
OPENING STATEMENT OF FELICITY ANN BOYD
Freshwater Planning Instrument
28 August 2023

Introduction

- 1 This statement provides an update on my understanding of the key issues in contention in the Freshwater Planning Instrument (FPI) parts of the Otago Regional Policy Statement 2021 (pORPS) since preparation of the section 42A report¹ and my supplementary evidence.² I am the reporting officer for all of the FPI except provisions in the RMIA and SRMR chapters for which Mr James Adams and Ms Jacqui Todd (respectively) are the reporting officers. While our statements are separate, we have worked closely together in their preparation.
- 2 Most of the FPI provisions are found in the LF – Land and freshwater chapter which contains both FPI and non-FPI provisions. The hearing for the non-FPI parts has been adjourned. Further evidence is being prepared on the implications of the NPSIB.
- 3 The FPI hearing of submitters will finish on 7 September and the Council’s reply is due by 18 September. Given the short timeframes, this statement provides my preliminary response to the evidence filed by submitters. Some of the recommendations I make in this statement may be revised once I have heard submissions and evidence from parties at the FPI hearing. In some cases, I have not yet made any revised recommendation.
- 4 This statement addresses the following themes:
 - 4.1 Technical information.
 - 4.2 Engagement and consultation.
 - 4.3 Te Mana o te Wai and ‘balance’.
 - 4.4 Te Mana o te Wai and the priorities

¹ Section 42A hearing report: Parts of the pORPS considered to be a FPI. (2 June 2023).

² Evidence of Felicity Ann Boyd: FPI – Implications of the NPSIB (11 August 2023.)

- 4.5 A transition framework
- 4.6 Emphasising existing regulatory and non-regulatory methods
- 4.7 Active engagement
- 4.8 Coordinated three waters strategy for Dunedin City Council (DCC).
- 4.9 Freshwater visions – structure and new region-wide
- 4.10 Freshwater visions – timeframes
- 4.11 Provisions managing natural wetlands
- 4.12 Direct wastewater discharges
- 4.13 Other changes

Technical information

- 5 Technical information to support the development of the LWRP is being produced at pace. In his evidence, Mr Dyer states that an additional report estimating the scale of change in nutrient run-off that is achievable from applying potential land use mitigations is in development and will likely become available in August 2023.³ I understand that report has been delayed and is now not due to be completed until October 2023. The panel may wish to clarify this with Mr Dyer, although I note ORC has not requested to be heard on its submission.
- 6 In her evidence, Ms Sandra McIntyre for Kāi Tahu ki Otago outlines her understanding that there are concerns about over-allocation of water quantity in a number of catchments across the region and states that it would be helpful for ORC to provide information on this to assist the panel.⁴
- 7 In his evidence, Mr Dyer states that part of the science programme underway has been hydrological modelling⁵ but provides no further information on that work. I agree with Ms McIntyre that it may assist the panel to have further evidence on water quantity; however, I am not aware that there are any technical reports publicly available on the state of water quantity across the region.

³ Tom Dyer for ORC, para 5.6.

⁴ Sandra McIntyre for Kāi Tahu ki Otago, para 20.

⁵ Tom Dyer for ORC, para 5.2.

- 8 In addition to the science work programme underway, ORC is also progressing an economic work programme. Most of the reports in that programme have now been published, including:
- 8.1 Phase 1 Report: Farmers and Growers in Otago.⁶
 - 8.2 Phase 2 Report: Otago Catchment Stories Summary Report.⁷
 - 8.3 Phase 3 Report: Otago Region Economic Profile for Land and Water.⁸
 - 8.4 Phase 4 Report: Otago's Rural Businesses and Environmental Actions for Fresh Water.⁹
- 9 Briefing papers on key topics for the LWRP have also been made publicly available following their consideration by ORC's Environmental Science and Policy Committee.¹⁰ The papers provide a high-level outline of the likely policy direction for these topics.
- 10 All of these reports inform the development of the LWRP and also demonstrate the rate at which information is being prepared to assist with plan development. In my s42A report, and again in this statement, I emphasise that the pORPS does not need to include all of the answers to implementing the NPSFM. Most of the answers are best addressed through the LWRP itself, as required by the NPSFM. My view is informed by the volume of work being prepared by or on behalf of ORC to assist plan development – it is not 'kicking the can down the road'; rather, a recognition that there will be information available to the LWRP that is not available for the pORPS at this time.

⁶ Moran, E. (Ed.) (2022). *Farmers and Growers in Otago*. EM Consulting for Otago Regional Council (LWRP Economic Work Programme), Dunedin, New Zealand. Available from <https://emconsulting.co.nz/wp-content/uploads/2022/12/Phase-1-Farmers-Grower-Report-ORC-Digital-30Nov.pdf>

⁷ Reilly, K (2023). *Otago Catchment Stories Summary Report*. Landpro for Otago Regional Council (LWRP Economic Work Programme), Dunedin. Available from <https://www.orc.govt.nz/media/14059/otago-catchment-stories-summary-report-final.pdf>

⁸ Yang, Y. & Cardwell, R. (2023). *Otago Region Economic Profile for Land and Water*. Otago Regional Council (LWRP Economic Work Programme), Dunedin. Available from https://www.orc.govt.nz/media/14680/otago-economic-profile-for-water-and-land_v9-2.pdf

⁹ Moran, E. (Ed.). (June, 2023). *Otago's rural businesses and environmental actions for fresh water*. Otago Regional Council (LWRP Economic Work Programme), Dunedin. Available from <https://www.orc.govt.nz/media/14832/farmer-grower-phase-2-report-otago-s-rural-businesses-and-environmental-actions-for-freshwater.pdf>

¹⁰ All papers are available from <https://www.orc.govt.nz/plans-policies-reports/land-and-water-regional-plan/how-we-develop-a-new-land-and-water-plan>

Engagement and consultation

- 11 There is criticism in the evidence filed about the engagement and consultation undertaken on the pORPS. Ms Claire Perkins for OWRUG, Federated Farmers, and Dairy NZ notes that the notified pORPS in 2021 was the first opportunity for the community to see the freshwater visions as a whole following consultation on their content and so this hearing is a critical piece of the engagement process. I agree this is the case. It has now been more than two years since the visions were notified, including a second round of notification, submissions, and further submissions, which have provided four additional opportunities for comment.
- 12 Some of the farmer witnesses for OWRUG, Federated Farmers, and Dairy NZ have outlined their views on ORC's engagement and consultation processes:
- 12.1 Ms Crutchley considers the process was "short and unimaginative" and notes three key themes that have not been reflected in the visions: the importance of community input, the importance of farming, and a general sense of too many regulations. Overall, she considers the process did not reflect the sense of community ownership that a vision should have.¹¹
- 12.2 Ms Hay considers the vision for North Otago does not fully reflect the values that the community articulated, such as maintaining a high production food industry, that rural communities are maintained and thriving, there is certainty in relation to water allocation, and recognition of the importance of existing irrigation schemes.
- 13 Engagement and consultation processes are notoriously fraught – they never satisfy everyone. While I respect the views of the farmer witnesses, in my opinion there was a lot of feedback from rural participants that was either focused on the methods to achieve visions (such as community involvement) or on matters that would 'lock in' the current state of water resources, preventing improvement from occurring as required by the NPSFM (such as providing certainty about water allocation).
- 14 The NPSFM requires regional councils to give effect to Te Mana o te Wai, including by applying the hierarchy of obligations when developing long-

¹¹ Emma Crutchley for OWRUG, Federated Farmers, Dairy NZ, paras 87-96.

term visions.¹² That means that when developing the visions, the health and well-being of water bodies and freshwater ecosystems had to be given priority. That is why there is a focus on the outcomes for the water bodies and their ecosystems, rather than on the uses of water. Instead, there are other provisions in the pORPS which recognise the importance of those uses. However, that cannot override the priority afforded to the health and well-being of water bodies in the hierarchy of obligations.

- 15 Mr Tim Ensor for Fulton Hogan draws attention to the requirement in clause 3.2 of the NPSFM to engage with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region. He appears to consider that this requires ORC to resolve all of the possible conflicts that might exist under the hierarchy of obligations. I discuss the hierarchy in more detail below; however, in relation to this point, I disagree with Mr Ensor's interpretation of clause 3.2.
- 16 In my view, the engagement requirements have been met through the consultation that occurred prior to the pORPS being notified as well as through the two notification processes since June 2021. I do not consider that determining how Te Mana o te Wai applies to water bodies and freshwater ecosystems requires the development of a suite of policies identifying all of the potential activities falling into each 'priority' and which has priority over another, as sought by Fulton Hogan.

Te Mana o te Wai and 'balance'

- 17 In his rebuttal evidence, Mr Ben Farrell for Fish & Game, Realnz and NZSki considers that some practitioners have not comprehended what Te Mana o te Wai means. He outlines his understanding of the concept, including that:¹³

...the basic and fundamental principle of putting the mauri and health of a waterbody ahead of human health and then associated well-beings should always be front and centre of plan making and decision-making. This is easier said than done given the majority of our society (inclusive of practitioners and decision-makers) have a European 'western' paradigm and are yet to have their paradigm disrupted by shifting towards an indigenous/Maori ('eastern') paradigm about the importance of freshwater.

¹² Clause 3.2(2)(c)(i), NPSFM.

¹³ Rebuttal evidence of Ben Farrell for Fish & Game, Realnz and NZSki, para 8.

18 I generally agree with Mr Farrell. Some of the planning witnesses are applying the approach of ‘balancing’ competing interests in decision-making and, in my opinion, misinterpreting what the NPSFM says about balance in clause 3.1(1). I have addressed this previously in my s42A report¹⁴ and my views have not changed. I agree with Ms McIntyre in her evidence for Kāi Tahu ki Otago where she states:¹⁵

Clause 1.3 of the NPSFM refers to “restoring and preserving the balance between the water, the wider environment, and the community”. Some submitters have interpreted this in a way that provides for weighing or trading off the needs of the community or resource users against the needs of water and the environment. The Kāi Tahu ki Otago further submission opposes those submissions on the grounds that they are based on a misinterpretation of the reference to balance in the NPSFM, and do not comply with the priorities in the sole objective.

Mr Ellison refers to the wording of clause 1.3 in his evidence. He points out that the reference to balance needs to be read in context, and he interprets it in a way that aligns with the Kāi Tahu perspective that use of resources must be based on an understanding and prioritisation of the natural balance in te taiao. I agree with Mr Ellison that the context in clause 1.3 indicates that it is this natural balance that must be restored, and I support the section 42A report recommendations to reject submissions that seek to implement a different interpretation.

19 I strongly disagree with Ms Hunter that LF-WAI-O1 is “superfluous and could be deleted”.¹⁶ Putting aside that including an objective expressing Te Mana o te Wai for a region in an RPS is a mandatory requirement of the NPSFM,¹⁷ in my view it would be unhelpful for the pORPS to rely only on the hierarchy of obligations without any further guidance to assist with applying that hierarchy. LF-WAI-P1 must be applied in a way that gives effect to the expression of Te Mana o te Wai in LF-WAI-O1.

20 Other than some minor amendments outlined in Attachment 1, I do not recommend any further amendments to LF-WAI-O1.

¹⁴ Paras 759-760

¹⁵ Paras 42-43

¹⁶ Claire Hunter for Contact, para 27.

¹⁷ Clause 3.2(3), NPSFM

Te Mana o te Wai and the priorities

21 The other matter in relation to Te Mana o te Wai that remains in contention is the priorities outlined in LF-WAI-P1. Generally, the planning witnesses continue to support the amendments sought by the submitters they appear for. I addressed those submissions in my s42A report¹⁸ and continue to hold the same views. Ms McIntyre helpfully summarises these as:¹⁹

- a) *the second priority in the Te Mana o te Wai hierarchy of priorities is confined to the health needs of people as they relate to physical contact, through immersion or ingestion of the water (including the safety of food harvested from water bodies), and is not intended to include more indirect matters such as food security or energy generation;*²⁰
- b) *Te Mana o te Wai is a 'water-centric' concept that does not extend to matters such as emissions reduction;*²¹ and
- c) *That it is the role of the LWRP rather than the PORPS to consider how specific activities should be managed to give effect to Te Mana o te Wai.*²²

22 The only additional point I would note is that, despite its broad scope, matters in the third priority will not all need to be addressed in the same way in the LWRP and, indeed, should not be. For example, food production and renewable electricity generation are both (in my view) examples of third tier priorities; however, the LWRP would not need to manage these activities in identical ways. There is nothing in the pORPS or the NPSFM that prevents different approaches being adopted to manage different activities. The key point, in my opinion, is that those activities are not afforded priority over the matters in priorities one and two.

23 I do not recommend any further amendments to LF-WAI-P1.

Transition framework

24 OWRUG, Federated Farmers, and Dairy NZ continue to seek the inclusion of a transition framework in the pORPS. I have previously addressed this

¹⁸ Section 8.3.5.3

¹⁹ Sandra McIntyre for Kāi Tahu ki Otago, para 49

²⁰ Section 42A report, paras 799-816

²¹ Section 42A report, para 818

²² Section 42A report, para 831.

in my s42A report²³ on the FPI and my reply report on the non-FPI provisions.²⁴ In her evidence, Ms Perkins proposes a new policy on transitioning (LF-FW-P7B) and consequential amendments to the freshwater visions (LF-VM-O2 to LF-VM-O5) to give effect to the policy. Her proposed LF-FW-P7B reads:

LF-FW-P7B – Support sustainable transition to achieve Freshwater Visions

Recognise that achieving the freshwater visions is likely to result in significant changes in land use activities and/or infrastructure by:

- a. At the time of setting of environmental outcomes, attribute states, environmental flows and levels identify:
 - i. Changes required by resource users;
 - ii. How those changes can be implemented;
 - iii. Costs of implementing those changes;
 - iv. The timeframe required to manage the costs of those changes in a way that can be sustained by the community that is ambitious but reasonable, and whether the dates in the visions need to be extended or brought forward in the Land and Water Plan.

25 In my view, the key aspect of Ms Perkins' proposed drafting is the ability to amend the vision timeframes through the LWRP. When developing the LWRP provisions, LF-FW-P7B(a)(iv) requires identifying whether the dates in the freshwater visions need to be amended in the LWRP. Consequential amendments to the freshwater visions then allow their timeframes to be amended through the LWRP.

26 I understand the amendments sought may not be lawful. This is addressed by Mr Anderson's legal submissions and so I address only planning matters here.

Other costs and benefits

27 In his rebuttal evidence, Mr Farrell for Fish & Game, Realnz and NZSki has outlined his opposition to the amendments proposed by Ms Perkins.²⁵ I agree with Mr Farrell that that policy is focused on future costs and does not recognise the current costs associated with historic decisions about the use of water. The cultural witnesses for Kāi Tahu ki Otago and Ngāi Tahu

²³ Para 280

²⁴ Section 4, Reply Report 9: LF – Land and freshwater (23 May 2023)

²⁵ Rebuttal evidence of Ben Farrell for Fish & Game, Realnz and NZSki, paras 40-42.

ki Murihiku have outlined the significance of these costs for mana whenua.²⁶

- 28 I also agree with Mr Farrell that the policy does not recognise the future benefits. The financial costs of regulation are always a key consideration in policy-making; however, this does not override the importance of other types of costs and benefits, including those that are difficult to quantify.

Amending the timeframes

- 29 Ms Perkins states that:²⁷

If there is no mechanism to evolve the timeframes then the only option would be to amend the PRPS provisions themselves through a Schedule 1 RMA process. This is both costly and an inefficient use of resources.

- 30 I agree with Mr Farrell²⁸ that amending an RPS does not need to be costly or inefficient. RPSs are required to be reviewed no less frequently than every ten years. Assuming the visions become operative in the next couple of years, they will be due for review again by the mid-2030s. As most of the visions have timeframes of between 2040 and 2050, this would provide an opportunity to review the progress made towards achieving the visions.

- 31 Even in the absence of review, a targeted change could be progressed to amend timeframes using the freshwater planning process or as part of a broader change. I note there are requirements in the NPSIB for RPSs that cannot be implemented in the pORPS at this time, indicating there will need to be further amendments in the future.

- 32 The LWRP is due to be notified in June 2024 and a decision is required on its provisions by June 2026. Even if it was lawful and appropriate to allow the LWRP to 'override' the timeframes in the freshwater visions, it could only do so in the next few years before its provisions also become operative. After that time, a plan change would still be required to amend the timeframes. In my opinion, it is far more likely that timeframes will need to be revisited further down the track (for example, in ten years) than in the next few years.

²⁶ See: Edward Ellison for Kāi Tahu ki Otago, paras 61-70; Evelyn Cook for Ngāi Tahu ki Murihiku, paras 21-31; Brendan Flack for Kāi Tahu ki Otago, para 19; Justin Tipa for Kāi Tahu ki Otago paras 7-14.

²⁷ Claire Perkins for OWRUG, Federated Farmers and Dairy NZ, para 66

²⁸ Rebuttal evidence of Ben Farrell for Fish & Game, Realnz and NZSki, para 41(b)

- 33 The evidence presented by the farming witnesses for OWRUG, Federated Farmers, and DairyNZ²⁹ emphasises the destabilisation and delay that can arise from uncertainty, especially uncertainty in regulation. Allowing the visions to be revisited through the LWRP would only increase the uncertainty for farmers and may incentivise ‘waiting to see’ – i.e. not making changes to resource use until the timeframes have been confirmed through the LWRP. That is an inefficient and ineffective outcome, for resource users and for the water bodies, especially given the information available on the degraded state of water in parts of Otago.

Duplication of requirements

- 34 The other aspect of new LF-FW-P7B is the requirement for the following information to be identified when setting environmental outcomes, attribute states, environmental flows and levels:

34.1 Changes required by resource users;

34.2 How those changes can be implemented;

34.3 Costs of implementing those changes;

34.4 The timeframe required to manage the costs of those changes in a way that can be sustained by the community that is ambitious but reasonable.

- 35 These are important considerations, however in my view they are already required to be included in a s32 evaluation report (my emphasis added):

(1) *An evaluation report required under this Act must—*

...

(b) *examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—*

(i) *identifying other reasonably practicable options for achieving the objectives; and*

(ii) *assessing the efficiency and effectiveness of the provisions in achieving the objectives; and*

(iii) *summarising the reasons for deciding on the provisions; and*

...

²⁹ For example, Emma Crutchley (para 20),

- (2) *An assessment under subsection (1)(b)(ii) must—*
- (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 the opportunities for—*
 - (i) *economic growth that are anticipated to be provided or reduced; and*
 - (ii) *employment that are anticipated to be provided or reduced; and*
 - (b) *if practicable, quantify the benefits and costs referred to in paragraph (a); and*
 - (c) *assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.*

36 ORC has developed an Economic Work Programme to support the LWRP and most reports are now completed, as previously. These reports will inform the development of the LWRP and the content of the accompanying s32 report.

37 For these reasons, I do not recommend including new LF-FW-P7B or the consequential amendments to visions.

Emphasising existing regulatory and non-regulatory methods

38 Ms Perkins for OWRUG, Federated Farmers, and Dairy NZ proposes a new LF-FW-P7C as follows:

When determining what methods to use to manage land and freshwater, give preference to the methods requiring the least additional regulatory intervention in the land and water plan, where this will enable progress towards achieving the visions, by:

- a. *Staging the implementation of any new regulatory requirements in recognition of the existing costs associated with addressing regulations that are already in force so that the implementation of new regulation can be managed by resource users;*
- b. *Relying on implementation of Freshwater Farm Plan Regulations;*
- c. *Avoiding where possible new rules for matters already managed by:*
 - i. *National Environmental Standards; and*
 - ii. *Regulations made under the Resource Management Act*
- d. *Leveraging existing catchment groups or community collectives;*
- e. *Not imposing new regulatory requirements where water quality is already at the target attribute state;*

- f. *Establishing trigger points where additional regulatory intervention is required to prevent degradation*

39 I address the parts of this policy in turn.

Preferring methods with the least additional regulatory intervention

40 In her rebuttal evidence,³⁰ Ms McIntyre outlines her opposition to the requirement in LF-FW-P7C to “give preference to the methods requiring least additional regulatory intervention” in the LWRP. I agree with Ms McIntyre that this would inappropriately constrain the decision-making process for the LWRP for the reasons she has set out.

Staging implementation

41 Staging implementation is a key tool for managing impacts on users and has been employed by ORC previously in respect of Plan Changes 6A and 8 to the Water Plan. The NPSFM clearly anticipates transitions over time: councils may set long term timeframes for target attribute states as long as they also set interim target attribute states³¹ and environmental flows and levels may be set and adapted over time to take a phased approach to achieving environmental outcomes and long-term visions.³² In my view, there is nothing in the pORPS that would prevent staged implementation from occurring.

Relying on Freshwater Farm Plans (FWFPs)

42 LF-FW-P7C(b) requires relying on freshwater farm plan (FWFP) regulations. Those regulations have recently been introduced and are still being rolled out in the first regions to implement them (Southland and Waikato). If FWFPs prove to be effective, they will be a valuable tool for addressing issues with fresh water.

43 In my view, the regulations are very detailed in terms of the *process* to be followed to prepare, certify, and audit FWFPs but light on the *outcomes* FWFPs must achieve.³³ As Ms Scott notes,³⁴ when farm operators are

³⁰ Rebuttal evidence of Sandra McIntyre for Kāi Tahu ki Otago, paras 16-18.

³¹ Clause 3.11(6), NPSFM

³² Clause 3.16(2), NPSFM

³³ There are 30 regulations across Parts 3 (Certification of FWFPs), 4 (Audit of certified FWFPs), 5 (Information Requirements) focused on procedural matters, and two (regulations 8 and 9) focused on the outcomes expected from implementing FWFPs.

³⁴ Kate Scott for OWRUG, Federated Farmers, Dairy NZ, para 41.

identifying and assessing the risks and actions on-farm, they are only required to “have regard to” the catchment context, challenges, and values (which includes the provisions of regional plans, RPSs and the NPSFM itself)³⁵ for the local area in which the farm is situated and to the impacts that farming has on the receiving environment.³⁶ I understand case law has determined that “have regard to” requires the decision-maker to give genuine attention and thought to the matter.³⁷ That is not a strong direction, and does not require that FWFPs contribute to achieving the outcomes sought by regional plans or the NPSFM.

- 44 My concerns are, in part, informed by recent reporting on Ōtūwharekai/Ashburton Lakes.³⁸ The Ōtūwharekai/Ashburton Lakes are a network of wetlands and lakes in the Ashburton high country, home to one of New Zealand’s best remaining inter-montane wetland systems and habitats for nationally significant species, and of high cultural value for Ngāi Tahu. The lakes are now partly eutrophic, with elevated sediment and nutrient levels, algal growth, and reduced clarity. The main nutrient source (90%+) across all lakes was identified as pastoral land use.
- 45 Upon learning of the degraded condition of these lakes, the Minister for the Environment commissioned a report on any regulatory system vulnerabilities that may have contributed to the lakes’ decline. The lakes are managed under the Canterbury Land and Water Regional Plan (CLWRP) which contains rules managing nutrient loss as well as a requirement for farm environment plans to be implemented. All four farms in the catchment require resource consent³⁹ and all have farm environment plans in place. Those plans were prepared, certified, and audited in accordance with the CLWRP provisions. Three of the four farms have achieved two consecutive A grades in their farm environment plan audits.
- 46 There were many findings in the report, however some are particularly relevant to FWFPs:⁴⁰

³⁵ Clause 4(c) and (e), FWFP Regulations 2023

³⁶ Regulation 9, FWFP Regulations 2023

³⁷ Unison Networks Ltd v Hastings District Council [2011] NZRMA 394 (HC) at [70]

³⁸ Ministry for the Environment. (2023). *Ōtūwharekai/Ashburton Lakes lessons learnt report: a case study examining ongoing deterioration of water quality in the Ōtūwharekai lakes*. Wellington: Ministry for the Environment. Available from:

https://environment.govt.nz/assets/publications/ME1763_LessonsLearnt_Final_24.5.pdf

³⁹ Two have been granted, two are still in train.

⁴⁰ Ministry for the Environment, 2023, pp.9-10.

- 46.1 Some critical decisions were devolved to farmers and their advisors. These included the nitrogen loss limit calculation, in which the CLWRP's limit-setting methodology was applied to the farmer's input data, and the choice and implementation of good management practices and actions to stay within the limit.
- 46.2 Good management practices were also used alongside the nitrogen loss limit but were not able, on their own, to drive adequate reductions or provide a firm limit.
- 46.3 Environment Canterbury was reliant on third party professionals to deliver the farm environment plan system and set farm N-loss limits, making it vulnerable to industry capture. While measures to address this were taken, vulnerabilities exist.
- 46.4 The farm environment plan system is overly focused on process rather than environmental outcomes. So long as A or B grade audits were achieved, intensification of high-risk areas near the lakes were not monitored or controlled.
- 47 The report goes on to note that the FWFP system has similarities to Environment Canterbury's farm environment plan system and that (my emphasis added):
- Like the [farm environment plan] tool, **the FWFP system used in isolation will have limitations on addressing issues of over-allocation in catchments**, particularly for contaminants like nitrogen. **Councils will need to rely on a combination of regulatory tools** (such as setting catchment and farm-level limits and rules on resource use that align with achieving environmental outcomes) and interventions, **alongside farm planning**, specific to each catchment's needs and context, to meet water quality limits and targets.*
- 48 In my view, FWFPs should be a useful tool for addressing on-farm mitigations, however they will not be sufficient (on their own) to address over-allocation. I therefore disagree with Ms Scott's suggestion that "as CFWFPs are phased in across Otago the need for greater regulatory control may well diminish."⁴¹

⁴¹ Kate Scott for OWRUG, Federated Farmers and Dairy NZ, para 53.

- 49 I consider it would be entirely inappropriate to constrain the LWRP to relying on FWFPs, especially in FMUS or rohe where there is over-allocation.

