegetation clearance. J Demeter seeks to retain the policy and states that the proposed changes "may need to include more protections". However, no specific additional protections are identified.
- H.36 Three submissions seek to delete the Policy, from Federated Farmers, Fulton Hogan and Trustpower.
- H.37 Trustpower is opposed to Policy 4.85A as the submitter states that it "inappropriately seeks to restrict activities in the beds of lakes and rivers, and conflicts with other objectives and policies in the Canterbury Land and Water Regional Plan" and Section 10 of the RPS. The submitter goes further to state that the reference to 'preventing the encroachment of activities into the beds and margins of lakes and rivers' in clause (a) of the policy also suggests that no new activities will be allowed in the bed of lakes and rivers. The submitter also states that the exception created for vegetation clearance associated with pest control, flood control and the maintenance of public access is considered to create uncertainty in relation to the definition of vegetation clearance.
- H.38 Federated Farmers seek to delete the Policy and replace with:

Recognise the unique characteristics of braided rivers and their associated ecosystems, and ensure activities enable the maintenance of sufficient variability in river flow and sufficient movement of gravels and sediment to maintain their braided characteristics.

The submitter states that the intent of the Policy is supported, however, the submitter is concerned that the Policy is drafted as a rule rather than a policy.

- H.39 Meridian and Genesis seek very similar amendments to Policy 4.85A. Both submitters are concerned that the Policy does not adequately recognise the influence of their assets on the braided river environment in the Waitaki Catchment. The submitters state that activities that occur in the braided river environment are wider than those relating to structures and that encroachment may be necessary to maintain and operate power schemes. Both submitters also state that the Policy "contains inappropriately high management responses to indigenous vegetation and habitat matter". Meridian⁹² seeks to amend the Policy as follows:
 - 4.85A <u>Canterbury's braided river systems indigenous biodiversity</u>, and habitats of indigenous fauna and flora is protected, and the natural character is preserved of <u>Canterbury's braided river systems is preserved</u> through:
 - (a) **preventing-restricting** encroachment of activities into the beds and margins of lakes and rivers; and
 - (b) limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons

unless the **vegetation clearance activity** is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures, **renewable hydro-electricity generation activities** or network utilities, or maintenance of public access.

- H.40 Transpower generally supports the intent of the Policy. However, the submitter considers amendments are required to address activities associated with network utilities to recognise technical, locational and operational requirements. Transpower seek to amend clause (b) as follows:
 - (b) limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons unless the vegetation clearance is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures or network utilities, or maintenance of public access and except where the activity is part of installing, or maintaining, operating or upgrading infrastructure that is in that location.
- H.41 Forest and Bird support the general intent of Policy 4.85A. However, the submitter seeks to amend clause (b) as it is "too broad" and seeks its deletion. Forest and Bird seeks the following amendments:

<u>Indigenous biodiversity, habitats of indigenous fauna and flora, and the natural character of</u> Canterbury's braided river systems is preserved through:

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⁹² Genesis' amendment very slightly differs from Meridian but is not repeated because the differences are minimal.

- (a) <u>preventing encroachment of activities into the beds and margins of lakes, coastal</u> **lagoons, wetlands** and rivers; and
- (b) <u>limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons".</u>
- H.42 Fulton Hogan also consider that the policy is "too broad" particularly in that is encompasses exotic vegetation along with indigenous vegetation.
- H.43 Hurunui Water seek to amend the policy to read:
 - 4.85A Indigenous biodiversity, habitats of indigenous fauna and flora, and the natural character of Canterbury's braided river systems is preserved through:
 - (a) preventing-managing the effects of activities encroachingment of activities into the beds and margins of lakes and rivers; and
 - (b) limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons

unless the vegetation clearance is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures or network utilities, structures associated with community irrigation/hydro schemes, or maintenance of public access.

- H.44 The submitter considers that the "focus should be managing any adverse effects of activities on the values of the indigenous biodiversity and indigenous vegetation". The submitter also highlights that, in its current form, the Policy doesn't recognise "important activities" such as irrigation and hydro schemes that require structures in the beds and margins of lakes and rivers.
- H.45 Whitewater NZ state that the policy does not go far enough to recognise and protect key recreation sites and therefore seek to add these to the Policy.
- H.46 ESAI opposes the Policy in part, but does not specify a decision requested. The submitter states that the Policy will impact cultivation and harvesting on productive land created after 5 September 2015 because of the definition of vegetation clearance.

Discussion

H.47 Braided river systems in Canterbury are one of the key natural features of the Plains, and are subject to a high level of policy protection. This includes a number of water conservation orders, specific recognition in the Canterbury Water Management Strategy⁹³, recognition of

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⁹³ The Vision and Principles of the Canterbury Water Management Strategy—Strategic Framework, November 2009, as included as Schedule 1 to the ECan Act set out:

A Natural character

The natural character (mauri) of Canterbury's rivers, streams, lakes, groundwater and wetlands is preserved and enhanced:

the braided river systems as outstanding natural features or landscapes and specific recognition within the RPS. On this basis, the superior document policy support for protection of braided rivers is, in my opinion, not in dispute.

- H.48 I consider that a small number of amendments ought to be made to new Policy 4.85A, to clarify the Policy, and avoid the unnecessary capture of minor and transitory activities. However, I am of the view that the Policy, and the associated provisions in relation to protection of braided rivers, be continued.
- H.49 Policy 4.85A has received a number of submissions, including several seeking that it be deleted or substantially revised. In my opinion, the Policy is necessary to support the definitions and rules providing protection of braided river systems. A number of submitters have sought refinements to the Policy, primarily to recognise that in some circumstances, particularly in relation to infrastructure, some activities may be appropriate and "protection" may not always be able to be achieved.
- H.50 Adjacent to most braided rivers is an area of woody vegetation, often in the form of exotic scrub, willows and other trees. While these areas often appear to have limited biodiversity value, the ecological reporting in the Section 32 Report shows that the areas are important biodiversity corridors and provide a range of habitats.
- H.51 Over time, these areas have become more confined, through conversion of these areas into farmland. This is continuing, with more pressure in some catchments than others. The intent of the provisions is to limit the occurrence of this in the future, as it appears, as explained in the Section 32 Report, to be having cumulative effects on the functioning of the braided river systems.

Rules 5.163, 5.164, 5.167 and 5.168

- H.52 The changes to Rules 5.163, 5.164, 5.167 and 5.168 read:
 - 5.163 The introduction or planting of any plant, or the removal and disturbance of existing vegetation in, on or under the bed of a lake or river <u>and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity, provided the following conditions are met:</u>
 - 1. The activity does not prevent access to lawfully established structures, including flood protection works, or to flood control vegetation; and
 - No vegetation used for flood control or bank stabilisation is disturbed, removed, damaged or destroyed except by or on behalf without the prior written permission of the person or agency responsible for maintaining that vegetation for flood control purposes; and

the dynamic processes of Canterbury's braided rivers define their character and are protected

- 3. No woody vegetation is disposed of in, on, over or under the bed of a lake or river other than for in situ decomposition of sprayed weeds that were growing in, on, over or under the bed; and
- 4. Introduction or planting of vegetation in, on, or under the bed of any lake or river is not of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy; and
- 5. Introduction or planting of vegetation in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Section 6 to 15 is only of indigenous plant species that naturally occur in the catchment; and
- 6. The disturbance, removal, damage or destroying of any plant or vegetation

 Vegetation clearance in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15 is only of:
 - (a) non-indigenous species; or
 - (b) indigenous species that form the understorey of plantation forest that is being harvested and a minimum 5 m set back from the river or lake is provided upon replanting (if replanting occurs); and
- 7. Except for clearance around utilities or existing structures, removal of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy, or clearance for the purposes of maintaining existing fence lines, vehicle tracks, firebreaks, drains, ponds, dams or crossings, the activity Vegetation clearance does not occur in an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
- 8. In a flood control rating district scheme area, the introduction or planting of any plant, is by or on behalf has the prior written permission of the person or agency responsible for maintaining that vegetation for flood control purposes; and
- 9. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riverbed vegetation; and
- 10. Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities and fencing, the concentration of total suspended solids in the discharge does not exceed:
 - (1) 50g/m³ where the discharge is to any Spring-fed river, Banks Peninsula
 River, or to a lake, except when the background total suspended solids
 in the waterbody is greater than 50g/m³ in which case the Schedule 5
 visual clarity standards shall apply; or
 - (2) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply.
- 5.164 The introduction or planting of any plant, or the removal or disturbance of existing vegetation in, on or under the bed of a lake or river and any associated discharge of

<u>sediment or sediment-laden water</u> that does not comply with one or more of the conditions $\frac{1}{1}$, $\frac{3}{1}$ or $\frac{5}{1}$ to $\frac{7}{1}$ of Rule 5.163, <u>excluding conditions 2 and 4</u>, and $\frac{9}{1}$ is a restricted discretionary activity.

- 5.167 The use of land for vegetation clearance outside the bed of a river or lake or adjacent to a wetland boundary but within:
 - (a) 10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land or land shown as High Soil Erosion Risk on the Planning Maps; or
 - (b) 5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country on the Planning Maps;

and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity, provided the following conditions are met:

- 1. Except in relation to recovery activities, the area of bare ground resulting from vegetation clearance:
 - (a) Does not exceed 10% of the area within the relevant setback distance in any site riparian margin at any time; or
 - (b) Is undertaken in accordance with a Farm Environment Plan that has been prepared in accordance with Schedule 7 Part A; or
 - (c) For plantation forestry activities is undertaken in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007;
- 2. Except in relation to recovery activities, the vegetation clearance is not on land above 900 m above sea level; and
- 2A. Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities and fencing, the concentration of total suspended solids in the discharge does not exceed:
 - (a) 50 g/m³ where the discharge is to any Spring-fed river, Banks

 Peninsula River, or to a lake, except when the background total

 suspended solids in the waterbody is greater than 50 g/m³ in which

 case the Schedule 5 visual clarity standards shall apply; or
 - (b) 100 g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100 g/m³ in which case the Schedule 5 visual clarity standards shall apply; and
- 3. The felling of trees, or any part of a tree, is away from any lake, river or wetland, except where it is not practicable to do so to ensure human safety, and no logs or tree trunks are dragged through or across the bed of a lake or a permanently flowing river, or a wetland; and
- 4. The vegetation clearance does not occur adjacent to a salmon or an inanga spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
- 5. The vegetation is not flood or erosion control vegetation-; and

- 6. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riparian vegetation, unless the earthworks have been authorised by a land use consent granted by the relevant territorial authority and conditions 1 to 5 above are also met.
- 5.168 The use of land for earthworks outside the bed of a river or lake or adjacent to a wetland boundary but within:
 - (a) 10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land or land shown as High Soil Erosion Risk on the Planning Maps; or
 - (b) 5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country;

and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity provided the following conditions are met:

- Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities and fencing, the extent of earthworks within the riparian margin relevant setback distances in any property:
 - (a) does not at any time exceed:
 - (i) an area of 500 m², or 10% of the area, whichever is the lesser; or
 - (ii) a volume of 10m³ on land shown as High Soil Erosion Risk on the Planning Maps; or
 - (b) Is undertaken in accordance with a Farm Environment Plan that has been prepared in accordance with Schedule 7 Part A; or
 - (c) For plantation forestry activities is undertaken in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007 and the NZ Forest Road Engineering Manual (2012); and
- 2. Except in relation to recovery activities or the establishment, maintenance or repair of network utilities and fencing, the concentration of total suspended solids in the discharge does not exceed any discharge of sediment associated with the activity into the water in a river, lake, or the Coastal Marine Area does not exceed 8 hours in any 24 hour period, and does not exceed 24 hours in total in any 6 month period; and
 - (1) 50 g/m³ where the discharge is to any Spring-fed river, Banks
 Peninsula River, or to a lake, except when the background total
 suspended solids in the waterbody is greater than 50 g/m³ in which
 case the Schedule 5 visual clarity standards shall apply; or
 - (2) 100 g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100 g/m³ in which case the Schedule 5 visual clarity standards shall apply; and

- 3. The activity does not occur adjacent to a significant spawning reach for salmon or an inanga spawning <u>site</u> area listed in Schedule 17;—or in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
- 4 Except in relation to recovery activities or the establishment, maintenance or repair of network utilities and fencing, any earthworks or cultivation is not within 5 m of any flood control structure:; and
- 5. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the earthworks do not result in a reduction in the area or diversity of existing riparian vegetation, unless the earthworks have been authorised by a land use consent granted by the relevant territorial authority and conditions 1 to 4 above are met.

Submissions

- H.53 Rule 5.163 received sixteen submissions, Rule 5.164 received seven submissions, Rule 5.167 received fourteen submissions and Rule 5.168 also received fourteen submissions.
- H.54 Several submissions relate to the inanga spawning additions, which are addressed in Section A of this Report.
- H.55 Hurunui Water seeks to retain "and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water" in rules 5.163, 5.164, 5.167 and 5.168 as permitted activities.
- H.56 Ngāi Tahu considers that the Rule needs to be amended to ensure it is clear that the associated discharges must only be of a temporary nature by amending the rule to state: "...on or under the bed of a lake or river and any associated temporary discharge of sediment or sediment-laden water.....". Clarification is also sought on the size and scale of the planting, removal or disturbance of existing vegetation that is allowed.
- H.57 Ngāi Tahu also submits on Rule 5.167 and 5.168 seeking to include a condition requiring that works shall occur in accordance with the ECan Erosion and Sediment Control Guidelines. Ngāi Tahu highlight concern for the potential for sediment to enter waterways when vegetation is removed (5.167) or earthworks are undertaken (5.168) adjacent to the beds of lakes, rivers and wetlands boundaries.
- H.58 Trustpower opposes Rule 5.163 and 5.164, stating that the Rules fail to acknowledge the definition of vegetation clearance. Trustpower seeks to amend the conditions in Rule 5.163 and 5.164 to consistently refer to 'vegetation clearance':
 - The introduction or planting of any plant, or the removal and disturbance of existing vegetation clearance in, on or under the bed of a lake or river...
- H.59 Beef + Lamb NZ also seeks alignment with the definition of 'vegetation clearance' proposed earlier.

- H.60 Forest and Bird seeks to retain "and disturbance" in the introduction to the Rule and condition
 2. Forest and Bird also seeks to amend condition 6 to manage both removal and alteration and disturbance. The submitter does not request specific wording. However, the submitter states that the condition is currently too narrow and only manages the effects of removal.
- H.61 Whitewater NZ seek to amend condition 4 of Rule 5.167 and condition 3 of Rule 5.168 to recognise and provide for recreation values.
- H.62 ESAI seeks to delete the amendments to both condition 7 of 5.163 and condition 4 of 5.167. The submitter is concerned with the definition of vegetation clearance and the reference to the date and 'production land' in the definition.
- H.63 Forest and Bird seek to amend condition 8 of Rule 5.163 to "include detail on basis for and required details of permission".
- H.64 Several submitters, including Federated Farmers, Waitaki Irrigators Collective, RDRML and Erralyn Farm seek various amendments to condition 9 of Rule 5.163, condition 6 of Rule 5.167 and condition 5 of Rule 5.168 to enable the control pest weed species or exotic species.
- H.65 Meridian and Genesis state that the rules do not adequately recognise and provide for the operation and maintenance of power scheme assets, as vegetation removal may be necessary to operate and maintain the infrastructure. The submitters therefore seek amendments to exclude the operation, maintenance or repair of renewable hydro-electricity generation activities or network utilities.
- H.66 Forest and Bird seeks to amend condition 9 of Rule 5.163, condition 6 of Rule 5.167 and condition 5 of Rule 5.168 as "this condition is far too broad and unworkable for a permitted activity". The submitter requests:

From 5 September 2015, no vegetation clearance takes place and within in the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riverbed vegetation; and...

This Forest and Bird submission point received four further submissions in opposition from Hurunui Water, Federated Farmers, ESAI and Trustpower.

- H.67 Trustpower and RDRML seek to amend the activity status of any activity that does not comply with condition 9 of Rule 5.163 to discretionary from non-complying, to provide increased certainty.
- H.68 Transpower and RDRML support the exemptions in these rules and seek extension to apply to upgrading of network utilities or *nationally/regionally significant infrastructure*.

- H.69 ESAI seeks to delete the amendment to condition 3 of Rule 5.168. The submitter states that artificial watercourses are predominantly dry and effects would only occur if the watercourses were flowing when works were undertaken.
- H.70 Fish and Game seeks to include "upstream" as it relates to significant salmon spawning sites in condition 3 of Rule 5.168. Fish and Game state that reliance on adjacent isn't sufficient as it doesn't provide adequate protection at significant salmon spawning sites.
- H.71 Erralyn Farm seeks to delete condition 5 of Rule 5.168. The submitter states that the vegetation definition in the LWRP would appear to capture the removal of existing crop and pasture through cultivation of soil therefore "precluding a landowner undertaking emergency river protection planting or works riparian margins".
- H.72 DoC seeks to add a new condition to Rules 5.163 and 5.164 as "the person or agency responsible for the river or lake bed should be mentioned to consistent with condition two provisions for flood control". The requested condition reads:
 - "No vegetation shall be disturbed, removed, damaged or destroyed without the prior written permission of the person or agency responsible for the management of the river or lakebed".
- H.73 J Demeter seeks to insert new conditions into Rules 5.163, 5.167 and 5.168 as "no provision is made for retaining areas of significant indigenous vegetation". Specifically, J Demeter requests the following wording:
 - 5.163: <u>Vegetation is not removed from any areas of significant indigenous vegetation</u>
 5.167 & 5.168: <u>The vegetation clearance is not in any area of significant indigenous vegetation</u>
 Nesting river-birds are not located <u>within 100m of the activity.</u>
- H.74 Forest and Bird seek to include provisions to protect all braided rivers used by endangered bird species. No specific decision requested however the submitter states that "more needs to be done to enhance nesting outcomes".

Minor Changes to Rules 5.165, 5.166, 5.169, 5.170, 5.171 and 5.174

- H.75 The changes to Rules 5.165, 5.166, 5.169, 5.170, 5.171 and 5.174 read:
 - 5.165 The introduction or planting of any plant, or the removal and disturbance of existing vegetation in, on or under the bed of a lake or river <u>and any associated discharge of sediment or sediment-laden water</u> that does not comply with conditions 2 <u>or 9</u> of Rule 5.163 is a non-complying activity.
 - 5.166 The introduction or planting of any plant, or the removal and disturbance of existing vegetation in, on or under the bed of a lake or river <u>and any associated discharge of</u>

<u>sediment or sediment-laden water</u> that does not comply with condition 4 of Rule 5.163 is a prohibited activity.

- 5.169 Vegetation clearance and earthworks outside the bed of a river or lake or adjacent to a wetland boundary but within:
 - (a) 10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land and land shown as High Soil Erosion Risk on the Planning Maps; or
 - (b) 5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country

and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water that does not comply with one or more of the conditions in Rules 5.167 or 5.168 is a restricted discretionary activity.

The exercise of discretion is restricted to the following matters:

- 1. For forest harvesting, the harvesting method, location of haulage and log handling areas, access tracks, and sediment control; and
- 2. The actual and potential adverse environmental effects on soil quality or slope stability; and
- 3. The actual and potential adverse environmental effects on the quality of water in rivers, lakes or artificial watercourses or, wetlands $\frac{1}{2}$ and
- 4. The actual and potential adverse environmental effects on areas of natural character, outstanding natural features or landscapes, areas of significant indigenous vegetation, <u>indigenous biodiversity</u> ^A and significant habitats of indigenous fauna, mahinga kai areas or sites of importance to Tangata Whenua; and
- 5. The actual and potential adverse environmental effects on the banks or bed of a waterbody or on its flood carrying capacity; and
- The actual and potential adverse environmental effects on transport networks, neighbouring properties or structures.
- 5.170 Within the area shown as High Soil Erosion Risk on the Planning Maps and outside any riparian margin, the use of land (excluding any works for which a building consent has been obtained from the relevant local authority) for:
 - (a) Cultivation or spraying of slopes less than 25 degrees; or
 - (b) Cultivation or spraying on slopes greater than 25 degrees; provided that, the total area sprayed or cultivated is less than 200 m²; or
 - (c) Vegetation clearance of species (including by spraying) listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy; or
 - (d) Hand clearance and spot spraying of vegetation; or
 - (e) Silvicultural practices of release cutting, pruning or thinning to waste and harvesting in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007; or

- (f) Earthworks within a production forest undertaken in accordance with NZ Forest Road Engineering Manual (2012); or
- (g) Maintenance of existing firebreaks, roads and tracks and, during a fire emergency, construction of new firebreaks and tracks; or
- (ga) Construction of fences; or
- (h) Construction of walking tracks no more than 1.5 m wide; or
- (i) Maintenance of existing transport networks; or
- (j) Earthworks and vegetation clearance associated with the establishment, repair or maintenance of pipelines, electricity lines, telecommunication lines and radio communication structures and fences; or
- (k) Other earthworks where:
 - (i) the volume is less than 10 m³ per site or per hectare (whichever is the greater); and
 - (ii) the maximum depth of cut or fill is 0.5 m;

<u>and any associated discharge of sediment or sediment-laden water in circumstances</u> <u>where sediment may enter surface water</u> is a permitted activity, provided the following conditions are met:

- Any cleared areas are stabilised and where it is not put to its final use shall be revegetated within 6 months from the date of the commencement of the vegetation clearance or earthworks; and
- 2. Any cultivation is across the contour of the land; and
- 3. When firebreaks, roads, or tracks are constructed or maintained the maximum depth of cut or fill is 0.5 m; and
- 4. The concentration of total suspended solids in the discharge shall not exceed:
 - (a) 50 g/m³, where the discharge is to any Spring-fed river, Banks Peninsula river, or to a lake except when the background total suspended solids in the waterbody is greater than 50 g/m³ in which case the Schedule 5 visual clarity standards shall apply; or
 - (b) 100 g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100 g/m³ in which case the Schedule 5 visual clarity standards shall apply.
- 5.171 Within the area shown as High Soil Erosion Risk on the Planning Maps and outside any riparian margin, the use of land for vegetation clearance, cultivation and earthworks that does not comply with one or more of the conditions of Rules 5.170, or vegetation clearance, cultivations or earthworks activities not listed in Rule 5.170(a) to (k), and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a restricted discretionary activity.