Avoiding new rules for matters already managed by regulations

- 50 National environmental standards and regulations promulgated under the RMA are developed to apply nationally. Whether they are sufficient to address the issues or outcomes identified in regions is a matter that regional councils need to consider. Most regulations, including the NESF⁴² and the Stock Exclusion Regulations,⁴³ specify whether provisions in lower order plans can be more or less stringent (and both of these documents allow additional stringency).
- 51 In my view, LF-FW-P7C(c) would prevent ORC from including additional stringency in the LWRP, even if that was the most effective way to achieve the outcomes sought for a FMU or rohe. Constraining ORC's decision-making in this way is not appropriate, especially if it prevents the LWRP from considering effective methods for achieving environmental outcomes.

Leveraging catchment groups or community collectives

- 52 Like Ms McIntyre, I am unsure what is meant by 'leveraging' these groups and I agree that the relationship between regulations and actions plans or catchment group activities, and the mix of these in achieving environmental outcomes, is a matter for the LWRP process. I note that LF-VM-M3 requires:
- 52.1 Engaging with communities and stakeholders to identify the methods to achieve environmental outcomes (clause 1);
- 52.2 Encouraging community stewardship of water resources and programmes to address freshwater issues at a local catchment level, including through catchment groups (clause 2); and
- 52.3 Supporting community initiatives that contribute to maintaining or improving the health and well-being of water bodies (clause 3).

⁴² Regulation 6, NESF

⁴³ Regulation 19, Stock Exclusion Regulations

- 53 In my view, the pORPS already recognises the role of catchment groups or community collectives as a method for achieving environmental outcomes in a way that is clearer and more specific than LF-FW-P7C.

Not imposing new regulatory requirements where water quality is already at the target attribute state

- 54 This requirement overlooks the importance of considering trends as well as states. A target attribute state might currently be achieved, but the trend may indicate that it is degrading over time, meaning there is a risk of the target attribute state no longer being met in the future. This is the case in some of ORC's FMUs and rohe. For example:

54.1 Mātakitaki (Matukituki) at West Wānaka (Upper Lakes rohe): state information shows this site is achieving A band for nitrate (Q95 and median), but the 10-year trend information shows that the trend is 'exceptionally unlikely' to be improving (i.e. it is degrading).

54.2 Cardrona at Mt Barker (Dunstan rohe): state information shows the site is achieving A or B band for the various E.coli measurements but the 10-year trend information shows that the trends are 'exceptionally unlikely' to be improving (i.e. they are degrading).

- 55 Policy 5 of the NPSFM requires that the health and well-being of water bodies and freshwater ecosystems is maintained or, if degraded, improved. The NPSFM goes on to state that if a regional council detects that an FMU or part of an FMU is degrading it must, as soon as practicable, take action to halt or reverse the degradation (for example, by making or changing a regional plan).⁴⁴

- 56 ORC has detected that some sites are degrading and therefore must take action to halt (at minimum) that degradation. In my view, it would not give effect to the NPSFM to prevent the LWRP from taking regulatory action in these situations.

Establishing trigger points where additional regulatory intervention is required to prevent degradation

- 57 There is an inherent conflict between LF-FW-P7C(e) (which prevents the imposition of new regulatory requirements where water quality is already at

⁴⁴ Clause 3.20(1), NPSFM

the target attribute state) and LF-FW-P7C(f) which requires trigger points for intervention to prevent degradation. That aside, clause 3.20 of the NPSFM already outlines what regional councils must do when they detect degradation. I do not consider this direction is necessary.

Concluding comment

58 Although I do not support the amendments proposed by Ms Perkins, I am still considering whether recognition of the need for transitions over time can be provided in the FPI provisions in some other way. I intend to provide my final position on this point in reply once I have heard from submitters.

Active engagement

59 Ms Perkins proposes a new policy LF-FW-7D⁴⁵ for local community involvement which reads:

When developing and implementing planning instruments to give effect to the objectives and policies in this policy statement through integrated management of land and freshwater, Otago Regional Council must actively engage with local communities, at the rohe and catchment level, to:

- (1) identify values and environmental outcomes for Otago's FMUs, rohe and catchments and the methods to achieve those outcomes, including as required by the NOF process; and*
- (2) develop and implement action plans that may be adapted over time with trigger points where additional regulatory and/or non-regulatory intervention is required; and*
- (3) at a local catchment level, including through catchment groups, encourage community initiatives to maintain or improve the health and well-being of water bodies.*

60 In her evidence, she notes that LF-VM-M3 already contains similar direction but states that:⁴⁶

Giving this engagement requirement more weight through the policy level rather than relying on it as a method, will ensure that ORC can be held accountable for the degree of engagement that is needed with the rural sector.

61 I do not consider there is any difference in weight between policies and methods in an RPS. Section 62(1)(d) and (e) require an RPS to state the

⁴⁵ In Ms Perkins' evidence this is called LF-FW-P7C, however to avoid confusion with the other LF-FW-P7C she has proposed I have referred to this policy as LF-FW-P7D.

⁴⁶ Claire Perkins for OWRUG, Federated Farmers, Dairy NZ, para 84.

policies for the issues and objectives, and an explanation of those policies, and the methods used, or to be used, to implement the policies. There is no difference in their effect; the difference is simply that they are provisions with different purposes.

- 62 In my view, this policy duplicates direction already set out in LF-VM-M3 and restates requirements already in the NPSFM (except it does not explicitly refer to tangata whenua forming part of 'local communities'). In terms of accountability, I note that this method begins "Otago Regional Council must..." which ensures its implementation is mandatory.

Coordinated three waters strategy for Dunedin City Council

- 63 In his evidence for Dunedin City Council (DCC), Mr James Taylor proposes a suite of new provisions and amendments to existing provisions to enable DCC's three waters system to achieve the objectives and policies of the pORPS. The key change is the introduction of new LF-FW-M11 that requires:

The owner of the Dunedin City three waters Regionally Significant Infrastructure prepares a coordinated strategy that outlines progressive improvements necessary to achieve the objectives of this regional policy statement.

- 64 This is supported by amendments to relevant freshwater visions and provisions managing stormwater discharges and wastewater discharges which, in effect, mean some of the implementation of these provisions depends on the development of the coordinated strategy proposed in LF-FW-M11 above.
- 65 I understand that there are issues with the lawfulness of this approach which are addressed in Mr Anderson's legal submissions. In my view, the lawfulness of the proposed drafting is the primary issue to address. That aside, in my view there is nothing in the pORPS preventing DCC or any other territorial authority from developing such a strategy. Similar types of strategies are regularly prepared by local authorities in accordance with the Local Government Act 2002.

Freshwater visions – structure and new region-wide objective

- 66 In the s42A report, I proposed significant changes to the structure of the freshwater visions in LF-VM-O2 to LF-VM-O6, primarily by including a new

region-wide objective for freshwater (LF-FW-O1A) that picked up common elements from the visions as notified and from the community consultation feedback.

- 67 Most planning witnesses support the approach I have recommended,⁴⁷ though some still seek specific amendments to LF-FW-O1A and/or the visions. Amongst the parties that have filed evidence, the main opposition comes from Vance Hodgson for Horticulture NZ and Claire Perkins for OWRUG, Federated Farmers, and DairyNZ.
- 68 Mr Hodgson is concerned that the variation between the notified visions was deliberate and reflected the community consultation process. I understand he is also concerned that something may have been lost from the engagement exercise as a result of the restructuring I have recommended. I share his concern and that is why, when preparing the s42A report, I carefully considered the consultation feedback provided.⁴⁸
- 69 Although I was not involved in the preparation of the first draft of the freshwater visions (prior to clause 3 consultation in 2021), I was involved in the second (notified) version. I am confident that the differences between similar provisions in the visions was an unintended outcome arising from the very short timeframes available, rather than a legitimate difference between FMUs/rohe.
- 70 Ms Perkins outlines two main reasons for her disagreement. Firstly, she considers that long-term visions cannot be set at a region-wide level. I agree and I addressed this in my s42A report.⁴⁹ My position remains the same; however, I note that Ms McIntyre has proposed amendments to each of the visions to more explicitly outline the connection between those visions and LF-FW-O1A. I consider those amendments are sensible and clarify that achieving LF-FW-O1A forms a part of achieving each of the visions.
- 71 Ms Perkins' second concern is that, even where the consultation feedback identified similarities across FMUs or rohe, a single objective cannot reflect the difference in the significance or importance of each of those matters

⁴⁷ For example, Sandra McIntyre for Kāi Tahu ki Otago, Murray Brass for the Director-General of Conservation, Carmen Taylor for Ravensdown, Susannah Tait for Fonterra, John Kyle for Silver Fern Farms, Aileen Crow for Waka Kotahi.

⁴⁸ For example, paras 895-903, 910, 934, 939, 943.

⁴⁹ Para 889

within each FMU or rohe.⁵⁰ Her recommendation is that some of the specificity of the clauses in LF-FW-O1A “go back to the individual FMU visions, along with the additional ones I have recommended in my evidence and below.”⁵¹ If the proposed solution is to simply move existing clauses back to the visions, I am unsure how this would reflect the difference in significance of these matters within FMUs or rohe.

72 In my view, a common outcome on paper does not need to result in a common outcome on the ground. For example, achieving LF-FW-O1A requires that “the natural character, including form and function, of water bodies reflects their natural behaviours to the greatest extent practicable”. What this outcome will look like once it has been achieved will inevitably be different in different parts of the region. I do not consider this is problematic, rather it ensures there is a consistent expectation across the region while allowing different actions to be taken to achieve the outcome depending on the characteristics of a particular area.

73 I continue to maintain my s42A recommendations with respect to the structural changes to the visions and to introduce LF-FW-O1A. In **Attachment 1** I have addressed the various amendments sought to the content of LF-FW-O1A and LF-VM-O2 to LF-VM-O6.

Freshwater visions – timeframes

74 In my s42A report, I addressed the various amendments sought to the timeframes for achieving the freshwater visions in general terms.⁵² I did not make any recommendations on the timeframes because I understood ORC (as submitter) and other submitters would provide additional information through evidence that would inform considerations of the timeframes.

75 Clause 3.3 of the NPSFM says the following about the content and timeframes for visions:

- (2) *Long-term visions:*
 - (a) *may be set at FMU, part of an FMU, or catchment level; and*
 - (b) *must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible); and*

⁵⁰ Claire Perkins for OWRUG, Federated Farmers, DairyNZ, paras 33-34.

⁵¹ Claire Perkins for OWRUG, Federated Farmers, DairyNZ, p.80.

⁵² Section 8.4.3, Section 42A report

(c) identify a timeframe to achieve those goals that is both ambitious and reasonable (for example, 30 years after the commencement date).

- 76 The test for goals is “ambitious but reasonable” and the test for timeframes is “ambitious and reasonable”. I do not consider there is much, if any, practical difference. To determine what is ambitious and reasonable, I consider that goals and timeframes are two halves of the same coin that should not be considered in isolation. For example, a goal may be ambitious or not depending on the timeframe associated with its achievement and vice versa. As I read clause (2)(b) above, the phrase “difficult to achieve but not impossible” applies to the combination of the two parts of the test – “ambitious and reasonable” means “difficult to achieve, but not impossible.”
- 77 I have previously set out the background to the development of the visions.⁵³ In my view, the evidence on the health of fresh water and freshwater ecosystems in Otago⁵⁴ suggests that all of the goals in the freshwater visions are ambitious in terms of what they are seeking to achieve. I do not consider that they are impossible to achieve (i.e. irrespective of timeframe), but they will certainly be difficult to achieve in some parts of the region. The difficulty depends, in part, on the timeframes for achieving them.
- 78 The timeframes in the visions range from 2030 to 2050 based on the complexity of the issues to address in each area, as assessed in 2020. The timeframes are based loosely on the concept of ‘change within a generation’. The importance of this is emphasised in the evidence for Kāi Tahu.⁵⁵ This was also one of the objectives of the *Essential Freshwater* programme which led to the introduction of the NPSFM 2020.
- 79 In June 2018, Cabinet approved the Essential Freshwater work programme in order to (my emphasis added):

⁵³ Section 2.4, Section 32 evaluation report; paras 879-855 and 895-945, Section 42A report.

⁵⁴ For example: Section 2, Section 42A report; Tom Dyer for ORC; Marine Richardson, Bruce McKinlay and Nicholas Dunn for Director-General of Conservation; Ami Coughlan and Jayde Couper for Fish and Game; Edward Ellison, Brendan Flack, and Justin Tipa for Kāi Tahu ki Otago; Evelyn Cook for Ngāi Tahu ki Murihiku.

⁵⁵ See Edward Ellison, paras 69-70; Brendan Flack, paras 17-18; Justin Tipa, para 30; Evelyn Cook, para 23; Sandra McIntyre, paras 62-68.

- 79.1 stop further degradation of New Zealand's freshwater resources and start making immediate improvements so that water quality is materially improving within five years,
- 79.2 reverse past damage to bring New Zealand's freshwater resources, waterways and ecosystems to a healthy state within a generation, and
- 79.3 address water allocation issues, by working to achieve efficient and fair allocation of freshwater resources, having regard to all interests including Māori, and existing and potential new users.
- 80 In 2019, detailed policies were developed to implement the first two of these objectives, culminating in the *Action for healthy waterways* discussion document (September 2019) that included drafts of a new NPSFM, an NES, and Stock Exclusion Regulations. In 2020, following consultation on the discussion document above, Cabinet approved the NPSFM 2020, NESF 2020, and Stock Exclusion Regulations 2020 which all came into force that September.
- 81 The very first paragraph of the Cabinet paper approving the NPSFM 2020 states:⁵⁶
1. *This paper seeks agreement to an Action for healthy waterways package, including:*
 - 1.1 *a new National Policy Statement for Freshwater Management (new NPS-FM) to replace the current NPS-FM 2014 (amended 2017). This will require regional councils to finalise long-term objectives in their freshwater planning instruments by 31 December 2026, to put the country on a path to restoring our waterways in a generation.*
- 82 For these reasons, I consider that 'within a generation' should be the starting point for considering timeframes. As I understand it, a human generation is the average time it takes for children to grow up, become adults, and have children of their own – generally considered to be around 20-30 years. All of the freshwater visions currently require achievement within 30 years.

⁵⁶ <https://environment.govt.nz/assets/publications/Cabinet-papers-briefings-and-minutes/cab-paper-action-for-healthy-waterways-decisions-on-national-direction-and-regulations-for-freshwater-management.pdf>

83 The question for the panel is whether the goals and timeframes in the visions are “ambitious but reasonable”. If they are so ambitious that they are unreasonable, there are two options available: reduce the ambition or increase the timeframe. If they are so reasonable that they are unambitious, the reverse is true: increase the ambition or reduce the timeframe.

84 In the sections below I outline my preliminary thoughts on the timeframes. For water quality information, I rely on the May 2023 report appended to Mr Dyer’s evidence. I am conscious that there is still little information available on water quantity in the region. For water quantity, I have relied on the evidence prepared by parties for the hearing on Plan Change 7 to the Water Plan and my general understanding of these catchments through my work for ORC on the pORPS and the development of the LWRP.

Clutha Mata-au FMU: Upper Lakes rohe (2030)

85 The Upper Lakes rohe has the best water quality in Otago, with most water bodies in essentially their natural state and a large area of conservation land. The latest water quality monitoring information includes information on 5-year trends which suggests there may be some degradation occurring, particularly in Lakes Wānaka, Whakatipu and Hāwea, however 5-year trends are very short and caution should be applied when considering them. The key issue for groundwater is arsenic, however that is largely due to the presence of schist. As I understand it, there is high rainfall in the area and low levels of abstraction and therefore there are unlikely to be issues with water quantity.

86 While some action may be required if the degrading trends continue, overall this rohe requires ‘maintaining’ rather than ‘improving’. Given how close the rohe is to achieving the vision already, it would be unreasonable to set a timeframe of an entire generation. On the evidence available, I consider the 2030 timeframe to be both ambitious and reasonable.

Clutha Mata-au FMU: Dunstan rohe (2045)

87 The main land use in the Dunstan rohe is drystock farming, followed by conservation estate. As you would expect, water quality is generally very good.⁵⁷ The key exception is Lake Hayes which is eutrophic. There are

⁵⁷ Some sites are below the national bottom line for suspended fine sediment due to the presence of glacial flour, a naturally occurring phenomenon.

fewer degrading 10-year trends than 20-year trends at surface water sites, but still some that are exceptionally unlikely to be improving. There are also four groundwater sites with 10-year trends that are exceptionally unlikely to be improving. Overall, although most catchments are likely to be 'maintaining', some will need to be improved.

- 88 I understand there may be some catchments within the Dunstan rohe where water quantity, and abstraction, is a concern. Information about the rohe on ORC's website states that:⁵⁸

Very little water is taken from the Shotover and Nevis Rivers, but there is significant water use in the Upper Clutha Mata-au Valley from the Clutha Mata-au river, and the Hāwea and Dunstan lakes. Here, irrigation is the lifeblood of farming, and some streams run dry in summer.

- 89 This suggests there is likely to be over-allocation in some catchments. With that context, I am inclined to consider the current timeframe (2045) ambitious but reasonable.

Clutha Mata-au FMU: Manuherekia FMU (2050)

- 90 Water quality in the Manuherekia rohe varies considerably due to the highly modified nature of the catchment. Generally, water quality is very high upstream of Falls Dam (on the mainstem of the Manuherekia River) and at Blackstone and Dunstan Creek. The lower Manuherekia mainstem and tributaries show degradation across many attributes, including E.coli and dissolved reactive phosphorus. Faecal source tracking has shown both avian and ruminant sources for E.coli detected. There are degrading trends for at least one attribute at all Manuherekia sites. Groundwater quality is generally good, with the exception of one bore showing an E.coli exceedance and elevated nitrate concentrations; however, the 10-year trend analysis showing that for nitrate-N most sites are 'unlikely' or 'very unlikely' to be improving.

- 91 The Manuherekia catchment is one of the most complex catchments in New Zealand. The first rights to take water from the river were issued under mining legislation in the late 1960s, which became 'deemed permits' when the RMA was introduced in 1991 and were due to expire in 2021. Many of those permits have now been reconseented for a short period (until 2028).

⁵⁸ <https://www.orc.govt.nz/plans-policies-reports/land-and-water-regional-plan/find-your-area/dunstan-rohe>

- 92 Flows and distribution of water in this rohe are highly modified. Water is taken from the Manuherekia River as well as tributaries and aquifers. Water races, along with natural watercourses, are used to convey water for irrigation, stock water, and domestic supplies by six major irrigation schemes: Omakau, Manuherekia, Galloway, Blackstone Hill, Hawkdun Ida Scheme, and Ida Valley. This has created an expansive and complex distribution network that moves water around the rohe as well as to and from the Taiari FMU. Falls Dam in the upper catchment of the Manuherekia River stores approximately 11 million m³ and supplements takes along the mainstem. Dams in the Pool Burn and upper Manor Burn store approximately 70 million m³ of water in total, but stored water is used sparingly.
- 93 Currently, the mainstem of the Manuherekia River has been managed by the irrigation schemes to maintain a voluntary minimum flow of 900 l/s at the Campground flow recorder but in dry seasons (with ORC approval) can drop to 600 l/s. On 22 August 2023, Council received a briefing from staff recommending the river to eventually have a minimum flow of between 2,000 and 2,500 l/s.⁵⁹
- 94 Minimum flows are typically paired with allocation regimes, residual flows, and flow sharing regimes in order to manage water abstraction and the consequential ecological stressors. Further work needs to be undertaken to develop these. The briefing report to Council states that “transitioning the river from the current management regime to a higher minimum flow should be implemented over an appropriate period of time.”⁶⁰
- 95 Mr Sheehan for OWRUG, Federated Farmers, and Dairy NZ has provided evidence on irrigation storage and water distribution for a range of schemes, including the Ida Valley Scheme in the Manuherekia catchment. In summary, his evidence is that:
- 95.1 The Upper Manorburn and Poolburn Dams are very old (108 and 91 years, respectively) and have unique engineering challenges. Installing new outlets to increase outflows would be very expensive and extremely challenging, and the costs would run into the multi

⁵⁹ <https://www.orc.govt.nz/media/14893/espc-briefing-paper-manuherekia-minimum-flow-update.pdf>

⁶⁰ Ibid, paras 175-176

millions. In both cases, existing outlet drains are not big enough to draw the reservoir down far enough to install a new outlet pipe.⁶¹

- 95.2 Moa Creek Weir and Poolburn Weir were constructed of very poor quality concrete that has meant significant repair work has been required over their lifetimes. Any structural changes (for example, to increase storage volume) would have significant engineering challenges and costs.⁶²
- 96 The vision for the Manuherekia rohe has one of the longest timeframes for achievement (2050) which I consider is appropriate given the significant change proposed for the management of flows in the Manuherekia, the age and limitations of the existing infrastructure, and the overall complexity of the water abstraction and conveyancing networks. There will undoubtedly be substantial change required in water use, supported by substantial investment in infrastructure. I note that most of the irrigation scheme infrastructure is very old and some were not constructed to a high standard. Potentially, some of this infrastructure is already nearing the end of its lifespan.
- 97 At this stage, I am inclined to retain the 2050 timeframe, acknowledging that there will be opportunities to review progress towards achieving the vision when the pORPS is reviewed in the future. However, I am not opposed to reconsidering this position should further evidence on the timeframes be produced.

Clutha Mata-au FMU: Roxburgh FMU (2045)

- 98 Water quality at three (Teviot, Fraser, and Clutha at Millers Flat) of the four monitored rivers in this rohe is generally good, achieving A band for most attributes (other than suspended fine sediment, which is affected by glacial meltwater and tannin staining). However, Bengier Burn falls below the national bottom line for all four measurements of E.coli. Groundwater quality state results highlight some issues in the Roxburgh Rohe, notably E.coli detections in most bores and high median nitrate-N concentrations. These results are potentially due to the intensive farming and septic tanks in the Ettrick area, where further land use intensification and housing expansion continues to occur.

⁶¹ Brendan Sheehan for OWRUG, Federated Farmers, Dairy NZ, paras 25-26 and 52-53.

⁶² Brendan Sheehan for OWRUG, Federated Farmers, Dairy NZ, paras 37 and 43.

- 99 I understand there may be issues with water quantity in this rohe. ORC's website states:⁶³

Water use for irrigation is high from all the rivers and streams in this rohe due to the extreme dryness in the spring, summer, and autumn months. In summer, the smaller streams and rivers can run dry due to both natural losses to groundwater and water taken for irrigation. Hydroelectricity generation at Roxburgh Dam is also an important control on water quantity.

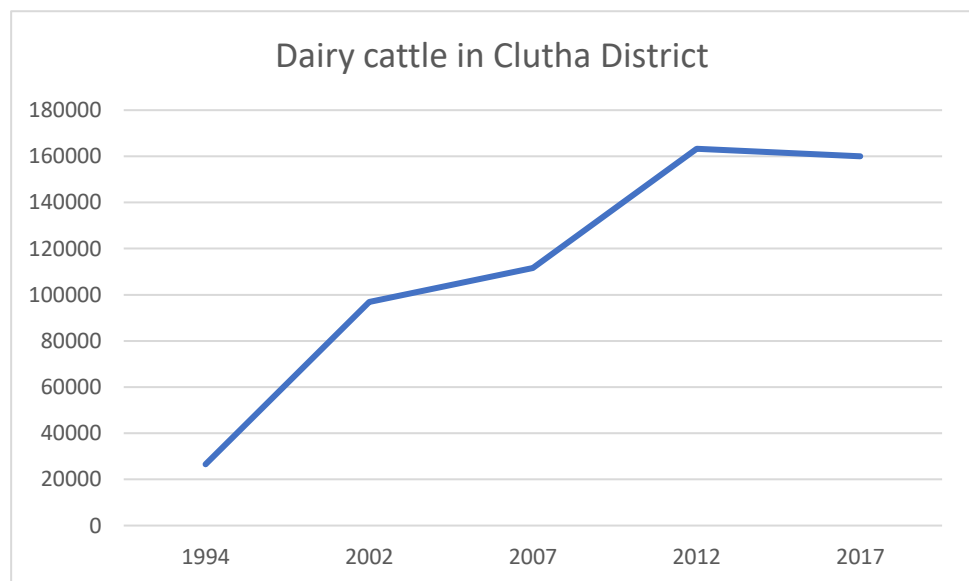
- 100 The complexity of this rohe suggests that achieving environmental outcomes, and visions, will not be straight forward. In that context, I am inclined to consider the current timeframe ambitious but reasonable.

Clutha Mata-au FMU: Lower Clutha rohe (2045)

- 101 Most sites in the Lower Clutha rohe fail to meet the national bottom line for E.coli (12 of 14), with give sites graded E. There are also sites below national bottom lines for suspended fine sediment and dissolved reactive phosphorus. Despite these poor results, most of the 20-year degrading trends are showing improving trends over the latest 10-year period.
- 102 Most of the monitoring sites in this rohe are in its largest catchment, the Poumāhaka. The catchment is characterised by poor draining pallic soils that have led to the installation of tile and mole drainage which influence water quality in the streams they discharge into. Generally, water quality is good in the upper Poumāhaka River but degrades along its length from there. Tributaries contribute sediment to the river, contributing to the D grade at the lowest Poumāhaka site.
- 103 The Waipahī River is nutrient rich and generally dominated by macrophytes. There is abundant periphyton growth in summer months, especially in the absence of flushing flows. Lake Tuakitoto is a freshwater wetland, fed primarily by Lovells Creek. The creek scores poorly across all attributes other than ammonia toxicity, reflecting the dominant land uses of intensively grazed pasture and plantation forestry. As a result, Lake Tuakitoto scores D for E.coli, total phosphorus, total nitrogen, and chlorophyll-a (phytoplankton) and is unlikely to be improved due to the shallow nature of the lake and its poor flushing flows.

⁶³ <https://www.orc.govt.nz/plans-policies-reports/land-and-water-regional-plan/find-your-area/roxburgh-rohe>

- 104 Groundwater results are mixed. Bores in the Poumāhaka catchment show several exceedances of the Drinking Water Standards NZ for E.coli and median nitrate-N concentrations, which are likely due to surrounding land uses (e.g. farming) and poor borehead security. Overall, this rohe generally requires improvement rather than maintenance.
- 105 With the possible exception of Te Waiwhero (Waiwera), I am not aware of any significant issues with water quantity in this rohe. The primary issue to address is water quality and overall the rohe requires improving rather than maintaining.
- 106 Mr Dyer for ORC appends advice on lag times for nitrogen and phosphorus which states that nitrogen “in NZ groundwater has an approximate lag time to changes in management practices of 12-36 years”, however the advice notes that other studies have found longer lag times depending on lithology, groundwater flows, and location/elevation.⁶⁴
- 107 Apart from small areas along the boundary with the Roxburgh rohe, the vast majority of the Lower Clutha rohe falls within the Clutha District Council area. Statistics New Zealand holds information on livestock numbers, including for the Clutha District which shows a 502% increase in dairy cattle numbers between 1994 (26,559) and 2017 (159,987).⁶⁵ There appears to have been a stabilisation, or slight decrease, in numbers between 2012 and 2017, indicating that perhaps the area has reached peak intensity.



⁶⁴ Tom Dyer for ORC, Attachment 3, p.3.

⁶⁵ <https://www.stats.govt.nz/indicators/livestock-numbers>

- 108 Assuming that intensity peaked in 2012, and taking into consideration the advice in Mr Dyer's evidence above, the lag time may mean that nitrogen concentrations in groundwater continue to degrade for anywhere between 12 and 35 years (or from 2024 to 2048) as a result of that intensification. Some of that may be mitigated by changes in practices from now, however it is difficult to say with certainty. Lag times for phosphorus are even longer.
- 109 The advice in Mr Dyer's evidence indicates that peak adoption time is around 16-20 years from implementing policies.⁶⁶ This rohe requires improvement, however the information from Mr Dyer suggests that between (a) lag times and (b) implementation timeframes, there could be a long period of time before any real improvement occurs in water quality.
- 110 Whether the 2045 timeframe is reasonable in this catchment is a difficult question to answer. There is no doubt that significant change will be required to improve water quality, however even rapid change may not show improvement in the water itself for many years (or decades) due to lag times for key contaminants. I note that this rohe is the lowest in the Clutha Mata-au FMU and therefore some of the results will rely on achieving outcomes higher in the catchment. In this respect, it is unusual that the Lower Clutha rohe has a shorter timeframe than the upper catchments, given the relationship between them.
- 111 One of the key reasons for having long-term visions is to inform the development of regional plans, and to implement the NOF requirements. In my view, the vision for the Lower Clutha rohe plays an important role in signalling the change needed over time. Resource users in this rohe should be aware as soon as possible of the level of improvement required and start on a pathway to achieving that. Uncertainty in lag times and implementation of action is a concern, however there will be opportunities to reassess trend information during reviews of this RPS (which, occurring at ten-year intervals, there should be at least one prior to 2045). This information will indicate the direction of travel for the rohe and allow reassessment of the timeframes.
- 112 In this context, I consider that the timeframe is not unreasonable and, in the event that information demonstrates it is, there are opportunities to revise it in the future. The ambition of the goals in the vision is an important signal

⁶⁶ Tom Dyer for ORC, Attachment 3, p.4.

to users that practice must change. However, I am conscious that the Lower Clutha rohe will be affected by what occurs higher up in the catchment and, in that respect, it may be beneficial to align the timeframe to take into account the timeframes for those upper catchments.

Catlins FMU (2030)

- 113 Water quality is generally very good in the Catlins FMU due to the intact nature of the headwaters and native vegetation, however there are more intensive land uses in cleared valleys. Sites at Owaka, Catlins and Tahakopa also score D for E.coli. While there are also D grades for suspended fine sediment, this is due to tannin staining.
- 114 Trend analysis showed degrading trends for E.coli, nitrite-nitrate nitrogen, and total nitrogen over the 20-year period, however over the 10-year period only the Owaka River still shows a degrading trend (for E.coli).
- 115 There is only one groundwater monitoring bore in this FMU which shows good water quality, but a 10-year trend showing that nitrite-nitrate nitrogen levels are 'exceptionally unlikely' to be improving. The bore is along the northern boundary of the FMU, along the border with the Lower Clutha rohe and its land use is more similar to that area than the rest of the Catlins. In the s42A report I recommended moving the Puerua River catchment from the Catlins FMU to the Lower Clutha rohe. If that change is accepted, this monitoring bore would be in the Lower Clutha rohe rather than Catlins FMU. I understand ORC is planning to drill additional bores in the Catlins FMU to improve information.
- 116 I am not aware of any issues relating to water quantity in this FMU.
- 117 Two of the four river monitoring sites show C and D bands for two attributes: dissolved reactive phosphorus and E.coli. At the Catlins at Houipapa site, trends have improved from mostly 'exceptionally unlikely' to be improving over the 20-year period to being either 'as likely as not' or 'likely' to be improving. This is positive, but indicates that the seven years remaining to achieve the freshwater vision may not be reasonable as the improvements to date have not been sufficient to move the D graded sites up to meeting national bottom lines. I am also conscious that there are sites with D grades for dissolved reactive phosphorus, and the advice in Mr Dyer's evidence suggests that lag times for phosphorus are long (i.e. decades).

118 In my view, as the trends are already improving, and there are likely further improvements to come from the implementation of more recent regulations (such as the NESF, Stock Exclusion Regulations, FWFPs, and from 2024 the LWRP), a significantly longer period is probably not warranted. At this stage, I consider that a shorter period (such as five years) may be more reasonable than the current period, but still ambitious.

Taiari FMU (2050)

119 This FMU is very large and its predominant land use is drystock farming. Water quality is generally good, with most sites achieving A and B bands. However, some of the tributaries on the plains have some of the poorest water quality in the region, especially the Silverstream which drains an intensively farmed catchment and houses a large urban settlement (Mosgiel).

120 E.coli is the worst performing attribute, with six of the 17 sites in the FMU failing to meet the national bottom lines, including two in the Taiari mainstem (Allanton and Sutton). Lake Wahiola generally achieves C grades for nutrients and phytoplankton, consistent with its eutrophic state. Trend analysis shows more improving trends over the 10-year period compared to the 20-year period which is encouraging.

121 Groundwater monitoring shows E.coli exceedances in most monitoring bores. The trend analysis of groundwater nitrate-N concentrations in the FMU paints a sombre picture. The 10-year trends show a mixed, pattern, with 'likely' or 'very likely improving' in three bores, all in the lower Taiari aquifer. Conversely, other two bores in the aquifer show 'exceptionally unlikely improving' or 'unlikely improving' trend. However, the 5-year trends within most bores in the FMU, with all except one bore falling to 'very'/'extremely unlikely' improving, which suggests that groundwater quality is not improving for this period.

122 According to LAWA, the Taiari catchment is "heavily over-allocated" due to deemed permits,⁶⁷ however I understand that under the Water Plan it is considered 'fully allocated' (because the Water Plan does not formally recognise allocation beyond being 'fully allocated'). Most water abstracted is for irrigation and the FMU is also home to three hydro-electric power

⁶⁷ <https://www.lawa.org.nz/explore-data/otago-region/water-quantity/surface-water-zones/taiari-catchment/>

schemes (Waipori, Paerau/Patearoa, and Deep Stream). There is significant water storage and extensive conveyancing networks, primarily using water races, making the Taieri a complex catchment to manage.

- 123 Mr Sheehan’s evidence for OWRUG, Federated Farmers, and Dairy NZ highlights some of the engineering complexities associated with the Loganburn Reservoir and the Mānīatoto irrigation scheme. He explains that:⁶⁸

Loganburn reservoir water augments water harvested for irrigation from Taieri River and is released when flows drop in the Taieri River, and irrigation demand is high. There is no residual flow released from Loganburn Reservoir.

- 124 Mr Sheehan explains that there are limitations on the existing outlet tunnel from the Loganburn Reservoir and constructing a new outlet would be “a very expensive and challenging exercise”.⁶⁹
- 125 This FMU is complex and has both water quantity and quality challenges to address to achieve its vision. These are not simple and will have impacts that need to be managed. At this stage, I have not been convinced that the 2050 timeframe is unreasonable, however I recognise there is little information on the water quantity issues in this catchment.

Dunedin & Coast FMU (2040)

- 126 The dominant land in this FMU is plantation forestry, followed by drystock farming. It is also home to Otago’s largest urban settlement, Dunedin. Water quality shows high bacteria and nutrient concentrations, especially in the urban catchments of the Kaikorae, Leith, and Lindsays Creek. This is likely due to stormwater discharges.
- 127 Both of the Tokomairaro River sites are located in rural settings. The upper site (West Branch Bridge) is located just downstream of hill country and the Manuka Gorge, whereas Blackbridge is located downstream of the intensive farming area of the Tokomairaro flats to the west of Milton. Although both sites return E.coli results below the national bottom line, median E.coli at the lower site was over four times that of the upper site

⁶⁸ Brendan Sheehan for OWRUG, Federated Farmers, Dairy NZ, para 71

⁶⁹ Brendan Sheehan for OWRUG, Federated Farmers, Dairy NZ, para 82

which may be due to differences in land use and the soil type below the gorge being generally fine textured silt or clay requiring artificial drainage to lower the water table and improve soil drainage.

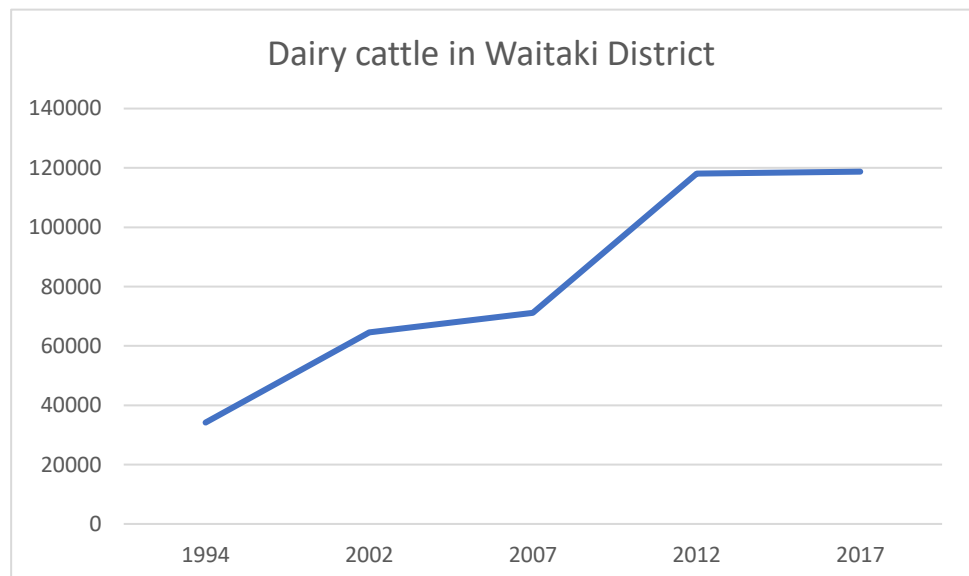
- 128 Trend analysis shows 10-year trends are generally improving, except for the Kaikarae (all attributes) and Tokomairaro at Blackbridge (E.coli, total nitrogen, and turbidity). There is only one groundwater monitoring bore in this FMU, which makes it difficult to know how representative its results are of the wider area. This bore shows good compliance with the Drinking Water Standards NZ.
- 129 I understand surface water use is relatively low, and water abstracted is used for a range of activities, including community water supply for Dunedin City, rural domestic water supply, dairy sheds and stock water, mining and landfill activities, and a small amount of irrigation.
- 130 Water quality degradation is the main issue to address in this FMU, along with habitat modification. The FMU has distinct parts with different pressures, states, and trends. I do not consider the evidence available suggests that the 2040 timeframe is unreasonable.

North Otago FMU (2050)

- 131 Water quality in North Otago is generally poor. Ōamaru Creek mainly returns D grades, likely due to its urban setting. The Waiareka Creek, Kakaho Creek, and Awamoko Stream sites, which are rural, also return mostly D bands. Trends analysis shows that over the 10-year and 20-year periods, many trends are 'exceptionally unlikely' to be improving. In the 10-year period, these include:
- 131.1 Waiareka Creek (dissolved reactive phosphorus, total phosphorus)
- 131.2 Waianakarua (E.coli, nitrite-nitrate nitrogen, total nitrogen)
- 131.3 Kauru (E.coli), and
- 131.4 Awamoko Stream (dissolved reactive phosphorus).
- 132 Groundwater monitoring show very high nitrate-N concentrations in North Otago which are the highest in Otago. Four sites (situated in the North Otago Volcanic Aquifer) and the (Kākaunui-Kauru Volcanic Aquifer) exceed the Drinking Water Standards NZ thresholds of 11.3mg/L. These are much

higher than the applicable NPSFM limits for surface water and in North Otago there are strong groundwater – surface water interactions in some of the rivers (including Kākaunui). There are also E.coli exceedances in most bores.

- 133 Trend analysis for groundwater sites generally shows improvements, however 10-year trends are only available for five sites. The elevated nitrate-N concentrations and E.coli exceedances are exacerbated in the North Otago FMU due to the high permeability (providing high infiltration rates) and shallow groundwater in some aquifers (e.g., Kākaunui-Kauru Alluvial Aquifer). The slow groundwater velocity in the North Otago Volcanic Aquifer (which reduces dilution) also contribute to the excessive nitrate-N concentrations in this aquifer.
- 134 Apart from an area along the boundary with the Taiari FMU, and the Waikōuaiti catchment in the south, the vast majority of the North Otago FMU falls within the Waitaki District area. Statistics New Zealand holds livestock numbers from 1994, including for the Waitaki District, which shows a 247% increase in dairy cattle numbers between 1994 (34,172) and 2017 (118,733).⁷⁰ Like the Lower Clutha rohe, there appears to have been a stabilisation in numbers between 2012 and 2017, indicating that perhaps the area reached ‘peak’ intensity around 2012.



- 135 The advice I outlined in regard to lag times in the Lower Clutha rohe are equally as applicable here, however in this case the nitrogen

⁷⁰ <https://www.stats.govt.nz/indicators/livestock-numbers>

concentrations are considerably worse, especially in groundwater. This FMU requires significant improvement to achieve the vision, however the information from Mr Dyer suggests that between (a) lag times and (b) implementation timeframes, there could be a long period of time before any real improvement occurs in water quality.

- 136 Given the significance of the degradation in the FMU and the lag times at play, I am not convinced the 2050 timeframe is reasonable. Like the Lower Clutha rohe, communities in North Otago need a clear signal about the level of change required and strong disincentives to any further intensification. The timeframe for this area should not indicate that there is 'plenty of time' for change. However, the hydrological processes and contaminant pathways may mean that achieving the vision by 2050 is impossible. At this stage, I am inclined to recommend a longer timeframe, but am open to hearing further evidence on the implications of that.

Direct wastewater discharges

- 137 The management of direct discharges of wastewater to water is a matter of contention across the freshwater visions and LF-FW-P16. The key question is whether direct discharges should be provided for at all. It is clear that the preference of Kāi Tahu is for wastewater discharges directly to water to be phased out entirely. As Mr Ellison for Kāi Tahu ki Otago states:⁷¹

The discharge of human waste to water is contrary to tikaka and kawa and renders affected waterways inaccessible for customary practices such as harvesting and eating mahika kai or using water for cultural purposes and rituals.

...

Instead, mana whenua support natural mixing of wastewater through land, a subsurface wetland, or a similar environment that provides a natural buffer or transition zone and makes use of the natural cleansing and purifying processes of Papatūānuku.

- 138 There are other parties who seek to allow for direct discharges in limited circumstances. Mr Taylor for DCC promotes the use of a coordinated strategy as a primary implementation tool for managing three waters infrastructure in the DCC area and considers that this "would lead to the

⁷¹ Edward Ellison for Kāi Tahu ki Otago, paras 71-72.

ability to phase out these discharges in the future, as far as is practical.⁷² (my emphasis added). He goes on to state that:⁷³

As outlined in Ms Moffat's evidence, the DCC wastewater network is complex and aged. Additionally, it is not all on property controlled by DCC and in many cases difficult to upgrade. In some cases certain upgrades may not be practicable, particularly when there are actions that could achieve much greater improvements elsewhere in the network at a much easier and faster rate. When applying the proposed wastewater policy to the matters addressed in LF-FW-P16(2) to DCC's urban wastewater network, this should be recognised by requiring the policy requirements "to the greatest extent practicable".

139 Mr Morgan Watt for Fonterra outlines the wastewater treatment system at Fonterra's Stirling site, which discharges treated wastewater to the Matau Branch of the Clutha Mata-au. He notes that there are constraints to the ability of the site to discharge to land, notably the topographical considerations (much of the surrounding land is steep hillside), the size of the land area likely required (370 hectares) and soil limitations (which would prevent irrigation around 50% of the season).⁷⁴

140 I understand the Kāi Tahu perspective and do not disagree in principle. I am concerned that there is no evidence about (a) the feasibility of moving all existing wastewater discharges to land or (b) the costs of doing so, including whether that is realistic. In **Table 1** below I have outlined key information on Otago's wastewater treatment plants. Phasing out wastewater discharges to water will affect Clutha and Central Otago District Councils most of all, however neither party is a submitter on the FPI. As at 2022, Stats NZ estimates the populations of these areas to be 18,650 and 25,500 respectively.⁷⁵ That is a small population base to fund what are likely to be significant infrastructure upgrades.

⁷² James Taylor for DCC, para 70.

⁷³ James Taylor for DCC, para 73.

⁷⁴ Morgan Watt for Fonterra, para 29.

⁷⁵ <https://infoshare.stats.govt.nz/ViewTable.aspx?pxID=a364fd6d-6211-473e-bbd5-f2dc89c7b462>

Table 1: Otago’s wastewater treatment plants

FMU/rohe	Territorial Authority	Location	Discharge	Expiry
North Otago FMU	Waitaki District Council	Moeraki	To land	2053
		Palmerston	To land	2046
		Ōamaru	To land and water	2028
Dunedin & Coast FMU	Dunedin City Council	Waikōuaiti	To land (coast)	2027
		Tahuna (Dunedin)	To coastal water	2032
		Green Island / Mosgiel ⁷⁶	To coastal water	2032
		Warrington ⁷⁷	To land (coast)	2024
		Seacliff	To land (coast)	2023
		Milton	To water	2044
Catlins FMU	Clutha District Council	Kaka Point	To coastal water	2046
Owaka		To water	2045	
Balclutha		To land and water	2053	
Kaitangata		To water	2049	
Heriot		To water	2049	
Lawrence		To water	2046	
Stirling		To water	2045	
Tapanui		To water	2045	
Clinton		To water	2027	
Waihola		To water	2028	
Taiari FMU	Dunedin City Council	Middlemarch	To land	2029
Manuherehia rohe	Central Otago District Council	Naseby	To land	2051
		Ranfurly	To water	2050
		Alexandra	To land and water	2038
		Omakau ⁷⁸	To water	2017
Roxburgh rohe	Central Otago District Council	Roxburgh	To land	2045
		Clyde	To land	2035
		Lake Roxburgh	To land	2023
Dunstan rohe	Central Otago District Council	Cromwell	To land and water	2049
		Queenstown Lakes District Council	Queenstown / Shotover	To land
Upper Lakes FMU	Queenstown Lakes District Council	Hāwea ⁷⁹	To land	2022
		Kingston (not yet constructed)	To land	2057
		Wanaka (Project Pure)	To land	2043
		Cardrona	To land	2045

⁷⁶ The discharge from Mosgiel is conveyed to Green Island and discharged to ocean outfall at Waldronville.

⁷⁷ Warrington, Seacliff and Waikouaiti discharge to planted areas of sand dunes.

⁷⁸ Operating on an expired permit under s124.

⁷⁹ Application to discharge treated wastewater to land and air currently being processed.

- 141 In addition to discharges from wastewater treatment plants, wastewater discharges also occur as a result of wet and dry weather overflows:
- 141.1 DCC holds three consents authorising wastewater overflows to the Kaikarae Stream, Lindsay Creek, and the Otago Harbour which are due to expire in 2032, 2037, and 2042 respectively.
- 141.2 In 2019, commissioners declined a global consent application by Queenstown-Lakes District Council to authorise wastewater overflows from its system, including to water.
- 142 Overflows can be far more difficult to phase out, particularly where overflow points have been constructed as part of the wider wastewater system. They can also occur as a result of misuse of the system, which territorial authorities sometimes have limited control over. However, I understand DCC has made a commitment to phase out these discharges to water in order to be able to surrender its current consents in the future.
- 143 Another part of this issue relates to the term ‘wastewater’ which I addressed in the s42A report.⁸⁰ In short, the Planning Standards definition of that term means any two of the following: sewage, greywater, industrial and trade waste. Mr Ellison speaks specifically about discharges of human waste being contrary to tikaka and kawa, however Ms Bartlett for Ngāi Tahu ki Murihiku refers to wastewater in her evidence without discussing the Planning Standards definition.⁸¹ I am unsure whether this was deliberate (i.e. to capture all three waste streams in the definition) or whether Ms Bartlett is relying on the more colloquial term ‘wastewater’, which in my experience has generally been used to describe discharges containing sewage (usually with some level of treatment).
- 144 In my view, it would assist the panel to understand:
- 144.1 Whether there should be differentiation between ‘discharges containing sewage’ and ‘wastewater’,
- 144.2 Whether existing and new discharges should be managed in the same way (i.e. if there are limited circumstances providing for existing discharges to water to continue, should those circumstances also apply to new discharges?), and

⁸⁰ Section 42A report, paras 941-943.

⁸¹ Maria Bartlett for Ngāi Tahu ki Murihiku, paras 57-59.

144.3 The impacts of the various approaches proposed.

Natural wetlands

- 145 Following my s42A recommendations, the NPSIB came into force and includes provisions that are relevant to managing natural inland wetlands. I discuss the implications of the NPSIB on the pORPS, including the management of wetlands, and recommend further amendments to the pORPS in my supplementary statement of evidence.⁸²
- 146 I did not recommend further changes to LF-FW-O9 or LF-FW-P10 on the basis that the recommended change to the definition appropriately recognises the direction in the objective and Policies 5 and 9 of the NPSFM with regard to wetlands. Several submitters have raised concerns with the change in scope of these provisions. Ms Hunter and Mr Kyle seek that the policy framework responds more specifically to the distinction between higher value 'natural inland wetlands' and other 'natural wetlands'.⁸³ It is not clear from the evidence of Ms Hunter or Mr Kyle how they consider that Policy 5 of the NPSFM would be achieved by not applying LF-FW-O9 or LF-FW-P10 to natural wetlands.
- 147 Witnesses for other submitters seek amendments to LF-FW-P9 to recognise that the NPSIB does not apply to renewable electricity generation assets and activities.⁸⁴ I understand the issue is that the effects management hierarchy in the NPSIB does not apply to renewable electricity generation activities. Policy LF-FW-P9(2) directs that effects on indigenous biodiversity as a result of an activity occurring in a natural inland wetland are to be managed in accordance with the pORPS effects management hierarchy for indigenous biodiversity.
- 148 If the effects management hierarchy in the ECO chapter is amended to align with the NPSIB (i.e. it does not apply to renewable electricity generation activities) then I agree with the amendment proposed by Ms Styles in her supplementary evidence, so long as it is clear that effects on indigenous biodiversity in rivers and natural wetlands must be managed by

⁸² Evidence of Ms Boyd – FPI – Implications of the NPSIB dated 11 August 2023 [supplementary-evidence-fpi-npsib.pdf \(orc.govt.nz\)](https://www.orc.govt.nz/evidence-fpi-npsib.pdf)

⁸³ Rebuttal evidence of Claire Hunter for Oceana Gold at para 22; Rebuttal evidence of John Kyle for Silver Fern Farms at para 30.

⁸⁴ Rebuttal evidence of Ms Ruston for Meridian at pp 13 to 15; Rebuttal evidence of Ms Styles for Manawa Energy at pp 3.6 to 3.11; Rebuttal evidence of Ainsley McLeod for Transpower at para 5.11.

the hierarchy in LF-FW-P13A (i.e. the NPSFM hierarchy, which *does* apply to these activities).

- 149 Some submitters have identified that this clause applies also to natural inland wetlands and is therefore more stringent than clause (2) because it may prevent activities that have a pathway through clause 3.22 of the NPSFM. I agree that is problematic and it was not intentional.
- 150 Ms Perkins seeks an amendment to LF-FW-P10 to recognise that there can be benefits associated with sheep grazing around wetland areas, including to manage pest plant species and pasture growth, while allowing native plantings to establish.⁸⁵ I agree that sheep grazing can be appropriate in these areas, and that their adverse effects are not comparable to those associated with access by heavy stock such as cattle.
- 151 Mr Brass, Ms McIntyre, and Ms Barlett support the proposed amendments,⁸⁶ with a further amendment to LF-FW-P9 recommended by Ms McIntyre as follows:⁸⁷

(1) ~~preventing activities that will, or are likely to, result in irreversible damage to degrade the ecological integrity of a natural wetland~~

- 152 Mr Farrell and Mr Couper for Fish and Game, Realnz, and NZSki also raise concerns with the use of “irreversible damage” and “preventing activities.” Mr Farrell instead proposes:

(1) managing activities to avoid or discourage the loss of natural wetland values such that the ecosystem health, hydrological functioning, and water quality of natural wetlands is maintained or enhanced

- 153 Mr Brass, Ms McIntyre, Ms Bartlett, Mr Farrell and I met on 25 August to see if we could reach agreement on the wording of a new clause (1) in LF-FW-P9 given the similarities in our evidence. While we have tentatively agreed on an amendment, the parties wished to confer with their experts before confirming. I expect they will provide an update on their positions when they appear, if not sooner.

⁸⁵ Evidence of Claire Perkins for OWRUG and Federated Farmers at Appendix 2

⁸⁶ Rebuttal evidence of Murray Brass for DoC at para 28 to 29; Rebuttal evidence of Sandra McIntyre at para 9; Rebuttal evidence of Maria Barlett at pp 15 to 16.

⁸⁷ Rebuttal evidence of Sandra McIntyre at para 15.

154 It would be helpful if the planning witnesses seeking amendments to the provisions for natural wetlands could provide a consolidated version of the amendments they now seek, taking into account their evidence-in-chief and any rebuttal and/or supplementary evidence.

LF-FW-P7A

155 There are a number of amendments proposed to this policy in the evidence, most of which I have addressed in **Attachment 1**. There is one point I want to address more fully, which relates to the amendments proposed by Mr Taylor and Ms Styles. Both witnesses seek to amend clause (1) so that it requires *prioritising* the allocation of fresh water for the activities listed (community drinking water supplies, renewable electricity generation, and land-based primary production).