The exercise of discretion is restricted to the following matters:

- The actual and potential adverse environmental effects on soil quality or slope stability; and
- 2. The actual and potential adverse environmental effects on the quality of water in rivers, lakes, <u>artificial watercourses or wetlands or the sea</u>; and

- 3. The actual and potential adverse environmental effects on areas of natural character, outstanding natural features or landscapes, areas of significant indigenous vegetation indigenous biodiversity and significant habitats of indigenous fauna, mahinga kai areas or sites of importance to Tangata Whenua; and
- 4. The actual and potential adverse environmental effects on a wetland or the banks or bed of a waterbody or on its flood carrying capacity; and
- 5. The actual and potential adverse environmental effects on transport networks, neighbouring properties or structures; and
- 6. In addition, for forest harvesting, the harvesting method, location of haulage and log handling areas, access tracks, and sediment control.
- 5.174 Within the Hill and High Country, the use of land for the burning of vegetation greater than 1 ha in area that is not provided for as a permitted activity under Rule 5.172 or as a controlled activity under Rule 5.173 is a discretionary activity.
- H.76 Forest and Bird seeks to have the amendments to Rules 5.165, 5.166, 5.169 and 5.171 retained. Federated Farmers seek to retain 5.174. Ngāi Tahu seek to retain matter of discretion (3) in Rule 5.171.
- H.77 ESAI seek to delete matter of discretion 3 of Rule 5.169 and matter of discretion 2 of Rule
 5.171. The submitter states that artificial watercourses a predominantly dry and would only be affected when flowing. Alternatively, the submitter seeks to reinstate the LWRP wording.
- H.78 DoC seeks to add a new condition to Rules 5.165 and 5.166 as "the person or agency responsible for the river or lake bed should be mentioned to consistent with condition two provisions for flood control". The requested condition reads:
 - No vegetation shall be disturbed, removed, damaged or destroyed without the prior written permission of the person or agency responsible for the management of the river or lakebed.
- H.79 The additional condition sought by DoC received seven further submissions. Five further submissions were received in opposition from Hurunui Water, RDRML, Federated Farmers, Fulton Hogan and Trustpower. Two submissions, from Forest and Bird and Ngāi Tahu, support the proposed condition.
- H.80 Trustpower seeks changes so that vegetation 'clearance' is referred to in these Rules, so that the rules "clearly distinguishes between those activities which constitute vegetation clearance in accordance with the definitions ..."
- H.81 Trustpower also seeks to change the activity status in Rules 5.165 because "it could have implications for the consenting of infrastructure located in beds of major rivers". Fulton Hogan and RDRML also seek the same amendments to Rule 5.165 to change the activity status from non-complying to discretionary or restricted discretionary.

- H.82 Forest and bird note that Rule 5.170(4) is not included in the PC4 amendments. However, the submitter seeks to include reference to 'wetlands' and 'spring-fed streams' in this Rule.
- H.83 Hurunui Water seeks retention of the additional term <u>'and any associated discharge of</u> sediment or sediment-laden water in circumstances where sediment may enter surface water'.

- H.84 As there are a number of changes to the rule framework, several of the issues raised in submissions have been dealt with in Section A of this report, relating to the protection of inanga spawning habitat and sites.
- H.85 A number of submissions have highlighted that indigenous vegetation ought to be protected, but not exotic vegetation. While the protection of indigenous vegetation is preferred, it is a reality that the banks and riparian areas of braided river systems are typically covered in exotic scrub, willows and other vegetation. As explained earlier, this vegetation does provide important habitat, shaded areas and other biodiversity values. In addition, the maintenance of these areas in riparian vegetation, rather than pasture, assists with the protection of water quality, particularly surface runoff contaminants. On this basis, I am unable to support restriction of the protections to indigenous species. However, I agree that the control of registered 'pest plants', ought not to require a resource consent to manage, and in my opinion, this is adequately addressed by the definition of vegetation clearance.
- H.86 Trustpowers request for use of the term 'vegetation clearance', rather than removal and disturbance of vegetation would widen the range of vegetation clearance activities that could be undertaken in the bed of a river. The 'vegetation clearance' terminology is used in relation to riparian vegetation and within the permitted activity conditions, and I consider this is appropriate. As the rule is currently drafted, any vegetation clearance in the bed of a river, including those that are excluded from the definition of "vegetation clearance", including crops and pasture and pest plants, may be captured by the rule. However, the permitted activity conditions would appear to be appropriate and not lead to unintended consequences.
- H.87 A number of submitters, primarily infrastructure providers, have sought a change in activity status to discretionary activity, for activities that breach proposed new condition 9. It is recognised that the establishment and maintenance of infrastructure, particularly where it is within or crosses the bed of a braided river, will require vegetation clearance as part of the maintenance activity. On this basis, the definition of vegetation clearance can be adjusted to accommodate this, rather than changing the activity status.

Recommendation

Retain definition of 'earthworks'.

Amend definition of 'vegetation clearance' to read:

means removal of vegetation by physical, mechanical, chemical or other means but excludes:

- a. cultivation <u>or harvesting</u> for the establishment of <u>forestry,</u>⁹⁴ crops or pasture <u>on</u> <u>production land established prior to 5 September 2015</u>;
- b. clearance for the establishment or maintenance of utilities, infrastructure⁹⁵, or structures;
- c. removal of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy;
- d. clearance for the purposes of maintaining existing fence lines, vehicle tracks, firebreaks, drains, ponds, dams or crossings; or
- e. domestic gardening and the maintenance of amenity planting;
- f. clearance by, or on behalf of, the Canterbury Regional Council for the purposes of maintaining the flood-carrying capacity of a river; or
- g. exotic vegetation clearance by the Department of Conservation or Land Information
 New Zealand for the purposes of pest management and maintenance of public access.

Amend new Policy 4.85A to read:

- 4.85A Indigenous biodiversity, habitats of indigenous fauna and flora, and the natural character of Canterbury's braided river systems is preserved through:
 - (a) preventing **further**⁹⁶ encroachment of activities into the beds and margins of lakes and rivers; and
 - (b) limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons

unless the vegetation clearance is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures or infrastructure network utilities⁹⁷, or maintenance of public access.

Retain Rules 5.163, 5.164, 5.165, 5.166, 5.167, 5.168, 5.169, 5.170, 5.171 and 5.174.

Discharge of Floodwaters – Definition of 'Floodwaters' & Rule 5.142

H.88 The new definition of 'floodwaters" reads:

means surface water that has inundated a property as a result of the breaching or over-topping of the banks of a surface water body.

H.89 Changes are also proposed to the definition of 'diversion'. However, there are no submissions on this change.

⁹⁴ Federated Farmers – PC4 LWRP-399

⁹⁵ Trustpower– PC4 LWRP-84

⁹⁶ Hurunui Water – PC4 LWRP-218

⁹⁷ Hurunui Water- PC4 LWRP-218

- H.90 The changes to Rule 5.142 and new Rule 5.142A read:
 - 5.142 The diversion of surface run-off water caused by flooding is discharge of floodwaters from a property to a river, lake or artificial watercourse to alleviate surface flooding is a permitted activity, provided the following conditions are met:
 - 1. The activity is undertaken by or on behalf of a local authority in accordance with a flood protection plan that has been certified by the Chief Executive of the Canterbury Regional Council as being in accordance with the CRC's River Engineering Section Quality and Environmental Management System Manual (March 2010) by the CRC. The discharge:
 - (1) is limited to a duration of 48 hours; and
 - (2) does not result in or exacerbate flooding of any other property; and
 - (3) does not cause or exacerbate erosion of any property or the bed or banks of any surface waterbody; and
 - (4) does not result in the destablisation of any lawfully established structure; and
 - (5) does not contain any hazardous substance; and
 - (6) is not from contaminated or potentially contaminated land.
 - 5.142A The discharge of floodwaters from a property to a river, lake or artificial watercourse
 to alleviate surface flooding that does not meet the condition of Rule 5.142, is a
 discretionary activity
- H.91 The deletion of Rules 5.143 and 5.144 received no submissions.

- H.92 Three submissions are on the definition of 'floodwaters'. Federated Farmers support the definition and state that the amendment is "helpful". The Oil Companies seek to delete the definition as it is much narrower and "is likely to be difficult to apply in practice".
- H.93 Selwyn DC supports the use of 'breaching' and 'overtopping' in the definition. Selwyn DC also state that the definition is too limited and therefore seek to amend the definition to add: <u>or</u> that has inundated a property as a result of surface run-off water.
- H.94 Four submissions are on Rule 5.142. The submissions from Selwyn DC, the Oil Companies and Waimakariri DC seek to delete the changes to the Rule. Selwyn DC considers the previous permitted activity rule (without PC4 (Omnibus) amendments) to be more appropriate to achieve the objectives and policies. Waimakariri DC question the practicality of the changes to the Rule, as some activities may require retrospective consent because of the conditions on the permitted activity rule. The Oil Companies state that the Rule is inappropriate and unenforceable. Of particular concern to the Oil Companies is condition 6 as should floodwaters flow onto a contaminated or potentially contaminated site, the property would be required to retain the floodwater while a discharge permit is sought.

H.95 Federated Farmers support the changes to the Rule and seek to delete condition 1, as there may be situation where, to alleviate flooding, there is a need to discharge floodwater for more than 48 hours.

Discussion

- H.96 The insertion of a new definition of 'Floodwater' is necessary as a consequence of the change to Rule 5.142 to address the discharge of floodwaters into a surface waterbody. The proposed amendments are intended to allow individual landowners more flexibility when discharging floodwater from their property to a waterbody. The proposed amendment also resolves the difficulty that arises between the existing rule and the definition of 'diversion'.
- H.97 In my opinion, the Selwyn DC concern is addressed within the rule itself, as in reality all surface water runoff has exceeded the capacity of a drainage system, artificial watercourses or stormwater system, leading to the "overtopping of the banks of a surface waterbody".
- H.98 The Oil Companies concern is, in my opinion, valid, in that it is difficult to contain and manage surface water flood flows that have resulted from the breaching or overtopping of the banks of a watercourse. It is unrealistic, should the floodwaters cross a contaminated site, to expect that the owner of a particular site will be able to manage those floodwaters. That said, in my opinion such a change to the rule would be at risk of not meeting the Section 70 requirements for permitted activities. On that basis, a small change is recommended that identifies that floodwaters that do not originate from a contaminated or potentially contaminated site are not captured by the conditions of the Rule.

Recommendation

Retain the new definition of 'floodwaters'.

Retain the definition of 'diversion'.

Amend Rule 5.142 to read:

- 5.142 The diversion of surface run off water caused by flooding is discharge of floodwaters from a property to a river, lake or artificial watercourse to alleviate surface flooding is a permitted activity, provided the following conditions are met:
 - 1. The activity is undertaken by or on behalf of a local authority in accordance with a flood protection plan that has been certified by the Chief Executive of the Canterbury Regional Council as being in accordance with the CRC's River Engineering Section Quality and Environmental Management System Manual (March 2010) by the CRC. The discharge:
 - (1) is limited to a duration of 48 hours; and
 - (2) does not result in or exacerbate flooding of any other property; and
 - (3) does not cause or exacerbate erosion of any property or the bed or banks of any surface waterbody; and

- (4) does not result in the destablisation of any lawfully established structure; and
- (5) does not contain any hazardous substance; and
- (6) does not originate is not potentially contaminated land.

Retain new Rule 5.142A.

Delete Rules 5.143 and 5.144.

Fine Sediment Removal from Rivers – Policy 4.92A, Rules 5.146A and 5.146B

H.99 New Policy 4.92A reads:

Fine Sediment Removal and Habitat Restoration

4.92A Enable catchment restoration activities that protect springheads, establish or enhance riparian margins, create restore or enhance wetlands, and remove macrophytes and fine sediment from waterways.

H.100 New Rules 5.146A and 5.146B read:

- 5.146A Despite any other rule in this Plan, the disturbance of the bed and banks of a river to remove fine sediment less than 2 mm in diameter for the sole purpose of habitat restoration, and the consequential damming, take, use and discharge of water in circumstances where contaminants may enter water is a restricted discretionary activity, provided the following conditions are met:
 - 1. The application for resource consent includes a management plan that describes:
 - (1) the location, timing and method of sediment removal, and the methods for management and disposal of that material; and
 - (2) the location of any sensitive ecological habitats and species located within, and 250 m downstream of, the works area; and
 - (3) an assessment of the environmental effects of the activity, including those effects that may occur downstream, and a description of how those adverse effects will be avoided or mitigated; and
 - The activity does not take place on any listed archaeological site; and
 - 3. Any damming of the waterbody will not occur for more than 12 hours at any one location; and
 - 4. The activity is undertaken more than 50m from any lawfully established surface water intake, or closer where written permission has been obtained from the owner of the surface water intake structure.

The exercise of discretion is restricted to the following matters:

⁹⁸ Oil Companies – PC4 LWRP-411

- 1. The content of the management plan including the comprehensiveness of the adverse effects identified and the adequacy of the proposed methods to mitigate any potential adverse effects; and
- The location, method and timing of sediment removal with respect to the life stage and habitat of sensitive ecological communities including fish and invertebrates; and
- 3. The potential adverse effects of the activity on downstream water quality, flows, drinking water supplies, surface water takes, bank stability, and significant habitats of indigenous fauna and flora; and
- 4. The effect of the activity on the reliability of any authorised surface water take; and
- The volume and rate at which water is abstracted and discharged to the river;
 and
- 6. The adverse effects of the activity on sites used for freshwater bathing as set out in Schedule 6; and
- 7. Any adverse effects on māhinga kai, wāhi tapu or wāhi taonga identified in any iwi management plan; and
- 8. The benefits of the activity to the applicant, community and the environment; and
- 9. Methods to restrict the activity when the river is at or below the minimum flow for that waterbody as set out in Sections 6 to 15 of this Plan, or any relevant catchment specific plan listed in section 2.8 of this Plan; and
- 10. Methods to restrict the maximum instantaneous rate of water abstraction to a rate not exceeding 50 percent of the flow in the river at the site being remediated.
- 5.146B The disturbance of the bed and banks of a river to remove fine sediment less than 2
 mm in diameter for the sole purpose of habitat restoration, and the consequential
 damming, take, use and discharge of water in circumstances where contaminants may
 enter water that does not meet one or more conditions of Rule 5.146A is a
 discretionary activity.

- H.101 Four submissions are on Policy 4.92A. Forest and Bird, J Demeter and Ngāi Tahu seek to retain the Policy. Forest and Bird and Ngāi Tahu support the policy because it is important to enable restoration and enhancement activities. Fish and Game support the Policy but are concerned that some macrophytes are important for the ecosystem health of waterways and therefore seek to amend the policy to restrict removal to *nuisance macrophytes*.
- H.102 Four submissions seek to retain Rules 5.149A and 5.149B, from Forest and Bird, Beef + Lamb NZ, Hurunui Water, J Demeter and Ngāi Tahu. Ngāi Tahu supports the removal of fine sediment for the sole purpose of habitat restoration. However, the submitter states it is unclear if the rule overrides the applicable sub-regional rules or not.

- H.103 Mackenzie DC seeks to delete Rule 5.146A. Mackenzie DC submission raises concerns about protection of community water supplies and community drinking water supplies.
- H.104 Selwyn DC generally supports both Rule 5.146A and 5.146B. However, the submitter states that the wording is "too restrictive" and requests that "for the sole purpose of" should be replaced with "where there are benefits for".

- H.105 A number of submissions provide overall support for the fine sediment removal provisions.
 None of the submission received on Policy 4.92A, Rule 5.146A or Rule 5.146B requested substantial amendments or highlights any concerns requiring substantial amendment.
- H.106 Fish and Game requested amendment to Policy 4.92A. However, the proposed amendment, referencing "nuisance macrophytes" is rather uncertain and would need subjective assessment in each case. In reality, the rules provide only for activities are undertaken "for the sole purpose of habitat restoration" which is likely to be sufficient to ensure there is an adequate consideration of beneficial macrophytes.
- H.107 The Selwyn DC submission on Rules 5.146A and 5.146B seeks to broaden the rule with the amendment to replace "for the sole purpose of" with "where there are benefits for". This amendment changes the intent of the Rule and opens the Rule to cover other activities to remove fine sediment not solely for habitat restoration. This may put at risk the ecological values the Rule is intended to protect, and is likely to result in unintended consequences.

Recommendation

Retain new Policy 4.92A.

Retain new Rules 5.146A and 5.146B.

I Gravel Extraction

I.1 PC4 (Omnibus) adds a new Policy 4.95A, and changes to Rules 5.148 to 5.150, are proposed to enable the provisions of the Canterbury Regional River Gravel Management Strategy to be given effect to when considering applications for resource consent to extract gravel. Amendments to Rule 5.149 are proposed to remove conditions that relate to effects which are managed through the Canterbury Regional River Gravel Management Strategy.

Policy 4.95A

- I.2 New Policy 4.95A reads:
 - 4.95A Effective management of rivers for flood control purposes is enabled, and erosion of riverbeds, banks and structures from the effects of gravel extraction is minimised, by aligning the duration and volume limits in any resource consent granted for the extraction of gravel with those set out in the Canterbury River Regional Gravel Management Strategy.

Submissions

1.3 One submission is on Policy 4.95A, from Federated Farmers. Federated Farmers opposes the new Policy and states that it is unnecessary as Policy 4.95⁹⁹ covers the matters addressed in Policy 4.95A and that anything additional could be covered as conditions under the relevant rules.

Discussion

1.4 While Policy 4.95 is related to Policy 4.95A, Policy 4.95A is considered to specifically strengthen the framework with respect to the Canterbury Regional Gravel Management Strategy and the abstraction of gravel that is authorised under that framework. This policy also enables ECan to directly consider the Canterbury River Regional Gravel Management Strategy, through reference to this policy, rather than the somewhat less direct "any other matter" in s104(c) when considering resource consent applications. Policy 4.95 is not considered to be adequately specific with respect to the Strategy, and accordingly new Policy 4.95A is recommended to be retained.

⁹⁹ Policy 4.95 reads:

^{4.95} For all gravel removal from the beds of rivers:

⁽a) the rate of gravel extraction does not exceed the rate of gravel recharge, except where stored gravel is available for extraction and in that case short-term extraction of stored gravel may occur at a rate that exceeds gravel recharge rates only to the point that bedloads are satisfactory for flood management purposes; and

⁽b) the activity is undertaken in ways which do not induce erosion (except for flood management purposes) and minimise adverse effects on water quality, significant indigenous biodiversity, wildlife habitat, sites of cultural significance to Ngāi Tahu, affect public access, and recreational values.

- I.5 The changes to Rules 5.148 and 5.149 read:
 - 5.148 The extraction of gravel from the bed of a lake or river including the deposition of substances on the bed and excavation or other disturbance of the bed of a lake or river is a permitted activity, provided the following conditions are met:
 - 1. The activity is not undertaken in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15; and
 - 2. No part of the activity occurs within flowing water; and
 - 3. The activity does not include the deposition of any substance, other than bed material, on the bed; and
 - 4. The volume excavated by any person or on behalf of any person, organisation or corporation:
 - (a) in the bed of any river or lake does not exceed 5 m³ in any 12 consecutive months; or
 - (b) between 1 February and 31 August, in the beds listed in Schedule 14, does not exceed 5 m³ per month and not more than 10 m³ in any 12 consecutive months period; or
 - (c) between 1 February and 31 August, in the beds listed in Schedule 15, does not exceed 10 m³ per month and not more than 20 m³ in any 12 consecutive months period; and
 - 5. Any excavated material (other than surplus or reject material) is removed from the bed within 10 days of the material being excavated; and
 - 6. Unless undertaken by the network utility operator responsible owner of for the structure, or written permission from the owner of the structure has been obtained, the activity is undertaken more than 50 m from any lawfully established dam, weir, culvert crossing, bridge, surface water intake plant or network utility pole or pylon, more than 150 m from any lawfully established water level recorder and more than 5 7.5 m of from any existing defences against water; and
 - 7. The activity and any associated equipment, materials or debris does not obstruct or alter access to or the navigation of the lake or river; and
 - 8. The activity does not include screening or any other processing of the gravel within the bed of the lake or river; and
 - 9. The activity is not undertaken in an inanga or salmon spawning site listed in Schedule 17, or in any inanga spawning habitat during the inanga spawning season of 1 March to 1 June inclusive; and
 - 10. Excavation shall not occur within 100 metres of birds which are nesting or rearing their young in the bed of the river.
 - 5.149 The extraction of gravel <u>from the bed of a lake or river</u>, including the ancillary deposition of substances on the bed and excavation or other disturbance of the bed

that complies with all the conditions in Rule 5.148, except with respect to the volume limits in condition 4 of <u>does not meet condition 4, 5, or 8 of</u> Rule 5.148, is a permitted activity, provided the following condition is met:

- 1. The extraction of gravel is undertaken by or on behalf of the CRC in conformance with the current version of the Canterbury Regional Gravel Management Strategy prepared to give effect to Policy 10.3.4 of the Canterbury Regional Policy Statement.
- 5.150 Any—The extraction of gravel from the bed of a lake or river including the ancillary deposition of substances on the bed and excavation or other disturbance of the bed where one or more of the conditions for that does not meet condition 1, 2, 3, 6, 7, 9 or 10 of Rule 5.148 or condition 1 of Rule 5.149 are not met is a discretionary activity.
- 1.6 Ten submissions were received on Rule 5.148. However, only four of the submissions relate to gravel extraction. The remaining six are made on inanga spawning, which is dealt with in Section A of this Report.
- I.7 Genesis, Meridian and Transpower all seek to have the changes made to Rule 5.148 retained. All three submitters specifically supported the changes made to condition 6. Condition 6 requires the approval of structure owners within set distances of gravel extraction activities. Genesis and Meridian stated that Condition 6 provides better recognition that the energy company "owns, operates and maintains nationally significant structures that could be affected by the extraction of gravel".
- I.8 Transpower gave similar reasoning for its support "Transpower supports the minor amendments to Rule 5.148 clause (6) because the amendments continue to provide for, and protect, Transpower's structures in lakes and riverbeds from effects associated with the extraction of gravel".
- 1.9 DoC seeks several amendments to Rule 5.148(4) and (5) as follows:
 - 4. The volume excavated by any person or on behalf of any person, organisation or corporation:
 - (a) in the bed of any river or lake does not exceed 5 m³ in any 12 consecutive months and occurs between 1 February and 31 July only; or
 - OR replace "August" with "July" in 5.148(4)(b) and (c):
 - (b) between 1 February and 31 August July, in the beds listed in Schedule 14, does not exceed 5 m³ per month and not more than 10 m³ in any 12 consecutive months period; or
 - (c) between 1 February and 31 August July, in the beds listed in Schedule 15, does not exceed 10 m³ per month and not more than 20 m³ in any 12 consecutive months period; and

and

- 5. Any excavated material (other than surplus or reject material) is removed from the bed within 10 days of the material being excavated <u>and the ground is levelled</u>; and
 - and, if the above relief is accepted, then delete condition 10.
- I.10 DoC seeks these changes to Rule 5.148(4) and (5) to provide better protection for birds against disturbance from gravel extractors during breeding time. The submitter states that the breeding season for riverbed birds begins in August, so the "rules managing extraction to avoid bird displacement should start on 31 July". The submitter states that if condition 4(a) of the Rule is amended to constrain the period within which the extraction may occur, then condition 10 will be redundant and should be deleted. The submitter's rationale for this is that a layperson will not be able to determine if there are birds nesting within the 100m of the activity and consequently expert advice may be required to establish this fact.
- I.11 In line with its other submission points, Whitewater NZ seeks to amend Rule 5.148(9) to recognise recreation values when gravel extraction is undertaken.
- I.12 Fulton Hogan seeks to remove the proposed changes made to Rule 5.149. The submitter refers to a previous submission on behalf of Fulton Hogan and Road Metals on the LWRP, where the submitters were concerned that the rule inequitably excludes parties, except for the CRC and its agents, from extracting gravel as a permitted activity and that this was not effects based.
- I.13 Fulton Hogan also states that the addition of the non-compliance with several conditions "will enable material to be left in the riverbed longer than 10 days and enable processing of gravel in the riverbed".
- I.14 A single submission in support of Rule 5.150 was received.