156 Both seek to prioritise allocation for community drinking water supplies first. Mr Taylor does not propose any further prioritisation between the other activities. Ms Styles seeks to amend the list so that, after community water supplies, water is allocated to:

156.1 Existing output capacity and future generation from renewable electricity generation schemes; then

156.2 Land-based primary production; then

156.3 Other commercial and industrial uses.

157 In his rebuttal evidence, Mr Farrell outlines his reasons for opposing the amendments proposed by Mr Taylor.⁸⁸ I generally agree with Mr Farrell, and particularly that drinking water is already prioritised through LF-WAI-P1 as it is a human health need.

158 When I drafted this policy, I deliberately did not include a prioritisation as sought by these witnesses. Clauses 3.16 and 3.17 of the NPSFM are clear that developing environmental flows and levels, and take limits, are a matter to be included in regional plans. In my view, decisions about prioritising allocation for certain activities must be considered as part of the development of flows and levels and take limits for specific catchments, rather than in advance of that process and in a region-wide way.

⁸⁸ Rebuttal evidence of Ben Farrell for Fish & Game, Realnz and NZSki, para 20.

159 Regional councils are required to identify the values applying to an FMU or part of an FMU and then develop environmental outcomes for those values. This allows differentiation in the management frameworks to reflect different values held in FMUs or rohe. Preventing this from occurring by 'locking up' priorities in the pORPS would constrain the content of the LWRP in a way that may have unintended consequences and does not reflect the significant variation in Otago's catchments.

160 In her reasoning for the amendments proposed, Ms Styles states that:⁸⁹

I consider that the way the new policy is worded provides acknowledgement of REG only and does not give effect to the NPS-REG which directs that REG be enabled. The language used downplays the necessity for REG and simply lists this as one means of supporting social, economic and cultural wellbeing.

161 I disagree with Ms Styles that the NPREG requires renewable electricity generation to be "enabled". This part of LF-FW-P7A is about water allocation and the preamble of the NPSREG states specifically that:

This national policy statement does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address in a catchment or regional context and may be subject to the development of national guidance in the future.

162 Mr Anderson has addressed the application of the NPSREG and its requirements in his submissions. For the reasons he has outlined, and my opinion above, I do not agree with the amendments proposed.

Other changes

163 I support some of the changes proposed in evidence for submitters for the reasons set out in the relevant witnesses' statements. Generally, these changes are minor. **Attachment 1** contains a table setting out the changes proposed, the relevant submitter, my recommendation and reasons.

164 For completeness, the table refers to relevant parts of this statement where a matter is more complex, notes where no further amendments are sought by submitters, and outlines my response to the amendments sought as well as my recommended amendments.

⁸⁹ Stephanie Styles for Manawa, para 8.22

Revised recommendations

165 **Attachment 2** contains a revised copy of the FPI provisions showing all changes recommended to provisions through the s42A report and the opening statements of Ms Todd and myself.



Felicity Ann Boyd

28 August 2023

Attachment 1: Other amendments

Provision	Amendments sought	Submitter	Response	Recommendation
Definitions				
Certified freshwater farm plan	No further amendments sought by submitters.	n/a	n/a	n/a
<u>New: Community water supply</u>	DCC seeks to include the following new definition: Community water supply <u>Regionally Significant Infrastructure that incorporates a reticulated water supply scheme that provides water treated to a potable standard that meets the health needs of the population being served and provides for their social, economic and cultural well-being, now and in the future including future urban growth provided for in accordance with the NPS-UD. For clarity this excludes a supply that provides for the commercial scale irrigation of rural land.</u>	DCC (James Taylor)	The definition contains ambiguous wording (“...incorporates a reticulated water supply scheme...” which makes the scope of it unclear. The definition appears to be focused on the benefits of community water supply, rather than defining the term and the infrastructure it applies to (and does not). I continue to maintain that this type of definition is best addressed in the regional plan.	Reject.
Drinking water	No further amendments sought by submitters.	n/a	n/a	n/a
<u>New: Minimise</u>	Fish and Game seeks to include the following new definition: Minimise <u>Means to reduce to the smallest amount reasonably practicable. Minimised, minimising and minimisation have the corresponding meaning.</u>		Including this definition would affect every other use of ‘minimise’ throughout the pORPS and the application of the provisions that use it. Should the panel consider including this definition, it should be used consistently across both parts. However, I maintain that this definition is unnecessary and the term has been used in ways that do not need further explanation (i.e. minimise by...).	Reject.
National objectives framework	No further amendments sought by submitters.	n/a	n/a	n/a
Natural hazard works	No further amendments sought by submitters.	n/a	n/a	n/a
Other infrastructure	No further amendments sought by submitters.	n/a	n/a	n/a
Over-allocation	No further amendments sought by submitters.	n/a	n/a	n/a
Specified infrastructure	No further amendments sought by submitters.	n/a	n/a	n/a
Specified rivers and lakes	No further amendments sought by submitters.	n/a	n/a	n/a
LF-WAI – Te Mana o te Wai				
LF-WAI-O1	The mauri of Otago’s <i>water bodies</i> and their health and well-being is protected, and restored where it is <i>degraded</i> , and the management of <i>land</i> and <i>water</i> recognises and reflects that: ... (2) there is an integral kinship relationship between <i>water</i> and Kāi Tahu whānui, and this relationship endures through time, connecting connects ⁹⁰ past, present and future, ... (4A) <u>protecting the health and well-being of <i>water</i> protects the wider <i>environment</i> and the <i>mauri of water</i>.</u> ⁹¹	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Barlett) – (4A) only	For the reasons set out in: • Para 46, McIntyre EIC • Paras 25-32, Bartlett EIC	Accept.

⁹⁰ FPI024.015 DairyNZ

⁹¹ FPI043.051 OWRUG, FPI019.003 Fonterra

	... <u>(6) people are enabled to use, enjoy and connect meaningfully with water bodies to further their health and well-being, including through recreation and harvesting food, and</u> <u>(67) all people and communities have a responsibility to exercise stewardship, care, and respect in the management of fresh water.</u>	Fish & Game, Realnz and NZSki (Ben Farrell)	For the reasons set out in paras 765-766 of the s42A report.	Reject.
	Delete or amend so that it reflects the full concept of Te Mana o te Wai (Clause 1.3).	Contact Energy (Claire Hunter)	See section 'Te Mana o te Wai – balance' in this statement.	Reject.
	Delete or amend as follows: The mauri of Otago's <i>water bodies</i> and their health and well-being is protected, and restored <u>improved</u> where it is <i>degraded</i> , and the management of <i>land</i> and <i>water</i> recognises and reflects that: ...	Oceana Gold (Claire Hunter)	For the reasons set out in paras 746-756 of the s42A report.	Reject.
	The mauri of Otago's <i>water bodies</i> and their health and well-being is protected, and restored where it is <i>degraded</i> , and the management of <i>land</i> and <i>water</i> recognises and reflects that: ...	OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)		Reject.
LF-WAI-P1	Opposes/criticises s42A response but does not provide any suggested amendments.	Fulton Hogan (Tim Ensor)	See section 'Engagement and consultation' of this statement.	Reject.
	Delete.	Oceana Gold (Claire Hunter)	See section 'Te Mana o te Wai' of this statement	Reject.
	... (2) second, health and well-being ⁹² needs of people, (te hauora o te tangata); ⁹³ interacting with <i>water</i> through ingestion (such as <i>drinking water</i> and consuming harvested resources <u>harvested from the <i>water body</i></u>) ⁹⁴ and immersive activities (such as harvesting resources and bathing primary contact), ⁹⁵ <u>and through the use of water for renewable electricity generation</u> , and	Manawa Energy (Stephanie Styles)	For the reasons set out in paras 817-825 of the s42A report.	Reject.
	... (2) second, health and well-being ⁹⁶ needs of people, (te hauora o te tangata); ⁹⁷ interacting with water through ingestion (such as drinking water and consuming harvested resources harvested from the water body) ⁹⁸ and immersive activities (such as harvesting resources and bathing primary contact), ⁹⁹ and	OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)	For the reasons set out in paras 799-816 of the s42A report.	Reject.
	... (3) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future <u>including enabling urban settlements to grow and develop as required by the NPS-UD.</u>	DCC (James Taylor)	I do not consider this amendment is necessary, as the activity is already provided for in the notified wording.	Reject.

⁹² FPI016.011 Meridian

⁹³ FPI017.004 Ravensdown

⁹⁴ FPI030.016 Kāi Tahu ki Otago, FPI017.004 Ravensdown, FPI045.006 Forest and Bird

⁹⁵ FPI017.004 Ravensdown

⁹⁶ FPI016.011 Meridian

⁹⁷ FPI017.004 Ravensdown

⁹⁸ FPI030.016 Kāi Tahu ki Otago, FPI017.004 Ravensdown, FPI045.006 Forest and Bird

⁹⁹ FPI017.004 Ravensdown

	... (4) <u>if there is a conflict between this policy and other provisions in this RPS that cannot be resolved by the application of higher order documents, then this policy takes precedence over Policy IM-P1.</u>	Director-General of Conservation (Murray Brass)	I do not consider the amendment is necessary. It is appropriate for any conflict to be resolved by applying the provisions of higher order documents, and I consider it is unlikely that after doing so in relation to fresh water, a conflict would still remain.	Reject.
New LF-WAI-P4	<u>Existing hydroelectric generation is recognised as an essential use of freshwater in Otago, due to its:</u> a) <u>Contribution to reducing greenhouse gas emissions and assisting climate change mitigation;</u> b) <u>Critical importance in supporting the health and wellbeing of communities;</u> c) <u>Contribution to the region's economic resilience and efforts to decarbonise the economy.</u>	Contact Energy (Claire Hunter)	Whether use of water for hydro-electricity generation is an “essential use” will be site specific. The EIT-EN chapter addresses renewable electricity generation already, including its benefits.	Reject.
LF-WAI-PR1	In accordance with the NPSFM, councils are required to implement a framework for managing <i>freshwater</i> that gives effect to <i>Te Mana o te Wai</i> . This places the mauri (life-force) of the water at the forefront of decision-making, recognising <u>recognises that</u> ¹⁰⁰ <i>te hauora o te wai</i> (the health of the <i>water</i>) is the first priority, and supports <i>te hauora o te taiao</i> (the health of the environment) and <i>te hauora o te takata</i> (the health of the people). ...	OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)	See section ‘Te Mana o te Wai – and ‘balance’ of this statement.	Reject.
	... It is only after the health of the <i>water</i> and the health of the <i>people</i> ¹⁰¹ is <u>sustained protected in a state of good health</u> that water can <u>should</u> be used for economic purposes. Giving effect to <i>Te Mana o te Wai</i> requires actively involving <i>takata mana</i> ¹⁰² <i>whenua</i> in <i>freshwater</i> planning and management.	Fish & Game, Realnz and NZSki (Ben Farrell)	It is unclear what “a state of good health” is. I do not consider the amendments assist readers to understand this paragraph.	Reject.
LF-WAI-AER2	The mauri of Otago's water bodies and their health and well-being is protected. The mauri of Otago's water bodies and the health and well-being of water bodies and freshwater ecosystems protects the wider environment and the mauri of water is protected, and restored where degraded. ¹⁰³	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett)	For the reasons set out in: • Para 46, McIntyre EIC • Paras 34-37, Bartlett EIC	Accept.
LF-FW – Fresh water				
LF-FW-O1A	Opposes region-wide vision	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)		
	... (1) <u>healthy freshwater and estuarine ecosystems support healthy flourishing populations of indigenous species and mahika kai that are safe for consumption,</u> (2) <u>the interconnection of land, freshwater (including springs, groundwater, ephemeral water bodies, wetlands, rivers, streams and lakes) and coastal water is recognised,</u> ... (4) <u>the natural form, and character, including form and function, and the flow patterns of water bodies (including aquifers) reflects their natural characteristics</u>	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett)	(1): Agree with first amendment for the reasons set out in McIntyre EIC at paras 31 and 58. Disagree with the second amendment as I am not convinced this is an “ambitious but reasonable” goal for the whole of Otago. I appreciate the importance of mahika kai abundance and so propose an alternative instead: (1) <u>healthy freshwater and estuarine</u> ¹⁰⁵ <u>ecosystems support healthy populations of indigenous species that are plentiful enough to support and mahika kai that are and</u> ¹⁰⁶ <u>safe for consumption,</u> (2): Agree for the reasons set out in Bartlett EIC at paras 22-24. Prefer to leave out ‘streams’ as these are incorporated in the definition of ‘river’. (4): Consider the addition of ‘flow patterns’ is unnecessary if ‘function’ is retained. Otherwise agree for the reasons set out in McIntyre EIC at paras 58-59. Recommend alternative drafting:	Accept in part.

¹⁰⁰ FPI030.017 Kāi Tahu ki Otago, FPI027.017 Contact

¹⁰¹ FPI027.017 Contact

¹⁰² FPI030.017 Kāi Tahu ki Otago, FPI032.016 Te Rūnanga o Ngāi Tahu

¹⁰³ FPI026.021 Federated Farmers, FPI043.058 OWRUG, FPI024.018 DairyNZ, FPI019.005 Fonterra

¹⁰⁵ FPI030.019 Kāi Tahu ki Otago

¹⁰⁶ FPI030.019 Kāi Tahu ki Otago

	<p><u>and natural behaviours to the greatest extent practicable.</u></p> <p><u>(4A) the quality of water reflects the natural range at all points along the course of water bodies (including aquifers).</u></p> <p><u>(4B) existing wetlands are restored and the area of wetlands is increased.</u></p> <p>...</p> <p><u>(8) direct discharges of wastewater to water bodies are phased out to the greatest extent practicable.</u>¹⁰⁴</p>		<p><u>(4) the natural form, function and character, including form and function, of water bodies reflects their natural characteristics and natural behaviours to the greatest extent practicable.</u></p> <p>(4A): Goals in visions must be ambitious but reasonable (that is, difficult but not impossible to achieve). Consider that requiring water quality to reflect its natural range at all points along its course is unreasonable and likely impossible for some water bodies.</p> <p>(4B): Wetlands are addressed specifically in LF-FW-O9, do not consider they need additional reference in the vision.</p> <p>(8): See section 'Freshwater visions – phasing out direct discharges of wastewater' in this statement.</p>	
	<p>...</p> <p><u>(3) indigenous species can migrate easily within and between catchments and as naturally as possible</u></p> <p><u>(4) the natural character, including form and function, of water bodies reflects their natural behaviours to the greatest extent where practicable</u></p> <p>...</p>	Waka Kotahi (Aileen Crow)	<p>(3): Agree that this retains the intent of the clause but addresses submitter concerns about the inability to provide 'natural' migration in some areas.</p> <p>(4): Disagree for the reasons set out in paras 922-924 of the s42A report.</p>	Accept in part.
	<p>...</p> <p><u>(3) indigenous species migrate easily and as naturally as possible, appropriate provision is made for indigenous species to migrate to and from the coastal environment.</u></p> <p><u>(4) where practicable, the natural character, including form and function, of water bodies reflects their natural behaviours to the greatest extent practicable.</u></p> <p>...</p> <p><u>(8) where practicable direct discharges of wastewater to water bodies are phased out to the greatest extent practicable.</u>¹⁰⁷</p>	Oceana Gold (Claire Hunter)	<p>(1): Prefer amendment proposed by Ms Crow for Waka Kotahi.</p> <p>(4): Disagree for the reasons set out in paras 922-924 of the s42A report.</p>	Accept in part.
	<p>...</p> <p><u>(3) indigenous species migrate easily and as naturally as possible practicable.</u></p>	DCC (James Taylor)	<p>(1): Prefer amendment proposed by Ms Crow for Waka Kotahi.</p>	Accept in part.
	<p>...</p> <p><u>(6) the health of the water supports the health and well-being of people and their connections with water bodies.</u></p> <p><u>(7) innovative and sustainable land and water management practices support food production and provide for the health and well-being of water bodies and freshwater ecosystems and improve resilience to the effects of climate change, and</u></p>	Horticulture NZ (Vance Hodgson)	<p>(6): Disagree. The wording I recommend reflects the second priority in LF-WAI-P1 as I have not recommended amendments to that policy.</p> <p>(7): Do not disagree with incorporating 'food production' in this clause for the reasons set out in Hodgson EIC at paras 55-62, however as proposed the remainder of the clause would be limited only to applying to practices supporting food production, rather than all practices (urban and rural) as intended. Suggest an alternative:</p> <p><u>(7) innovative and sustainable land and water management practices provide for the health and well-being of water bodies and freshwater ecosystems.</u></p>	Accept in part.

¹⁰⁴ FPI044.007 DOC, FPI037.014 Fish and Game, FPI030.019 Kāi Tahu ki Otago, FPI045.008 Forest and Bird

¹⁰⁷ FPI044.007 DOC, FPI037.014 Fish and Game, FPI030.019 Kāi Tahu ki Otago, FPI045.008 Forest and Bird

			<u>and improve resilience to the effects of climate change, and support food production, and</u> ¹⁰⁸	
...	<u>(1A) all waterbodies are in a state of good health and well-being.</u>	Fish & Game, Realnz and NZSki (Ben Farrell)	(1A): I consider this clause is redundant, as water bodies will need to be in good health to achieve the rest of the objective. (9): Already provided in LF-WAI-O1(6). (10): Addressed in part by (1). I am reluctant to include the reference to 'food' more broadly because this does not reflect the nuanced relationship in direction between managing the habitats of indigenous species and those of trout and salmon, all of which could be considered 'food'. (11): Addressed by (6) which recognises people's connections with water bodies, including for recreation. (12): Outcome sought conflicts with the content of LF-FW-P7. I consider the latter better gives effect to the higher order direction and that the direction does not need to be repeated in an objective.	Reject.
...	<u>(9) people and activities affecting freshwater support the health and well-being of affected water bodies.</u>			
	<u>(10) food is available to be harvested from water bodies in abundance and is safe to consume.</u>			
	<u>(11) people have abundant recreation opportunities to access and use water bodies.</u>			
	<u>(12) subject to LF-FW-O1A(1), healthy populations of trout and salmon are able to move within and between catchments, and have habitats protected in a good state of health and well-being.</u>			
	LF-FW-O1A – Region-wide objective vision for freshwater	Director-General of Conservation (Murray Brass)	Title: Disagree for the reasons set out in para 889 of the s42A report. (9): Agree for the reasons set out in Brass EIC at paras 58-63, however as clause (1) already addresses indigenous species and their habitats I recommend incorporating reference to non-diadromous galaxiids and Canterbury mudfish there instead: <u>(1) healthy freshwater and estuarine</u> ¹⁰⁹ <u>ecosystems support healthy populations of indigenous species (including non-diadromous galaxiids and Canterbury mudfish)</u> ¹¹⁰ <u>that are plentiful enough to support and mahika kai that are and</u> ¹¹¹ <u>safe for consumption.</u> (10): Agree for the reasons set out in Brass EIC at paras 64-69, however the clause proposed is about the management of land and water rather than an outcome. As I recommend they be amended in the non-FPI process, LF-LS-O11 is that "Otago's land and soil resources support healthy habitats for indigenous species and ecosystems" and LF-LS-O12 (2) that the use, development, and protection of land and soil contributes to achieving environmental outcomes for freshwater. I consider the recognition sought by Mr Brass is best located in the LF-LS chapter and specifically in LF-LS-P21 as follows: Achieve the improvement or maintenance of fresh water quantity, or quality <u>The health and well-being of water bodies is maintained</u> ¹¹² <u>or, if degraded, improved</u> ¹¹³ <u>to meet environmental outcomes set for Freshwater Management Units and/or rohe by:</u>	Accept in part.
	...			
	<u>(9) non-diadromous galaxiid and Canterbury mudfish populations and their habitats are protected and restored.</u>			
	<u>(10) water and land management recognise the drylands nature of much of Otago and the resulting low water availability.</u>			
	<u>(11) urban development is located and designed to protect and enhance gully heads, rivers, lakes, wetlands, springs and riparian margins.</u>			

¹⁰⁸ FPI047.015 Horticulture NZ
¹⁰⁹ FPI030.019 Kāi Tahu ki Otago
¹¹⁰ FPI044.015 DOC
¹¹¹ FPI030.019 Kāi Tahu ki Otago
¹¹² 00121.066 Ravensdown
¹¹³ 00226.206 Kāi Tahu ki Otago

			<p>(1) reducing or otherwise managing the adverse effects of¹¹⁴ direct and indirect <i>discharges of contaminants to water</i> from the use and development of <i>land</i>, and</p> <p>(2) managing <i>land</i> uses that may have adverse <i>effects</i> on the flow of <i>water</i> in surface <i>water bodies</i> or the recharge of <i>groundwater</i>, and</p> <p>(2A) recognising the drylands nature of much of Otago and the resulting low water availability, and</p> <p>(3) maintaining or, where degraded, enhancing the habitat and biodiversity values of riparian margins.¹¹⁵</p> <p>(11): Although I do not disagree with Mr Brass, I am reluctant to include this clause because urban development is the focus of the UFD chapter. It is an activity-specific clause which I have generally not supported in this vision, which is about outcome, not activities. I would prefer to hear the evidence from submitters before making a recommendation.</p>	
New LF-VM-OA2	<u>LF-VM-OA2 – Region-wide vision (applies to all FMUS)</u> <u>Achievement of the outcomes set out in LF-FW-O1A by no later than 2040 in all Otago catchments.</u>	Fish & Game, Realnz and NZSki (Ben Farrell)	Disagree for the reasons set out in section 'Freshwater visions – timeframes' in this statement.	
Changes sought to every vision	<p>Seeks to include the following clause in all visions:</p> <p><u>Innovative and sustainable land and water management practices:</u></p> <p><u>a. support primary production,</u></p> <p><u>b. enable continued social, economic and cultural wellbeing of rural communities, and</u></p> <p><u>c. improve resilience of primary production to the effects of climate change.</u></p> <p>Also seeks amendments to each vision as follows:</p> <p>the outcomes sought in this vision are to be achieved within the following timeframes, <u>unless amended through the Land and Water Plan in accordance with LF-FW-P7B:</u></p>	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)	<p>LF-FW-O1A(7) already refers to innovative and sustainable land and water management practices supporting food production, as I recommend the clause be amended elsewhere in this statement. I consider 'food production' is more consistent with the community feedback, which expressed concern about both permanent and plantation forestry occurring in parts of Otago (the latter is within the scope of the definition of 'primary production').</p> <p>The wording in proposed (b) may not be possible to achieve in catchments that are over-allocated and is inappropriately focused on the well-being of rural communities.</p> <p>I do not consider that improving resilience of primary production the effects of climate change is a vision "for freshwater" as per clause 3.3 of the NPSFM.</p>	Reject.
LF-VM-O2	<p>In the Clutha Mata-au <i>FMU</i>, <u>and in addition to the matters in LF-FW-O1A:</u></p> <p>(1) management of the <i>FMU</i> recognises that:</p> <p>(a) the Clutha Mata-au is a single connected system ki uta ki tai, and</p> <p>(b) the source of the wai is pure, coming directly from Tawhirimatea <u>Tāwhirimātea</u>¹¹⁶ to the top of the mauka and into the awa,</p> <p><u>(2) the ecosystem connections between freshwater, wetlands, and the coastal environment are preserved and, wherever possible, restored,</u></p> <p><u>(3) sustainable abstraction occurs from lakes, river main stems or groundwater in preference to tributaries.</u></p> <p>---</p> <p>(67A) in the Lower Clutha rohe,:</p> <p>---</p> <p>(iii) <i>land management practices reduce discharges of nutrients and other contaminants to water bodies so that they are safe for human contact, and</i>¹¹⁷</p>	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett) – chapeau	<p>Chapeau: Agree this clarifies the relationship between the provisions.</p> <p>(2): LF-FW-O1A(2) already addresses interconnections between different types of water and water bodies, and in my view that includes ecosystem connections. I do not consider this clause is necessary.</p> <p>(3): Agree for the reasons set out in McIntyre EIC at para 61(a)(ii) and Bartlett EIC at paras 50-52.</p> <p>(7A)(iii): Disagree that this clause is required, as the outcomes to be achieved by reducing contaminant discharges are set out in LF-FW-O1A.</p> <p>(8): Agree that deleting the reference to (7) improves clarity.</p> <p>Timeframes: See section 'Freshwater visions – timeframes' in this statement.</p>	Accept in part.

¹¹⁴ FPI029.037 Contact, FPI017.014 Ravensdown, FPI021.006 Ballance

¹¹⁵ FPI029.037 Contact, FPI017.014 Ravensdown, FPI044.022 DOC

¹¹⁶ FPI027.019 Contact

¹¹⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

	<p>(iv) there are no direct discharges of wastewater to water bodies, and¹¹⁸</p> <p>(8) the outcomes sought in (7) this vision¹¹⁹ are to be achieved within the following timeframes:</p> <p>(a) by 2030 in the Upper Lakes rohe,</p> <p>(b) by 2045 in the Dunstan, Manuherekia, Roxburgh and Lower Clutha rohe, and</p> <p>(c) by 2050 in the Manuherekia rohe.</p>			
...	<p>(6) the national significance of the <u>ongoing operation, maintenance and upgrading of the Clutha hydro-electricity generation scheme, including its generation capacity, storage, and operational flexibility and its contribution to climate change mitigation.</u> is recognised, <u>provided for and protected.</u></p> <p>...</p> <p>(e7A) in the Lower Clutha rohe,:</p> <p>(i) there is no further modification of the shape and behaviour of the water bodies and opportunities to restore the natural form and function of water bodies are promoted as far as this can be practicably achieved wherever possible, and¹²⁰</p>	Contact Energy (Claire Hunter)	<p>(6): I do not consider that ongoing maintenance and upgrades to the Clutha scheme are necessarily nationally significant in themselves. The objective of the NPSREG is to recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance, and upgrading of new and existing activities. I consider the following addition more clearly gives effect to the NPSREG:</p> <p>(6) the national significance of the Clutha hydro-electricity generation scheme is recognised, <u>and its operation, maintenance, and upgrading is provided for.</u>¹²¹</p> <p>(7A): The s42A recommended wording focuses this clause on promoting <u>opportunities</u> to restore the form and function of water bodies. I do not consider any further weakening of the direction is warranted.</p>	Accept in part.
...	<p><u>(6B) freshwater management avoids inconsistency with the Water Conservation (Kawarau) Order 1997</u></p> <p>(7) in addition to (1) to (6) above:¹²²</p> <p>(b) in the Dunstan, Manuherekia and Roxburgh rohe:¹²³</p> <p>...</p> <p>(iii) <u>sustainable abstraction occurs from main stems or groundwater in preference to tributaries,</u></p> <p>(8) the outcomes sought in (7) this vision¹²⁴ are to be achieved within the following timeframes:</p> <p>(a) by 2030 in the Upper Lakes rohe,</p> <p>(b) by 2045 <u>2040</u> in the Dunstan, Roxburgh and Lower Clutha rohe, and</p> <p>(c) by 2050 <u>2040</u> in the Manuherekia rohe.</p>	Director-General of Conservation (Murray Brass)	<p>(6B): While I agree that RPSs and regional plans must not be inconsistent with WCOs, I do not consider the RPS needs to restate a legal requirement for the pORPS. In my view, the pORPS is not inconsistent with the Kawarau WCO and the LWRP will need to be prepared in accordance with the applicable legal requirements.</p> <p>(7): See response to amendments sought by Kāi Tahu ki Otago (Sandra McIntyre) and Ngāi Tahu ki Murihikku (Maria Bartlett).</p> <p>Timeframes: See section 'Freshwater visions – timeframes' in this statement.</p>	Accept in part.
...	<p>(7) in addition to (1) to (6) above:¹²⁵</p> <p>(a) in the Upper Lakes rohe, the high quality waters of the lakes and their tributaries are protected, and if degraded are improved restored.¹²⁶ recognising the significance of the purity of these waters to Kāi Tahu and to the wider community,</p>	Fish & Game, Realnz and NZSki (Ben Farrell)	Prefer to retain s42A wording, which is more consistent with Policy 5 of the NPSFM.	Reject.
	The submission of Waka Kotahi generally supports Objectives LF-VM-O2 and LF-VM-O5 but seeks that the clauses relating to " <u>no further modification of the shape and</u>	Waka Kotahi (Aileen Crow)	Addressed by amendments recommended in s42A report.	n/a

¹¹⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

¹¹⁹ Clause 16(2), Schedule 1, RMA

¹²⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

¹²¹ FPI027.019 Contact

¹²² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

¹²³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

¹²⁴ Clause 16(2), Schedule 1, RMA

¹²⁵ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

¹²⁶ FPI027.019 Contact

	<i>behaviour of the water bodies</i> be amended to provide some flexibility in order to allow modification of water bodies in appropriate circumstances.			
LF-VM-O3	By 2050 <u>2040</u> in the North Otago FMU: ...	Director-General of Conservation (Murray Brass)	Timeframe: See section 'Freshwater visions – timeframes' in this statement.	None at this stage.
	By 2050 <u>2045</u> in the North Otago FMU, <u>and in addition to the matters to LF-FW-O1A</u> : ...	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett)	Timeframe: See section 'Freshwater visions – timeframes' in this statement. Other chapeau amendment: Agree this clarifies the relationship between the provisions.	Accept in part.
LF-VM-O4	By 2050 <u>2045</u> in the Taiari <u>Taiari</u> ¹²⁷ FMU, <u>and in addition to the matters to LF-FW-O1A</u> : ... (5A) within limits, the allocation of fresh water provides for land-based primary production that supports the social, economic, and cultural well-being of communities in this FMU. ¹²⁸	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett) – chapeau	Timeframe: See section 'Freshwater visions – timeframes' in this statement. Other chapeau amendment: Agree this clarifies the relationship between the provisions. (5A): Agree for the reasons set out in McIntyre EIC at para 61(c).	Accept in part.
	By 2050 in the Taiari <u>Taiari</u> ¹²⁹ FMU: <u>(1A) three waters Regionally Significant Infrastructure within Dunedin City has been progressively upgraded as part of a coordinated strategy to align with the Objectives of the Taiari FMU.</u> ... <u>(5A) the allocation of fresh water maintains the hierarchy of obligations in Te Mana o te Wai by prioritising:</u> <u>(a) The health and wellbeing of water bodies and freshwater ecosystems</u> <u>(b) The health needs of people including the provision of drinking water including, but not necessarily limited to, through the establishment and operation of Community Water Supply Schemes that provide for current and future populations, and</u> <u>(c) The ability of people and communities to provide for their social, economic and cultural well-being, now and in the future.</u> OR <u>(5A) within limits, the allocation of fresh water maintains existing allocations that are in use for Community Water Supply including for future growth as required by the NPS-UD, unless efficiencies in existing networks can be identified to enable practical reductions. After these essential allocation requirements are satisfied, the allocation of fresh water also provides for land-based primary production that supports the social, economic, and cultural well-being of communities in this FMU.</u> ¹³⁰	DCC (James Taylor)	(1A): See section 'Coordinated three waters strategy for Dunedin City Council' in this statement. (5A): Clause is unnecessary and duplicates/conflicts with LF-WAI-P1. Allocations should not be 'locked up' prior to the development of the LWRP and without the ability to assess them against Te Mana o te Wai.	Reject.
	By 2050 <u>2040</u> in the Taiari <u>Taiari</u> ¹³¹ FMU: ...	Director-General of Conservation (Murray Brass)	Timeframe: See section 'Freshwater visions – timeframes' in this statement. (3): Agree for the reasons set out in Brass EIC at paras 90-92.	Accept in part.

¹²⁷ FPI030.049 Kāi Tahu ki Otago

¹²⁸ FPI043.002 OWRUG

¹²⁹ FPI030.049 Kāi Tahu ki Otago

¹³⁰ FPI043.002 OWRUG

¹³¹ FPI030.049 Kāi Tahu ki Otago

	<p>(3) healthy wetlands are restored in¹³² the upper and lower catchment wetland complexes, including the Waipori/Waihola Wetlands Waipōuri/Waihola wetland complex,¹³³ Tunahoketaka/Lake Taiari, scroll plain, Upper Taiari wetland complex,¹³⁴ and connected¹³⁵ tussock areas are <u>protected, restored or enhanced where they have been degraded or lost,</u>¹³⁶</p> <p>...</p> <p><u>(5B) discharges from Lake Mahinerangi and the Loganburn Reservoir are managed to avoid adverse effects on downstream ecosystem function.</u></p>		(5B): I consider this clause is extremely stringent and may stray beyond 'ambitious' into 'unreasonable.' There are many catchments with large dams in place which affect hydrology which have not been recognised in visions (with the exception of the Clutha hydro scheme, which is nationally significant).	
	<p>By 2050 in the Taiari <u>Taiari</u>¹³⁷ FMU:</p> <p>...</p> <p><u>(4A) the national significance of the Waipori hydroelectric power scheme and the regional significance of the Deep Stream, and Paerau/Patearoa hydroelectric power schemes are recognised.</u></p> <p>...</p>	Manawa Energy (Stephanie Styles)	Agree for the reasons set out in Styles EIC at paras 8.11-8.16. For consistency with LF-VM-O2, I propose the following wording: <u>(4A) the national significance of the Waipōuri hydro-electricity generation scheme, and the regional significance of the Deep Stream and Paerau/Patearoa hydro-electricity generation schemes, is recognised and their operation, maintenance, and upgrading is provided for.</u>	Accept in part.
LF-VM-O5	<p>By 2040 in the Dunedin & Coast FMU, <u>and in addition to the matters to LF-FW-O1A:</u></p> <p>...</p>	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett)	Agree this clarifies the relationship between the provisions.	Accept.
	<p>By 2040 <u>2043</u> in the Dunedin & Coast FMU: <u>(1A) three waters Regionally Significant Infrastructure within Dunedin City has been progressively upgraded as part of a coordinated strategy to align with the Objectives of the Dunedin and Coast FMU.</u></p>	DCC (James Taylor)	Timeframe: See section 'Freshwater visions – timeframes' in this statement. Clause (1A): See section 'Coordinated three waters strategy for Dunedin City Council' in this statement.	Reject.
	<p>The submission of Waka Kotahi generally supports Objectives LF-VM-O2 and LF-VM-O5 but seeks that the clauses relating to "<i>no further modification of the shape and behaviour of the water bodies</i>" be amended to provide some flexibility in order to allow modification of water bodies in appropriate circumstances.</p>	Waka Kotahi (Aileen Crow)	Addressed by amendments recommended in s42A report.	Accept in part.
LF-VM-O6	<p>By 2030 in the Catlins FMU, <u>and in addition to the matters to LF-FW-O1A:</u></p> <p>...</p>	Kāi Tahu ki Otago (Sandra McIntyre) Ngāi Tahu ki Murihiku (Maria Bartlett)	Agree this clarifies the relationship between the provisions.	Accept.
LF-FW-O9	<p>Otago's <i>natural wetlands, including ephemeral wetlands,</i> are protected or restored so that:</p> <p>...</p> <p>(2) there is no net¹³⁸ decrease, <u>and preferably an increase,</u>¹³⁹ in the range <u>extent</u>¹⁴⁰ and diversity of indigenous ecosystem types and habitats in <i>natural wetlands,</i></p>	Director-General of Conservation (Murray Brass)	The amendments sought by these witnesses pre-date the additional supplementary evidence filed by myself and other parties on the implications of the NPSIB. I have not had time to consider that suite of evidence in detail yet, other than as summarised in the section 'Natural wetlands' of this statement. I expect to address these provisions in reply.	None at this stage.

¹³² FPI025.020 Beef + Lamb and DINZ

¹³³ FPI030.022 Kāi Tahu ki Otago

¹³⁴ FPI044.011 DOC

¹³⁵ FPI022.005 Manawa Energy

¹³⁶ FPI025.020 Beef + Lamb and DINZ

¹³⁷ FPI030.049 Kāi Tahu ki Otago

¹³⁸ FPI033.003 Fulton Hogan

¹³⁹ FPI035.012 Wise Response

¹⁴⁰ FPI030.029 Kāi Tahu ki Otago, FPI021.004 Ballance, FPI025.027 Beef + Lamb and DINZ

	<p>Otago's <i>natural wetlands</i> are protected or restored so that:</p> <p>(1) <i>mahika kai</i> and other <i>mana whenua</i> values are sustained and enhanced now and for future generations,</p> <p>(2) there is no <u>net</u>¹⁴¹ decrease, <u>and preferably an increase</u>,¹⁴² in the <u>range extent</u>¹⁴³ and diversity of indigenous ecosystem types and habitats in of <i>natural wetlands across the region</i>,</p> <p>(3) there is no <u>net</u> reduction <u>and, where degraded, there is an improvement</u>¹⁴⁴ in their <u>wetland</u>¹⁴⁵ ecosystem health, hydrological functioning, <i>amenity values</i>, extent or water quality <u>across the region</u>, and if degraded they are it is improved, and¹⁴⁶</p> <p>(4) their flood attenuation <u>and water storage</u>¹⁴⁷ capacity is maintained <u>or improved</u>.¹⁴⁸</p>	Fulton Hogan (Tim Ensor)		
	<p>Otago's <i>natural wetlands</i> are protected or restored so that:</p> <p>(1) <i>mahika kai</i> and other <i>mana whenua</i> values are sustained and enhanced now and for future generations,</p> <p>(2) there is no <u>net</u>¹⁴⁹ decrease, <u>and preferably a net increase</u>,¹⁵⁰ in the <u>range extent of natural wetlands and in the extent</u>¹⁵¹ and diversity of indigenous ecosystem types and habitats in <i>natural wetlands</i>,</p> <p>(3) there is no reduction <u>and, where degraded, there is an improvement</u>¹⁵² in their <u>wetland</u>¹⁵³ ecosystem health, hydrological functioning, <i>amenity values</i>, extent or water quality, and if degraded they are improved, and¹⁵⁴</p> <p>(4) their flood attenuation <u>and water storage</u>¹⁵⁵ capacity is maintained <u>or improved</u>.¹⁵⁶</p>	Silver Fern Farms (John Kyle)		
	<p>Otago's <i>natural wetlands</i> are protected or restored so that:</p> <p>(1) <i>mahika kai</i> and other <i>mana whenua</i> values are sustained and enhanced now and for future generations,</p> <p>(2) there is no <u>net</u>¹⁵⁷ decrease, <u>and preferably an increase</u>,¹⁵⁸ in the <u>range extent</u>¹⁵⁹ of <i>natural wetlands and in the extent</i> and diversity of indigenous ecosystem types and habitats in <i>natural wetlands</i>,</p> <p>(3) there is no reduction and, where degraded, where appropriate there is an <u>improvement</u>¹⁶⁰ in their <u>wetland</u>¹⁶¹ ecosystem health, hydrological functioning,</p>	<p>Contact Energy (Claire Hunter)</p> <p>Oceana Gold (Claire Hunter)</p>		

¹⁴¹ FPI033.003 Fulton Hogan

¹⁴² FPI035.012 Wise Response

¹⁴³ FPI030.029 Kāi Tahu ki Otago, FPI021.004 Ballance, FPI025.027 Beef + Lamb and DINZ

¹⁴⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI033.003 Fulton Hogan

¹⁴⁵ FPI033.003 Fulton Hogan

¹⁴⁶ FPI033.003 Fulton Hogan

¹⁴⁷ FPI030.029 Kāi Tahu ki Otago

¹⁴⁸ FPI035.012 Wise Response

¹⁴⁹ FPI033.003 Fulton Hogan

¹⁵⁰ FPI035.012 Wise Response

¹⁵¹ FPI030.029 Kāi Tahu ki Otago, FPI021.004 Ballance, FPI025.027 Beef + Lamb and DINZ

¹⁵² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI033.003 Fulton Hogan

¹⁵³ FPI033.003 Fulton Hogan

¹⁵⁴ FPI033.003 Fulton Hogan

¹⁵⁵ FPI030.029 Kāi Tahu ki Otago

¹⁵⁶ FPI035.012 Wise Response

¹⁵⁷ FPI033.003 Fulton Hogan

¹⁵⁸ FPI035.012 Wise Response

¹⁵⁹ FPI030.029 Kāi Tahu ki Otago, FPI021.004 Ballance, FPI025.027 Beef + Lamb and DINZ

¹⁶⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI033.003 Fulton Hogan

¹⁶¹ FPI033.003 Fulton Hogan

	<p>amenity values, extent or water quality, and if degraded they are improved, and¹⁶² if applicable (4) their flood attenuation and water storage¹⁶³ capacity is maintained or improved.¹⁶⁴</p> <p>LF-FW-09 – Natural wetlands</p> <p>Otago's <i>natural</i> wetlands are protected or restored so that:</p> <p>(1) <i>mahika kai</i> and other <i>mana whenua</i> values are sustained and enhanced now and for future generations,</p> <p>(2) there is no <u>net¹⁶⁵ decrease, and preferably an increase.¹⁶⁶</u> in the <u>range extent¹⁶⁷</u> and diversity of <u>habitats and</u> indigenous ecosystem types and habitats in <i>natural wetlands</i>,</p> <p>(3) there is no reduction <u>and, where degraded, there is an improvement¹⁶⁸</u> in <u>their wetland¹⁶⁹</u> ecosystem health, hydrological functioning, amenity values, extent or water quality, and if degraded they are improved, and¹⁷⁰</p> <p>(4) their flood attenuation and water storage¹⁷¹ capacity is maintained or improved.¹⁷²</p> <p><u>(5) their ability to support recreation values and food harvesting activities are enhanced now and for future generations.</u></p> <p>...</p> <p><u>(5) only activities that are identified and assessed appropriate may be undertaken in a natural wetland.</u></p>	<p>Fish & Game, Realnz and NZSki (Ben Farrell)</p> <p>Transpower (Ainsley McLeod)</p>		
LF-VM-P5	<p><u>Coastal boundaries of the FMUs and rohe shall follow either mean high water springs or, where this crosses a water body, where the water in that water body meets the territorial sea.</u></p> <p>No specific amendments sought but notes that "where the water in a water body meets the territorial sea" is defined as the inner limit of the territorial sea in section 5 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Act 1977.</p>	<p>Director-General of Conservation (Murray Brass)</p> <p>Kāi Tahu ki Otago (Sandra McIntyre)</p>	<p>For the reasons set out in:</p> <ul style="list-style-type: none"> Paras 116-122, Brass EIC Para 32, McIntyre EIC <p>It is unclear where the text proposed by Mr Brass is to be included. I recommend incorporating it as new clause (1) and amending the language as suggested by Ms McIntyre, as follows:</p> <p>Otago's freshwater resources are managed through the following freshwater management units or rohe which:</p> <p><u>(1) have coastal boundaries that follow either mean high water springs or, where this crosses a water body, the inner limit of the territorial sea, and</u></p> <p><u>(2) are shown on MAP1:</u></p> <p>...</p>	Accept in part.
LF-VM-P6	No further amendments sought by submitters.	n/a	n/a	n/a

¹⁶² FPI033.003 Fulton Hogan

¹⁶³ FPI030.029 Kāi Tahu ki Otago

¹⁶⁴ FPI035.012 Wise Response

¹⁶⁵ FPI033.003 Fulton Hogan

¹⁶⁶ FPI035.012 Wise Response

¹⁶⁷ FPI030.029 Kāi Tahu ki Otago, FPI021.004 Ballance, FPI025.027 Beef + Lamb and DINZ

¹⁶⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI033.003 Fulton Hogan

¹⁶⁹ FPI033.003 Fulton Hogan

¹⁷⁰ FPI033.003 Fulton Hogan

¹⁷¹ FPI030.029 Kāi Tahu ki Otago

¹⁷² FPI035.012 Wise Response

LF-FW-P7	<p><i>Environmental outcomes, attribute states (including target attribute states), environmental flows and levels,</i>¹⁷³ and limits ensure that:</p> <p>...</p> <p>(2) the <u>significant</u> habitats of indigenous <i>freshwater</i> species associated with water bodies¹⁷⁴ are protected <u>and sustained</u>,¹⁷⁵ including by providing for fish passage,</p> <p>...</p> <p>(5) existing over-allocation is phased out and future over-allocation is avoided, and</p> <p>(6) fresh water is allocated within environmental limits and used efficiently.¹⁷⁶</p>	Silver Fern Farms (John Kyle)	<p>(2): The change sought does not give effect to Policy 9 of the NPSFM which requires that “the habitats of indigenous freshwater species are protected.”</p> <p>(5): Agree for the reasons set out in Kyle EIC paras 24-26.</p>	Accept in part.
	<p><i>Environmental outcomes, attribute states (including target attribute states), environmental flows and levels,</i>¹⁷⁷ and limits ensure that:</p> <p>...</p> <p>(2) the habitats of indigenous <u>freshwater</u> species associated with water bodies¹⁷⁸ <u>with life stages dependent on water bodies</u> are protected <u>and sustained</u>,¹⁷⁹ including by providing for fish passage,</p> <p>...</p>	Kāi Tahu ki Otago (Sandra McIntyre)	Agree for the reasons set out in McIntyre EIC para 78(a). Additionally, I consider this is consistent with the direction on managing highly mobile species (including a number of bird species) in the NPSIB.	Accept.
	<p><i>Environmental outcomes, attribute states (including target attribute states), environmental flows and levels,</i>¹⁸⁰ and limits ensure that:</p> <p>...</p> <p>(2) the habitats of indigenous <i>freshwater</i> species associated with water bodies¹⁸¹ are protected <u>and sustained</u>,¹⁸² including by providing for fish passage <u>except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats,</u></p> <p>...</p>	Manawa Energy (Stephanie Styles)	<p>Agree for the reasons set out in Styles EIC paras 8.17-8.20. I recommend incorporating the additional text as a new clause (2B) rather than amending (2), as follows:</p> <p>...</p> <p>(2) the habitats of indigenous <u>freshwater</u> species associated with water bodies <u>with life stages dependent on water bodies</u>¹⁸³ are protected <u>and sustained</u>,¹⁸⁴ including by providing for fish passage,</p> <p><u>(2A) the habitats of trout and salmon are protected insofar as this is consistent with (2),</u>¹⁸⁵</p> <p><u>(2B) fish passage is provided for, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats,</u>¹⁸⁶</p> <p>...</p>	Accept in part.
	<p>...</p> <p>(1) the health and well-being of water bodies is maintained or, if degraded, improved are restored to and protected in a state of good health and well-being,</p> <p>(2) the habitats of indigenous <i>freshwater</i> species associated with water bodies¹⁸⁷ are <u>restored to a state</u></p>	Fish & Game, Realnz and NZSki (Ben Farrell)	<p>Amendments sought are repetitive and unclear.</p> <p>Clause (1): This language reflects the direction in Policy 5, NPSFM. I consider this is clearer and better understood than Mr Farrell’s amended version.</p>	Accept in part.

¹⁷³ FPI030.030 Kāi Tahu ki Otago, FPI017.010 Ravensdown, FPI021.005 Ballance, FPI027.026 Contact
¹⁷⁴ FPI027.026 Contact, FPI021.005 Ballance
¹⁷⁵ FPI030.030 Kāi Tahu ki Otago, FPI027.026 Contact
¹⁷⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including LF-FW-P7A
¹⁷⁷ FPI030.030 Kāi Tahu ki Otago, FPI017.010 Ravensdown, FPI021.005 Ballance, FPI027.026 Contact
¹⁷⁸ FPI027.026 Contact, FPI021.005 Ballance
¹⁷⁹ FPI030.030 Kāi Tahu ki Otago, FPI027.026 Contact
¹⁸⁰ FPI030.030 Kāi Tahu ki Otago, FPI017.010 Ravensdown, FPI021.005 Ballance, FPI027.026 Contact
¹⁸¹ FPI027.026 Contact, FPI021.005 Ballance
¹⁸² FPI030.030 Kāi Tahu ki Otago, FPI027.026 Contact
¹⁸³ FPI027.026 Contact, FPI021.005 Ballance
¹⁸⁴ FPI030.030 Kāi Tahu ki Otago, FPI027.026 Contact
¹⁸⁵ FPI037.019 Fish and Game
¹⁸⁶ FPI022.006 Manawa
¹⁸⁷ FPI027.026 Contact, FPI021.005 Ballance

	<p><u>of good health and</u> protected and sustained,¹⁸⁸ including by providing for fish passage,</p> <p>(2A) <u>the habitats of trout and salmon, including fish passage, are restored to a state of good health and are protected insofar as this is consistent with (2).</u>¹⁸⁹</p>		<p>Clauses (2) and (2A): I do not disagree with the intent of Mr Farrell's amendments, but consider a simpler way of addressing the need to improve or restore habitats is by amending (1) to refer to the health and well-being of freshwater ecosystems as well as water bodies. This is also more consistent with Policy 5, NPSFM. Recommended alternative:</p> <p>(1) the health and well-being of water bodies <u>and freshwater ecosystems</u>¹⁹⁰ is maintained or, if degraded, improved,</p> <p>Clause (2A): The NPSFM does not require the habitats of trout and salmon to be restored. This is a likely outcome of achieving the objectives in the pORPS, regardless, however I do not consider it should be a specific aim due to the difficulties with species interaction and the nuanced approach to managing indigenous species and trout and salmon habitats under the NPSFM.</p>	
	<p><i>Environmental outcomes, attribute states (including target attribute states), environmental flows and levels,</i>¹⁹¹ and limits ensure that:</p> <p>...</p> <p>(6) <u>fresh water is allocated within environmental limits and used efficiently.</u></p>	<p>OWRUG, Federated Farmers, DairyNZ (Claire Perkins)</p>	<p>Recommended deleting this clause because its content is now addressed in LF-FW-P7A. Still maintain it should be deleted for the same reason.</p>	<p>Reject</p>
LF-FW-P7A	<p>...</p> <p>(1) <u>allocating fresh water efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for:</u></p> <p>...</p>	<p>Silver Fern Farms (John Kyle)</p>	<p>Agree with amendments as proposed for the reasons set out in Kyle EIC para 27.</p>	<p>Accept.</p>
	<p><u>Within limits and in accordance with any relevant environmental flows and levels, the benefits of using fresh water are recognised and over-allocation is either phased out or avoided by:</u></p> <p>(1A) <u>managing over-allocation as set out in LF-FW-M6,</u></p> <p>(1) <u>allocating fresh water efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for:</u></p> <p>(a) <u>community drinking water supplies,</u></p> <p>(b) <u>renewable electricity generation, and</u></p> <p>(ba) <u>mana whenua needs and aspirations, and</u></p> <p>(c) <u>land-based primary production.</u></p> <p>(2) <u>ensuring that no more fresh water is abstracted than is necessary for its intended use.</u></p> <p>(3) <u>ensuring that the efficiency of freshwater abstraction, storage, and conveyancing infrastructure is improved, including by providing for off-stream storage capacity in locations where this will support Te Mana o te Wai, and</u></p>	<p>Kāi Tahu ki Otago (Sandra McIntyre)</p>	<p>Chapeau: Cannot find an explanation for this amendment in Ms McIntyre's evidence. I consider the reference to limits is important as it emphasises that the benefits of using water must be within a framework that prevents over-allocation. I do not recommend accepting this amendment.</p> <p>Clause (1A): Agree with amendment as proposed for the reasons set out in McIntyre EIC para 79(a).</p> <p>Clause (1): Agree with amendments as proposed for the reasons set out in McIntyre EIC para 79(b), noting the amendment aligns with that sought by Mr Kyle for Silver Fern Farms.</p> <p>Clause (1)(ba): Agree for the reasons set out in McIntyre EIC para 58.</p> <p>Clause (3): Agree with amendment proposed for the reasons set out in McIntyre EIC para 79(d) and noting this direction was previously included in LF-FW-M6(5) as notified.</p>	<p>Accept in part.</p>
	<p><u>Within limits and in accordance with any relevant environmental flows and levels, the benefits of using fresh water are recognised and over-allocation is either phased out or avoided by:</u></p> <p>(1) <u>allocating fresh water efficiently to first provide for Community Water Supply, including capacity for growth as provided for in the relevant District Plans and secondly to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for:</u></p>	<p>DCC (James Taylor)</p>	<p>Clause (1) – see section 'LF-FW-P7A' in this statement.</p> <p>Policy 11 requires that freshwater is used efficiently. There are no qualifiers on the practicability, I do not consider that the amendment proposed by Mr Taylor gives effect to this policy, or prioritises the health and well-being of the water bodies.</p>	<p>Reject.</p>

¹⁸⁸ FPI030.030 Kāi Tahu ki Otago, FPI027.026 Contact

¹⁸⁹ FPI037.019 Fish and Game

¹⁹⁰ FPI037.019 Fish and Game

¹⁹¹ FPI030.030 Kāi Tahu ki Otago, FPI017.010 Ravensdown, FPI021.005 Ballance, FPI027.026 Contact

	<p>(a) community drinking water supplies, (b) renewable electricity generation, and (c) land-based primary production,</p> <p>(2) ensuring that, <u>as far as is practicable</u>, no more <i>fresh water</i> is abstracted than is necessary for its intended use.</p> <p>...</p>			
	<p>Within <i>limits</i> and in accordance with any relevant environmental flows and levels, the benefits of using <i>fresh water</i> are recognised and <i>over-allocation</i> is either phased out or avoided by:</p> <p>(1) allocating <i>fresh water</i> efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within <i>limits</i>, including <u>prioritising allocation of available fresh water</u> for:</p> <p>(a) community drinking water supplies, and (b) <u>existing output capacity and future generation from renewable electricity generation schemes, and then</u> (c) <i>land-based primary production, and then</i> (d) <u>other commercial and industrial uses,</u></p> <p>...</p>	Manawa (Stephanie Styles)	See section 'LF-FW-P7A' in this statement.	Reject.
	<p>...</p> <p>(1) allocating <i>fresh water</i> efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for:</p> <p>(a) community drinking water supplies, (b) <i>renewable electricity generation,</i> and (c) land-based primary production,</p> <p>...</p>	Oceana Gold (Claire Hunter)	I understand the reasons put forward by Ms Hunter and Mr Eaqub but would prefer to hear the evidence of submitters before making a recommendation.	None at this stage.
	<p>Within <i>limits</i> and in accordance with any relevant environmental flows and levels, the benefits of using <i>fresh water</i> are recognised and over-allocation is either phased out or avoided by while:</p> <p>(1) allocating <i>fresh water</i> efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within limits, including for:</p> <p>...</p>	OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)	See section 'LF-FW-P7A' in this statement.	Reject.
	<p>(1) allocating <i>fresh water</i> efficiently to support the social, economic, and cultural well-being of people and communities to the extent possible within <i>limits</i>, including for:</p> <p>...</p> <p>(d) <u>temporary dewatering activities necessary for construction and maintenance,</u></p> <p>(2) ensuring that no more <i>fresh water</i> is abstracted than is necessary for its intended use, <u>and any associated discharge occurs as close as practicable to the point of abstraction.</u></p>	The Fuel Companies (Gavin McCullagh)	The amendments sought are highly specific to one particular use of water and are out of step with the content of the policy because of this. Dewatering is an activity commonly managed in regional plans and I consider that is the most appropriate planning document for this type of direction. The amendment to (2) may be appropriate for dewatering activities, but conflicts with direction elsewhere in this chapter about preferring discharges to land over water.	Reject
New LF-FW-P7B	<p><u>LF-FW-P7B – Support sustainable transition to achieve Freshwater Visions</u> <u>Recognise that achieving the freshwater visions is likely to result in significant changes in land use activities and/or infrastructure by:</u></p> <p>a. <u>At the time of setting of environmental outcomes, attribute states, environmental flows and levels identify:</u></p> <p>i. <u>Changes required by resource users;</u> ii. <u>How those changes can be implemented;</u></p>	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)	See section 'Transition framework' in this statement.	