- 1.15 The submissions on changes to Rule 5.148 and 5.149 are generally supportive.
- I.16 The submission from DoC seeks, in the main, to add additional limitations that will provide further protection to nesting birds. These matters were not considered specifically as part of the PC4 (Omnibus) changes, and the reasoning given in the DoC submission is limited. Without additional specific analysis of the changed date ranges, and wider input from the public, the requested changes may be difficult to justify, in the light of the modest amount of gravel extraction permitted under this rule framework, compared with other activities that occur without control in riverbeds. Further evidential support would be required to justify its inclusion.
- I.17 The Fulton Hogan submission seeks to raise issues that were addressed during the LWRP hearings. During those hearings, the process for reliance on the Canterbury River Regional Gravel Management Strategy was discussed, and since that time that Strategy has been

finalised and come into effect. The policy framework has been strengthened in PC4 (Omnibus) around that Strategy, and the existing rule framework is considered appropriate to give effect to the revised Policy

Recommendation

Retain new Policy 4.95A.

Retain changes to Rules 5.148, 5.149 and 5.150.

J Sediment-Laden Water Discharges

J.1 PC 4 (Omnibus) includes the addition of a new definition, an amendment to a definition and policy, and makes amendments to several rules.

Definitions of "Sediment-laden Water" and "Recovery Activities"

J.2 The new definition of 'Sediment-laden Water' reads:

means water and entrained sediment arising from earthworks, geotechnical investigations, vegetation clearance, or the introduction or removal of vegetation, but excludes construction-phase stormwater which is separately defined.

J.3 The changes to the definition of 'Recovery Activity' reads:

means, in the context of responding to a natural disaster event for which a regional or national state of emergency was declared, extending, repairing or improving the integrity of any land, water body, or infrastructure, and any associated discharge of sediment-laden water arising as a result of that extension, repair or improvement, but excludes any discharges associated with the operation of infrastructure.

Submissions

- J.4 Forest and Bird seeks to have the new definition retained. The Oil Companies seek confirmation that the new definition does not consider 'dewatering' to be captured by this definition. The submitter states "as currently drafted the dewatering provisions refer specifically to groundwater or dewatering water and therefore the Oil Companies understand that the definition does not encapsulate dewatering water".
- J.5 One submission from the Oil Companies supports the definition of "Recovery Activities".

Discussion

- J.6 A new definition of 'sediment-laden water' is proposed to be inserted in order to constrain the types of discharges provided for in Rules 5.170 and 5.171 and to enable a distinction between construction-phase stormwater and discharges arising from other types of earthworks. "Dewatering" is separately defined in the LWRP.
- J.7 As the submissions are neutral or in support of the new definition of sediment laden water and the amended recovery activities definition, and no submitter opposes the definitions or seeks amendment, they are recommended to be retained.

Policies 4.76A and 4.18

- J.8 New Policy 4.76A reads:
 - 4.76A Adverse effects on surface water quality are minimised through limiting the concentration of sediment and other contaminants present in the dewatering water prior to its discharge to surface water.
- J.9 The change to Policy 4.18 reads:
 - 4.18 The <u>loss or</u> discharge of sediment <u>or sediment-laden water</u> and other contaminants to surface water from earthworks, including roading, works in the bed of a river or lake, land development or construction, is avoided, and if this is not achievable, the best practicable option is used to minimise the loss or discharge to water.

- J.10 Three submissions were received on Policy 4.76A. Forest and Bird seeks to have the new Policy retained and Ngāi Tahu and the Oil Companies seek to make amendments.
- J.11 Ngāi Tahu is supportive of "limiting the concentration of sediment and other contaminants present in dewatering water prior to discharge". However, the submitter opposes discharge of water directly to surface water and therefore seeks amendments to Policy 4.76A to "require that dewatering water is treated on or through land before being discharged to water".
- J.12 The Oil Companies seek that the requirement to limit the concentration be relaxed so that this is done 'as far as practicable' as the submitter states that "what is theoretically possible by way of minimisation is not necessarily reasonable having regard to effects". The submitter also seeks to have Policy 4.76A extended to apply to groundwater "to recognise that in some instances dewatering water [will be] be discharged to land onsite".
- J.13 Policy 4.18 received two submissions, which both seek to have the proposed amendments retained.
- J.14 Fonterra supports the use of the "best practicable option to minimise the loss or discharge of sediment or sediment-laden water and other contaminants to surface water from earthworks, etc."
- J.15 The Oil Companies state that the proposed amendments have not changed the intent of the policy and that the stance of the policy has been clarified.

- J.16 A new policy is proposed to specifically address discharges arising from dewatering activities. The policy directs that adverse effects on surface water quality are to be minimised through limits on the concentration of sediment and other contaminants present in the dewatering water. The proposed policy provides guidance for decision making on applications to carry out dewatering activities.
- J.17 The preference of Ngāi Tahu for discharge of water to land, rather than directly to surface water is recognised. This issue is a consistent theme in the Ngāi Tahu submission and is addressed in Section B of this Report, in relation to stormwater.
- J.18 The Oil Companies concerns relate to the standards not always being able to be met. In my view this is an appropriate circumstance by which case by case analysis under the resource consent framework is appropriate. In these situations, the quality of the water in the receiving environment, and the effect of the discharge on the values of that receiving environment can be specifically assessed.

Rules 5.109 and 5.119

- J.19 The changes to Rules 5.109 and 5.119 read:
 - 5.109 The taking of water from groundwater for the purposes of carrying out bore development or pumping tests, or incidental to geotechnical investigations, and the associated use and discharge of that water is a permitted activity, provided the following conditions are met:
 - 1. The take continues only for the time required to carry out bore development or a pumping test and in any event, the taking does not exceed 120 hours within any 14 day period and total no more than 10 days in any consecutive 12 month period per bore; and
 - 2. Any bore development or pumping test is carried out in accordance with Schedule 11; and
 - 3. An assessment of interference effects, undertaken in accordance with Schedule 12, does not show that any community, group or private drinkingwater supply bore will be prevented from taking water; and
 - 3A Bore development or pumping tests shall cease upon notification that the pumping may be preventing access to <u>any</u>
 - (a) community, group or private drinking water suppliesy; and or
 - (b) private drinking water supply, except any supply located on the property the test is being carried out on; and
 - 4. At the point and time of any discharge to surface water, the rate of flow in the river or artificial watercourse is at least five times the rate of the discharge.; and
 - 5. The concentration of total suspended solids in the discharge does not exceed:

- (1) 50 g/m³ to any spring-fed river, Banks Peninsula river, or to a lake; or
- (2) 100 g/m³ where the discharge is to any other river or to an artificial watercourse.
- 5.119 The taking of water from groundwater for the purpose of de-watering for carrying out excavation, construction, maintenance and geotechnical testing and the associated use and discharge of that water is a permitted activity, provided the following conditions are met:
 - 1. The take continues only for the time required to carry out the work but the take shall not last for a period exceeding 6 months; and
 - 2. The abstraction is not from a site where an activity or industry listed in Schedule 3 has occurred or is occurring; The take or discharge is not from, into, or onto contaminated or potentially contaminated land; and
 - 3. The take does not lower the groundwater level more than 8 m below the ground level of the site or cause subsidence of any other site; and
 - 4. The take does not have a moderate, high or direct stream depletion effect on a surface waterbody, determined in accordance with Schedule 9, unless the abstracted groundwater is being discharged to the surface waterbody to which it is hydraulically connected; and
 - 5. An assessment of interference effects, undertaken in accordance with Schedule 12, does not show that any community, group or private drinkingwater supply bore will be prevented from taking water; and
 - 6. At the point and time of any discharge to surface water, the rate of flow in the river or artificial watercourse is at least five times the rate of the discharge; and
 - 7. The concentration of <u>total</u> suspended solids in any discharge to a surface waterbody does not exceed:
 - (1) 50 g/m³ where the discharge is to any Spring-fed river, Banks
 Peninsula river, or to a lake or wetland; or
 - (2) __100 g/m³ <u>where the discharge is to any other river or to an artificial</u> <u>watercourse;</u> and
 - 7A The discharge after reasonable mixing with the receiving waterbody meets the visual clarity standards in Schedule 5; and
 - 8. The <u>point of</u> discharge is not within a Group or Community Drinking-water Protection Zone as set out in Schedule 1.
- J.20 Ngāi Tahu seeks to have condition (5) of Rule 5.109 retained. Ngāi Tahu supports "limiting the concentration of sediment in the discharge".
- J.21 Forest and Bird seeks to make several amendments to condition 5 of Rule 5.109 and condition 7 of Rule 119. Firstly, the submitter seeks to add 'wetland' and 'spring-fed streams'. The submitter states that wetland should be included "if it is intended that discharges to wetlands are to be allowed under this rule". In addition, to include 'spring-fed streams' for clarity, despite the RMA including 'streams' in the definition of 'river'. Secondly, the submitter considers that the lower limit of 50 g/m³ should apply to all rivers.

- J.22 In addition, the submitter seeks to include in Rule 5.109 the same condition as contained in condition 7A of Rule 5.119 which limits the extent to which the discharge may affect the visual clarity of the receiving waterbody.
- J.23 Ngāi Tahu supports the wording in condition 5 of Rule 5.119, but seeks amendments to the Rule, similar to those sought for Policy 4.76A, which require the dewatering water to be treated on or through land before entering a waterbody.
- J.24 The Oil Companies support the changes made to Rule 5.119 as they "do not change the thrust of the existing rule" and because "dewatering discharges from existing service stations will require consent but a potential permitted activity pathway exists for discharges from greenfield sites".

- J.25 The submissions on the relevant rules limiting the concentration of sediment discharge and providing additional protection to drinking water supplies are generally supported in submissions.
- J.26 Forest and Bird generally seeks greater levels of protection, both in terms of the waterbodies covered and a lowering of the sediment limit in the discharge to 50 g/m³ across all rivers.
- J.27 As the activities covered by these rules are generally short term in nature, and commonly occur in urban areas where water quality is often compromised by stormwater and other discharges, the technical advice is that the sediment discharge levels need to be improved for spring-fed and Banks Peninsula rivers. These rivers already experience considerable natural and induced sedimentation, and can have limited flushing capability.
- J.28 It is commonly accepted that reaching a level of 50 g/m³ will often require considerable treatment and management, especially during construction activities. The application of this sediment limit to all discharges entering waterways may lead to increased costs that are not commensurate with the environmental benefit gained from such a restriction and accordingly may not be the most appropriate way to manage these discharges.

Recommendation

Retain new definition of "sediment-laden water" and changes to the definition of "recovery activity".

Retain new Policy 4.76A and changes to Policy 4.18

Retain changes to Rules 5.109 and 5.119.

K Contaminated Land

K.1 PC4 (Omnibus) makes changes to contaminated land rules. A number of amendments are proposed to ensure consistent terminology throughout the LWRP. Other amendments are proposed to ensure the correct linkages between provisions and for clarification.

Policy 4.19

- K.2 The change to Policy 4.19 is as follows:
 - 4.19 The discharge of contaminants to groundwater from earthworks, excavation, waste collection or disposal sites and contaminated <u>sites land</u> is avoided or minimised by ensuring that:
 - (a) activities are sited, designed and managed to avoid the contamination of groundwater;
 - (b) existing or closed landfills and contaminated sites are managed and monitored where appropriate to minimise any contamination of groundwater; and
 - (c) there is sufficient thickness of undisturbed sediment in the confining layer over the Coastal Confined Aquifer System to prevent the entry of contaminants into the aquifer or an upward hydraulic gradient is present which would prevent aquifer contamination.
- K.3 The proposed deletion of the term 'site' in Policy 4.19 and its replacement with the term 'land' ensures alignment with the definition of 'contaminated land' in section 2.9 of the Plan.
- K.4 One submission was received from the Oil Companies on this Policy. The submitter seeks to also change clause (b) of this Policy to also refer to "contaminated land", rather than "contaminated sites". The Oil Companies state that the reference to 'site' is inconsistent with the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, which refers to "piece of land"¹⁰⁰, and the RMA, which includes a definition of contaminated land.

Discussion

K.5 The submission point from the Oil Companies is recommended to be accepted, as it ensures consistency with the remainder of the policy and the rule framework.

¹⁰⁰ See in particular Clause 5, which refers repeatedly to a "piece of land".

- K.6 The changes to Rules 5.81, 5.82, 5.119, 5.187 and 5.188 read:
 - 5.81 The use of land for an existing <u>a</u> cemetery, that existed as at 5 September 2015 and any ancillary discharge of contaminants into or onto land in circumstances where a contaminant may enter water, is a permitted activity.
 - 5.82 The use of land for a new cemetery or an extension to an existing cemetery <u>after 5</u> <u>September 2015</u>, and any ancillary discharge of contaminants into or onto land in circumstances where a contaminant or water may enter water, is a permitted activity, provided the following conditions are is met:
 - 1. Any new cemetery or an extension to an existing cemetery <u>after 5 September</u> 2015 is not located:
 - (a) within 20 m of a surface waterbody or the Coastal Marine Area; or and
 - (b) within 50 m of a bore used for water abstraction; or and
 - (c) within a Group or Community Drinking-water Protection Zone as set out in Schedule 1; or and
 - (d) where groundwater is less than 3 m below the ground surface; or and
 - (e) within the Christchurch Groundwater Protection Zone as shown on the Planning Maps.; and
 - (f) on contaminated or potentially contaminated land.
 - 5.119 The taking of water from groundwater for the purpose of de-watering for carrying out excavation, construction, maintenance and geotechnical testing and the associated use and discharge of that water is a permitted activity, provided the following conditions are met:
 - 1. The take continues only for the time required to carry out the work but the take shall not last for a period exceeding 6 months; and
 - 2. The abstraction is not from a site where an activity or industry listed in Schedule 3 has occurred or is occurring; The take or discharge is not from, into, or onto contaminated or potentially contaminated land; and
 - 3. The take does not lower the groundwater level more than 8 m below the ground level of the site or cause subsidence of any other site; and
 - 4. The take does not have a moderate, high or direct stream depletion effect on a surface waterbody, determined in accordance with Schedule 9, unless the abstracted groundwater is being discharged to the surface waterbody to which it is hydraulically connected; and
 - 5. An assessment of interference effects, undertaken in accordance with Schedule 12, does not show that any community, group or private drinking-water supply bore will be prevented from taking water; and
 - 6. At the point and time of any discharge to surface water, the rate of flow in the river or artificial watercourse is at least five times the rate of the discharge; and

- 7. The concentration of <u>total</u> suspended solids in any discharge to a surface waterbody does not exceed:
 - (1) 50 g/m³ where the discharge is to any Spring-fed river, Banks

 Peninsula river, or to a lake or wetland; or
 - (2) 100 g/m³ where the discharge is to any other river or to an artificial watercourse; and
- 7A The discharge after reasonable mixing with the receiving waterbody meets the visual clarity standards in Schedule 5; and
- 8. The <u>point of</u> discharge is not within a Group or Community Drinking-water Protection Zone as set out in Schedule 1.
- 5.187 The <u>passive</u> discharge of contaminants onto or into land from a contaminated site land onto or into land in circumstances where those contaminants may enter water is a permitted activity, provided the following conditions are met:
 - 1. There has been a site investigation report provided to the CRC in accordance with Rule 5.185; and
 - 2. The site investigation report identifies reasons for concluding that: <u>The</u> discharge does not result in the concentration of contaminants
 - (1) The concentration of contaminants in groundwater meets at the property boundary, or at any existing groundwater bore (excluding any monitoring bore located on the property), breaching the limits for groundwater set out in Schedule 8; or and
 - (2) The concentration of contaminants in the groundwater: at the property boundary, at the location of any existing groundwater bore (excluding monitoring bores), and at any point where the groundwater exits to surface water does not breaching the water quality standards in Schedule 5 for 90% of species; and
 - 3. At any point where the groundwater exits to surface water the discharge does not produce any:
 - (a) Conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) Conspicuous change in the colour or visual clarity.; or
 - (c) Emission of objectionable odour.
- 5.188 The <u>passive</u> discharge of contaminants onto or into land from a contaminated site land onto or into land in circumstances where those contaminants may enter water that does not meet one or more of the conditions in Rule 5.187 is a discretionary activity.
- K.7 Rule 5.83 received no submissions.

Submissions

K.8 Three submissions were received on Rule 5.82. Forest and Bird seek to retain Rule 5.82 however do not provide specific reasoning to support their decision requested.

- K.9 Mackenzie DC seeks to delete Rule 5.81 condition 1(c). The Mackenzie DC submission is in general opposition to group drinking water provisions. The decision requested has been incorrectly coded against 5.81 and should be coded against 5.82.
- K.10 Ngāi Tahu seeks to retain the new wording in condition 1(f) of Rule 5.82 as the submitter "supports limiting the activities that can occur on contaminated or potentially contaminated land". Ngāi Tahu also seek to amend the rule to ensure water supplies that supply more than one household but fewer than 25 people also be protected.
- K.11 Ngāi Tahu is also the only submitter on Rule 5.119. The submitter seeks to retain condition 2 for the same reasons as for Rule 5.82.
- K.12 Three submissions were received on Rule 5.187. Trustpower and the Oil Companies oppose this rule as it is based on 'passive' discharges and they are concerned about this will have "significant implications for consenting of contaminated land".
- K.13 Trustpower seeks to have the proposed amendments to Rule 5.187 deleted, or to have the term 'passive discharge' defined so that the ambiguity is resolved so that landowners will not be required to manage run-off or discharges they did not generate or do not have any control over.
- K.14 The Oil Companies seeks amendments to Rule 5.187 as follows:
 - 5.187 The <u>passive</u> discharge of contaminants onto or into land from a contaminated site land onto or into land in circumstances where those contaminants may enter water is a permitted activity, provided the following conditions are met:
 - 1. There has been a site investigation report provided to the CRC in accordance with Rule 5.185; and
 - 2. The site investigation report identifies reasons for concluding that: The site investigation report identifies reasons for concluding that #the discharge does not result in the concentration of contaminants
 - (1) The concentration of contaminants in groundwater meets at the property boundary, or atfor any existing groundwater bore (excluding any monitoring bore located on the property), or where there is a community groundwater protection zone, breaching the limits for groundwater set out in Schedule 8; or or otherwise the New Zealand Drinking-water Standards; and
 - (2) The concentration of contaminants in the groundwater: at the property boundary, at the location of any existing groundwater bore (excluding monitoring bores), and at any point where the groundwater exits to surface water does not breaching the water quality standards in Schedule 5 for 90% of species; and
 - 3. At any point where the groundwater exits to surface water the discharge does not produce any:

- (a) Conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
- (b) Conspicuous change in the colour or visual clarity; or
- (c) Emission of objectionable odour.
- K.15 These amendments are stated to create a risk-based approach to contaminated land management, consistent with the MfE guidelines, the effects based approach of the RMA and other rules in the LWRP, which are focused on the effects of the discharge.
- K.16 Both submitters state that this rule will require significant investment to provide for drilling and testing and Trustpower seeks a delay in implementation of the rule until 2018.
- K.17 The third submitter, J Demeter, supports the proposed amendments. However, the submitter states that there needs to be a condition requiring that passive discharges be identified, and a method to implement subsequent actions.
- K.18 The only submission received on Rule 5.188 is from the Oil Companies who seek to have the proposed amendments retained.

- K.19 The proposed changes involve amendments to Rules 5.187 and 5.188 to clarify that these rules apply only to 'passive' discharges from contaminated land, and that other 'non-passive' discharges are to be assessed under the specific activity-based rules.
- K.20 Proposed amendments to condition 2 of Rule 5.187 replace the word 'or' with 'and' to clarify that for an activity to be permitted, the discharge would need to meet both the Schedule 8 groundwater quality limits and the Schedule 5 surface water quality limits.
- K.21 These changes give effect to the intent outlined in the narrative report which formed part of Council's decisions on submissions on the LWRP which indicated that both limits must be met in order for the permitted activity status to be satisfied and ensure that only those discharges with an acceptable level of effect are permitted.
- K.22 Proposed amendments to conditions (2)(1) and (2) of Rule 5.187 are sought to ensure the correct linkages between the groundwater quality limits in Schedule 8 and the surface water quality limits in Schedule 5.
- K.23 The majority of the submissions on these rules support the changes made with respect to contaminated land.
- K.24 The area of disagreement relates to Rule 5.187 in relation to passive discharges. The crux of the disagreement appears to be the continual performance against the water quality limits in the LWRP, compared with the risk-based approach of requiring technical reporting that identifies the risk of passive discharges from the site occurring.

- K.25 I agree with the submitters that the costs for monitoring of contaminated land, particularly where there are groundwater resources involved, is likely to be significant. However, the rule itself does not require any monitoring. I am pf the view that the wording of the Oil Companies proposed rule is not likely to be adequate to prevent potentially significant adverse effects and will not be an improvement in certainty over the existing rule framework.
- K.26 With respect to the reference to the NZ Drinking Water Standards, Schedule 8 already refers to these Standards, but sets a limit of 50% of the Maximum Allowable Value. Further evidence would be necessary to show that this is inappropriate in the context of passive discharges.