	<p>iii. <u>Costs of implementing those changes;</u></p> <p>iv. <u>The timeframe required to manage the costs of those changes in a way that can be sustained by the community that is ambitious but reasonable, and whether the dates in the visions need to be extended or brought forward in the Land and Water Plan.</u></p>			
New LF-FW-P7C	<p><u>LF-FW-P7C Recognise existing regulatory and non-regulatory measures when managing land and freshwater</u></p> <p><u>When determining what methods to use to manage land and freshwater, give preference to the methods requiring the least additional regulatory intervention in the land and water plan, where this will enable progress towards achieving the visions, by:</u></p> <p>a. <u>Staging the implementation of any new regulatory requirements in recognition of the existing costs associated with addressing regulations that are already in force so that the implementation of new regulation can be managed by resource users;</u></p> <p>b. <u>Relying on implementation of Freshwater Farm Plan Regulations;</u></p> <p>c. <u>Avoiding where possible new rules for matters already managed by:</u></p> <p>i. <u>National Environmental Standards; and</u></p> <p>ii. <u>Regulations made under the Resource Management Act</u></p> <p>d. <u>Leveraging existing catchment groups or community collectives;</u></p> <p>e. <u>Not imposing new regulatory requirements where water quality is already at the target attribute state;</u></p> <p>f. <u>Establishing trigger points where additional regulatory intervention is required to prevent degradation</u></p>	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)	See section 'Emphasising existing regulatory and non-regulatory methods' in this statement.	
New LF-FW-P7D	<p><u>LF-VM-P7C – Local community involvement</u></p> <p><u>When developing and implementing planning instruments to give effect to the objectives and policies in this policy statement through integrated management of land and freshwater, Otago Regional Council must actively engage with local communities, at the rohe and catchment level, to:</u></p> <p>(1) <u>identify values and environmental outcomes for Otago's FMUs, rohe and catchments and the methods to achieve those outcomes, including as required by the NOF process; and</u></p> <p>(2) <u>develop and implement action plans that may be adapted over time with trigger points where additional regulatory and/or non-regulatory intervention is required; and</u></p> <p>(3) <u>at a local catchment level, including through catchment groups, encourage community initiatives to maintain or improve the health and well-being of waterbodies.</u></p>	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)	See section 'Active engagement' in this statement.	Reject.
LF-FW-P9	<p>Seeks to ensure that regulatory frameworks within both the NES-F and the NES-PF were referenced as pertinent to the management of activities in and around natural wetlands.</p> <p><u>Protect <i>natural wetlands</i> by implementing clause 3.22(1) to (3) of the NPSFM, except that:</u></p> <p>(1) in the coastal environment, <i>natural wetlands</i> must also be managed in accordance with the NZCPS, and</p> <p>(2) when managing the adverse effects of an activity on <i>indigenous biodiversity</i>, the effects management hierarchy (in relation to <i>indigenous biodiversity</i>) applies</p>	<p>Otago Forestry Companies (Lynette Baish)</p> <p>Contact Energy (Claire Hunter)</p> <p>Oceana Gold (Claire Hunter)</p> <p>Transpower (Ainsley McLeod)</p>	<p>The amendments sought by these witnesses pre-date the additional supplementary evidence filed by myself and other parties on the implications of the NPSIB. I have not had time to consider that suite of evidence in detail yet, other than as summarised in the section 'Natural wetlands' of this statement. I expect to address these provisions in reply.</p>	None at this stage.

	instead of the effects management hierarchy (in relation to natural wetlands and rivers).			
	Protect <i>natural wetlands</i> by implementing clause 3.22(1) to (3) of the NPSFM, except that: ... (2) when managing the adverse effects of an activity, other than the construction or upgrade of specified infrastructure, on indigenous biodiversity, the effects management hierarchy (in relation to indigenous biodiversity) applies instead of the effects management hierarchy (in relation to natural wetlands and rivers). ¹⁹²	Manawa Energy (Stephanie Styles)		
	Protect <i>natural wetlands</i> by implementing clause 3.22(1) to (3) of the NPSFM, except that: (1) in the coastal environment, natural all wetlands must also be managed in accordance with the NZCPS, and (2) when managing the adverse effects of an activity on indigenous biodiversity, the effects management hierarchy (in relation to indigenous biodiversity) applies instead of the effects management hierarchy (in relation to natural wetlands and rivers). ¹⁹³ (3) wetlands that do not meet the definition of 'natural wetlands', excluding artificial wetlands, are to be protected and restored by: (a) avoiding or discouraging the loss of wetland values, and (b) promoting restoration and enhancement of wetland values.	Fish & Game, Realnz and NZSki (Ben Farrell)		
LF-FW-P10	Where it is appropriate and can be practicably achieved, improve the ecosystem health, hydrological functioning, water quality ¹⁹⁴ and extent of <i>natural wetlands</i> that have been degraded or lost by requiring, where possible to the greatest extent practicable. ¹⁹⁵ (1) an increase in the extent and quality condition ¹⁹⁶ of habitat for indigenous species, (2) the restoration of hydrological processes, (3) control of pest species and vegetation clearance, and (4) the exclusion of stock.	Contact Energy (Claire Hunter) Oceana Gold (Claire Hunter)		
	Improve the ecosystem health, hydrological functioning, water quality ¹⁹⁷ and extent of <i>natural wetlands</i> that have been degraded or lost by requiring, where possible to the greatest extent practicable. ¹⁹⁸ (1) to the greatest extent practicable, an increase in the extent and quality condition ¹⁹⁹ of habitat for indigenous species, (2) where possible: (a) the restoration of hydrological processes, (3b) control of pest species and vegetation clearance, and (4c) the exclusion of stock.	Kāi Tahu ki Otago (Sandra McIntyre)		

¹⁹² FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

¹⁹³ FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

¹⁹⁴ FPI024.030 DairyNZ

¹⁹⁵ FPI045.018 Forest and Bird, FPI025.043 Beef + Lamb and DINZ, FPI035.015 Wise Response, FPI020.017 Silver Fern Farms, FPI022.008 Manawa Energy

¹⁹⁶ FPI046.012 QLDC

¹⁹⁷ FPI024.030 DairyNZ

¹⁹⁸ FPI045.018 Forest and Bird, FPI025.043 Beef + Lamb and DINZ, FPI035.015 Wise Response, FPI020.017 Silver Fern Farms, FPI022.008 Manawa Energy

¹⁹⁹ FPI046.012 QLDC

	<p>Improve the ecosystem health, hydrological functioning, water quality²⁰⁰ and extent of <i>natural wetlands</i> that have been degraded or lost by requiring, where possible to the greatest extent practicable:²⁰¹</p> <p>(1) an increase in the extent and <u>quality condition</u>²⁰² of habitat for indigenous species, (2) the restoration of hydrological processes, (3) control of pest species and vegetation clearance, and (4) the exclusion of stock, except that sheep do not need to be excluded where there will be no enhancement of the matters in clauses (1) to (3).</p>	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)		
	<p>Improve the ecosystem health, hydrological functioning, water quality²⁰³ and extent of <i>natural wetlands</i> that have been degraded or lost by:</p> <p><u>(1) requiring, where possible to the greatest extent practicable</u>:²⁰⁴</p> <p>(1a) an increase in the extent and <u>quality condition</u>²⁰⁵ of habitat for indigenous species, (2b) the restoration of hydrological processes, (3c) control of pest species and vegetation clearance, and (4d) the exclusion of stock.</p> <p><u>(2) recognising the benefits to wetland protection and restoration from activities that result in either 1-4 of LF-FW-P10 above, and recognising the benefits to people from activities that improve people's awareness of, and access to, wetlands for customary, scientific, education, or recreational uses.</u></p>	Fish & Game, Realnz and NZSki (Ben Farrell)		
LF-FW-P15	<p>Minimise the adverse <i>effects</i> of direct and indirect <i>discharges of stormwater and wastewater</i>²⁰⁶ to <i>fresh water</i> by:</p> <p>...</p> <p>(2) requiring:</p> <p>...</p> <p>(ab) <u>integrated catchment management plans for management of stormwater in urban areas and in Dunedin City the integrated catchment management plans are supported by a coordinated strategy for three waters Regionally Significant Infrastructure</u>.²⁰⁷</p> <p>...</p> <p>(c) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring for reticulated stormwater and wastewater systems.²⁰⁸</p> <p>...</p>	DCC (James Taylor)	<p>(2)(ab): See section 'Coordinated three waters strategy for Dunedin City Council' in this statement.</p> <p>(2)(c): Agree that the wording of this clause is unclear and may not be practical. It was intended to address the issue of stormwater overflows and infiltration into wastewater systems which then result in wastewater overflows (including into stormwater systems), rather than stormwater overflows out of stormwater systems (but not into wastewater systems). Suggest alternative wording:</p> <p>(c) implementation of methods to progressively reduce <u>stormwater inflows to and infiltration of the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring for reticulated stormwater and wastewater systems</u>,²¹¹</p> <p>(3): This clause is about reticulating new areas, whereas clause (2)(b) is about discharging into existing reticulated systems. Have considered Mr Taylor's views in light of the amendments sought by Ms McIntyre and recommended alternative wording below.</p>	Accept in part.

²⁰⁰ FPI024.030 DairyNZ

²⁰¹ FPI045.018 Forest and Bird, FPI025.043 Beef + Lamb and DINZ, FPI035.015 Wise Response, FPI020.017 Silver Fern Farms, FPI022.008 Manawa Energy

²⁰² FPI046.012 QLDC

²⁰³ FPI024.030 DairyNZ

²⁰⁴ FPI045.018 Forest and Bird, FPI025.043 Beef + Lamb and DINZ, FPI035.015 Wise Response, FPI020.017 Silver Fern Farms, FPI022.008 Manawa Energy

²⁰⁵ FPI046.012 QLDC

²⁰⁶ FPI044.019 DOC

²⁰⁷ FPI030.033 Kāi Tahu ki Otago

²⁰⁸ FPI001.024 DCC

²¹¹ FPI001.024 DCC

	<p>(3) promoting to the greatest extent practicable, requiring²⁰⁹ the reticulation of stormwater and wastewater²¹⁰ in urban areas, and</p> <p>...</p>			
	<p>Minimise the adverse effects of direct and indirect discharges of stormwater and wastewater²¹² to fresh water by:</p> <p>...</p> <p>(2) requiring:</p> <p>...</p> <p>(ca) consideration of the use of on-site systems to attenuate flow and filter stormwater prior to discharge into any reticulated system,</p> <p>(d) on-site wastewater stormwater systems to be designed and operated in accordance with best practice standards,²¹³</p> <p>...</p> <p>(3) promoting to the greatest extent practicable, requiring²¹⁴ the reticulation of stormwater and wastewater²¹⁵ in urban areas except where an integrated catchment management plan shows an alternative system will produce better freshwater outcomes, and</p> <p>...</p>	<p>Kāi Tahu ki Otago (Sandra McIntyre)</p> <p>Ngāi Tahu ki Murihiku (Maria Bartlett)</p>	<p>(2)(ca): Agree for the reasons set out in McIntyre EIC at para 71.</p> <p>(2)(d): Note that I questioned whether there was a good enough understanding of what these standards are for stormwater systems in the s42A report at paras 1525-1526. No parties have opposed the amendment sought by Kāi Tahu ki Otago, so on that basis agree for the reasons set out in the Kāi Tahu ki Otago submission.</p> <p>(3): Agree that on-site attenuation can be preferable to discharging into reticulated networks. Taking into account the comments of Mr Taylor as well, recommend largely reverting to the notified wording with amendments to reduce the stringency of the direction and qualify it:</p> <p>(3) promoting the reticulation of stormwater and wastewater in urban areas, <u>where appropriate,</u></p>	<p>Accept in part.</p>
	<p>...</p> <p>(2) requiring:</p> <p>...</p> <p>(b) all stormwater to be discharged into a reticulated system, where one is <u>made available by the operator of the reticulated system, unless alternative treatment and disposal methods will result in the same, similar or improved outcomes for fresh water,</u>²¹⁶</p> <p>...</p>	<p>Transpower (Ainsley McLeod)</p>	<p>Agree for the reasons set out in McLeod EIC at paras 8.41-8.45 that if outcomes are the same or better, discharges should not need to be into a reticulated system. This is consistent with McIntyre EIC above and the amendment I propose in response. 'Similar' is a fairly subjective term and I do not support its inclusion.</p>	<p>Accept in part.</p>
	<p>....</p> <p>(4) promoting source control as a method for reducing contaminants in discharges, <u>and</u></p> <p>(5) promoting the use of relevant industry-led guidelines for management of stormwater.</p>	<p>The Fuel Companies (Gavin McCullagh)</p>	<p>Agree for the reasons set out in McCullagh EIC at 30-32, but consider the addition can be incorporated into clause (4) and that 'good practice' is preferable to 'industry-led':</p> <p>(4) promoting source control as a method for reducing contaminants in discharges- <u>and the use of good practice guidelines for management of stormwater.</u></p>	<p>Accept in part.</p>
LF-FW-P16	<p>Minimise the adverse effects of direct and indirect discharges containing animal effluent, sewage, and industrial and trade waste to fresh water by:</p> <p>(1) <u>phasing out existing discharges containing sewage or industrial and trade waste directly to water to the</u></p>	<p>DCC (James Taylor)</p>	<p>(1), (2), (2)(a), (2)(f): See section 'Direct wastewater discharges' in this statement.</p>	

²⁰⁹ FPI046.013 QLDC

²¹⁰ FPI019.009 Fonterra, FPI017.022 Ravensdown

²¹² FPI044.019 DOC

²¹³ FPI019.009 Fonterra, FPI017.022 Ravensdown

²¹⁴ FPI046.013 QLDC

²¹⁵ FPI019.009 Fonterra, FPI017.022 Ravensdown

²¹⁶ FPI001.021 DCC, FPI017.022 Ravensdown

	<p>greatest extent possible practicable, and for the Dunedin City three waters Regionally Significant Infrastructure, requiring this be supported by a coordinated strategy to align with the Objectives of the relevant FMU,</p> <p>(2) requiring, to the greatest extent practicable:</p> <p>(a) with the exception of existing three waters Regionally Significant Infrastructure, new discharges containing sewage or industrial and trade waste to be to land, unless adverse effects associated with a discharge to land are demonstrably greater than a discharge to fresh water,</p> <p>(b) discharges from activities that produce domesticated containing animal effluent to be to land,</p> <p>...</p> <p>(d) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring into from reticulated wastewater systems,</p> <p>...</p> <p>(f) that discharges from existing Regionally Significant Infrastructure within Dunedin City are progressively improved through the implementation of a coordinated strategy for three water Regionally Significant Infrastructure and any other discharges do not prevent water bodies from meeting any applicable water quality standards set for FMUs and/or rohe,</p> <p>(3) to the greatest extent practicable, requiring the reticulation of wastewater in urban areas, and</p> <p>...</p>		<p>(2)(b): Agree for the reasons set out in Taylor EIC at paras 79-81 that this clause may inadvertently capture urban discharges of animal effluent. I am concerned the wording proposed by Mr Taylor may capture more than just effluent, and therefore suggest an alternative:</p> <p>(b) discharges containing of animal effluent from land-based primary production to be to land.</p> <p>(2)(d): Agree for the reasons set out in Taylor EIC at para 69.</p> <p>(3): This clause is about reticulating new areas, whereas clause (2)(c) is about discharging into existing reticulated systems. Some parts of Otago have high densities of on-site wastewater systems which contribute to contamination of groundwater. I do not recommend accepting this deletion.</p>	
	<p>Minimise the adverse effects of direct and indirect discharges containing animal effluent, sewage, greywater, and industrial and trade waste to fresh water by:</p> <p>(1) phasing out existing discharges containing sewage or industrial and trade waste directly to water to the greatest extent possible,</p> <p>(2) requiring:</p> <p>(a) new discharges containing sewage or industrial and trade waste to be to land, unless adverse effects associated with a discharge to land are demonstrably greater than a discharge to fresh water,</p>	<p>Fonterra (Susannah Tait)</p>	<p>Chapeau: Agree for the reasons set out in Tait EIC at 7.13.</p> <p>(1) and (2): See section 'Direct wastewater discharges' in this statement.</p>	<p>Accept in part.</p>
	<p>Minimise Avoid the adverse effects of direct and indirect discharges containing animal effluent, sewage, and industrial and trade waste to fresh water by:</p>	<p>Kāi Tahu ki Otago (Sandra McIntyre)</p> <p>Ngāi Tahu ki Murihiku (Maria Bartlett)</p>	<p>Chapeau: Disagree that the actions in the policy would, in all cases, lead to all adverse effects being avoided.</p> <p>(1): See section 'Direct discharges of wastewater' in this statement.</p>	<p>Reject.</p>

<p>(1) phasing out existing <i>discharges</i> containing <i>sewage</i> or <i>industrial and trade waste</i> directly to water to the greatest extent possible,</p> <p>(2) requiring:</p> <p>...</p> <p>(c) that all <i>discharges</i> containing <i>sewage</i> or <i>industrial and trade waste</i> are discharged into a reticulated <i>wastewater</i> system, where one is made available by its owner, unless alternative treatment and disposal methods will result in improved outcomes for <i>fresh water</i>.</p> <p>...</p> <p>(4) promoting source control as a method for reducing <i>contaminants</i> in <i>discharges</i> containing <i>industrial and trade waste</i>.</p>		<p>(2)(c): Disagree that this is inappropriate in relation to wastewater discharges. It is still the asset owner's decision to accept new connections and/or discharges into the system or not.</p> <p>(4): I am not convinced that source control would always be inappropriate or irrelevant for discharges of animal effluent or containing sewage. In my view there is no harm in this part of the policy applying broadly.</p>	
<p>Minimise the adverse <i>effects</i> of direct and indirect <i>discharges</i> containing animal effluent, <i>sewage</i>, and <i>industrial and trade waste</i> to fresh water <i>natural waterbodies</i> by:</p> <p>(1) phasing out existing <i>discharges</i> containing <i>sewage</i> or <i>industrial and trade waste</i> directly to water bodies to the greatest extent possible where this is practicable,</p> <p>(2) requiring considering:</p> <p>(a) new <i>discharges</i> containing <i>sewage</i> or <i>industrial and trade waste</i> to be to <i>land</i>, unless adverse <i>effects</i> associated with a <i>discharge</i> to <i>land</i> are demonstrably greater than a <i>discharge</i> to fresh water <i>a natural waterbody</i>.</p> <p>...</p> <p>(e) on-site <i>wastewater</i> systems and animal effluent systems to be designed and operated in accordance with the best practice standards <i>practicable option</i>.</p> <p>...</p> <p>(3) to the greatest extent practicable, requiring, where <i>practicable</i> the reticulation of <i>wastewater</i> in <i>urban areas</i>, and</p> <p>(4) promoting the promotion of source control as a method for reducing <i>contaminants</i> in <i>discharges</i>.</p>	<p>Oceana Gold (Claire Hunter)</p>	<p>Chapeau and (2)(a): It is unclear what a 'natural water body' is. The definition of 'water body' includes rivers, which are defined as <i>including</i> 'modified watercourses.' Additionally, artificial water bodies may still be connected to other water bodies and therefore affect their health and well-being.</p> <p>(1) and (2): See section 'Direct discharges of wastewater' in this statement.</p> <p>(2)(e): In my experience, the best practicable option can be less stringent (i.e. result in poorer environmental outcomes) than best practice due to its focus on financial implications.</p> <p>(3): 'Hot spots' for contaminant concentrations as a result of the density of on-site wastewater systems is an issue in parts of Otago. I do not agree that this direction should be softened.</p> <p>(4): I do not consider there is any practical difference between 'promoting' and 'the promotion of'.</p>	
<p>...</p> <p>(1) phasing out existing <i>discharges</i> containing <i>sewage</i> or <i>industrial and trade waste</i> directly to water to the greatest extent possible <i>practicable</i>,</p> <p>(2) requiring:</p> <p>...</p> <p>(e) on-site <i>wastewater</i> systems and animal effluent systems to be designed and operated in accordance with the best practice standards <i>practicable option</i>.</p> <p>...</p>	<p>Silver Fern Farms (John Kyle)</p>	<p>(1): See section on 'Direct discharges of wastewater' in this statement.</p> <p>(2)(e): In my experience, the best practicable option can be less stringent (i.e. result in poorer environmental outcomes) than best practice due to its focus on financial implications.</p>	

New LF-FW-P17	<u>LF-FW-P17 – Regional plan timeframe</u> <u>Otago Regional Council must publicly notify a Land and Water Regional Plan no later than 30 June 2024.</u>	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)	See section 'Active engagement' in this statement.	Reject.
LF-FW-M6	... <u>(9) recognise and respond to Kāi Tahu cultural and spiritual concerns about mixing of water between different catchments.</u>	Kāi Tahu ki Otago (Sandra McIntyre)	For the reasons set out in paras 80-81 of McIntyre EIC.	Accept.
	(8) manage the adverse effects of stormwater and wastewater <u>discharges containing animal effluent, sewage, or industrial and trade waste</u> in accordance with LF-FW-P15 and LF-FW-P16A. ²¹⁷	Silver Fern Farms (John Kyle)	Corrects an error.	Accept.
	Otago Regional Council must publicly notify <u>prepare</u> a Land and Water Regional Plan no later than 31 December 2023 30 June 2024 ²¹⁸ and, after it is made operative, maintain that regional plan to: (1A) implement the required steps in the NOF process in accordance with the NPSFM <u>in accordance with LF-FW-P7C</u> . ²¹⁹ (1) identify the compulsory and, if relevant, other values for each Freshwater Management Unit, ²²⁰ (2) state environmental outcomes as objectives in accordance with clause 3.9 of the NPSFM, ²²¹ (3) identify water bodies that are <u>over-allocated in terms of either their water quality or quantity</u> ²²² and the methods and timeframes for phasing out that <u>over-allocation</u> (including through environmental flows and levels and <u>limits</u>) within the timeframes <u>(as may be amended in accordance with LF-FW-P7B)</u> required to achieve the relevant <u>freshwater vision</u> . ²²³	OWRUG, Federated Farmers, DairyNZ (Claire Perkins)	See section 'Active engagement' in this statement.	Reject.
LF-FW-M7	... (2) include provisions to protect the significant and outstanding values of outstanding water bodies <u>from inappropriate use and development</u> ...	Waka Kotahi (Aileen Crow)	Policy 8 of the NPSFM requires that “the significant values of outstanding water bodies are protected.” I consider the amendment proposed makes it unclear whether this is a different requirement to that in the NSPFM.	Reject.
	... (2) include provisions to protect the significant and outstanding values of outstanding water bodies <u>while enabling communities to provide for their social, economic, and cultural wellbeing.</u>	Transpower (Ainsley McLeod)	The rest of the pORPS provisions, including the EIT chapter, still apply when developing regional plans. Provisions do not need to include reference to other outcomes in every requirement.	Reject.
LF-FW-M8	No further amendments sought by submitters.	n/a	n/a	n/a
LF-FW-M8A	As per non-FPI Reply Report.	Kāi Tahu ki Otago (Sandra McIntyre)	Ms McIntyre correctly identifies that LF-FW-M8A is missing from the FPI provisions appended to my s42A report. That was an oversight and I recommend including the provision to correct this error.	Accept.
	As per non-FPI reply report but with the following amendments: ...	Fish & Game, Realnz and NZSki (Ben Farrell)	While I acknowledge Fish and Game is seeking the same relief in both the FPI and non-FPI processes, LF-FW-M8A was addressed in the non-FPI hearing at length. It would be inefficient to readdress the provision and evidence again in	Reject.

²¹⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI019.009 Fonterra, FPI017.011 Ravensdown, FPI030.033 Kāi Tahu ki Otago

²¹⁸ Clause 16(2), Schedule 1, RMA

²¹⁹ FPI025.030 Beef + Lamb and DINZ

²²⁰ FPI025.030 Beef + Lamb and DINZ

²²¹ FPI025.030 Beef + Lamb and DINZ

²²² FPI001.028 DCC

²²³ FPI012.007 Minister for the Environment

	(2) <u>Otago Regional Council will work with the Department of Conservation, the relevant Fish and Game Council and Kāi Tahu to:</u> ... (b) <u>identify areas where the protection and restoration of the habitat of trout and salmon, including fish passage, will be consistent with the protection and restoration of the habitat of indigenous species and areas where it will not be consistent,</u>		the FPI hearing. For this reason, I do not recommend accepting the amendments sought by Mr Farrell.	
New LF-FW-M11	<u>LF-FW-M11 – Coordinated three waters Regionally Significant Infrastructure strategy</u> <u>The owner of the Dunedin City three waters Regionally Significant Infrastructure prepares a coordinated strategy that outlines progressive improvements necessary to achieve the objectives of this regional policy statement.</u>	DCC (James Taylor)	See section 'Coordinated three waters strategy for Dunedin City Council' in this statement.	
LF-VM-E2	No further amendments sought by submitters.	n/a	n/a	n/a
LF-VM-PR2	No further amendments sought by submitters.	n/a	n/a	n/a
LF-FW-AER4	No further amendments sought by submitters.	n/a	n/a	n/a
LF-FW-AER5	No further amendments sought by submitters.	n/a	n/a	n/a
LF-FW-AER6	No further amendments sought by submitters.	n/a	n/a	n/a
LF-FW-AER7	<u>Water in Otago's aquifers is suitable for human consumption, unless that water is naturally unsuitable for consumption.</u> ²²⁴	Kāi Tahu ki Otago (Sandra McIntyre)	Agree for the reasons set out in McIntyre EIC at para 81(b).	
LF-FW-AER8	No further amendments sought by submitters.	n/a	n/a	n/a
LF-FW-AER9	<u>Direct discharges of wastewater to water are phased out to the greatest extent practicable and the The²²⁵ frequency of wastewater overflows is reduced.</u>	Kāi Tahu ki Otago (Sandra McIntyre)	See section 'Direct wastewater discharges' in this statement.	None at this stage.
LF-FW-AER10	<u>Direct discharges of stormwater to water bodies are reduced across the region and The the quality of stormwater discharges from existing urban areas is improved.</u>	Kāi Tahu ki Otago (Sandra McIntyre)	See section 'Direct wastewater discharges' in this statement.	None at this stage.
LF-FW-AER11	No further amendments sought by submitters.	n/a	n/a	n/a
New LF-FW-AER12	<u>The economic, social and cultural wellbeing of communities is sustained.</u>	OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)	Agree that this is an environmental outcome to be expected from implementing the provisions.	Accept.
LF-LS – Land and soil				
LF-LS-P18	Minimise soil erosion, and the associated risk of sedimentation in water bodies, resulting from <i>land</i> use activities by: (2) maintaining vegetative cover on erosion-prone <i>land</i> , and (1) <u>where vegetation removal is necessary or there is no vegetative cover,</u> ²²⁶ implementing effective management practices to retain topsoil in-situ and minimise the potential for soil to be <i>discharged</i> to <i>water bodies</i> , including by controlling the timing, duration, scale and location of soil exposure, <u>and</u> (3) promoting activities that enhance soil retention	Contact Energy (Claire Hunter) Oceana Gold (Claire Hunter)	For the reasons set out in paras 73-77 of Hunter EIC for Contact, I agree that the reference to soil being retained 'in situ' is inappropriate. However, I disagree that retaining topsoil altogether is inappropriate. Stockpiling topsoil so that it can be replaced after completion of works is a common practice and assists with retaining soil values. I recommend an alternative amendment, as follows: ... (1) <u>where vegetation removal is necessary or there is no vegetative cover,</u> ²²⁷ implementing effective management practices to retain topsoil in-situ and minimise the potential for soil to be <i>discharged</i> to <i>water bodies</i> , including by controlling the timing, duration, scale and location of soil exposure, <u>and</u> ...	Accept in part.

²²⁴ FPI047.027 Horticulture NZ, FPI026.035 Federated Farmers, FPI020.023 Silver Fern Farms

²²⁵ FPI032.026 Te Rūnanga o Ngāi Tahu, FPI030.040 Kāi Tahu ki Otago

²²⁶ FPI017.013 Ravensdown

²²⁷ FPI017.013 Ravensdown

LF-LS-P21	<p>Achieve the improvement or maintenance of fresh water quantity, or quality The health and well-being of <i>water bodies and freshwater ecosystems</i> is maintained²²⁸ or, if <i>degraded</i>, improved²²⁹ to meet <i>environmental outcomes</i> set for <i>Freshwater Management Units</i> and/or rohe by:</p> <p>(1) reducing or otherwise managing the adverse effects of²³⁰ direct and indirect <i>discharges of contaminants</i> to <i>water</i> from the use and development of <i>land</i>, and</p> <p>(2) managing <i>land</i> uses that may have adverse effects on the flow of <i>water</i> in surface <i>water bodies</i> or the recharge of <i>groundwater</i>, and</p> <p>(3) maintaining or, where degraded, enhancing the habitat and biodiversity values of riparian margins.²³¹</p> <p>(3) managing riparian margins to maintain or enhance their habitat and biodiversity values, reduce sedimentation of water bodies and support natural flow behaviour.</p>	Kāi Tahu ki Otago (Sandra McIntyre)	<p>Amendment to the chapeau: for the reasons set out in paras 85 and 87 of McIntyre EIC.</p> <p>(1): I do not consider further amendments to clause (1) are required. While I agree that “otherwise managing” is not directive, the clause must be read in conjunction with the chapeau, which requires either maintaining or improving the health and well-being of water bodies and freshwater ecosystems. Reducing the effects of discharges will clearly be required for degraded water bodies, however in my view ‘maintenance’ could be achieved in a number of ways – so long as that is the outcome achieved.</p> <p>(3): I addressed this point in para 1761 of my s42A report. I continue to consider that it is not necessary to list the various functions of riparian margins, however I accept that my proposed amendment inappropriately narrows the application of the clause. I recommend a minor amendment to this clause, as follows:</p> <p>(3) maintaining or, where degraded, enhancing the habitat and biodiversity values of riparian margins.</p>	Accept in part.
	<p>Achieve the improvement or maintenance of fresh water quantity, or quality The health and well-being of <i>water bodies</i> is maintained²³² or, if <i>degraded</i>, improved²³³ to meet <i>environmental outcomes</i> set for <i>Freshwater Management Units</i> and/or rohe by <u>in accordance with LF-FW-P7C</u>:</p>	OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)	See section ‘Emphasising existing regulatory and non-regulatory methods’ in this statement.	Reject.
LF-LS-M11	<p>Otago Regional Council must publicly notify <u>prepare</u> a Land and Water <i>Regional Plan</i> no later than 31 December 2023 <u>30 June 2024</u>²³⁴ and then, when it is made operative, maintain that <i>regional plan</i> to <u>in accordance with LF-FW-P7C</u>:</p> <p>...</p> <p>(1) manage <i>land</i> uses that may affect the ability of <i>environmental outcomes</i> for <i>water</i> quality to be achieved by requiring:</p> <p>...</p> <p>(b) the adoption of practices that reduce the risk of sediment and nutrient loss to water, including by minimising the area and duration of exposed soil, using buffers, and actively managing critical source areas,</p> <p>(b) the development and implementation of harvest and forests earthwork management plans as set out in the NES-PF.</p> <p>...</p> <p>...</p> <p>(2) provide for changes in <i>land</i> use that improve the sustainable and efficient allocation and use of <i>fresh water</i> <u>and that reduce water demand where there is existing over-allocation</u>, and</p> <p>...</p> <p>(1) manage <i>land</i> uses that may affect the ability of <i>environmental outcomes</i> for <i>water</i> quality to be achieved by requiring:</p> <p>...</p>	<p>OWRUG, Federated Farmers, Dairy NZ (Claire Perkins)</p> <p>Otago Forestry Companies (Lynette Baish)</p> <p>Kāi Tahu ki Otago (Sandra McIntyre)</p> <p>Fish & Game, Realnz and NZSki (Ben Farrell)</p>	<p>The amendment sought would remove direction for managing any type of land disturbance or earthworks and replace it with direction that applies only to one activity. Given there are issues with sedimentation of water bodies in parts of Otago, I do not consider that is appropriate. Additionally, the LWRP does not need to repeat the content of higher order documents, particularly NESs.</p> <p>Agree for the reasons set out in McIntyre EIC at para 88.</p> <p>Agree for the reasons set out in Farrell EIC at paras 65-69.</p>	<p>Reject.</p> <p>Accept.</p> <p>Accept.</p>

²²⁸ 00121.066 Ravensdown

²²⁹ 00226.206 Kāi Tahu ki Otago

²³⁰ FPI029.037 Contact, FPI017.014 Ravensdown, FPI021.006 Ballance

²³¹ FPI029.037 Contact, FPI017.014 Ravensdown, FPI044.022 DOC

²³² 00121.066 Ravensdown

²³³ 00226.206 Kāi Tahu ki Otago

²³⁴ Clause 16(2), Schedule 1, RMA

	(b) the adoption of practices that avoid or minimise reduce the <i>risk</i> of sediment and nutrient loss to <i>water</i> , including by minimising the area and duration of exposed soil, using buffers, and actively managing critical source areas,			
LF-LS-AER14	No further amendments sought by submitters.	n/a	n/a	n/a
Part 4 – Maps and Appendices				
MAP1	Map provided showing proposed new boundary between Dunedin & Coast and North Otago FMUs.	DCC (James Taylor) Kāi Tahu ki Otago (Sandra McIntyre)	Map provided is based on s42A recommendation.	Accept amendments as proposed.

Attachment 2: Recommended amendments to provisions

Appearance	Explanation
Black text with no shading	Parts of the pORPS notified on 26 June 2021 that are not a freshwater planning instrument (FPI).
Black text with underlining or strikethrough	Amendments recommended by reporting officers to non-FPI parts of the pORPS.
Black text with blue shading	Parts of the pORPS notified on 30 September 2022 that are a freshwater planning instrument.
Black text with underlining or strikethrough and blue shading	Amendments recommended by reporting officers (including from s42A reports, supplementary evidence, opening statements, and reply reports).
Green text with underlining or strikethrough	Amendments recommended in supplementary evidence dated 18 August.
Red text with underlining or strikethrough	Amendments recommended in opening statement dated 28 August.

Interpretation

Definitions

Term	Definition
Certified freshwater farm plan	<p>has the same meaning as section 217B of the Resource Management Act 1991 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>means a <i>freshwater</i> farm plan certified under section 217G, as amended from time to time in accordance with section 217E(2) or (3)</p> </div>
Drinking water	<p>has the same meaning as in Standard 14 of the National Planning Standards 2019 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>means <i>water</i> intended to be used for human consumption; and includes <i>water</i> intended to be used for food preparation, utensil washing, and oral or other personal hygiene</p> </div>
National Objectives Framework	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>means the framework for managing <i>freshwater</i> as described in subpart 2 of Part 3</p> </div>
Natural hazard works	<p>has the same meaning as in regulation 51(1) of the National Environmental Standard for Freshwater 2020 (as set out in the box below)</p>

Term	Definition
	<p>means works for the purpose of removing material, such as trees, debris, and sediment, that—</p> <p>(a) is deposited as the result of a <i>natural hazard</i>, and</p> <p>(b) is causing, or is likely to cause, an immediate hazard to people or property</p>
<p>Natural inland wetland²³⁵</p>	<p>has the same meaning as in clause 3.21 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <p><u>means a <i>wetland</i> (as defined in the Act) that is not:</u></p> <p><u>(a) in the <i>coastal marine area</i>; or</u></p> <p><u>(b) a deliberately constructed <i>wetland</i>, other than a <i>wetland</i> constructed to offset impacts on, or to restore, an existing or former <i>natural inland wetland</i>; or</u></p> <p><u>(c) a <i>wetland</i> that has developed in or around a deliberately constructed <i>water body</i>, since the construction of the <i>water body</i>; or</u></p> <p><u>(d) a <i>geothermal wetland</i>; or</u></p> <p><u>(e) a <i>wetland</i> that:</u></p> <p><u>(i) is within an area of pasture used for grazing; and</u></p> <p><u>(ii) has vegetation cover comprising more than 50% exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)); unless</u></p> <p><u>(iii) the <i>wetland</i> is a location of a habitat of a <i>threatened species</i> identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply.</u></p>
<p>Other infrastructure²³⁶</p>	<p>has the same meaning as in regulation 3 of the National Environmental Standard for Freshwater 2020 (as set out in the box below)²³⁷</p> <p>means <i>infrastructure</i>, other than <i>specified infrastructure</i>, that was lawfully established before, and in place at, the close of 2 September 2020</p>
<p>Over-allocation, or over-allocated²³⁸</p>	<p>has the same meaning as in clause 1.4 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)²³⁹</p> <p>in relation to both the quantity and quality of freshwater, <u>is means</u> the situation where:</p> <p>(a) resource use exceeds a limit; or</p> <p>(b) if limits have not been set, an FMU or part of an FMU is degraded or degrading; <u>or</u></p> <p><u>(c) an FMU or part of an FMU is not achieving an environmental flow or level set for it under clause 3.16.</u></p>

²³⁵ FPI045.017 Forest and Bird

²³⁶ Clause 10(2)(b)(i) – consequential amendment arising from FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

²³⁷ Clause 10(2)(b)(i) – consequential amendment arising from FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

²³⁸ Clause 16(2), Schedule 1, RMA

²³⁹ Clause 16(2), Schedule 1, RMA

Term	Definition
Specified infrastructure 240	<p>has the same meaning as in clause 3.21 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)²⁴¹</p> <div style="border: 1px solid black; padding: 5px;"> <p><u>means any of the following:</u></p> <p><u>(a) infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002);</u></p> <p><u>(b) regionally significant infrastructure identified as such in a regional policy statement or regional plan;</u></p> <p><u>(c) any public flood control, flood protection, or drainage works carried out:</u></p> <p style="padding-left: 20px;"><u>(i) by or on behalf of a local authority, including works carried out for the purposes set out in section 133 of the Soil Conservation and Rivers Control Act 1951, or</u></p> <p style="padding-left: 20px;"><u>(ii) for the purpose of drainage by drainage districts under the Land Drainage Act 1908</u></p> </div>
Specified rivers and lakes	<p>has the same meaning as in Appendix 3 of the National Policy Statement for Freshwater Management 2020 (as set out in the box below)</p> <div style="border: 1px solid black; padding: 5px;"> <p>means:</p> <p>(a) rivers that are fourth order or greater, using the methods outlined in the River Environment Classification System, National Institute of Water and Atmospheric Research, Version 1, and</p> <p>(b) lakes with a perimeter of 1.5km or more</p> </div>

LF – Land and freshwater

LF-WAI – Te Mana o te Wai

Objectives

LF-WAI-O1 – Te Mana o te Wai

The mauri of Otago's *water bodies* and their health and well-being is protected, and restored where it is *degraded*, and the management of *land* and *water* recognises and reflects that:

- (1) *water* is the foundation and source of all life – na te wai ko te hauora o ngā mea katoa,

²⁴⁰ Clause 10(2)(b)(i) – consequential amendment arising from FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

²⁴¹ Clause 10(2)(b)(i) – consequential amendment arising from FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

- (2) there is an integral kinship relationship between *water* and Kāi Tahu whānui, and this relationship **endures through time, connecting connects** past, present and future,
- (3) each *water body* has a unique whakapapa and characteristics,
- (4) *fresh water, and land, and coastal water*²⁴² have a connectedness that supports and perpetuates life, ~~and~~
- (4A) protecting the health and well-being of *water* protects the wider *environment* ~~and~~ the mauri of *water*,²⁴³
- (5) Kāi Tahu exercise rakatirataka, manaakitaka and their *kaitiakitaka* duty of care and attention over wai and all the life it supports, ~~and~~
- (6) all people and communities have a responsibility to exercise stewardship, care, and respect in the management of *fresh water*.²⁴⁴

Policies

LF-WAI-P1 – Prioritisation

In all decision-making affecting management of²⁴⁵ *fresh water* in Otago, prioritise:

- (1) first, the health and well-being of *water bodies* and *freshwater* ecosystems, (te hauora o te wai) and the contribution of this to²⁴⁶ the health and well-being of the *environment* (te hauora o te taiao), ~~and~~ together with²⁴⁷ the exercise of *mana whenua* to uphold these,²⁴⁸
- (2) second, ~~health and well-being~~²⁴⁹ needs of people, (te hauora o te tangata),²⁵⁰ interacting with *water* through ingestion (such as *drinking water* and consuming ~~harvested~~ resources harvested from the *water body*)²⁵¹ and immersive activities (such as harvesting resources and ~~bathing~~ primary contact),²⁵² and
- (3) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

LF-WAI-P2 – Mana whakahaere

Recognise and give practical effect to Kāi Tahu rakatirataka in respect of *fresh water* by:

²⁴² FPI019.003 Fonterra, FPI032.014 Te Rūnanga o Ngāi Tahu, FPI030.015 Kāi Tahu ki Otago, FPI044.005 DOC, FPI042.08 Ngāi Tahu ki Murihiku

²⁴³ FPI043.051 OWRUG, FPI019.003 Fonterra

²⁴⁴ FPI019.003 Fonterra, FPI037.012 Fish and Game, FPI032.014 Te Rūnanga o Ngāi Tahu, FPI030.015 Kāi Tahu ki Otago, FPI044.005 DOC

²⁴⁵ FPI024.016 DairyNZ, FPI027.016 Contact, FPI019.004 Fonterra, FPI012.003 Minister for the Environment, FPI017.004 Ravensdown, FPI021.002 Ballance

²⁴⁶ FPI030.016 Kāi Tahu ki Otago

²⁴⁷ FPI017.004 Ravensdown, FPI021.002 Ballance

²⁴⁸ In matters of mana, the associated spiritual and cultural responsibilities connect natural resources and *mana whenua* in a kinship relationship that is reciprocal and stems from the time of creation.

²⁴⁹ FPI016.011 Meridian

²⁵⁰ FPI017.004 Ravensdown

²⁵¹ FPI030.016 Kāi Tahu ki Otago, FPI017.004 Ravensdown, FPI045.006 Forest and Bird

²⁵² FPI017.004 Ravensdown

- (1) facilitating partnership with, and the active involvement of, *mana whenua* in *freshwater* management and decision-making processes,
- (2) sustaining the environmental, social, cultural and economic relationships of Kāi Tahu with *water bodies*,
- (3) providing for a range of customary uses, including ~~mahika kai~~ *mahika kai*,²⁵³ specific to each *water body*, ~~and~~
- (4) incorporating mātauraka into decision making, management and monitoring processes, ~~and~~
- (5) managing wai and its connections with whenua in a holistic and interconnected way – ki uta ki tai.²⁵⁴

LF-WAI-P3 – Integrated management/ki uta ki tai

Manage the use of *freshwater* and *land*, ~~in accordance with tikanga and kawa~~, using an integrated approach that is consistent with tikaka and kawa,²⁵⁵ that:

- (1) sustains and, to the greatest extent practicable, restores or improves:²⁵⁶
 - (a) ~~recognises and sustains~~²⁵⁷ the natural²⁵⁸ connections and interactions between *water bodies* (large and small, surface and ground, fresh and coastal, permanently flowing, intermittent and ephemeral),
 - (2b) ~~sustains and, wherever possible, restores~~²⁵⁹ the natural²⁶⁰ connections and interactions between *land* and *water*, from the mountains to the sea,
 - (3c) ~~sustains and, wherever possible, restores~~²⁶¹ the habitats of ~~mahika kai~~ *mahika kai*²⁶² and indigenous species, including taoka species associated with the ~~water body~~ *bodies*,²⁶³
- (4) manages the *effects* of the use and development of *land* to maintain or enhance the health and well-being of *freshwater*, ~~and~~ *coastal water* and associated ecosystems,²⁶⁴
- (5) encourages the coordination and sequencing of regional or urban growth to ensure it is sustainable,

²⁵³ Clause 10(2)(b)(i) – consequential amendment arising from 00226.038 Kāi Tahu ki Otago

²⁵⁴ 00234.026 Te Rūnanga o Ngāi Tahu

²⁵⁵ 00235.080 OWRUG, FS00226.362 Kāi Tahu ki Otago, FS00234.164 Te Rūnanga o Ngāi Tahu

²⁵⁶ 00306.032 Meridian

²⁵⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00306.032 Meridian

²⁵⁸ 00026.161 Moutere Station

²⁵⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00306.032 Meridian

²⁶⁰ 00026.161 Moutere Station

²⁶¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00306.032 Meridian

²⁶² Clause 10(2)(b)(i) – consequential amendment arising from 00226.038 Kāi Tahu ki Otago

²⁶³ 00226.161 Kāi Tahu ki Otago, 00234.027 Te Rūnanga o Ngāi Tahu

²⁶⁴ 00226.161 Kāi Tahu ki Otago, 00234.027 Te Rūnanga o Ngāi Tahu

- (6) has regard to foreseeable *climate change risks* and the potential effects of *climate change on water bodies*, including on their natural functioning,²⁶⁵ ~~and~~
- (7) has regard to cumulative *effects*, and
- ~~(8)~~²⁶⁶ ~~the need to apply~~ applies²⁶⁷ a precautionary approach where there is limited available information or uncertainty about potential adverse *effects*,²⁶⁸ in accordance with IM-P6.²⁶⁹

LF-WAI-P4 – Giving effect to *Te Mana o te Wai*

All persons exercising functions and powers under this regional policy statement and all persons who use, develop or protect resources to which this regional policy statement applies must recognise that LF-WAI-O1, LF-WAI-P1, LF-WAI-P2 and LF-WAI-P3 are fundamental to upholding *Te Mana o te Wai*, and must be given effect to when making decisions affecting *freshwater*, including when interpreting and applying the provisions of the LF chapter.

Methods

LF-WAI-M1 – ~~Mana whenua involvement~~ Kāi Tahu rakatirataka²⁷⁰

Otago Regional Council must partner with Kāi Tahu in *freshwater* management by:

- (1) implementing the actions in MW-M3 and MW-M4,
- (2) actively identifying and pursuing opportunities for *mana whenua* to be involved in *freshwater* governance, including through use of available mechanisms such as transfers of functions (under section 33 of the RMA-1991)²⁷¹ and supporting the establishment of *freshwater* mātaihai,
- (3) implementing actions to foster the development of *mana whenua* capacity to contribute to the Council's decision-making processes, including resourcing,
- (4) supporting *mana whenua* initiatives that contribute to maintaining or improving the health and well-being of *water bodies*, ~~and~~
- (5) providing relevant information to *mana whenua* for the purposes of (1), (2), (3) and (4), ~~and~~
- (6) developing a kaupapa Kāi Tahu monitoring programme and facilitating the use of mātauraka to inform *freshwater* management decision-making processes, methods and outcomes, in combination with environmental science.²⁷²

LF-WAI-M2 – Other methods

²⁶⁵ 00226.161 Kāi Tahu ki Otago, 00234.027 Te Rūnanga o Ngāi Tahu

²⁶⁶ 00231.047 Fish and Game

²⁶⁷ 00231.047 Fish and Game

²⁶⁸ 00239.072 Federated Farmers, 00022.016 Graymont, 00409.005 Ballance

²⁶⁹ 00022.016 Graymont, 00409.005 Ballance

²⁷⁰ 00226.163 Kāi Tahu ki Otago

²⁷¹ Clause 16(2), Schedule 1, RMA

²⁷² 00223.081 Ngāi Tahu ki Murihiku

In addition to method LF-WAI-M1, the methods in the LF-VM, LF-FW, and LF-LS sections are also applicable.

Explanation

LF-WAI-E1 – Explanation

Water is a central element in Kāi Tahu creation traditions. It was present very early in the whakapapa of the world: in the beginning there was total darkness, followed by the emergence of light and a great void of nothingness. In time Maku mated with Mahoronuiatea which resulted in great expanses of *water*, then Papatūānuku Papatūānuku²⁷³ and Takaroa met and had children after which Takaroa took a long absence. Papatūānuku Papatūānuku²⁷⁴ met Rakinui and they had many children who conspired to force their parents' coupled bodies apart to let the light in. They were also responsible for creating many of the elements that constitute our world today – the mountains, *rivers*, forests and seas, and all fish, bird and animal life. To Kāi Tahu, the²⁷⁵ whakapapa and spiritual source of *water* and *land* are connected, and *water bodies* are the central unifying feature that connects our landscapes together. The spiritual essence of *water* derives from the atua and the life it exudes is a reflection of the atua.