Recommendation

Amend Policy 4.19 to read:

- 4.19 The discharge of contaminants to groundwater from earthworks, excavation, waste collection or disposal sites and contaminated <u>sites land</u> is avoided or minimised by ensuring that:
 - (a) activities are sited, designed and managed to avoid the contamination of groundwater;
 - (b) existing or closed landfills and contaminated sites land¹⁰¹ are managed and monitored where appropriate to minimise any contamination of groundwater; and
 - (c) there is sufficient thickness of undisturbed sediment in the confining layer over the Coastal Confined Aquifer System to prevent the entry of contaminants into the aquifer or an upward hydraulic gradient is present which would prevent aquifer contamination.

Retain changes to Rules 5.82, 5.83, 5.119 and 5.188.

Amend Rule 5.187 to read:

- 5.187 The <u>passive</u> discharge of contaminants onto or into land from a contaminated site land onto or into land in circumstances where those contaminants may enter water is a permitted activity, provided the following conditions are met:
 - 1. There has been a site investigation report provided to the CRC in accordance with Rule 5.185; and
 - 2. The site investigation report identifies reasons for concluding that: <u>The</u> discharge does not result in the concentration of contaminants:
 - (a) The concentration of contaminants in groundwater meets at the property boundary, or at any existing groundwater bore (excluding any monitoring bore located on the property), or where there is a

¹⁰¹ Oil Companies – PC4 LWRP-418

- <u>Community Drinking Water Protection Zone, 102</u> breaching the limits for groundwater set out in Schedule 8; or and
- (b) The concentration of contaminants in the groundwater: at the property boundary, at the location of any existing groundwater bore (excluding monitoring bores), and at any point where the groundwater exits to surface water does not breaching the water quality standards in Schedule 5 for 90% of species; and
- 3. At any point where the groundwater exits to surface water the discharge does not produce any:
 - (a) Conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
 - (b) Conspicuous change in the colour or visual clarity; or
 - (c) Emission of objectionable odour.

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¹⁰² Oil Companies – PC4 LWRP-435

L Stock Exclusion

L.1 PC4 (Omnibus) proposes a new rule (Rule 5.68A) to provide certainty regarding the spatial extent of the bed of a braided river for the purpose of the stock exclusion rules; and amends a condition of Rule 5.68 to limit the application of the rule with respect to the type of lakes that cattle are to be excluded from.

Rule 5.68A

L.2 New Rule 5.68A reads:

5.68A For the purposes of Rules 5.68 to 5.71 of this Plan:

- 1. The bed (including the banks) of a braided river is limited to the wetted channels, any gravel islands, the gravel margins, and
 - (1) the outer edge of any flood protection vegetation owned or controlled by the CRC for flood protection purposes; or
 - (2) where no flood protection vegetation owned or controlled by the CRC exists, 50m either side of the outer gravel margin as measured on any given day.
- 2. Any artificial lake is excluded, unless the artificial lake has been created as a result of the damming of a river.

- L.3 Thirteen submissions were received on Rule 5.68A. Four submissions were received in support. Forest and Bird and the Deer Farmers Association seek to retain the Rule. Ngāi Tahu supports the clarity the Rule brings and the distances it includes, and DoC seeks retention of the Rule as it gives effect to the RMA, NPSFM 2014, RPS, and protects the habitat of inanga/whitebait.
- L.4 Three submissions were received seeking to delete Rule 5.68A. Malmer Farms seeks to delete the Rule because it fails to provide the intended certainty regarding the outer limits of the bed of a braided river, particularly in regards to difficulties with plan implementation and enforcement. The submitter is concerned with the section 32 analysis and the potentially significant adverse consequences for the on-going legitimate use of freehold land.
- L.5 Erralyn Farm is also concerned with the uncertainty of Rule 5.68A and the section 32 analysis. Of particular concern to the submitter is the 50m setback not being supported by a robust technical assessment and other consequences including (but not limited to) effects on the legitimate use of freehold land (including land that has formed through accretion), increased fire risk, and the implications for weed and pest management.
- L.6 Federated Farmers states that it is not opposed to including a definition of braided river for clarity. However, the submitter seeks to delete the rule because of the potential to capture a

number of smaller waterways which meander within gravel beds and result in large areas of land being captured by the definition. The submitter states that the setback could also result in consent being required for normal farming activities and should exclude flood protection works such as stopbanks. The submitter alternatively seeks to amend the rule as follows:

5.68A For the purpose of Rules 5.68 to 5.71 of this plan:

- (1) The bed (including the banks) of a braided river the Waimakariri, Rakia,

 Rangitata and Waitaki Rivers is the wetted channels, any gravel islands and
 the gravel margins, and
 - (i) The outer edge of any flood protection vegetation owned or controlled by the CRC for flood protection purposes, and excludes stopbanks which are located on the landward side of any flood protection vegetation; or ..."
- L.7 Fonterra & Dairy NZ seeks to amend 5.68A(1)(2) as follows:
 - (2) where no flood protection vegetation owned or controlled by the CRC exists, **50m5m** either side of the outer **exposed** gravel margin as measured on any given day.
- L.8 Fonterra & Dairy NZ is concerned that very variable interpretation of "outer gravel margin" is possible and seeks amendments for clarification. The submitter also considers a 50m setback to be excessive and a setback of 50m either side of braided rivers in Canterbury is a very sizable area of production land that could no longer be used. The submitter therefore proposes a 5m setback which the submitter states "may be appropriate" as "preventing sediment and stock effluent entering waterways can be achieved by a significantly smaller setback".
- L.9 Waitaki Irrigators Collective seeks to amend 5.68A as follows:

<u>1. ...</u>

- (1) the outer edge of any flood protection vegetation owned or controlled by the CRC for flood protection purposes; or
- (2) where no flood protection vegetation owned or controlled by the CRC exists, 50m 10m either side of the outer gravel margin as measured on any given day.
- L.10 The submitter states that it is not clear why a distinction has been drawn between flood protection vegetation which is privately owned or controlled. The submitter is also concerned with the setback distance and uses an example of the Waitaki River where there is approximately 85km of river frontage. The introduction of the setback rule, the submitter states, "effectively means that they will need to obtain consent to farm dozens of hectares of highly productive land or else take the land out of production".
- L.11 H Rennie seeks to amend Rule 5.68A as follows:
 - 5.68A For the purposes of Rules 5.68 to 5.71 of this Plan:

- 1. The bed (including the banks) of a braided river is limited to the wetted channels, any gravel islands, the gravel margins, and
 - (1) the outer-inner edge of any flood protection vegetation owned or controlled by the CRC for flood protection purposes; or
 - (1a) where flood protection vegetation owned or controlled by the CRC is discontinuous, the edge of the river bed shall be determined by projecting a connecting continuation of the line of vegetation as if it were to continue to lie adjacent to the river bed in the manner it had been up to the point of discontinuation; or ...
- L.12 The submitter seeks to delete reference to Rule 5.68-5.71 because there is no scope to delete the definition of 'bed'. The submitter seeks the amendment 'inner edge' to better reflect the location of the bed of the river to enable "water averse stock" to drink water from the river. The submitter also seeks to include a new condition to provide for areas with discontinuous vegetation to continue the line as the setback and not require the 50m setback.
- L.13 Fish and Game seeks to amend Rule 5.68A(2) as follows:
 - 2. Any artificial lake is excluded, unless the artificial lake has been created as a result of the damming of a river; or the artificial lake discharges directly into a watercourse that is natural or leads to a natural watercourse.
- L.14 The submitter states that artificial lakes may become more degraded as a result of stock and other animals accessing them, therefore the submitter considers that where an artificial lake discharges directly into a natural watercourse or artificial watercourse that runs directly into a natural water course, then Rule 5.68A should apply.
- L.15 A submission from Waimakariri DC seeks to delay introduction of Rule 5.68A until the formation of the sub-region chapters to account for different sub-region characteristics. However, no specific date is requested.

- L.16 Rule 5.68A is proposed to provide certainty to the application of Regional Rules 5.68 to 5.71. The submissions received on Rule 5.68A highlight a general support for the intent to clarify the extent of a "braided river". However, a number of submissions seek amendments which would substantially change the intent of the Rule.
- L.17 A braided river is defined in the LWRP: "means any river with multiple successively divergent and rejoining channels separated by gravel islands". Federated Farmers stated in its submission that it is not opposed to a definition of 'braided river' and as an alternative to deleting the Rule specifically define what rivers are covered by the regional stock exclusion rules. H Rennie similarly seeks to amend the Rule to broaden the scope by not limiting the Rule to Rules 5.68 to 5.71. The intent of the Rule is to define the area of a braided river

- specifically for stock exclusion provisions, and it is considered that braided rivers do not need to be specifically listed as the definition is quite clear.
- L.18 Federated Farmers highlights a potential for other activities such as "normal farming activities" and flood protection works to be caught by Rule 5.68A. The rules only apply to stock exclusion and therefore do not require exemptions for flood protection works. As the intention is not to retrospectively require the removal of stock from existing farmland outside the active bed, an amendment to the Rule is proposed, in response to several submitters request for additional certainty.
- L.19 A number of submitters submitted on the outer setback limit of condition (1)(2). The Malmer Farms and Erralyn Farm submissions question the Section 32 analysis of the outer setback limit particularly in regards to the use of freehold land. An outer limit is required because of the nature of braided rivers, and because of the relationship of the proposed rule with the vegetation clearance provisions. Further, without such specificity, the nature of Canterbury's braided river systems means that some existing farming activities may be considered noncomplying or prohibited activities.
- L.20 The amendment to the vegetation clearance provisions, coupled with the stock exclusion rules amendments, are intended to manage areas within the braided river environment that have been cleared and used for stocking and ultimately restricting the natural movement of the braided river system. The outer setback limit protects the braided river system.
- L.21 The Waitaki Irrigators Collective submission seeks to amend the rule to apply to any flood protection area, and not just those administered by CRC. This amendment is too ambiguous as 'flood protection vegetation' is not defined. For the purpose of the rule to provide certainty as to the spatial extent of a braided river this requested amendment would reduce certainty, but may increase the areas protected.
- L.22 H Rennie seeks to add a new condition to Rule 5.68A for areas of the bed where flood protection vegetation is not continuous (see wording in paragraph L.11). I consider that proposed condition 2 adequately manages areas without flood protection vegetation. H Rennie's amendment does not take into account the meandering nature of braided rivers and it would introduce uncertainty if these are areas, possibly tens of kilometres long, where there is no flood protection vegetation, which would require estimation.
- L.23 Fish and Game seeks to amend condition (2) to broaden the condition to include artificial lakes that discharge either directly or indirectly to natural waterways (see wording in paragraph L.13). In order to be consistent with the suggested amendment to Rule 5.68 discussed below, recognition of artificial lakes that discharge into natural watercourses is considered appropriate.
- L.24 Finally, the delay of the introduction of Rule 5.68A, as sought by Waimakariri DC, is considered to be inappropriate as clarification of a braided river is required for the now operative provisions of the LWRP. The constrained bed definition applies an appropriate setback

distance between waterbodies and stock so as to ensure that any adverse effects on water quality and ecosystems arising from stock access (e.g. pugging, defecation etc) remain acceptable.

L.25 Additionally, the proposed changes overcome the implementation challenges arising from the broad definition of the 'bed' under the RMA. Such a definition potentially results in large areas of developed farmland being considered the 'bed' of the river, and as a result the rules apply a level of restriction to stock access on developed pastoral land that is not commensurate with the level of effect arising from those activities. Waiting for a sub-regional planning process to address this matter would not resolve the interim issue, or provide the necessary relief sought.

Rule 5.68

- L.26 The changes to Rule 5.68 read:
 - 5.68 The use and disturbance of the bed (including the banks) of a lake, river or a wetland by stock and any associated discharge to water is a permitted activity, provided the following conditions are met:
 - 1. The use or disturbance of the bed (including the banks) of a lake, river or wetland and any associated discharge to water is not categorised as a non-complying activity under Rule 5.70 or a prohibited activity under Rule 5.71; and
 - 2. The use or disturbance of the bed (including the banks) of a lake or river and any associated discharge to water is at a stock crossing point that is: (a) not more than 20 m wide; and (b) perpendicular to the direction of water flow, except where this is impracticable owing to the natural contours of the riverbed or adjoining land; and (c) aligns with a constructed track or raceway on either side of the crossing point; or
 - 3. The use or disturbance of the bed (including the banks) of a lake or river and any associated discharge to water that is not at a permanent stock crossing point does not result in:
 - (a) pugging or de-vegetation that exposes bare earth in the bed (including the banks) of a lake or river; or
 - (b) a conspicuous change in colour or clarity of the water, outside the Mixing Zone; or
 - (c) cattle standing in any lake; and
 - (1) lake located outside of the Hill and High Country Area; and
 - (2) lake located within a Lake Zone, as shown on the Planning Maps; and
 - (3) lake classified as a High Naturalness Waterbody; and
 - 4. The disturbance of a wetland does not result in a conspicuous change in colour or clarity of water, or pugging or de-vegetation that exposes bare earth.

- L.27 Seven submissions are on the changes to Rule 5.68.
- L.28 Two submissions seek to retain the PC 4 (Omnibus) amendments. DoC seeks to retain the rule as it gives effect to the RMA, NPSFM 2014, RPS, and protects the habitat of inanga/whitebait. Beef + Lamb support the proposed amendment to Rule 5.68.
- L.29 Ngāi Tahu and Federated Farmers seek to delete the proposed amendment to Rule 5.68. Ngāi Tahu supports the LWRP wording stating that "Ngāi Tahu supports 'cattle standing' not being permitted in any lake or waterbody, unless there is a good reason why this shouldn't be the case".
- L.30 Federated Farmers seeks to delete condition (3)(c) because it considers it to be unnecessary as the lakes of concern are protected in other ways; for example, located within the "Sensitive Lake Zones" with controlled activity status for farming activities, tight constraints on nutrient discharge and the requirement for farm environment plans. Alternatively, the submitter seeks to amend the condition to specify that it applies only to natural lakes, to exclude farm ponds and dams. The following amendment is sought:
- L.31 Amendments are sought by Forest & Bird, and Fish & Game. Forest and Bird seeks to either amend Condition 3(c)(1) as follows:
 - (1) lake located outside of within the Hill and High Country Area; and

Or delete Condition 3(c) because the submitter considers the condition to be too limited in its protection of Hill and High Country areas. The submitter considers that it is not appropriate for this to be a permitted activity in these areas.

- L.32 Fish and Game seeks to amend Condition 3(c)(1) as follows:
 - (c) cattle standing in any lake **or river; and**
 - (1) lake located **outside of within** the Hill and High Country Area.
- L.33 The submitter states that the proposed amendment restricts stock exclusion to only three defined lake types, where previously, cattle were prohibited from standing in any lakes. Fish & Game considers it is inappropriate to make this Rule more relaxed, as site damage and water quality degradation will occur if cattle are allowed to stand in lakes.

Discussion

L.34 The existing Rule 5.68(3) requires landowners to exclude cattle from standing in all lakes, irrespective of the location or sensitivity of the lake, the stocking density or the practicalities of excluding that stock (e.g. fencing).

- L.35 In response to Ngāi Tahu's submission to revert back to the rule applying to all lakes, and Fish and Game's submission to reinstate lake and insert river the PC4 (Omnibus) amendments were intended to remove the hill and high country lakes from the rule because the economic costs associated with implementing measures to exclude stock from lakes in the hill and high country area are not justified when compared against the environmental impacts that arise from this access.
- L.36 Further amending the rule to include rivers is too onerous and would require further analysis and assessment. This issue was discussed at some length in the LWRP hearings, and the existing LWRP rule was appealed by Federated Farmers. It was concluded that the inclusion of "rivers" is not appropriate. As such, the submissions from Forest and Bird and Fish and Game which seek to amend the rule to state "within" the hill and high country are also contradictory to the intent of PC4 (Omnibus), which is to strike an appropriate balance between the need for certainty, protection of water quality and the economic costs and practicalities of excluding stock in the hill and high country.
- L.37 Part of the relief sought by Federated Farmers does have merit. I agree that the definition of lake in the RMA is broad and Rule 5.68(3)(c) in its current drafting has potential to capture farm ponds. Limiting the rule to "natural" lakes may mean a number of large waterbodies, such as hydroelectric lakes and water storage dams would be excluded. A more precise exclusion is recommended to address those artificial lakes that stock could reasonably be expected to enter.

Recommendation

Amend Rule 5.68A to read:

5.68A For the purposes of Rules 5.68 to 5.71 of this Plan:

- 1. The bed (including the banks) of a braided river is limited to the wetted channels, any gravel islands, the gravel margins, and
 - (1) the outer edge of any flood protection vegetation owned or controlled by the CRC for flood protection purposes; or
 - (2) where no flood protection vegetation owned or controlled by the CRC exists, the lesser of:
 - (a) the distance from the outer gravel margin to land that was cultivated or in crop or pasture on 5 September 2015; or 103
 - (b) 50m either side of the outer gravel margin as measured on any given day.
- 2. Any artificial lake is excluded, unless the artificial lake has been created as a result of the damming of a river; or the artificial lake discharges directly into a natural watercourse. 104

¹⁰³ Waitaki Irrigators Collective – PC4 LWRP-254

¹⁰⁴ Fish and Game – PC4 LWRP-478

Amend Rule 5.68 as follows:

- 5.68 The use and disturbance of the bed (including the banks) of a lake, river or a wetland by stock and any associated discharge to water is a permitted activity, provided the following conditions are met:
 - 1. The use or disturbance of the bed (including the banks) of a lake, river or wetland and any associated discharge to water is not categorised as a non-complying activity under Rule 5.70 or a prohibited activity under Rule 5.71; and
 - 2. The use or disturbance of the bed (including the banks) of a lake or river and any associated discharge to water is at a stock crossing point that is: (a) not more than 20 m wide; and (b) perpendicular to the direction of water flow, except where this is impracticable owing to the natural contours of the riverbed or adjoining land; and (c) aligns with a constructed track or raceway on either side of the crossing point; or
 - 3. The use or disturbance of the bed (including the banks) of a lake or river and any associated discharge to water that is not at a permanent stock crossing point does not result in:
 - (a) pugging or de-vegetation that exposes bare earth in the bed (including the banks) of a lake or river; or
 - (b) a conspicuous change in colour or clarity of the water, outside the Mixing Zone; or
 - (c) cattle standing in any lake; and
 - (1) lake located outside of the Hill and High Country Area, other
 than any farm pond specifically constructed to provide stock
 water and that has no outlet to a water course¹⁰⁵; and
 - (2) lake located within a Lake Zone, as shown on the Planning

 Maps; and
 - (3) lake classified as a High Naturalness Waterbody; and
 - 4. The disturbance of a wetland does not result in a conspicuous change in colour or clarity of water, or pugging or de-vegetation that exposes bare earth.

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¹⁰⁵ Federated Farmers - PC4 LWRP-441

M Minor Corrections

M.1 The amendments included in this topic relate to a number of separate, minor changes to the LWRP. They are technical corrections of minor inconsistencies, omissions, and drafting errors in the LWRP and are considered to have minimal effect.

High Naturalness Waterbodies

Objective 3.14

M.2 Objective 3.14 reads:

Objective 3.14 Outstanding fresh water bodies <u>High naturalness waterbodies</u> and hāpua and their margins are maintained in a healthy state or are improved where degraded.

Submissions

M.3 The proposed amendments to Objective 3.14 are considered minor. There are two submissions on the objective from Trustpower and the DoC, both of which are in support of the proposed changes. Trustpower states that the changes will "assist in ensuring consistency across the terminology used in the objectives, policies and rules" of the LWRP. DoC seeks retention of the change as it gives effect to the RMA, NPSFM, RPS and the CWMS.

Definition of 'High Naturalness Waterbody'.

M.4 The new definition of 'High Naturalness Waterbody' reads:

means those hāpua, wetlands and natural state water bodies which are considered to have outstanding or significant characteristics and which are listed as high naturalness water bodies in Sections 6 to 15 of this Plan.

- M.5 Four submissions were received on the definition of 'high naturalness waterbodies'. Trustpower support the deletion of 'outstanding fresh water bodies' and support the proposed definition as it ensures consistency across the terminology used in the objectives, policies and rules. DoC also supports the definition as it gives effect to the RMA, NPSFM, RPS and the CWMS.
- M.6 Forest and Bird and Fish and Game support the definition in part, however seek to amend the definition to include water bodies subject to Water Conservation Orders. The submitter states that water bodies subject to Water Conservation Orders have been omitted from the definition and that water bodies subject to Water Conservation orders were in the definition

of 'outstanding fresh water bodies' that the definition replaces. This decision requested received four further submissions. Three in opposition (Trustpower, Federated Farmers and RDRML) and one in support (Fish and Game).

Discussion

- M.7 The insertion of the new definition of 'high naturalness waterbody' and deletion of the definition of 'outstanding fresh waterbodies' were included in PC4 (Omnibus) as minor changes. The term 'high naturalness waterbody' is used throughout the LWRP. However, the term is not defined. In contrast the term 'outstanding freshwater bodies' is defined in the LWRP but is only used once in Objective 3.14 and is not used in any policy or rule. Objective 3.14 is therefore amended by PC4 (Omnibus) to make it consistent.
- M.8 As all the submissions received on Objective 3.14 are in support of the objective, it is recommended to be retained without amendment.
- M.9 The submissions of Forest and Bird and Fish and Game on the definition of 'high naturalness waterbodies' highlight the omission of Water Conservation Order waterbodies. However, it is considered that not all Water Conservation Order waterbodies are high naturalness waterbodies and the waterbodies with Water Conservation Orders in Canterbury are recognised for a range of values. On this basis, it may not be appropriate to include waterbodies with Water Conservation Orders in the definition.

Definition of Animal Effluent

M.10 The change to the definition of 'animal effluent' reads:

means faeces and urine from animals other than humans, including associated process water, wash-down water, contaminants and sludge <u>but</u> excluding solid animal waste. <u>For the purposes of this definition, it does not include incidental animal effluent present in livestock processing waste streams</u>.

- M.11 The definition of 'animal effluent' received three submissions. ANZCO and Silver Fern Farms support the proposed amendments.
- M.12 EPFNZ & PIANZ (egg and poultry producers) seek to amend the definition of animal effluent to exclude "poultry wash-down water". The submitter seeks the amendment so that poultry wash down water is a permitted activity, as the submitter considers this will also exclude poultry wash down water from Rule 5.36, and makes the discharge permitted.

M.13 The submitter attached an appendix to the submission, which gives information about the nitrogen levels in poultry wash down water, from the two main types of poultry operations. The submitter concludes that for both operations, the small amounts of nitrogen discharged in poultry wash down water annually, is "likely to be below the level that would cause any adverse effect."

Discussion

- M.14 The definition is proposed to exclude incidental animal effluent present in livestock processing waste streams from the definition, so that these discharges are assessed against the more appropriate rules relating to discharges of industrial and trade waste (Rules 5.91 & 5.92), rather than those rules that manage the storage and discharge of animal effluent (Rules 5.33 5.37).
- M.15 Comments on the EPFNZ & PIANZ submission from Dr Lisa Scott of ECan is attached in Appendix B. Overall, the information provided by the submitter relies on a very limited set of data to support their position, being only one-off water quality tests from two poultry sheds on a single Canterbury farm. The main difference between poultry wash down water and other animal effluent appears to be lower volumes and rates of effluent application. The information from Dr Scott suggests that the test report shown is very limited and levels of contaminants are largely unknown.
- M.16 In addition, I note that the amendment seeks to distinguish between processing waste and animal effluent wastes. A simple exclusion from one definition will mean that the discharge is covered by other rules, and will not revert to permitted activity status, as the submitter appears to seek.

Policy 4.86

Policy 4.86 reads:

- 4.86 <u>Earthworks, and structures</u> <u>Activities that occur</u> in the beds or margins of lakes, rivers, wetlands, hāpua, coastal lakes and, lagoons are managed or undertaken so that:
 - (a) maintain—the character and channel characteristics of rivers including the variable channel characteristics of braided rivers <u>are maintained</u>;
 - (b) protect sites and areas of significant indigenous biodiversity values or of cultural significance to Ngāi Tahu are protected; and
 - (c) do not preclude any existing lawful access to the bed of the lake, river, wetland, hāpua, coastal lake, or lagoon for recreational, customary use, water intakes or supplies or flood control purposes, <u>is not precluded</u>, except where necessary to protect public health and safety.

Submissions

- M.17 Policy 4.86, which control activities in beds of lakes and rivers, received two submissions from Whitewater NZ and Forest and Bird. Forest and Bird seek to amend Policy 4.86(a) so that the natural character is 'preserved', not just 'maintained'.
- M.18 Whitewater NZ seeks to amend Policy 4.86(a) as a part of amendments sought to a number of policies and rules to recognise recreation values.

Discussion

- M.19 The proposed amendments to Policy 4.86 are grammatical changes to improve wording. The amendment requested in the Forest and Bird submission is recommended to be accepted as it will more closely align the Policy with Section 6(a) of the RMA¹⁰⁶.
- M.20 The Whitewater NZ submission is assessed in full in Section A of this Report.

Water for Construction Maintenance - Rule 5.116

M.21 The change to condition 4 of Rule 5.116 reads:

Rule 5.116(4) Where the take is from a water body with a minimum flow set in Sections 6 to 15, the take or diversion ceases when the flow is at or below the minimum flow, as measured estimated by the Canterbury Regional Council; and

Submissions

M.22 Forest and Bird also seek to amend 5.116(4) to delete the amendment, which replaced 'measured' with 'estimated', and states that "this is on waterbody with minimum flows, so estimates will be clearly inadequate".

Discussion

M.23 Forest and Bird has misunderstood the intent of the amendment. The minor change is needed to reflect the fact that in practice minimum flows for many waterbodies are estimated by ECan staff, often using correlations from other sites where flows are actually measured. The amendment does not change the function of the rule.

¹⁰⁶ Section 6(a) of the RMA states, as a matter of national importance:

⁽a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

Structures – Rules 5.135, 5.141A and 5.141B

- M.24 The changes to Rule 5.135 and new Rules 5.141A and 5.141B read:
 - 5.135 The placement, use, alterationing, reconstruction, maintenance or removal of pipes, ducts, cables or wires over the bed of a lake or river, whether attached to a structure or not, and associated support structures is a permitted activity, provided the following conditions are met:
 - 1. The pipes, ducts, cables or wires and associated support structures do not prevent access to or over the bed or to lawfully established structures or defences against water; and
 - 2. The activity is not undertaken in, on, or over the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15, unless the pipes, ducts, cables or wires are attached to an existing structure; and
 - 3. The pipes, ducts, cables or wires and associated support structures do not obstruct or alter navigation of the lake or river or reduce the flood carrying capacity of the waterway.
 - 5.141A The placement, installation, erection, reconstruction, alteration or removal of any structure, excluding dams, on, in or under the bed of a lake or river, and including any associated excavation, disturbance, diversion and discharge in the bed of a lake or river that does not comply with Rules 5.135 to 5.141 is a discretionary activity.
 - 5.141B Where not classified by any other Rule in this plan, the diversion or discharge of water and contaminants as a result of the excavation and disturbance of a river or lake bed, or the establishment of a structure or defence against water, is a discretionary activity.

Submissions

- M.25 Four submissions were received on Rule 5.135. DoC and Genesis seek to retain the proposed amendments and Transpower and Fonterra seek amendments.
- M.26 Transpower seek to amend the Rule because the submitter states the proposed amendments in PC4 (Omnibus) create inconsistencies in the management of activities relating to the establishment of support structures and their maintenance. The submitter states that even though support structures for pipes, ducts, cables and wires may be constructed throughout the year, support structures for pipes, ducts, cables and wires cannot be maintained between 1 March and 1 June.
- M.27 Fonterra seeks the reinstatement of the words 'use' and 'maintenance' back into Rule 5.135. Fonterra states that "provision for use and maintenance of pipes, ducts, cables, wires, bridges, and culverts (as was previously provided by rules 5.135 to 5.137), is appropriate and necessary".

- M.28 Four submissions were received on Rule 5.141A. The submissions from Meridian, Genesis, Hurunui Water and Fonterra received all seek to retain Rule 5.141A.
- M.29 Two submissions were received on Rule 5.141B. Both Hurunui Water and DoC seek to have the addition of this new Rule retained. Hurunui Water supports the new rule and the Restricted Discretionary activity status. DoC supports Rule 5.141B because "it gives effect to the RMA, NPSFM 2014, RPS and the CWMS."

Discussion

- M.30 The submissions from Transpower and Fonterra on the changes to Rule 5.135 seek to include 'use' and 'maintenance' in the Rule. However, the intent of the amendment was to delete 'use' and 'maintenance' so that use and maintenance activities are not subject to the condition of 5.135. Use and maintenance are therefore managed by Rule 5.139. If the relief sought was adopted, it may mean that some maintenance and use of structures would not be permitted. Recommendations in relation to Transpower's inanga spawning concerns have been made in Section A, and should alleviate the submitter's concerns.
- M.31 As all the submissions received on Rule 5.141A and 5.141B seek to retain the rule, it is recommended that both be retained without amendment.

Rule 5.145 & 5.146

M.32 Rule 5.145 reads:

- Rule 5.145 The <u>use of land for the</u> refuelling of vehicles or equipment in the bed of a lake or river is a permitted activity, provided the following conditions are met:
 - 1. The refuelling of machinery does not take place over the wet bed of a river or lake, or in any area where spills may enter surface water; and
 - 2. All refuelling and bulk deliveries are directly supervised by the equipment operator; and
 - 3. All mobile plant is refuelled in a designated area, Refuelling occurs on an impermeable <u>surface</u> base away from drains or watercourses and if not, drip trays are used; and
 - 4. All non-mobile plant has <u>a</u> drip trays or other spill-containment <u>equipment</u> installed.
- M.33 There are two submissions on Rule 5.145.
- M.34 Fish and Game seek to add a new condition to the Rule to read <u>Fuel is securely stored overnight</u> or removed from site. The submitter states the inclusion of this condition would help to prevent "water quality degradation that would impact ecosystem health and life supporting capacity".

- M.35 Fulton Hogan seeks to delete the PC4 (Omnibus) changes to condition 3. Fulton Hogan opposes the removal of the option to use drip trays, when refuelling in lake and riverbeds, from condition 3. The submitter is concerned that, given there are other options available, it would be "impractical and unnecessary" to develop impermeable surfaces wherever refuelling.
- M.36 No submissions were received on Rule 5.146.

Discussion

- M.37 An amendment to condition 3 of Rule 5.145 is proposed to refine the language and to address uncertainties in the application of the Rule. The Fulton Hogan submission does not resolve the uncertainties surrounding the existing wording, particularly relating to 'designated areas'. The requirement for impermeable surfaces is simply to enable leaks and spills to be captured, and it may be that a drip tray is adequate for this purpose. A preferred option may be to refuel mobile equipment outside of the bed of a lake or river, thereby reducing risk.
- M.38 The Hazardous Substances and New Organisms Act 1996 addresses the security of storage of fuel. On this basis, the Fish and Game submission is considered to be covered by the Hazardous Substances and New Organisms Act 1996 and duplication of requirements is not recommended.

Rules 5.154 - 5.156 and 5.176-5.178

- M.39 The changes to Rules 5.154 to 5.156 read:
 - 5.154 The damming of water in the bed of a river and the constructing, using, altering, maintaining and operating of dam structures within the bed of a river, and the use of land to store water, including any associated damming or impounding of water outside the bed of a river or natural lake is a permitted activity, provided the following conditions are met:
 - 1. For the damming or impounding of water outside the bed of a river or natural lake:
 - (a) the volume of water impounded is less than 20,000m³; or
 - (b) the maximum depth of water <u>impounded above ground level</u>
 (measured as the maximum vertical distance between the crest of the
 dam and the ground level immediately adjacent to the dam) is less
 than 3 4m; and
 - 5.155 The damming of water in the bed of a river and the constructing, using, altering, maintaining and operating <u>of dam</u> structures within the bed of a river, and the use of land to store water, including any associated damming of water outside the bed of a river or natural lake that does not meet <u>one or more of</u> the conditions of Rule 5.154 is a discretionary activity, provided the following conditions are met:

[no changes to conditions proposed]

- 5.156 The damming of water in the bed of a river, including the associated and the constructing, using, altering, maintaining and operating of structures within the bed of a river that does not comply with one or more of the conditions in Rule 5.155 is a non-complying activity.
- M.40 No submissions were received on Rules 5.176, 5.177 and 5.178 Earthworks over aquifers.

Submissions

- M.41 J Demeter seeks to add a new condition 2(h) to Rule 5.154: <u>The damming does not inundate</u> <u>the nests of any nesting river-birds.</u> The submitter requests this condition because the rule "has no provision for the inundation of nests of river beds".
- M.42 Federated Farmers seeks to amend 5.154(1)(a) as follows:

 the volume of water impounded <u>above ground level (where depth is measured as the vertical distance between the maximum water height within the dam and the natural ground level immediately adjacent to the dam)</u> is less than 20,000 m³; or ...
- M.43 The submitter supports the amendments made to condition (1)(b) "as it clarifies that the depth of water is measured as the height of the crest of the dam above ground level immediately adjacent to the dam". However, the submitter considers that it would be "useful to provide the same clarification to condition (1)(a), because the critical factor is the volume of water impounded above ground level immediately adjacent to the dam".
- M.44 Orari Water Users Group requests that Rule 14.4.1 of the LWRP should be amended to "reflect proposed Rule 5.154".
- M.45 Hurunui Water seeks to have both Rules amended to remove the proposed amendments made to them. The submitter opposes the amendments, which have removed the provision for the use of land to store water, as the submitter states that "this is a valid activity that is required to be provided for as part of an irrigation scheme that adopts water storage options".
- M.46 Whitewater NZ seeks to amend both Rule 5.154 and 5.155 to prevent a dam from being located "in any freshwater bathing sites listed in Schedule 6, in any key river recreation sites listed in Schedule 24". This submission is part of a substantial set of submission points. This is addressed in Section A.
- M.47 One submission was received on Rule 5.156 from Whitewater NZ. Whitewater NZ support the rule and do not state specific reasoning for support.

Discussion

- M.48 The intent of the changes included in PC4 (Omnibus) are to more closely align the rules with the Building Act amendments, and to remove controls for storage ponds outside of a lake or river bed.
- M.49 The Federated Farmers amendment may result in a different measurement method between the LWRP and the Building Act. For simplicity, the same criteria is more appropriate.
- M.50 Given that dams that meet the conditions of the permitted activity rule occur relatively infrequently and are relatively small in size, the potential for inundating river birds nests is low. This is especially so as these kinds of dams typically fill in the winter period, meaning their extend it largest in the spring-time.
- M.51 Hurunui Water may have misinterpreted the change to the Rules in relation to the storage of water outside the bed of a lake or river. The effect of the change will mean the actual use of land for this purpose will not be controlled by the LWRP. Therefore, the concern of the submitter is addressed.
- M.52 The Orari Water Users Group request in relation to aligning Rule 14.4.1 of the LWRP with these rules has merit. However, Section 14 of the LWRP is not amended by PC4 (Omnibus) and therefore may not be within scope of this plan change.
- M.53 As there is a single submission in support of Rule 5.156 it is recommended to the amendment be retained.

Schedule 9 – Assessment of Stream Depletion Effect

M.54 The changes to Schedule 9 read:

Notes:

- 1. This effect will be included in the surface water allocation irrespective of the rate of take
- 2. This effect will be included in the surface water allocation if the stream depletion effect exceeds the stream depletion effect cut-off in Sections 6 to 15, or where none has been set in Sections 6 to 15, 5 L/s

Submissions

M.55 DoC is the only submitter on this Schedule. DoC seeks to retain the amendments and states that the amendments "establishes regional limits within the Plan as required under the NPS (Freshwater), Part II of the Act, and the RPS".

Discussion

M.56 The minor correction to the notes included in this Schedule is required to correct the references the sub-region sections of the LWRP. As there is a single submission in support of the amendment it is recommended to be retained.

Recommendation

Retain all minor corrections except:

Amend Policy 4.86 as follows:

- 4.86 <u>Earthworks, and structures Activities that occur</u> in the beds or margins of lakes, rivers, wetlands, hāpua, coastal lakes and, lagoons <u>are managed or undertaken so that</u>
 - (a) maintain—the character and channel characteristics of rivers including the variable channel characteristics of braided rivers are maintained preserved¹⁰⁷;
 - (b) protect sites and areas of significant indigenous biodiversity values or of cultural significance to Ngāi Tahu are protected; and
 - (c) do not preclude any existing lawful access to the bed of the lake, river, wetland, hāpua, coastal lake, or lagoon for recreational, customary use, water intakes or supplies or flood control purposes, is not precluded, except where necessary to protect public health and safety.

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¹⁰⁷ Forest and Bird – PC4 LWRP-273

N Sewage, Wastewater and Industrial and Trade Wastes

- N.1 PC4 (Omnibus) makes changes numerous changes to sewage, wastewater and industrial and trade waste provisions. Specifically, amendments are made to the definition of 'sewage sludge' for the purposes of clarifying and constraining the definition and to ensure consistency between the terminology used in the definitions and the rules. Minor changes are proposed to give effect to proposed changes to the definition of 'sewage sludge', and to ensure consistency throughout the LWRP.
- N.2 In terms of wastewater, minor changes to remove the term 'domestic' from the phrase 'on-site domestic wastewater treatment system' are proposed to these rules as the existing term unnecessarily constrains the scope of this rule to applying to only those systems that serve domestic dwellings.
- N.3 Finally, minor changes are made to the industrial and trade wastes provisions to exclude the term 'wastewater' from the rules is proposed to ensure discharges of sewage and greywater are not considered against the industrial and trade waste rules.

Definitions - Wastewater, Bio-solids and Sewage Sludge

N.4 The change to the definition of 'Wastewater' reads:

means liquid waste (and liquids containing waste solids) from domestic, industrial or commercial premises, including, but not limited to, sewage, toilet wastes, wastewater and grey water(household wastewater from kitchens, bathrooms and laundries), sullage and trade wastes and but excludes stormwater, trade wastes and other industrial or trade process wastes.

N.5 The change to the definition of 'Bio-solids' reads:

means sewage or sewage sludge derived from a sewage treatment plant, that does not include animal effluent or products derived from industrial wastewater treatment plants, and that has been treated and/or stabilised to the extent that it is able to be safely and beneficially applied to land.

N.6 No submissions were received on the definition of 'Sewage Sludge'.

Submissions

- N.7 There are four submissions on the definition of 'wastewater'. The Oil Companies, Silver Fern Farms and Fonterra seek to retain the changes.
- N.8 The Oil Companies seek to retain the proposed amendments to 'wastewater' as the "clarification afforded by the amendments" are supported. Fonterra also seek to have the

amendments retained as the submitter is in support of confining the definition to apply to sewage and greywater and that "contaminants from industrial and trade waste processes are assessed under specific and more appropriate rules". Silver Fern Farms supports the amendments, which have clarified that the definition does not include industrial/trade processing waste.

- N.9 ANZCO seeks to amend the definition of 'wastewater': ...<u>trade wastes and other industrial or trade process wastes (which includes waste from livestock processing)</u>." The submitter seeks to clarify the ambiguity with how livestock processing is dealt with under the definition and Rule 5.91 Industrial and Trade wastes.
- N.10 ANZCO states that because Rule 5.91 includes 'livestock processing' and that as the amendments to the definition of 'wastewater' have excluded industrial and trade wastes, then ANZCO considers that there should be clarity that the discharge of processing waste from ANZCO's sites are not considered to be 'wastewater'. ANZCO is unsure whether livestock processing is included or excluded from Rule 5.91 and seeks the definition of wastewater be amended to make this clear.
- N.11 One submission was received from Fonterra on the definition of 'Bio-solids'. Fonterra seek to retain the proposed amendments because the "deletion of the reference to wastewater consequential to the amendments to the definition of 'wastewater'", is supported.

Discussion

- N.12 Minor changes to the wording of the definition are proposed to ensure the type of contaminants allowed for under this definition are constrained to only sewage and greywater. These changes will ensure consistency between the terminology used in the definitions and the rules.
- N.13 The ANZCO submission is considered to be consistent with the existing LWRP provisions (Rules5.91 and 5.92) which state that industrial or trade processing includes livestock processing.
- N.14 As single submissions were received on the definitions of 'On-site Wastewater Treatment System' and 'Bio-solids', both in support of the amendments to the definition, it is recommended that the amendments be retained.

Recommendation

Amend the definition of 'wastewater' to read:

means liquid waste (and liquids containing waste solids) from domestic, industrial or commercial premises, including, but not limited to, sewage, toilet wastes, Wastewater and grey water(household waste water from kitchens, bathrooms and laundries), sullage and trade

wastes and but excludes stormwater, trade wastes and other industrial or trade process wastes including livestock processing. 108

Retain the definition of 'biosolids'.

Retain the definition of 'Sewage sludge'.

Policy 4.28 and Rule 5.84

- N.15 Policy 4.28 reads:
 - 4.28 The disposal of <u>sewage</u> sludge from the treatment of human effluent:
 - (a) does not contaminate any drinking-water supply;
 - (b) avoids adverse effects on people's health or safety, on human or stock water supplies and on surface water beyond the site boundary;
 - (c) does not restrict activities on adjoining properties; (d) avoids creating a dust nuisance on adjoining properties.
- N.16 Rule 5.84 received no submissions.

Submission

N.17 One submission from Fonterra was received on this Policy. Fonterra seeks to have the change retained and states that the addition of the word 'sewage' provides clarity "as to what sort of contaminant it applies to".

Discussion

N.18 As there is a single submission on Policy 4.28 in support of the change, it is recommended that the change be retained.

Recommendation

Retain the changes to Policy 4.28 and Rule 5.84.

Definition of On-Site Wastewater Treatment System

N.19 The changes to the definition of 'on-site wastewater treatment system' reads:

means a system that receives domestic wastewater from a single site <u>property</u> and treats and applies the wastewater to a land application system on the site <u>property</u>. Such domestic

¹⁰⁸ ANZCO - PC4 LWRP-150

wastewater includes that from facilities serving staff/employees/residents in institutional, utility, commercial and industrial establishments.

Submissions

- N.20 One submission was received from Fonterra on the definition of 'on-site wastewater treatment system'. Fonterra seeks to have the proposed amendments retained as the submitter supports the deletion of the word 'domestic' so that the definition also applies to commercial operations. The submitter also supports the reference to 'property' instead of 'site', as the LWRP defines property as a piece of land that may contain several certificates of title, whereas 'site' "essentially refers to a single certificate of title".
- N.21 The Fonterra submission, in relation to the change of the definition, identifies support for the change, and no submission seeks any further changes.

Recommendation

Retain the changes to the definition of 'on-site wastewater treatment system'.

Rules 5.7 and 5.8

- N.22 The changes to Rules 5.7 and 5.8 read:
 - Rule 5.7 The discharge of wastewater from an existing on-site domestic wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:...
 - Rule 5.8 The discharge of wastewater from a new, modified or upgraded on-site domestic wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:...

Submissions

- N.23 There are four submissions on Rule 5.7 and six on Rule 5.8. Five of the submissions on Rules5.7 and 5.8 relate to Group and Community Drinking Water Supplies and are addressed in Section D of this Report.
- N.24 DoC seeks substantial amendments to Rules 5.7 and 5.8 primarily to provide for 'back country huts':
 - 5.7 The discharge of wastewater from an existing on-site domestic wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:

- 1. The discharge consists of contaminants associated with domestic or backcountry hut wastewater only; and
- 2. The onsite system was installed and operational prior to 6 October 2015; and
- 3. The discharge does not exceed 2 m³ per day; and
- 4. The discharge site is onto or into a site that is equal to or greater than 4 hectares in area; and
- 5. Inflow or infiltration of stormwater, other surface water and groundwater to the system is minimised; and
- 6. For backcountry huts, the greywater huts, the greywater treatment and disposal system is operated and maintained within the system design specification for maintenance, which shall be provided to ECan by 31 December 2023, or
- 1. The discharge was lawfully established prior to 1 November 2013; and
- The treatment and disposal system has not been altered or modified from that established at the time the system was constructed, other than through routine maintenance; and
- 3. The volume of the discharge has not been increased as a result of the addition of buildings, an alteration of an existing building, or a change in use of a building that is connected to the system; and
- 4-7 <u>For domestic systems</u> ** the treatment and disposal system is operated and maintained in accordance with the system's design specification for maintenance or, if there is no design specification for maintenance, Section 6.3 of New Zealand Standard AS/NZS 1547:2012 On-site Domestic Wastewater Management; and
- 5. The discharge is not onto or into land:
 - (a) where there is an available sewerage network; or
 - (b) that is listed as an archaeological site; or
 - (c) where the discharge would enter any surface waterbody; or
 - (d)(c) within 20 m of any surface waterbody or the Coastal Marine Area; or
 - (e)(d) within 50 m of a bore used for water abstraction; or
 - **(f)(e)** within a Group or Community Drinking-water Protection Zone as set out in Schedule 1 of this Plan; or
 - (g) where there is, at any time, less than 1 m of vertical separation between the discharge point and groundwater; and
- 6. The discharge does not result in wastewater being visible on the ground surface; and
- 7. The discharge does not contain any hazardous substance
- 5.8 The discharge of wastewater from a new, modified or upgraded on-site domestic wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:
 - 1. The discharge consists of contaminants associated with domestic or back country hut wastewater only; and

- **2a**.(2) The discharge is not located within an area where residential density exceeds 1.5 dwellings per hectare and the total population is greater than 1000 persons; and
- 1.(3) The discharge volume does not exceed 2 m³ per day; and
- **2.** (4) The discharge is onto or into a site that is equal to or greater than 4 hectares in area; and
- (5) In flow or infiltration of stormwater, other surface water and groundwater to the system is minimised; and
- 6. For backcountry huts, the greywater treatment and disposal system is operated and maintained within the system design specification for maintenance: or
- **4.**(7) <u>For domestic t</u>∓he treatment and disposal system is designed and installed in accordance with Sections 5 and 6 of New Zealand Standard AS/NZS 1547:2012 On-site Domestic Wastewater Management; and
- **3.**(8) The discharge is not onto or into land:
 - (1) where there is an available sewerage network; or
 - (2) that is contaminated or potentially contaminated; or
 - (3)(2) that is listed as an archaeological site; or
 - (4) in circumstances where the discharge would enter any surface waterbody; or
 - (5)(3) within 20 m of any surface waterbody or the Coastal Marine Area; or
 - (4) within 50 m of a bore used for water abstraction; or
 - (7)(5) within a Group or Community Drinking-water Protection Zone as set out in Schedule 1; or
- (8) where there is, at any time, less than 1 m of vertical separation between the discharge point and groundwater; and
- 5. The treatment and disposal system is operated and maintained in accordance with the system's design specification for maintenance or, if there is no design specification for maintenance, Section 6.3 of New Zealand Standard AS/NZS 1547:2012 On site Domestic Wastewater Management; and
- <u>6-(9) The discharge does not result in wastewater being visible on the ground</u> <u>surface; and</u>
- 7-(10) The discharge does not contain any hazardous substance.
- N.25 For both Rules 5.7 and 5.8, DoC seeks to amend the rules to enable wastewater (greywater) from backcountry huts as the submitter states that greywater has less cumulative effect as compared to the discharge of nitrogen and phosphorus from farming activities. The submitter states that other regions such as Southland, makes this activity permitted, but within limits. In addition, the DoC seek to delete several conditions such as stating that Rule 5.7(5)(c) "contradicts the purpose of the rule", and Rule5.7(5)(g) is "void for want of certainty".

Discussion

- N.26 The substantial changes sought by DoC are to address perceived uncertainty in the Rule and to provide for wastewater from back-country huts. I am unable to support the changes that DoC seeks that purport to make the Rules more certain. It is my understanding that the Rules are being administered effectively, and there are not ongoing concerns with respect to uncertainty.
- N.27 With respect to back-country huts, I understand the concern of DoC, and recommend changes that will address their concern. This is recommended to be in a somewhat different framework to what has been requested by DoC, to enable a simpler rule framework.

Recommendation

Retain changes to Rules 5.7 and 5.8.

Add a new Rule 5.8A:

- 5.8A The discharge of wastewater from an existing, new, modified or upgraded back country hut wastewater treatment system onto or into land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:
 - 1. The discharge volume does not exceed 2 m³ per day; and
 - 2. The treatment and disposal system is operated and maintained within the system design specification for maintenance; and
 - 3. The discharge is not onto or into land:
 - (1) where there is an available sewerage network; or
 - (2) that is contaminated or potentially contaminated; or
 - (3) that is listed as an archaeological site; or
 - (4) in circumstances where the discharge would enter any surface waterbody; or
 - (5) within 20 m of any surface waterbody or the Coastal Marine Area; or
 - (6) within 50 m of a bore used for water abstraction; or
 - (7) within a Community Drinking-water Protection Zone as set out in Schedule 1; or
 - (8) where there is, at any time, less than 1 m of vertical separation between the discharge point and groundwater; and
 - 4. The discharge does not result in wastewater being visible on the ground surface; and
 - 5. The discharge does not contain any hazardous substance.

Rules 5.91 and 5.92

- N.28 The changes to Rules 5.91 and 5.92 read:
 - 5.91 The discharge of any wastewater, liquid waste or sludge waste from an industrial or trade process, including livestock processing, excluding sewage wastewater, into or onto land, or into or onto land in circumstances where a contaminant may enter water is a permitted activity, provided the following conditions are met:
 - 1. The volume of the discharge does not exceed 10 m³ per day; and
 - 2. The discharge is at a rate not exceeding 5 mm per day; and
 - 3. The discharge does not contain any hazardous substance; and
 - 4. The discharge is not:
 - (a) directly to a surface water body, or within 50 m of a surface water body, a bore used for water abstraction, a dwelling house, school, community facility or the Coastal Marine Area; or and
 - (b) within a Group or Community Drinking-water Protection Zone as set out in Schedule 1; or <u>and</u>
 - (c) within the Christchurch Groundwater Protection Zone as shown on the Planning Maps; or and
 - (d) onto or into land over an unconfined or semi-confined aquifer, where the land has less than 0.3 m depth of soil; or and
 - (e) within any area or zone identified in a proposed or operative district plan for residential or commercial purposes; or and
 - (f) within a Nutrient Allocation Zone identified as "At Risk" (Orange) or "Water Outcomes Not Met" (Red) on the Planning Maps, unless the discharge contains no nitrogen or phosphorus, or otherwise causes a limit in Schedule 8 to be exceeded; or and
 - (g) onto or into contaminated or potentially contaminated land.
 - 5.92 The discharge of any wastewater, liquid waste or sludge waste from an industrial or trade process, including livestock processing, excluding sewage wastewater, into or onto land, or into or onto land in circumstances where a contaminant may enter water that does not meet one or more of the conditions in Rule 5.91 is a discretionary activity.

Submissions

- N.29 Rule 5.91 received six submissions. Submissions from Ngāi Tahu and Mackenzie DC have been addressed in Section D Group and Community Drinking Water Supplies. Two submissions were received in support from Forest and Bird and the Oil Companies.
- N.30 The Oil Companies seek to retain the proposed amendments to Rules 5.91 and 5.92. The submitter states "the removal of the reference to wastewater is appropriate and reflects that they are appropriately addressed by specific rules pertaining to wastewater".

- N.31 J Demeter seeks to amend Rule 5.91 to add a condition to determine which contaminants are acceptable or not, as the submitter states, "there is no consideration of the nature of the contaminants in the waste".
- N.32 ANZCO seeks to address the ambiguity in Rule 5.91. ANZCO states that livestock processing is included in Rule 5.91, however 'wastewater' is excluded. This ambiguity is caused by the definition of wastewater, which excludes 'trade wastes and other industrial or trade process works'. ANZCO is unsure whether livestock processing is included or excluded from Rule 5.91 and seeks the definition of wastewater be specifically amended to specifically include livestock processing or to exclude livestock processing by adding a definition of sewage.
- N.33 ANZCO seek to amend Rule 5.92 by including "an advice note to ensure that trade wastes from the processing activities captured under these rules are not inadvertently captured under other rules that could be interpreted as also applying, due to the components in a livestock processors waste stream". As a consequential change to this, ANZCO also seek to add a definition of farming activity to reinforce that farming activity excludes livestock processing operations including the discharges to land.
- N.34 ANZCO seeks to add a definition for 'Farming Activity' as follows:

means the activity of growing crops and/or raising livestock. This does not include livestock processing operations including their discharges to land.

Discussion

- N.35 The changes to Rules 5.91 and 5.92 are intended to improve certainty in the rule framework with respect to industrial waste streams, as well as livestock processing and animal effluent waste streams.
- N.36 In my opinion, there is no need for a definition of "farming activity", and to include such a definition could have unintended consequences for other parts of the LWRP. However, I understand the concern of ANZCO that wastewater from livestock processing is typically irrigated onto land from which the grass is cut and removed, in a "cut and carry operation", rather than a typical farming operation. It is understandable that the submitter is concerned that resource consent will be required under this Rule, with a full assessment of effects and suite of management conditions, and then potentially consent being required under the farming activity rules. This is inefficient and it is suggested that the note sought by the submitter, with some modifications, is included.

Recommendation

Retain the changes to Rules 5.91 and 5.92.

Add a note under Rule 5.92:

| Note: If operating under a resource consent granted pursuant to Rule 5.92 for the discharge of liquid |
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| waste from livestock processing, which includes limits on the amount of nutrients that may be |
| discharged, no resource consent is required under Rules 5.41 – 5.64. 109 |
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| ¹⁰⁹ ANZCO– PC4 LWRP-614 |

O Water Takes and Water Supply Strategies

- O.1 The proposed changes to water takes and water supply strategies seek to clarify the intent of the current provisions and ensure that the activity status is aligned with their anticipated effects.
- O.2 In particular, the proposed amendments involve minor amendments to the wording in Rules 5.111, 5.116, 5.123 and 5.128 to add clarity to the rules and provide clearer links to the water supply protection zones. Rule 5.114A has been included to remove an unintended consequence that arises as a result of the architecture of the water take rules.
- O.3 The inclusion of Rule 5.114A rectifies this by assigning a restricted discretionary status to any take that does not comply with the 20m setback.

Definition of Community Water Supply

O.4 The change to the definition of Community Water Supply reads:

means water taken primarily for group drinking water supply and includes group drinking water supply, and community drinking-water supply, but and includes that may also be used for other purposes such as supply to institutional, industrial, processing, <u>or</u> stockwater <u>purposes</u>, or amenity irrigation use and fire-fighting activities.

- O.5 ANZCO seeks to amend the definition of 'Community Water Supply' to clarify that water taken for livestock processing is a primary use of water from a community water supply. ANZCO requested the definition to read:
 - means water taken **primarily** for group drinking-water supply and includes group drinking-water supply, but and includes that may also be used for other purposes such as supply to for institutional, industrial, processing, or stockwater purposes, or amenity irrigation use and fire-fighting activities
- O.6 The Mackenzie DC seeks to delete all changes made to the amendments to the three definitions Community Drinking-water Supply, Community water Supply and Group Drinking Water Supply.

Discussion

O.7 The ANZCO submission seeks to change the nature of these water takes to enable the tasking of water, as a restricted discretionary activity, for water takes for livestock processing, without the need for this to be secondary to supply to 'people'. This change would have the effect of elevating some purely commercial uses of water above others, in that they would not be subject to the same limits. In the absence of any compelling reason to do so, and a way to

address the potential for equity issues between competing commercial interests in water, the change is not supported.

Policy 4.49, Rule 5.115 and Schedule 25

- O.8 The change to Policy 4.49, Rule 5.115 and new Schedule 25 read:
 - 4.49 Enable the taking of water for a community water supply by not requiring compliance with any minimum or residual flow or partial restriction conditions and the environmental flow and allocation regime or groundwater allocation limit provided a water supply strategy <u>developed in accordance with Schedule 25</u> is in place and the water supply is so managed as to restrict the use of water from those supplies during periods of low flow or water levels.
 - 5.115 The taking and using of water for a community water supply from groundwater or surface water is a restricted discretionary activity, provided the following conditions are complied with:
 - 1. A Water Supply Strategy <u>prepared in accordance with Schedule 25</u> is submitted with the resource consent application; and
 - 2. Where the application seeks water for purposes other than drinking water, the application shall identify which components are not related to drinking water, and which of those are existing or new activities.

The exercise of discretion is restricted to the following matters:

- 1. The reasonable demand for water, taking into account the size of the community, the number of properties and stock that are to be supplied, the uses that are to be supplied and the potential growth in demand for water; and
- 2. The effectiveness and efficiency of the distribution network; and
- 3. The quality and adequacy of, compliance with and auditing of the Water Supply Strategy; and
- 4. The actual and potential adverse effects on other water takes, including reliability of supply; and
- The effect on the environmental flow and allocation limits within the relevant sub-region Sections 6 to 15; and
- 5. The potential benefits of the activity to the applicant, the community and the environment; and
- 6. Compliance with any relevant Water Conservation Order-; and
- 7. The need for and extent of the proposed community drinking-water supply protection zone; and
- 8. The matters set out in Schedule 1 and the way in which those matters are responded to in the proposal for which consent is sought and the assessment of effects forming part of the application; and

9. The actual and potential effects on any land user with land located within the proposed community drinking water supply protection zone.

Schedule 25

A water supply strategy is a document required to accompany an application for resource consent to take and use water for a community water supply. It must contain the following information in sufficient detail to enable the consent authority to be reasonably informed on the nature and extent of the activity and any effects of that activity on the environment:

- 1. A description of the community water supply system including:
 - (1) the location of the water source, surface water or groundwater abstraction point, and any relevant bore numbers; and
 - (2) a description of the water conveyance method; and
 - (3) the geographical extent of the water supply distribution network; and
 - (4) the estimated population supplied, or to be supplied, by the network; and
 - (5) primary water uses e.g. stock water, domestic, industrial or commercial use; and
 - (6) expected peak demand water requirements; and
 - (7) water treatment methods; and
- 2. An assessment of existing and future demand for water to meet:
 - (1) reasonable domestic needs; and
 - (2) public health needs; and
 - (3) the responsibilities of municipal water supply authorities under the Local Government Act 2002 with respect to the supply of water; and
 - (4) any staged increase in allocation that may be sought during the term of the water permit to meet these demands; and
- 3. A description of:
 - (1) any proposed water conservation methods and measures to ensure efficient use of water (including both regulatory and non-regulatory actions); and
 - (2) measures to minimise water loss from the water reticulation network; and
 - (3) how the above measures in (3)(a) and (3)(b) will be implemented; and
 - (4) performance targets to measure the effectiveness of the methods implemented; and
 - (5) the timeframe for review of any specified actions listed in the implementation plan; and
- 4. An assessment of any alternative water sources available or alternative means of sourcing water; and
- 5. A drought management plan that includes:
 - (1) methods to reduce consumption during water shortage conditions and particularly consumption by non-essential agricultural, residential, industrial or trade processes; and
 - (2) a description of any methods to ensure water conservancy during times of drought, including but not limited to public education programmes and compliance or enforcement measures.

Submissions

- O.9 Two submissions are on Policy 4.49. Forest and Bird seeks to restrict the taking of water to 'non-commercial community uses' only. The submitter states that 'community water supply' can include taking of water for commercial uses. ANZCO supports the proposed amendments made to Policy 4.49, provided Schedule 25 is amended in relation to the changes sought to include livestock processing water in the definition.
- O.10 Mackenzie DC and the Oil Companies seek to delete the changes to Rule 5.115. Mackenzie DC opposes these amendments, as part of their general submission, in which all amendments that alter the group drinking water supply provisions are opposed.
- O.11 The Oil Companies oppose these amendments and state that this Rule allows the "introduction of new protection zones via a potentially non-notified consent process which will act as a de-facto plan change. The Oil Companies however, state that "point 9 is a redeeming feature" as it recognises effects on other land users.
- O.12 Selwyn DC supports condition 1 of Rule 5.115, however seeks to delete matter of discretion 8 and 9. The submitter considers that "other additions for matters of discretion are not necessary nor appropriate with respect to the objectives and policies relating to protection of community drinking water".
- O.13 The CDHB seek to amend Rule 5.115 by deleting the matter of discretion 5.115(9) as the submitter states that community water supplies are essential to public health and need to be prioritised over all other uses.
- O.14 Forest and Bird seeks amendment to include all relevant matters of discretion from Rules 5.123 and 5.128, "to better provide for any effects on biodiversity".
- O.15 ANZCO support the amendments made to Rule 5.115. However, the submitter requests that consequential changes be made in response to submission on Schedule 25 and on the definition of 'Community Water Supply'.
- O.16 Four submissions are on Schedule 25, from Forest and Bird, ANZCO, the Oil Companies and Horticulture NZ, which all seek amendments.
- O.17 Forest and Bird support the addition of Schedule 25 as it "provides clearer guidance for the activity". However, the submitter seeks that there be a requirement to assess any environmental effects from the take and use added to the Schedule because it is "inappropriate" to not require this due to "the range of uses that a community water supply can be used".
- O.18 ANZCO seek an amendment to Schedule 25(1)(5) for recognition of livestock processing as a primary water use as "a clean, secure supply of water is essential to ANZCO's operation".

- O.19 Horticulture NZ seeks to amend the requirements under part 5 of the Schedule. Horticulture NZ seeks to amend Schedule 25(5) by requiring methods to reduce consumption for all uses, not just those listed in the Schedule, and also to require methods to provide for essential human health and sanitation. Horticulture NZ did not provide specific wording for the amendments they seek.
- O.20 The Oil Companies seek to have Schedule 25 deleted. This request follows on from the comments made regarding the issues the submitter had with Rule 5.115 and Policies 4.23A and 4.23B, relating to the potential for non-notified resource consent applications to act as de facto plan changes with implications for existing users. The Oil Companies also opposes a matter of discretion in Rule 5.115, where the actual and potential effects on any land located within the proposed community drinking water supply protection zone needs consideration, has been left out of Schedule 25.

Discussion

- O.21 In general, the submitters appear to have misinterpreted Schedule 25. Community water supplies are subject resource consent under Rule 5.115. The intent of Schedule 25 is to clarify what is to be included in the "Water Supply Strategy" set out in condition 1 and assessment matter 3. The majority of the matters raised by the submitters are addressed in the resource consent process more generally, and not in terms of Schedule 25, which is intended as a management tool for water supply operators.
- O.22 The concern of the Oil Companies, and the converse concern of CDHB are discussed earlier at paragraph D.31, and no change is recommended.

Recommendation

Retain the changes to Policy 4.49, Rule 5.115 and Schedule 25.

Rules 5.111, 5.113, 5.114 and 5.114A

- O.23 The changes to Rules 5.111 and 5.114 and new Rule 5.114A read:
 - 5.111 The take and use of water from a river, lake or an artificial watercourse is a permitted activity, provided the following conditions are met:
 - 1. The total take and use per site property:
 - (a) is less than the following rates and volumes:

| Waterbody | 7DMALF | Rate | Volume per day |
|-----------|---------------|---------|------------------|
| River | <100 L/s | 0.5 L/s | 2 m ³ |
| River | 100-500 L/s | 2 L/s | 10 m³ |
| River | 500L/s-10m³/s | 5 L/s | 20 m³ |
| River | 10-20 m³/s | 5 L/s | 50 m³ |

| River | >20m³/s | 5 L/s | 100 m³ |
|-------------|---------|-------|-------------------|
| Artificial | N/A | 5 L/s | 10 m ³ |
| Watercourse | | | |
| Lakes | N/A | 5 L/s | 50 m³ |

Or

- (b) for rivers where the 7DMALF is unable to be calculated, is at a rate of less than 5 L/s and a maximum volume of 10 m 3 per day; and
- 2. Fish are prevented from entering the water intake as set out in Schedule 2; and
- 3. Where the take is from a waterbody with a minimum flow that is set in Sections 6 to 15, the take of water for other than an individual's reasonable domestic and stockwater use ceases when the flow is at or below the minimum flow for that waterbody, as measured estimated by the Canterbury Regional Council; and
- 4. The take is not from any river or part of a river that is subject to a Water Conservation Order; and
- 5. Where the take is from a water race, irrigation or hydro-electricity canal or storage facility, the abstractor holds a current written agreement with the holder of the resource consents for the taking of water into the water race, canal or storage facility; and
- 6. The take is not from the Avon River/Ōtākaro or Heathcote River or a wetland or a hapua
- 5.114 The taking and using of less than 5 L/s and more than 10 m³ but less than 100 m³ per property per day of groundwater on a property more than 20ha in area is a permitted activity, provided the following conditions are complied with:
 - 1. The site is more than 20 ha in area; and
 - 2.1 The bore is located more than 20 m from the site property boundary where that adjoining site is in different ownership or any surface waterbody.

5.114A The taking and using of:

- (a) less than 5 L/s and 10m³ per property per day of groundwater that does not meet the condition of Rule 5.113; or
- (b) less than 5 L/s and more than 10 m³ but less than 100 m³ per property per day of groundwater on a property more than 20ha in area that does not meet the condition of Rule 5.114; is a restricted discretionary activity.

The exercise of discretion is restricted to the following matter:

- 1. The actual and potential adverse environmental effects of not meeting the condition of Rule 5.113 or Rule 5.114.
- 0.24 No submissions were received on Rule 5.113.

Submissions

O.25 Rule 5.111 received two submissions. H Rennie seeks the following amendment:

1. The total take and use per site property in addition to that provided for in s14(3)(b) of the Resource Management Act:

The amendment is sought to avoid any unintended consequences of the current phrasing and give clarity with respect to Note 2 in the LWRP. H Rennie also seeks to amend condition 3 to delete 'reasonable'.

- O.26 RDRML states that the replacement of the word 'site' with 'property' under Rule 5.111(1) is not sufficiently justified, as this will increase the compliance costs for those that have multiple sites within their properties. RDRML seeks that the proposed amendments to Rule 5.111 be deleted.
- O.27 One submission is on Rule 5.114 from Horticulture NZ. Horticulture NZ opposes Rule 5.114, which makes the taking and using of water for properties over 20ha a permitted activity, subject to some conditions. Horticulture NZ seeks these proposed amendments be deleted as there is no provision for properties under 20ha to apply for restricted discretionary status, thus "unfairly penalising smaller horticultural operations". Horticulture NZ seeks to remedy this issue by adding a new condition to 5.114A as follows:
 - c) less than 5L/s and more than 10m³ but less than 100m³ per property per day of groundwater on a property less than 20 ha in area.
- O.28 Two submissions were received on new Rule 5.114A from Forest and Bird and Horticulture NZ. Forest and Bird supported the matters of discretion "being broad enough to allow consideration of all water and biodiversity effects".

Discussion

- O.29 H Rennie's submission in relation to Rule 5.111 is considered to be appropriately covered by the existing general statement at the beginning of the take and use rules that states "Nothing in the Plan affects an individual's right to take water in accordance with section 14(3)(b) of the RMA". There is no need to repeat this within the Rule.
- O.30 The changes from 'site' to 'property' ensures landowners with multiple 'sites' contained in one 'property' are restricted to abstracting no more the 100 m³ per day on the property as a permitted activity. Multiple takes of 100 m³ per property have the potential to add to existing over-allocation of ground water, and, in my opinion, should be subject to the same rules as other takes, including being subject to limits. This same reasoning applies to arguments for s more permissive regime for sites under 20 hectares, as requested by Horticulture NZ.
- O.31 Rule 5.114A has been included to remove an unintended consequence that arises from the structure of the LWRP water take rules. The current rules permit small water takes provided the bore is not located within 20m of the property boundary. If a water take does not meet this setback requirement, it defaults to a prohibited activity status under Rule 5.130.

Recommendation

Retain changes to Rules 5.111, 5.113 and 5.114 and new Rule 5.114A.

Take and Use Surface Water/Groundwater Rules 5.123, 5.128, 5.129, and 5.130

- O.32 The changes to Rules 5.123 and 5.128 read:
 - 5.123 The taking and use of surface water from a river or lake is a restricted discretionary activity, provided the following conditions are met:
 - 1. Unless the proposed take is the replacement of a lawfully established activity affected by the provisions of section 124-124C of the RMA, the take, in addition to all existing consented takes, does not result in any exceedance of any environmental flow or allocation limit or rate of take or seasonal or annual volume limits set in Sections 6 to 15 for that surface waterbody; and
 - 2. Unless the proposed take is the replacement of a lawfully established take affected by the provisions of section 124-124C of the RMA, if no limits are set in Sections 6 to 15 for that surface waterbody, the take, both singularly and in addition to all existing consented takes meets a flow regime with a minimum flow of 50% of the 7-day mean annual low flow (7DMALF) as calculated estimated by the CRC and an allocation limit of 20% of the 7DMALF; and
 - 3. Unless it is associated with the artificial opening of a hāpua, lagoon or coastal lake to the sea, the take is not from a wetland, hāpua or a high naturalness river or high naturalness lake that is listed in Sections 6 to 15.

The exercise of discretion is restricted to the following matters:

- 1A. The rate, volume and timing of the take; and
- The actual or potential adverse environmental effects on water quality, including whether the activity, in combination with all other activities, will alter the water quality allocation status of the relevant catchment; and
- Whether the amount of water to be taken and used is reasonable for the proposed use. In assessing reasonable use for irrigation purposes, the CRC will consider the matters set out in Schedule 10; and
- 3. For water used for irrigation, the management of water allocation and resulting nutrient discharges on individual farms; and
- 4. The potential effects on groundwater recharge where the groundwater allocation zone is fully or over allocated as set out in Sections 6 to 15; and
- 5. The availability and practicality of using alternative supplies of water; and
- 6. The effects the take has on any other authorised takes or diversions; and
- 7. The potential to frustrate or prevent the attainment of the regional network for water harvest, storage and distribution, shown on the Regional Concept diagram in Schedule 16; and

- 8. The reduction in the rate of take in times of low flow and restrictions to prevent the flow from reducing to zero as set out in policies to this Plan; and
- 9. Whether and how fish are prevented from entering the water intake; and
- 10. The provisions of any relevant Water Conservation Order; and
- 11. The proximity and actual or potential adverse environmental effects of water use on any significant indigenous biodiversity and adjacent dry land habitats; and
- 12. Where the proposed take is the replacement of a lawfully established take affected by the provisions of Section 124-124C of the RMA and is from an overallocated surface water catchment, the reduction in the rate of take and volume limits to enable reduction of the over-allocation; and
- 13. Where the water is to be used for irrigation, the preparation and implementation of a Farm Environment Plan in accordance with Schedule 7 to manage the effects arising from the use of the water.
- 5.128 The taking and use of groundwater is a restricted discretionary activity, provided the following conditions are met:
 - The take is from within a Groundwater Allocation Zone on the Planning Maps;
 and
 - 2. Unless the proposed take is the replacement of a lawfully established take affected by the provisions of section 124-124C of the RMA, for stream depleting groundwater takes, the take, in addition to all existing consented surface water takes, does not result in any exceedance of any environmental flow and allocation limits set in Sections 6 to 15 for that surface waterbody in accordance with Schedule 9; and
 - 3. Unless the proposed take is the replacement of a lawfully established take affected by the provisions of section 124-124C of the RMA, the seasonal or annual volume of the groundwater take, in addition to all existing consented takes, as determined by the method in Schedule 13 does not exceed the groundwater allocation limits for the relevant Groundwater Allocation Zone in Sections 6 to 15; and
 - 4. <u>Unless the proposed take is the replacement of a lawfully established take affected by the provisions of sections 124-124C of the RMA, Fighe bore interference effects on any groundwater abstraction other than an abstraction by or on behalf of the applicant are acceptable, as determined in accordance with Schedule 12.</u>

The exercise of discretion is restricted to the following matters:

- 1A. The rate, volume and timing of the take; and
- 1. Whether the amount of water to be taken and used is reasonable for the proposed use. In assessing reasonable use for irrigation purposes, the CRC will consider the matters set out in Schedule 10; and
- 2. The availability and practicality of using alternative supplies of water; and
- 3. The maximum rate of take, including the capacity of the bore or bore field to achieve that rate, and the rate required to service any irrigation system; and

- 4. The actual or potential adverse environmental effects on surface water resources if the groundwater take is within a surface water catchment where the surface water allocation limit, as set out in Sections 6 to 15 is fully or over allocated; and
- 5. <u>Unless the proposed take is the replacement of a lawfully established take</u>

 <u>affected by the provisions of sections 124 124C of the RMA</u>, <u>Tthe actual or</u>

 potential adverse environmental effects the take has on any other authorised takes, including interference effects as set out in Schedule 12; and
- 6. For stream depleting groundwater takes, the matters of discretion under Rule 5.123; and
- 7. Whether salt-water intrusion into the aquifer or landward movement of the salt water/fresh water interface is prevented; and
- The proximity and actual or potential adverse environmental effects of water use to any significant indigenous biodiversity and adjacent dryland habitats; and
- 9. The protection of groundwater sources, including the prevention of backflow of water or contaminants; and
- 10. Where the proposed take is the replacement of a lawfully established take affected by the provisions of Section 124-124C of the RMA and is from an overallocated groundwater allocation zone, the reduction in the rate of take and volume limits to enable reduction of the over-allocation.
- 11. Where the water is to be used for irrigation, the preparation and implementation of a Farm Environment Plan in accordance with Schedule 7 to manage the effects arising from the use of the water.
- O.33 No submissions were received on Rules 5.129 and 5.130.

Submissions

- O.34 There are seven submissions on Rule 5.123 and eight on Rule 5.128. The changes to these Rules are inherently related, and the submissions received on them are be considered together.
- O.35 ESAI opposed matter of discretion 13 under Rule 5.123 and matter of discretion 11 under Rule 5.128 and seeks to have them deleted. The submitter states that there are already provisions within the LWRP that deal with nutrient management and that there is "no need for this to be a further assessment under consents for the use of ground or surface water". The submitter is concerned that it will increase the costs of "implementation and consent processing".
- O.36 Federated farmers and Horticulture NZ seeks changes to matter of discretion 13 under Rule 5.123 and matter of discretion 11 under Rule 5.128, to restrict the issues to managing the efficiency of the use of water, rather than managing all effects arising from the use of water:

Where the water is to be used for irrigation, the adequacy of a Farm Environment Plan prepared under Schedule 7 to ensure that the water is used efficiently, including efficient

<u>operation of the irrigation system—the preparation and implementation of a Farm</u>
<u>Environment Plan in accordance with Schedule 7 to manage the effects arising from the use of the water.</u>

- O.37 Federated Farmers is concerned that the addition of the new matters of discretion will require farmers to "re-litigate the adequacy of the Farm Environment Plan as part of gaining or renewing their water permits", despite already having Farm Environment Plan's as part of their land use requirements. Therefore, the submitter seeks that this matter of discretion should be limited to ensuring the water is used efficiently and effectively.
- O.38 Horticulture NZ seeks a similar amendment to focus the Farm Environment Plan on efficient water use only.
- O.39 Forest and Bird seek matter of discretion 13 of Rule 5.123 and matter of discretion 11 of Rule 5.128, which require the applicant to prepare a Farm Environment Plan, need to be included as a new condition (4) under Rule 5.123 and new condition (5) under rule 5.128. The submitter states that these needs to be conditions "so that the rule does not apply where a Farm Environment Plan has not been prepared".
- O.40 Beef + Lamb NZ seeks amendments to matter of discretion 13 of Rule 5.123 and matter of discretion 11 of Rule 5.128 as follows:
 - Where the water is to be used for irrigation, the preparation and implementation of a Farm Environment Plan in accordance with Schedule 7 to manage the effects arising from the use of the water, for every individual farm within the irrigation scheme, including demonstrating that the farm is at Good Management Practise.
- O.41 Beef + Lamb NZ states that a Farm Environment Plan should be required for each individual farm within an irrigation scheme to "address the same issues that farms outside the irrigation scheme must address despite adverse impacts resulting from nutrient losses to water may be considerably less those within an irrigation scheme".
- O.42 Federated Farmers seeks to have condition 4 of Rule 5.128 retained. The submitter supports the fact that if there is no change in the physical nature of the consent, there will be no need to re-assess well interference effects.
- O.43 ANZCO supports condition 4 of Rule 5.128 and seeks to have it retained as it "ensures that a situation does not arise where a long established bore may need to be moved, deepened or abandoned due to interference effects on a bore that was drilled nearby later in time". The submitter also seeks to make consequential amendments to applicable sub-regional rules such as Rule 11.5.32(8). Hurunui Water also seeks to retain the new condition (4) of rule 5.128.
- O.44 Forest and Bird seeks to amend 5.123(2) to delete the amendment which replaced 'calculated' with 'estimated' and states that "this is on waterbody with minimum flows, so estimates will

be clearly inadequate". (Forest and Bird have stated that the original wording was 'measured', but in fact the original wording was 'calculated', therefore, there was an error in the submission. However, the intent of what the submitter seeks is clear).

O.45 DoC seeks to amend condition (2) under Rule 5.123 to replace the 50% of the 7-day mean annual low flow (7DMALF) with 100%. DoC states that the 50% 7DMALF "does not provide for life supporting capacity of the freshwater ecosystems" and is inconsistent with "s5 of the RMA, A1 of the NPS, Objective 7.2.1 and Policy 7.3.4 of the RPS and principles 2,4 5 and 8 of the CWMS". Three further submissions were received; in support from Fish and Game and Forest and Bird and opposition from RDRML.

Discussion

- O.46 The changes to Rules 5.123 and 5.128 cover a range of issues.
- O.47 The reason for the change from "calculated" to "estimated", and the Forest and Bird submission point is discussed at paragraph M.23.
- O.48 A number of submission points relate to the new Farm Environment Plan requirements as part of the matters to which discretion is restricted for both rules. Many submissions seek modification of this, particularly limiting consideration to irrigation efficiency. The intention of these additions is to give effect to Policy 4.61(h) and to provide a mechanism by which that policy can be implemented.¹¹⁰
- O.49 In my opinion, if a Farm Environment Plan, in accordance with Schedule 7 is required under this Rule in addition to the farming rules, it should not create additional consenting inefficiency, as the Farm Environment Plan content and requirements is set out in Schedule 7 and should only need to be completed once.
- O.50 The additional direction, requested by Beef + Lamb NZ, with respect to good management practices, is in my opinion, addressed adequately within Schedule 7. The additional specificity is not recommended to be adopted.

4.61 Any abstraction of surface water or stream depleting groundwater with direct, high, or moderate depletion, is subject to conditions specifying:

- (d) the area or property within which the water is to be used;
- (e) the location of the take;
- (f) the prevention of fish entering any intake, in accordance with Schedule 2;
- (g) when partial restrictions (when rivers are flowing above the minimum or residual flow limit but below the sum of the minimum or residual flow and the allocation limit) come into force; and
- (h) where the water is used for irrigation, the need for, compliance with, and auditing of a Farm Environment Plan.

¹¹⁰ Policy 4.61 reads:

⁽a) the maximum instantaneous rate of take;

⁽b) except for hydro-electricity generation activities, a maximum volume based on reasonable use determined in accordance with Schedule 10 over the period the water is required;

⁽c) a minimum flow at which abstraction ceases in accordance with the relevant flow and allocation limits;

- O.51 ANZCO has suggested that consequential amendments be made to the appropriate subregional rules. While I am cautious as to whether these amendments would be "on the plan change", I generally support the intention.
- O.52 The DOC request to amend Condition 2 of Rule 5.123, with respect to 7DMALF, represents a potentially significant change to the consenting framework for new applications. This change has not been the subject of investigation and analysis under section 32, nor has it been consulted upon or considered as a part of the development of PC4 (Omnibus). In the absence of analysis of the implications for potential applicants and wider public input I am hesitant to recommend the change.

Recommendation

Retain changes to Rules 5.123, 5.128, 5.129 and 5.130.

Transfer of Water Permits Rule 5.133

- O.53 The change to Rule 5.133 reads:
 - 5.133 The temporary or permanent transfer, in whole or in part, (other than to the new owner of the site to which the take and use of the water relates and where the location of the take and use of water does not change) of a water permit to take or use surface water or groundwater, is a restricted discretionary activity, provided the following conditions are met:
 - 1. The reliability of supply for any other lawfully established water take is not reduced; and
 - 2. The seasonal or annual volume of take after the transfer is less than or equal to the volume of take prior to the transfer, or if no seasonal or annual volume has been applied, a seasonal or annual volume is applied in accordance with Schedule 10; and
 - 3. In the case of surface water, the point of take remains within the same catchment and the take complies with the limits set in Sections 6 to 15; and
 - 4. In the case of groundwater:
 - (a) the point of take is within the same groundwater allocation zone; and
 - (b) the bore interference effects as set out in Schedule 12 are acceptable; and
 - (c) in addition for stream depleting groundwater takes:
 - (i) the transfer is within the same catchment; and
 - (ii) the take complies with the limits set in Sections 6 to 15 <u>or the</u> <u>limits in any relevant catchment specific plan listed in section</u> 2.8 of this Plan; and
 - (iii) the stream depletion effect is no greater in the transferred location than in the original location

- O.54 There is one submission on Rule 5.133, from Selwyn DC. The submitter seeks to amend the Rule to provide a new Rule 5.133A with a permitted activity status, as follows:
 - 5.133A The temporary or permanent transfer, in whole or in part, where the location of the take and use of water does not change) of a water permit to take or use surface water or groundwater, is a permitted activity, provided the following conditions are met:
 - 1. The transfer is to a territorial authority for the purpose of providing a community water supply.
- O.55 The submitter seeks to make an amendment to the introduction of the rule by adding 'community supply', so that the rule covers a transfer to either a new owner or a Council. This is to allow the transfer the permit for consented water supply from private developers to a territorial authority.

Discussion

- O.56 Selwyn DC requests a permitted activity framework for the transfer for community water supplies. This matter has been addressed on a number of occasions in the past, and it is my understanding that community water supplies are best provided for as part of the restricted discretionary activity framework for new or replacement water takes, or through the ordinary transfer provisions of Rule 5.133.
- O.57 These provisions are, in my opinion, supportive of community water supplies, and are not overly onerous. On that basis, I do not recommend departing from the existing framework for community water supplies.

Recommendation

Retain changes to Rule 5.133.

P Groundwater and Surface Water Limits

P.1 PC4 (Omnibus) makes amendments to Policy 4.13 and Schedule 5. The change to Policy 4.13 ensures that further degradation of these water bodies is prevented while recognising that these waterbodies do not currently meet the limits in Schedule 5. Schedule 5 amendments are proposed to provide for a more appropriate definition of the mixing zone, which ensures that the size of the mixing zone is reflective of the receiving environment.

Policy 4.13

- P.2 The changes to Policy 4.13 read:
 - 4.13 For other discharges of contaminants into or onto land where it may enter water or to surface water bodies or groundwater (excluding those passive discharges to which Policy 4.26 applies), the effects of any discharge are minimised by the use of measures that:
 - (a) first, avoid the production of the contaminant;
 - (b) secondly, reuse, recover or recycle the contaminant;
 - (c) thirdly, minimise the volume or amount of the discharge; or
 - (d) finally, wherever practical utilise land-based treatment, a wetland constructed to treat contaminants or a designed treatment system prior to discharge; and
 - (e) in the case of surface water, results in a discharge that after reasonable mixing:
 - (i) meets the receiving water standards in Schedule 5 <u>as a first priority;</u> and
 - (ii) as a second priority, does not result in any further degradation in water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order.

Submissions

- P.3 Twelve submissions were received on Policy 4.13. Six submitters seek to have the amendments retained.
- P.4 Fonterra supports the amendments made to Policy 4.13 and seeks to have them retained. J Demeter supports the amendments made to Policy 4.13 as the submitter supports "any measures that maintain water quality". CDHB supports the amendments made to 4.13(e)(ii) because the policy "aims to prevent further decline in water quality".
- P.5 Federated Farmers support the retention of the proposed amendments. The submitter states that they suitably address the fact that the discharge does not cause the non-compliance, but rather the quality of the water within the waterway and that "even after reasonable mixing,"

- the water quality within a waterway will be unable to meet the water quality standards set out within Schedule 5".
- P.6 The reasoning of the Oil Companies and that of Horticulture NZ for supporting the proposed amendments is similar to that of Federated Farmers. The Oil Companies state that in some circumstances "existing water quality may dictate that a discharge cannot meet the receiving water standards in Schedule 5".
- P.7 Horticulture NZ also supports the proposed amendments due to the addition of a "second priority for no further degradation where the quality of the water to which the discharge is to be made is already degraded".
- P.8 Selwyn DC seeks to amend Policy 4.13(e) as follows:
 - 4.13(e) in the case of surface water, results in a discharge that after reasonable mixing:
 - (i) meets the receiving water standards in Schedule 5 as a first priority; and or
 - (ii) as a second priority, does not result in any further degradation in **overall** water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order.
- P.9 Selwyn DC considers that the environmental balance needs to consider the overall benefits to the environment, therefore seeks to include reference to the word 'overall'. The second amendment sought is requested so that the two situations in (i) and (ii) do not apply at all times, but rather (ii) is intended to apply at times, when (i) has not been met.
- P.10 ANZCO and RDRML seek amendments to Policy 4.13 so that water quality degradation is not prohibited. ANZCO seek the following:
 - (ii) as a second priority, does not result in avoids, remedies or mitigates the effects of any further degradation in water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order.
- P.11 ANZCO states that the amendments to Policy 4.13 places "undue emphasis on avoidance", and that there may be "other solutions which, although having adverse environmental effects, might have offsetting positive effects".
- P.12 RDRML seeks:
 - (ii) as a second priority, does not result in any unacceptable further degradation in water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order. The phrase 'unacceptable further degradation' is a change that will, or is likely to result in adverse environmental effects that are minor or greater in their magnitude".

- P.13 RDRML questions whether prohibiting any degradation of water quality is the best approach and suggests situations where degradation of water quality could occur, but only if the effects were "minor" or "negligible".
- P.14 Christchurch CC, Forest and Bird, and Fish and Game seek to make amendments to halt degradation of waterbodies altogether. Christchurch CC seeks:
 - (i) meets the receiving water standards in Schedule 5 <u>as a first priority while also not</u>
 resulting in a degradation in water quality; and
- P.15 Christchurch CC states the policy is 'ambiguous' because "it could be interpreted as meaning that a discharge can be of worse quality if the receiving waterbody's water quality standard is met", which the Council assumes is not what was intended. Further, Christchurch CC is confused about the use of first and second priorities and questions, "is this simply a choice left to the discharger, or does the applicant have to show that they cannot achieve the standard?"

P.16 Fish and Game seek:

- (e) in the case of surface water, results in a discharge that after reasonable mixing:
 - (i) meets the receiving water standards in Schedule 5 as a first priority .; and
 - (ii) as a second priority, does not result in any further degradation in water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order.
- P.17 Fish and Games reasoning is similar to that of the Christchurch CC's above because they also state that the use of first and second priority is confusing and that "there is no definition of what the priorities mean" and that the wording implies that "degradation in water quality is now a second priority or of less importance".
- P.18 Forest and Bird also state that the use of priorities is confusing and find it difficult to understand how it would work. The submitter states that ECan should be seeking to "halt degradation in all receiving waterbodies".

Discussion

- P.19 It would appear that the use of the terms "first priority" and "second priority" has caused concern and confusion for a number of submitters.
- P.20 The intention of this policy was to accept that in some circumstances, where the existing water quality does not meet the receiving water standards in Schedule 5, there is scope for a discharge to meet the ambient water quality, without causing any degradation in water quality. In these circumstances, it would be inappropriate to require the water quality, after reasonable mixing, to meet the receiving water standards in Schedule 5.

P.21 In my opinion, the wording that has been chosen for PC4 (Omnibus) is less than ideal, given the confusion it has raised in submissions. On this basis, a plain-English wording that maintains the intention of the change to the Policy, and conforms to the requirements of the Freshwater NPS, is suggested.

Recommendation

Amend Policy 4.13 to read:

- 4.13 For other discharges of contaminants into or onto land where it may enter water or to surface water bodies or groundwater (excluding those passive discharges to which Policy 4.26 applies), the effects of any discharge are minimised by the use of measures that:
 - (a) first, avoid the production of the contaminant;
 - (b) secondly, reuse, recover or recycle the contaminant;
 - (c) thirdly, minimise the volume or amount of the discharge; or
 - (d) finally, wherever practical utilise land-based treatment, a wetland constructed to treat contaminants or a designed treatment system prior to discharge; and
 - (e) in the case of surface water, results in a discharge that after reasonable mixing:
 - (i) meets the receiving water standards in Schedule 5 as a first priority; and or
 - (ii) as a second priority, does not result in any further degradation in water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order.

Schedule 5 – Mixing Zones

P.22 The changes to Schedule 5 read:

Mixing Zones

The area (and underlying volume) of a receiving water where the water quality standards specified for rivers, artificial watercourses and lakes do not have to be met is referred to as the Mixing Zone. The Mixing Zone, as a result of a point source discharge of a contaminant, is:

- 1. For river and artificial watercourse locations with flowing water present at all times;
 - (a) no longer than 200 m along the longest axis of the zone, and
 - (b) occupies no greater than two-thirds of the wetted channel width at the estimated 7DMALF for that location; and
 - (c) <u>no longer than 10 times the wetted channel width at the estimated 7DMALF</u> for that location.
 - 2. For river and artificial watercourse locations, with intermittent flows, no longer than 20 m at times of flow and 0 m at no flow;

- 3. For lake locations:
 - (a) if the discharge location is within 50 m of the lake water edge at any time, a circle with a diameter of 50 m; or
 - (b) if the discharge location is greater than 50 m from the lake water edge at all times, a circle with a diameter of 100 m; and
- 4. When within a Group or Community Drinking-water Protection Zone, as set out in Schedule 1, 0 m

Submissions

- P.23 Three submissions were received on Schedule 5. Two of the submissions relate to the 'Group and Community Drinking Water Supplies' issues discussed in Section D of this Report.
- P.24 The DoC submitted in support of the change to the mining zone definition and seeks to have the proposed amendments retained because it "clarifies the mixing zone for river and artificial watercourses".

Discussion

P.25 As the only submission in relation to mixing zones is in support, and no submissions seeking any amendment have been received, it is considered appropriate to confirm the change.

Recommendation

Retain the changes to Schedule 5.

Schedule 8

P.26 The changes to the Rivers Table in Schedule 8 amendments read:

| River type | Type Parameter | Measurement | Limit |
|----------------------------|------------------|---------------|-----------|
| Lowland streams | Nitrate toxicity | annual median | 3.8 mgN/L |
| Spring-fed plains | | | |
| Spring-fed plains urban | | | |

P.27 The changes to the footnotes to the Groundwater Table in Schedule 8 amendments read:

Compliance with the limit to be determined as follows:

If less than one organism is detected in fewer than 50% of the samples, the limit is considered to be met.

If one or more organisms is detected in 50% or more of the samples, the sampling regime is to be repeated within 5 days. If one or more organisms is detected in any of the repeated samples, the limit is considered to be breached.

Submissions

- P.28 Five submissions are on Schedule 8. DoC and Fonterra and Dairy NZ seek to have the changes retained, while Ngāi Tahu, CDHB and Federated Farmers seek to have further changes made to Schedule 8.
- P.29 The DoC supports and seeks retention of the changes because "the provision establishes regional limits within the Plan as required under the NPS (Freshwater), Part II of the RMA, and the RPS".
- P.30 Fonterra and Dairy NZ support the inclusion of footnote four to Schedule 8. The submitter states that as Schedule 8 sets a limit for *E.coli*, which means that "absolutely no *E.coli* could be detected in any sample", the footnote is helpful in how it "describes a reasonable method for determining whether compliance with the *E.coli* limit in groundwater has been achieved".
- P.31 Federated Farmers states that a statement needs to be included that "the groundwater *E.coli* standard applies to groundwater >30m deep and that groundwater <30m deep should not be used for drinking water unless tested and found to consistently meet the Schedule 8 standard or treated to ensure potability." The submitter is concerned that this standard will be difficult to achieve consistently and that separate standards should apply to deep and shallow groundwater, as the LWRP should "recognise the vulnerable nature of shallow groundwater to microbial contaminants".
- P.32 CDHB seek to delete sub-note 4. The submitters decision requested states "for shallow groundwater a target level could be considered of <1 E coli/100ml". The limit for E coli in ground water remains <1 organism/100ml. CDHB do not agree with the associated statement regarding compliance with the limit which reads: "if less than one organism is detected in fewer than 50% of the samples, the limit is considered to be met". The CDHB state that "E coli levels above 10 E coli/100ml would also be very concerning in shallow ground water, especially if the water is used as a source of drinking water for communities or individuals" and therefore suggest a target level for shallow groundwater.
- P.33 Ngāi Tahu opposes the amendments made to the 'Rivers table' in this Schedule from 'Lowland streams' to 'Spring-fed plains and Spring-fed plains urban'; the submitter did not provide any reasoning.

Discussion

P.34 The change made to the footnote recognises the Fonterra and Dairy NZ submission point, which effectively means that under the existing provision the limit is zero. The intention of the change is to provide a small amount of flexibility, to avoid the situation where a short-term (say as a result of a significant rain event) or errant reading would lead to the breaching of a limit. However, the development of a criteria around this 'zero' limit has caused difficulties in the past.

- P.35 The Federated Farmers request for different microbial contaminant standards for 'shallow' groundwater represents a significant change of position and is likely to have widespread implications for people living in rural areas, particularly in eastern areas of Canterbury. Many of these people take drinking water from wells less than 30 metres deep. Without proper analysis of the implications of such a change, particularly on public health, I am unable to recommend it be adopted.
- P.36 CDHB are strongly opposed to the criteria added in the footnote. I accept that the wording of the footnote is confusing and possibly leads to an incorrect outcome. On this basis, an adjustment to the wording of the footnote is recommended to provide certainty and clarity.

Recommendation

Retain the changes to the Rivers Table in Schedule 8.

Amend the footnotes to the Groundwater Table in Schedule 8 to read:

Compliance with the limit to be determined as follows:

If less than one no organism is detected in fewer more than 50% of the samples, the limit is considered to be met.

If one or more organisms is detected in 50% or more of the samples, the sampling regime is to be repeated within 5 days. If one or more organisms is detected in any of the repeated samples, the limit is considered to be breached. 111

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¹¹¹ CDHB- PC4 LWRP-649

Q Miscellaneous

Q.1 A number of submissions were received requesting additional amendments to the LWRP or amendments to provisions of the LWRP that are not amended by PC4 (Omnibus). A few submissions were received on aspects of PC4 (Omnibus) that are not identified in the topics discussed in this report. These submissions are analysed below.

Definitions

'Hāpua' and 'Coastal Lagoons'

Q.2 Ngāi Tahu seeks to include definitions for the words 'hāpua' and 'coastal lagoons'. Ngāi Tahu question whether these words are used interchangeably in both PC4 (Omnibus) and in the sub-regional chapters of the LWRP. The submitter states that there needs to be a definition for each word to provide consistency. A specific wording is not provided.

'Educational Activities'

Q.3 The Ministry of Education seeks to include a definition of 'educational activity'. The submitter states that this has been defined in many district plans, which ensures that those activities that reflect those uses of land that are required to deliver sustainable education at a national level. The submitter seeks to insert this definition to support the requested changes to Rule 5.96.

Discussion

- Q.4 "Coastal lagoons" is a reasonably common term used throughout New Zealand, and on that basis, I am dubious as to the merits of including it in the LWRP. On the other hand, "hāpua" are uncommon in the remainder of the country, being a product of Canterbury's east coast shingle beaches. "Hāpua" has a current definition in the LWRP of "means a shallow lake at the termination of a river, separated from the sea by a bank of sand or shingle and includes coastal lakes which may be in the coastal marine area." On this basis, the submitters concern is already addressed.
- Q.5 While "educational activities" have been recommended to be included into Rule 5.96, as requested by the Ministry of Education, I am of the view that as the term is used once in the LWRP and it is a term in common usage, no specific definition in the LWRP is necessary.

Timaru Groundwater Zone Boundary

Q.6 Beaconsfield Estates seeks that the amendments to the Timaru GW zone be deleted as the submitter states this area becomes "over-allocated" as a result of the change.

Discussion

- Q.7 The change in PC4 (Omnibus) is intended to correct errors and properly identify the Levels Plains and Timaru groundwater zones. These had previously been incorrectly shown in the planning maps, as is discussed in the Kaelin Memoranda included as a part of the Section 32 Report. That Memoranda summarises reporting on the issue dating back to 2008.
- Q.8 While the net result of the correction may be to make the area over-allocated, this reflects the analysis of the sustainable limits for the groundwater zone. The consequential over-allocated status arising from the correction to the mapping is not, in my opinion, a valid reason to continue with an inaccurate planning document.

Schedules

- Q.9 Amendments to Schedules (Section 16) generally seek to add schedules for protection of other specific areas or animals.
- Q.10 Whitewater NZ seeks to add a new schedule of Key White Water Recreation Reaches on Rivers in Canterbury. See reasoning for this submission at paragraph 3.20.
- Q.11 DoC and Working Waters Trust seeks to add a schedule containing a list of Canterbury mudfish sites and Ngāi Tahu seeks to amend to include protection for tuna migration periods, and protection of freshwater mataitai.

Discussion

Q.12 These submission points are discussed at paragraphs A.45 and A.46, where it is concluded that the inclusion of these schedules is not appropriate.

Scope Issues

- Q.13 DoC seeks to define in the LWRP maps, which areas of Crown Land riverbed and lake bed are within the natural state waterbody area. The submission is against Table 1a and 1b of the LWRP. In addition, DoC seeks to delete '4' as the TLA indicator for Maori Lakes, Lake Emily and Georgina and replace with '3.5'.
- Q.14 Christchurch CC seeks to amend changes to Table 5B under Schedule 5. Changes to Table 5B are not included PC4 (Omnibus).

Discussion

Q.15 While Table 1a and 1b are included in PC4 (Omnibus), the only change relates to a minor word correction and the addition of a footnote.

Q.16 As is indicated in the legal submissions, there is doubt as to whether these submission points are valid. These changes have not been the subject of investigation and analysis under section 32, nor have they been consulted upon or considered as a part of the development of PC4 (Omnibus). In the absence of analysis of the implications and wider public input I am hesitant to recommend any changes.

Preamble to the Plan Change

- Q.17 Section A of PC4 (Omnibus) contains information about how to read the document. It sets out the sections to be amended, provides general information to be noted when reading, how the proposed amendments are shown and how the amended categories are organised to assist in identifying the issue or matter associated with each amendment. No submissions were received on Section A.
- Q.18 Section B of Plan Change 4 (Omnibus) includes Part 1 General Amendments and Part 2 Other Amendments. Part 1 includes Table 2, which sets out proposed amendments that result in an identical change to multiple parts of the Plan. Part 2 describes how all other amendments in the Plan are set out.
- Q.19 One submission was received on Section B. RDRML noted a minor typographical error in Table 2: "Rule 5.24 Condition 54(b)".
- Q.20 To the extent necessary in the final PC4 (Omnibus) decision, this correction is recommended to be made.

Section 6 - Kaikoura and Section 7 - Hurunui - Waiau

- Q.21 No submissions were received on the amendments to Section 6 Kaikoura and Section 7 Hurunui-Waiau.
- Q.22 Retain amendments to Section 6 Kaikoura and Section 7 Hurunui-Waiau.

Appendix A – Qualifications and Experience of Reporting Officers

Philip Maw

I am a partner in the law firm Wynn Williams, and lead the firm's Resource Management and Local Government team. I hold a Bachelor of Laws and Bachelor of Science. I have over 10 years of experience and regularly appear before Councils, the Environment Court and the High Court for a range of clients.

I have particular expertise in freshwater management, having acted as lead counsel on the development of the Canterbury Land and Water Regional Plan and the Hurunui and Waiau River Regional Plan. I am a member of the Resource Management Law Association and was previously a member of the National Committee of the Resource Management Law Association.

Matthew McCallum-Clark

I am a resource management consultant and a director of the firm Incite. I hold a Bachelor of Laws from Canterbury University, a Bachelor of Commerce (Economics) from Otago University and have undertaken a postgraduate diploma in environmental auditing through Brunel University in the UK. I am also a qualified and experienced independent hearing commissioner, with chair endorsement.

I have been a resource management consultant for over 20 years. Over this time, I have worked on a range of district and regional plans, including the proposed Land and Water Regional Plan, prepared and lodged resource consents and notices of requirement, prepared and presented section 42A reports and acted as hearings commissioner for both resource consent and plan change hearings.

Appendix B – Technical Memoranda

Date 26/11/15

MEMORANDUM File Reference:

FROM: MICHAEL GREER AND JEAN-MARIE TOMPKINS

TO: MATTHEW McCallum-Clark

SUBJECT: RESPONSE TO SUBMITTERS ON INANGA SPAWNING PROTECTION IN PLAN CHANGE 4

Plan Change 4 of the LWRP introduces a map of inanga spawning habitat, developed from a model that has determined the upstream extent of tidal inundation in Canterbury Rivers. Rules place restrictions on certain activities within these areas during the spawning season (January to June). The specific points raised in submissions are addressed below:

| Submitter | Submission |
|--------------|---|
| Fulton Hogan | Fulton Hogan states that an inanga spawning habitat area covers a large area of |
| | the Waimakariri River mouth and upstream to the west of the Main North Road |
| | Bridge. Fulton Hogan state that comprehensive review of sites like these needs |
| | to be undertaken as the level of uncertainty is unacceptable. |
| Response: | Spawning habitat was identified using the model and applied consistently |
| | throughout the region which resulted in the lower Waimakariri River area being |
| | identified. Spawning sites have been reviewed, and those confirmed with |
| | certainty included within the plan. |
| | The Section 32 report (pg. 34) states that there may be areas identified that do |
| | not provide habitat for inanga spawning due to the limited factors used in the |
| | model to determine habitat areas. Consequently, Fulton Hogan has argued that |
| | given the consenting implications associated with these maps, this level of |
| | uncertainty is unacceptable. In my opinion this is not the case and the |
| | uncertainty is far less than what Fulton Hogan has interpreted from the S32 |
| | report, which only summarises the relevant section of the appended technical |
| | report (Environment Canterbury Technical Report No. R15/100). |
| | The uncertainty in the model presented in the S32 report arises from the fact that |
| | flow regime could not be accounted for, and ephemeral and permanently flowing |
| | waterways were treated the same. This meant that ephemeral waterways could |
| | be mapped as spawning habitat, even though spawning is unlikely to occur. It |
| | cannot be stressed enough that the potential for potential spawning habitat to |
| | be misidentified because of this uncertainty is limited to ephemeral waterways |
| | and the model does accurately predicts spawning habitat in permanently flowing waterways. |

| | The section of the S32 report cited by Fulton Hogan is a summary of information presented in section 4.3 of the appended technical report which discusses the source and implications of uncertainty in the model. In the technical report it is stated that the uncertainty only exists around the spawning habitat predicted in ephemeral waterways. However, this key message was omitted from the summary in the S32 report. |
|-----------|---|
| | Recommendation : Ephemeral reaches of waterways within the mapped area are unlikely to provide spawning habitat, they should not be subject to the same rules as intermittent and permanent reaches. |
| CCC | Christchurch City Council (CCC) has noted that there may be anomalies between their data and the data in Schedule 17 which lists significant inanga spawning sites within Christchurch. They have stated that it is important that there is consistency between Council and Environment Canterbury with regard to significant sites, and more analysis and discussion between the two councils is required. |
| Response: | I (M Greer) have talked with Belinda Margetts at CCC we have concluded that these anomalies are the result of the different methods employed by Environment Canterbury and CCC when classifying spawning sites. The Schedule 17 sites are discrete points where eggs have been found. However, CCC's sites are reaches, determined from the location of eggs and the length of suitable spawning habitat upstream and downstream. This classification system has also been employed in previous versions of the LWRP. Since CCC are likely the only party impacted by the presence of Schedule 17 sites on the Avon and Heathcote Rivers I suggest we work with them to replace the Schedule 17 sites on these Rivers with reaches they have listed. These reaches will still encompass the discrete points currently in the plan and will actually offer a greater protection to spawning. |
| J Demeter | The submitter questions "has the modelled data been ground-truthed against the measured salt wedge in these estuaries". In addition, the submitter seeks an additional 10m upstream and downstream of proposed area margins to accommodate likely salt wedge location changes due to hapua and local river mouth morphology variances |
| Response: | The model has been successfully ground truthed against known spawning sites rather than salt water wedge measurements. Ground truthing against known spawning sites is a more relevant method of confirming the accuracy of the model and we found that 98% of known spawning sites within the areas where the model was run were predicted. |
| | The model is based on altitude measurements from LIDAR, so assumes unobstructed tidal inundation. Therefore, changes in river mouth openings should not result in spawning habitat moving upstream of the predicted habitat. In addition, the model predicts all of the waterway downstream of maximum |

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| | Including the general upstream area of the waterways is not consistent with the modelling approach, which, when ground-truthed, found that 98% of known spawning sites within the areas where the model was run were predicted. Due to the imposition of potential restrictions on adjacent landowners, data or modelling is needed to support the mapping. |
|------------|---|
| | 2. The different periods relate to the activity the rule covers, the longer period is given where vegetation clearance is being considered – and requires further time to re-establish. |
| Waitaki | The submitter seeks clarification of the exact site in the Waitaki River where the |
| Irrigators | inanga spawn. |
| Response: | Recommendation : Remove Waitaki River site as is not within the Canterbury Region |
| Working | The submitter states that these known inanga spawning sites needs to be |
| Waters | revisited every 5 years due to sea level rise from climate change or after earthquakes |
| Response: | Agree, and may be subject to a future plan change. |

<u>Additional Inanga/Whitebait Spawning Site Information – Rūnanga Feedback</u>

Please provide as much information as possible such as: exact location (map reference); what has been observed at the site (eggs or spawning activity); who made the observation; when the observation was made; any general information/description of the site.

| Location (GPS/NZTM co- ordinate E:N/ map grid reference) | Site Description (e.g. near bridge, rank grass, opposite farm shed etc.) | Observation (e.g. eggs seen /spawning activity) | Observer name & contact details | Date of Observation (approximate) |
|--|--|---|--|---|
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Date 18/11/15

MEMORANDUM

File Reference:

FROM: DR LISA SCOTT

TO: MATTHEW McCallum-Clark

SUBJECT: ADVICE ON EPFNZ/PIANZ SUBMISSION ON THE EXCLUSION OF POULTRY

WASHDOWN WATER FROM THE DEFINITION OF 'ANIMAL EFFLUENT' IN THE

LWRP PLAN CHANGE 4

The submitters have provided a very limited set of data to support their application, being only one-off water quality tests from two poultry sheds on a single Canterbury farm. The composition of washdown water could be highly variable both over time at a single operation and between different operations. The submitters do acknowledge that composition can vary between poultry sheds

The composition of the poultry wash water provided by the submitters is not very different in nutrient composition to that of published data for other types of animal effluent in New Zealand, such as dairy shed effluent and piggery effluent (Table 1).

Nitrate-nitrogen concentrations in poultry washdown water appear to be higher than those of other effluent types. This could be a result of allowing enough time for the organic nitrogen in poultry waste to mineralise and oxidise to nitrate before washing.

Nutrients are not the only potential contaminants present in animal effluent. Aislabie *et al.* (2011), for example, reported concentrations of *E. coli* ranging from 4.5×10⁴ to 1.5×10⁷/100mL in dairy shed effluent. The submission does not provide any data on the bacteriological composition of poultry washdown water. It is expected that microbial pathogens will be present in water that has been in contact with poultry faeces.

The main difference between poultry washdown water and other animal effluent appears to be lower volumes and rates of effluent application. The submission indicates that one large rearer poultry shed generates 10 m³ of effluent once per year and a large broiler poultry shed, 60 m³ (6 cycles of 10 m³ each) over a year. These amounts are likely small compared to dairy shed discharges. Annual volumes of effluent will depend on the size and number of poultry sheds and washdown practices and will also be specific to a particular operation.

References:

Aislabie, J, M McLeod, J Ryburn, A McGill and D Thornburrow, 2011: Soil type influences the leaching of microbial indicators under natural rainfall following application of dairy shed effluent, *Soil Research*, 49, 270–279.

Laurenson, JNS, NS Bolan, G Cartwright, DM Wheeler and MR Redding, 2006: Literature review. The transformation and loss of major nutrients following the application of piggery effluent to land, Report prepared by Massey University and AgResearch for the Sustainable Farming Fund, September 2006.

 $\underline{\text{http://www.nzpork.co.nz/images/custom/pig_manure_application_and_impacts_massey_uni_sep} \\ \underline{\text{t_2006.pdf}}$

Wallace, DF and PR Johnstone, 2010: Dairy effluent – composition, application and release. Report prepared for: Foundation for Arable Research by Plant & Food Research, PFR Client Report No. 36803, July 2010. http://maxa.maf.govt.nz/sff/about-projects/search/07-037/dairy-effluent-review-plant-and-food-report.pdf

Nutrient concentrations (g/m³) reported for other animal effluents in New Zealand compared with the Mandeville poultry washdown water analysis Table 1:

| Analyte | | | | | Dairy shec | y shed effluent | ıt | | | | Pigge | Piggery effluent | ent | Poultry washdown water | ltry down ter |
|--|-------------------------|----------------|------------------------------------|--------------------------------|---------------------------------|----------------------------------|---|--------------------------------|--------------------------|-------------------------|----------------|-------------------------|--------------|------------------------------|---------------------------|
| Data source | Bolan et al. 2004 | Cameron et al. | Di <i>et</i> <i>al.</i> 1998 | Di and Came- ron 2002 | Hawke and Summers 2003 | Long- hurst et al. 2000 | Mahimai- raja e <i>t al.</i> 1990 | Silva <i>et al.</i> 1999 | Sukias et al. 2001 | Zaman et al. 2002 | Cameron et al. | Carey et al. 1997 | Lowe 1993 | Shed1 EPFNZ/ PIANZ | Shed 2 EPFNZ/ PIANZ |
| Total Potassium | 231 | 220 | | 55 | 53 | 370 | | | | | | | 162 | 310 | 300 |
| Total Nitrogen | 135 | 190 | 383 | 246 | 80 | 269 | | 240 | 72 | 295 | 1420 | 1628 | | 220 | 220 |
| Nitrate-N + Nitrite-N | | | 9.0 | | 0.2 | 2 | 6.0 | 0.2 | 0.1 | 0.1 | <0.5 | <0.5 | | 23 | 22 |
| Ammonia-N | | | <u> </u> | 28 | 36 | 48 | 09 | 61 | 71 | | 1200 | 1026 | | | |
| Organic Nitrogen | | | | | | 219 | 286 | | 13 | 80.5 | | | | | |
| Total Kjeldahl Nitrogen (TKN) | | | | | | 267* | 336* | | 102* | | | | | 196 | 198 |
| Total Phosphorus | 22 | 30 | | | 31 | 69 | | | | | 200 | | 99 | 28 | 27 |

^{*} TKN was calculated from Organic N + Ammonia-N.

The data for dairy and piggery effluents were sourced from summaries by Wallace and Johnstone (2010) Laurenson et al. (2006). References to the other studies can be found within these reports.

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