To Kāi Tahu, the²⁷⁶ whakapapa of *mana whenua* and *water* are also integrally connected. There is a close kinship relationship, and *mana whenua* and the wai cannot be separated. The tūpuna relationship with *water*, and the different uses made of the *water*, provide a daily reminder of greater powers – of both the atua and tūpuna. This relationship continues into the present and future and is central to the identity of Kāi Tahu. The mana of wai is sourced from the time of creation and the work of kā Atua, invoking a reciprocal relationship with *mana whenua* based in kawa, tikaka and respect for *water's* life-giving powers and its sanctity.

The kinship connection engenders a range of rights and responsibilities for *mana whenua*, including rakatirataka rights and the responsibility of *kaitiakitaka*. *Kaitiakitaka* encompasses a high duty to uphold and maintain the mauri (life-force)²⁷⁷ of the wai. If the mauri is degraded it has an impact not only on the mana of the wai but also on the kinship relationship and on *mana whenua*. The mauri expresses mana and connection, which can only be defined by *mana whenua*. Recognising rakatirataka enables *mana whenua* to enjoy their rights over *water bodies* and fulfil their responsibilities to care for the wai and the communities it sustains.

The condition of *water* is seen as a reflection of the condition of the people - when the wai is healthy, so are the people. Kawa and tikaka have been developed over the generations, based on customs and values associated with the Māori world view that span the generations, ~~recognising and honouring~~ Giving effect to ~~te mana~~ Te Mana o te wai Wai and upholding upholds the mauri of the wai and is consistent with this value base.²⁷⁸

²⁷³ 00226.024 Ngāi Tahu ki Murihiku

²⁷⁴ 00226.024 Ngāi Tahu ki Murihiku

²⁷⁵ 00226.165 Kāi Tahu ki Otago

²⁷⁶ 00226.165 Kāi Tahu ki Otago

²⁷⁷ 00239.192 Federated Farmers; 00236.111 Horticulture NZ; 00140.003 Waitaki DC

²⁷⁸ 00235.082 OWRUG

To Kāi Tahu, ~~Each each~~²⁷⁹ *water body* is unique. This is a reflection of its unique whakapapa and characteristics, and it means that each *water body* has different needs. Management and use must recognise and reflect this.

The concept of *Te Mana o te Wai* aligns closely with the Kāi Tahu approach to *freshwater* management, but it is not confined to Kāi Tahu.²⁸⁰ *Water* is valued by the community.²⁸¹ The life-giving qualities of *freshwater* support the health and well-being of the whole community and all people have a shared responsibility to respect and care for the health and well-being of *freshwater bodies*.²⁸² Access to *water*, within *limits* (in relation to *water*),²⁸³ is an important contributor achieving social, cultural and economic well-being within Otago.²⁸⁴

Principal reasons

LF-WAI-PR1 – Principal reasons

In accordance with the NPSFM, councils are required to implement a framework for managing *freshwater* that gives effect to *Te Mana o te Wai*. This places the mauri (life-force) of the *water* at the forefront of decision making, recognising that²⁸⁵ *te hauora o te wai* (the health of the *water*) is the first priority, and supports *te hauora o te taiao* (the health of the environment) and *te hauora o te takata* (the health of the people). It is only after the health of the *water* and the health of the people²⁸⁶ is sustained that *water* can be used for economic purposes. Giving effect to *Te Mana o te Wai* requires actively involving *takata mana*²⁸⁷ *whenua* in *freshwater* planning and management.

The NZCPS also recognises the interconnectedness of *land* and *water*. It notes inland activities can have a significant impact on *coastal water* quality which, in many areas around New Zealand, is in decline. This is a consequence of point and diffuse sources of contamination which can have environmental, social, cultural and economic implications. For example, poor *water* quality adversely *effects* aquatic life and opportunities for *mahika kai* *mahika kai*²⁸⁸ gathering and recreational uses such as swimming and kayaking.

Anticipated environmental results

LF-WAI-AER2

~~The mauri of Otago's *water bodies* and their health and well-being is protected. The mauri of Otago's *water bodies* and the health and well-being of *water bodies* and *freshwater* ecosystems protects the wider environment and the mauri of *water* is protected, and restored where degraded.²⁸⁹~~

²⁷⁹ 00226.165 Kāi Tahu ki Otago

²⁸⁰ 00226.165 Kāi Tahu ki Otago

²⁸¹ 00235.082 OWRUG

²⁸² 00226.165 Kāi Tahu ki Otago

²⁸³ 00231.009 Fish and Game

²⁸⁴ 00235.082 OWRUG

²⁸⁵ FPI030.017 Kāi Tahu ki Otago, FPI027.017 Contact

²⁸⁶ FPI027.017 Contact

²⁸⁷ FPI030.017 Kāi Tahu ki Otago, FPI032.016 Te Rūnanga o Ngāi Tahu

²⁸⁸ Clause 10(2)(b)(i) – consequential amendment arising from 00226.038 Kāi Tahu ki Otago

²⁸⁹ FPI026.021 Federated Farmers, FPI043.058 OWRUG, FPI024.018 DairyNZ, FPI019.005 Fonterra

LF-WAI-AER1

Kāi Tahu are actively involved in the management of *freshwater* and able to effectively exercise their *rakaitirataka*, *manaakitaka* and *kaitiakitaka*.

LF-VM – Visions and management LF-FW – Fresh water

Note to readers: As a result of reporting officer recommendations, this chapter combines the LF-VM and LF-FW provisions as notified. The numbering in this section reflects the notified numbering of the provisions so that it is clear that the provision has been moved rather than introduced as 'new'. The numbering will be corrected at the end of the hearing process.

Objectives

LF-FW-01A – Region-wide objective for fresh water

In all FMUs and rohe in Otago and within the timeframes specified in the *freshwater* visions in LF-VM-02 to LF-VM-06:

- (1) healthy freshwater and estuarine²⁹⁰ ecosystems support healthy populations of indigenous species (including non-diadromous galaxiids and Canterbury mudfish)²⁹¹ that are plentiful enough to support ~~and~~ mahika kai ~~that are~~ and²⁹² safe for consumption,
- (2) the interconnection of land, freshwater (including ~~springs, groundwater, ephemeral water bodies, wetlands, rivers, and lakes~~)²⁹³ and coastal water is recognised,
- (3) indigenous species migrate easily ~~and as naturally as possible within and between catchments,~~²⁹⁴
- (4) the natural ~~form, function and~~ character, ~~including form and function,~~ of water bodies reflects their ~~natural characteristics and natural~~ behaviours to the greatest extent practicable,²⁹⁵
- (5) the ongoing relationship of Kāi Tahu with wāhi tūpuna, including access to and use of water bodies, is sustained,
- (6) the health of the water supports the health of people and their connections with water bodies,
- (7) innovative and sustainable land and water management practices provide for the health and well-being of water bodies and freshwater ecosystems, ~~and~~ improve resilience to the effects of climate change, and ~~support food production, and~~²⁹⁶
- (8) direct discharges of wastewater to water bodies are phased out to the greatest extent practicable.²⁹⁷

²⁹⁰ FPI030.019 Kāi Tahu ki Otago

²⁹¹ FPI044.015 DOC

²⁹² FPI030.019 Kāi Tahu ki Otago

²⁹³ FPI030.019 Kāi Tahu ki Otago

²⁹⁴ FPI027.019 Contact

²⁹⁵ FPI030.019 Kāi Tahu ki Otago

²⁹⁶ FPI047.015 Horticulture NZ

²⁹⁷ FPI044.007 DOC, FPI037.014 Fish and Game, FPI030.019 Kāi Tahu ki Otago, FPI045.008 Forest and Bird

LF-VM-O2 – Clutha Mata-au *FMU* vision

In the Clutha Mata-au *FMU*, and in addition to the matters in LF-FW-O1A.²⁹⁸

- (1) management of the *FMU* recognises that:
 - (a) the Clutha Mata-au is a single connected system ki uta ki tai, and
 - (b) the source of the wai is pure, coming directly from ~~Tāwhirimātea~~ Tāwhirimātea²⁹⁹ to the top of the mauka and into the awa,

(1A) sustainable abstraction occurs from lakes, river main stems or groundwater in preference to tributaries,³⁰⁰

~~(2) fresh water is managed in accordance with the LF WAI objectives and policies,~~³⁰¹

~~(3) the ongoing relationship of Kāi Tahu with wāhi tūpuna is sustained,~~³⁰²

~~(4) water bodies support thriving mahika kai and Kāi Tahu whānui have access to mahika kai,~~³⁰³

~~(5) indigenous species migrate easily and as naturally as possible along and within the river system,~~³⁰⁴

(6) the national significance of the Clutha hydro-electricity generation scheme is recognised, and its operation, maintenance, and upgrading is provided for,³⁰⁵

(6A) water bodies support a range of outdoor recreation opportunities,³⁰⁶

(7) ~~in addition to (1) to (6) above:~~³⁰⁷

~~(a) in the Upper Lakes rohe, the high quality waters of the lakes and their tributaries are protected, and if degraded are improved,~~³⁰⁸ recognising the significance of the purity of these waters to Kāi Tahu and to the wider community,

~~(b) in the Dunstan, Manuherekiā and Roxburgh rohe:~~³⁰⁹

²⁹⁸ Clause 10(2)(b)(ii), Schedule 1, RMA – consequential amendment arising from introducing LF-FW-O1A

²⁹⁹ FPI027.019 Contact

³⁰⁰ FPI030.020 Kāi Tahu ki Otago

³⁰¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁰² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁰³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁰⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁰⁵ FPI027.019 Contact

³⁰⁶ FPI038.008 NZSki, FPI039.010 Realnz

³⁰⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁰⁸ FPI027.019 Contact

³⁰⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

- ~~(i) flows in *water bodies* sustain and, wherever possible, restore the natural form and function of main stems and tributaries to support Kāi Tahu values and practices, and~~
- ~~(ii) innovative and sustainable *land* and *water* management practices support food production in the area and reduce discharges of nutrients and other *contaminants* to *water bodies* so that they are safe for human contact, and~~
- ~~(iii) sustainable abstraction occurs from main stems or *groundwater* in preference to tributaries,~~

~~(e7A) in the Lower Clutha rohe,²~~

- ~~(i) there is no further modification of the shape and behaviour of the *water bodies* and opportunities to restore the natural form and function of *water bodies* are promoted wherever possible, and³¹⁰~~
- ~~(ii) the ecosystem connections between *freshwater*, *wetlands* and the coastal environment are preserved and, wherever possible, restored,³¹¹~~
- ~~(iii) *land* management practices reduce discharges of nutrients and other *contaminants* to *water bodies* so that they are safe for human contact, and³¹²~~
- ~~(iv) there are no direct *discharges* of *wastewater* to *water bodies*, and³¹³~~

(8) the outcomes sought in ~~(7) this vision~~³¹⁴ are to be achieved within the following timeframes:

- (a) by 2030 in the Upper Lakes rohe,
- (b) by 2045 in the Dunstan, Roxburgh and Lower Clutha rohe, and
- (c) by 2050 in the Manuherekia rohe.

LF-VM-O3 – North Otago FMU vision

By 2050 in the North Otago FMU, and in addition to the matters in LF-FW-O1A:³¹⁵

~~(1) fresh *water* is managed in accordance with the LF-WAI objectives and policies, while recognising that the Waitaki River is influenced in part by catchment areas~~

³¹⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³¹¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³¹² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³¹³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³¹⁴ Clause 16(2), Schedule 1, RMA

³¹⁵ Clause 10(2)(b)(ii), Schedule 1, RMA – consequential amendment arising from introducing LF-FW-O1A

~~within the Canterbury region the Waitaki River is managed holistically, ki uta ki tai, despite its catchments spanning the Canterbury and Otago regions,~~³¹⁶

~~(1B) the national significance of the Waitaki hydroelectricity generation scheme is recognised,~~³¹⁷

~~(2) the ongoing relationship of Kāi Tahu with *wāhi tūpuna* is sustained and Kāi Tahu maintain their connection with and use of the *water bodies*,~~³¹⁸

~~(3) healthy riparian margins, *wetlands*, estuaries and lagoons support thriving *mahika kai*, indigenous habitats and~~³¹⁹ the health of³²⁰ downstream coastal ecosystems,

~~(4) indigenous species can migrate easily and as naturally as possible to and from the coastal environment,~~³²¹

~~(5) *land* management practices reduce *discharges* of nutrients and other *contaminants* to *water bodies* so that they are safe for human contact, and~~³²²

~~(6) innovative and sustainable *land* and *water* management practices support food production in the area and improve resilience to the *effects of climate change*.~~³²³

LF-VM-O4 – ~~Taiari~~ Taiari³²⁴ FMU vision

By 2050 in the ~~Taiari~~ Taiari³²⁵ FMU, and in addition to the matters in LF-FW-O1A:³²⁶

~~(1) *fresh water* is managed in accordance with the LF-WAI objectives and policies,~~³²⁷

~~(2) the ongoing relationship of Kāi Tahu with *wāhi tūpuna* is sustained,~~³²⁸

~~(3) healthy *wetlands* are restored in~~³²⁹ the upper and lower catchment *wetland* complexes, including the ~~Waipori/Waihola Wetlands~~ Waipōuri/Waihola wetland complex,³³⁰ ~~Tunaheketaka/Lake Taiari, scroll plain, Upper Taiari wetland~~

³¹⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI033.001 Fulton Hogan

³¹⁷ FPI016.013 Meridian

³¹⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³¹⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³²⁰ Clause 16(2), Schedule 1, RMA

³²¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³²² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³²³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³²⁴ FPI030.049 Kāi Tahu ki Otago

³²⁵ FPI030.049 Kāi Tahu ki Otago

³²⁶ Clause 10(2)(b)(ii), Schedule 1, RMA – consequential amendment arising from introducing LF-FW-O1A

³²⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³²⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³²⁹ FPI025.020 Beef + Lamb and DINZ

³³⁰ FPI030.022 Kāi Tahu ki Otago

complex,³³¹ and connected³³² tussock areas are **protected,³³³ restored or enhanced where they have been degraded or lost,³³⁴**

(4) the gravel *bed* of the lower ~~Taieri~~ Taieri³³⁵ is restored and sedimentation of the ~~Waipori Waipōuri/Waiholā³³⁶ wetland³³⁷~~ complex is reduced,

(4A) the national significance of the Waipōuri hydro-electricity generation scheme, and the regional significance of the Deep Stream and Paerau/Patearoa hydro-electricity generation schemes, is recognised and their operation, maintenance, and upgrading is provided for,³³⁸

(5) creative ecological approaches contribute to reduced occurrence of didymo, and

~~(5A) within limits, the allocation of fresh water provides for land-based primary production that supports the social, economic, and cultural well-being of communities in this FMU.³³⁹~~

~~(6) water bodies support healthy populations of galaxiid species,~~

~~(7) there are no direct discharges of wastewater to water bodies, and³⁴⁰~~

~~(8) innovative and sustainable land and water management practices support food production in the area and improve resilience to the effects of climate change.³⁴¹~~

LF-VM-O5 – Dunedin & Coast FMU vision

By 2040 in the Dunedin & Coast FMU, and in addition to the matters in LF-FW-O1A:³⁴²

~~(1) fresh water is managed in accordance with the LF-WAI objectives and policies,³⁴³~~

~~(2) the ongoing relationship of Kāi Tahu with wāhi tūpuna is sustained,³⁴⁴~~

(3) healthy riparian margins, wetlands, estuaries, and lagoons and ~~coastal waters³⁴⁵~~ support the health of thriving mahika kai and downstream coastal ecosystems, and indigenous species can migrate easily and as naturally as possible to and from these areas,³⁴⁶

³³¹ FPI044.011 DOC

³³² FPI022.005 Manawa Energy

³³³ Uncoded submission point - Kāi Tahu ki Otago submission, para 3.8

³³⁴ FPI025.020 Beef + Lamb and DINZ

³³⁵ FPI030.049 Kāi Tahu ki Otago

³³⁶ FPI030.049 Kāi Tahu ki Otago

³³⁷ FPI030.022 Kāi Tahu ki Otago

³³⁸ FPI022.005 Manawa

³³⁹ FPI043.002 OWRUG

³⁴⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁴¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁴² Clause 10(2)(b)(ii), Schedule 1, RMA – consequential amendment arising from introducing LF-FW-O1A

³⁴³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁴⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁴⁵ FPI001.012 DCC

³⁴⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

~~(4) there is no further modification of the shape and behaviour of the *water bodies* and opportunities to restore the natural form and function of *water bodies* are promoted wherever possible, and³⁴⁷~~

~~(5) *discharges of contaminants* from urban environments are reduced so that *water bodies* are safe for human contact.~~³⁴⁸

LF-VM-O6 – Catlins *FMU* vision

By 2030 in the Catlins *FMU*, and in addition to the matters in LF-FW-O1A.³⁴⁹

~~(1) *fresh water* is managed in accordance with the LF-WAI objectives and policies,~~³⁵⁰

~~(2) the ongoing relationship of Kāi Tahu with *wāhi tūpuna* is sustained,~~³⁵¹

~~(3) *water bodies* support thriving *mahika kai* and access of Kāi Tahu whānui to *mahika kai*,~~³⁵²

~~(4) the high degree of naturalness of the *water bodies*³⁵³ and ecosystem connections between the forests, *freshwater* and coastal environment are preserved, and~~

~~(5) *water bodies* and their catchment areas support the health and well being of *coastal water*, ecosystems and indigenous species, including downstream *kaimoana*, and³⁵⁴~~

~~(6) healthy, clear and clean *water* supports opportunities for recreation and sustainable food production for future generations.~~

LF-VM-O7 – Integrated management

~~*Land* and *water* management apply the ethic of *ki uta ki tai* and are managed as integrated natural resources, recognising the connections and interactions between *fresh water*, *land* and the coastal environment, and between surface water, *groundwater* and *coastal water*.~~³⁵⁵

LF-FW-O9 – Natural wetlands

Otago's *natural wetlands* are protected or restored so that:

(1) *mahika kai* and other *mana whenua* values are sustained and enhanced now and for future generations,

³⁴⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁴⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁴⁹ Clause 10(2)(b)(ii), Schedule 1, RMA – consequential amendment arising from introducing LF-FW-O1A

³⁵⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁵¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁵² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁵³ FPI030.024Kāi Tahu ki Otago

³⁵⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI044.007 DOC and others

³⁵⁵ 00121.056 Ravensdown

- (2) there is no net³⁵⁶ decrease, and preferably an increase,³⁵⁷ in the range extent³⁵⁸ and diversity of indigenous ecosystem types and habitats in *natural wetlands*,
- (3) there is no reduction and, where degraded, there is an improvement³⁵⁹ in their wetland³⁶⁰ ecosystem health, hydrological functioning, *amenity values*, extent or *water quality*, and if degraded they are improved, and³⁶¹
- (4) their flood attenuation and water storage³⁶² capacity is maintained or improved.³⁶³

Policies

LF-VM-P5 – Freshwater Management Units (FMUs) and rohe

Otago's *freshwater* resources are managed through the following *freshwater management units* or rohe which:

- (1) have coastal boundaries that follow either mean high water springs or, where this crosses a water body, the inner limit of the territorial sea, and³⁶⁴
- (2) are shown on MAP1:

Table 1 – Freshwater Management Units and rohe

Freshwater Management Unit	Rohe
Clutha Mata-au	Upper Lakes Dunstan Manuherekia Roxburgh Lower Clutha
Tairi-Tairi ³⁶⁵	n/a
North Otago	n/a
Dunedin & Coast	n/a
Catlins	n/a

LF-VM-P6 – Relationship between FMUs and rohe

Where rohe have been defined within FMUs:

- (1) *environmental outcomes* must be developed for the FMU within which the rohe is located,

³⁵⁶ FPI033.003 Fulton Hogan

³⁵⁷ FPI035.012 Wise Response

³⁵⁸ FPI030.029 Kāi Tahu ki Otago, FPI021.004 Ballance, FPI025.027 Beef + Lamb and DINZ

³⁵⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI033.003 Fulton Hogan

³⁶⁰ FPI033.003 Fulton Hogan

³⁶¹ FPI033.003 Fulton Hogan

³⁶² FPI030.029 Kāi Tahu ki Otago

³⁶³ FPI035.012 Wise Response

³⁶⁴ FPI030.025 Kāi Tahu ki Otago

³⁶⁵ FPI030.049 Kāi Tahu ki Otago

- (2) if any additional rohe-specific environmental outcomes are included for rohe, those environmental outcomes.³⁶⁶
- (a) must³⁶⁷ set target *attribute* states that are no less stringent than the parent *FMU environmental outcomes* if the same *attributes* are adopted in both the rohe and the *FMU*, and
- (b) may include additional *attributes* and target *attribute* states provided that any additional *environmental outcomes* give effect to the *environmental outcomes* for the *FMU*,
- (3) limits and action plans to achieve environmental outcomes, including by achieving target attribute states,³⁶⁸ may be developed for the *FMU* or the rohe or a combination of both,
- (4) any *limit* or action plan developed to apply within a rohe:
- (a) prevails over any *limit* or action plan developed for the *FMU* for the same *attribute*, unless explicitly stated to the contrary, and
- (b) must be no less stringent than any limit or action plan³⁶⁹ set for the parent *FMU* for the same *attribute*, and
- (c) must not conflict with any limit set or action plan developed³⁷⁰ for the underlying parent³⁷¹ *FMU* for *attributes* that are not the same, and
- (5) the term “no less stringent” in this policy applies to *attribute states* (numeric and narrative) and any other metrics and timeframes (if applicable).

LF-FW-P7 – Fresh water

Environmental outcomes, attribute states (including target *attribute states*), environmental flows and levels,³⁷² and limits ensure that:

- (1) the health and well-being of *water bodies* and freshwater ecosystems³⁷³ is maintained or, if *degraded*, improved,
- (2) the habitats of indigenous freshwater species ~~associated with water bodies~~ with life stages dependent on water bodies³⁷⁴ are protected and sustained,³⁷⁵ including by providing for fish passage,
- (2A) the habitats of trout and salmon are protected insofar as this is consistent with (2),³⁷⁶

³⁶⁶ FPI021.004 Ballance

³⁶⁷ FPI030.026 Kāi Tahu ki Otago

³⁶⁸ FPI021.004 Ballance

³⁶⁹ FPI021.004 Ballance

³⁷⁰ FPI021.004 Ballance

³⁷¹ Clause 16(2), Schedule 1, RMA

³⁷² FPI030.030 Kāi Tahu ki Otago, FPI017.010 Ravensdown, FPI021.005 Ballance, FPI027.026 Contact

³⁷³ FPI037.019 Fish and Game

³⁷⁴ FPI027.026 Contact, FPI021.005 Ballance

³⁷⁵ FPI030.030 Kāi Tahu ki Otago, FPI027.026 Contact

³⁷⁶ FPI037.019 Fish and Game

~~(2B) fish passage is provided for, except where it is desirable to prevent the passage of some fish species in order to protect desired fish species, their life stages, or their habitats,³⁷⁷~~

(3) *specified rivers and lakes* are suitable for primary contact within the following timeframes:

- (a) by 2030, 90% of *rivers* and 98% of *lakes*, and
- (b) by 2040, 95% of *rivers* and 100% of *lakes*, and

(4) resources harvested from *water bodies* including³⁷⁸ *mahika kai* and *drinking water* are safe for human consumption.

~~(5) existing over-allocation is phased out and future over-allocation is avoided, and³⁷⁹~~

~~(6) fresh water is allocated within environmental *limits* and used efficiently.³⁸⁰~~

LF-FW-P7A – Water allocation and use³⁸¹

Within *limits* and in accordance with any relevant environmental flows and levels, the benefits of using *fresh water* are recognised and *over-allocation* is either phased out or avoided by:

(1A) managing over-allocation as set out in LF-FW-M6,³⁸²

(1) allocating *fresh water* efficiently to support the social, economic, and cultural well-being of people and communities ~~to the extent possible within *limits*,~~³⁸³ including for:

- (a) community drinking water supplies,
- (b) *renewable electricity generation*, and
- (ba) *mana whenua* needs and aspirations, and³⁸⁴
- (c) *land-based primary production*,

(2) ensuring that no more *fresh water* is abstracted than is necessary for its intended use,

(3) ensuring that the efficiency of *freshwater* abstraction, storage, and conveyancing *infrastructure* is improved, including by providing for off-stream storage capacity in locations where this will support Te Mana o te Wai, and

³⁷⁷ FPI022.006 Manawa

³⁷⁸ FPI037.018 Fish and Game

³⁷⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including LF-FW-P7A

³⁸⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including LF-FW-P7A

³⁸¹ FPI025.028 Beef + Lamb and DINZ, FPI045.016 Forest and Bird, FPI043.065 OWRUG, FPI009.008 COWA, FPI047.023 Horticulture NZ, FPI022.006 Manawa Energy, FPI027.026 Contact, FPI023.010 Moutere Station

³⁸² Clause 16(2), Schedule 1, RMA

³⁸³ FPI030.030 Kāi Tahu ki Otago,

³⁸⁴ FPI030.019 Kāi Tahu ki Otago

(4) providing for spatial and temporal sharing of allocated *fresh water* between uses and users where feasible.³⁸⁵

LF-FW-P8 – Identifying *natural inland*³⁸⁶ *wetlands*

By 3 September 2030, ~~Identify~~ identify³⁸⁷ and map *natural inland*³⁸⁸ *wetlands* that are:

- (1) 0.05 hectares or greater in extent, or
- (2) of a type that is naturally less than 0.05 hectares in extent (such as an ephemeral *wetland*) and known to contain *threatened species*.

LF-FW-P9 – Protecting *natural wetlands*

Protect *natural wetlands* by:

- (1) preventing activities that will, or are likely to, result in irreversible damage to a *natural wetland*; and³⁸⁹
- (2) for *natural inland wetlands*,³⁹⁰ implementing clause 3.22(1) to (3) of the NPSFM, except that:

(1a) in the coastal environment, *natural wetlands* must also be managed in accordance with the NZCPS, and

(2b) when managing the adverse *effects* of an activity on *indigenous biodiversity*, the *effects management hierarchy (in relation to indigenous biodiversity)* applies instead of the *effects management hierarchy (in relation to natural wetlands and rivers)*.³⁹¹

Protect *natural wetlands* by:

~~(1) avoiding a reduction in their values or extent unless:~~

~~(a) the *loss of values* or extent arises from:~~

- ~~(i) the customary harvest of food or resources undertaken in accordance with tikaka Māori,~~
- ~~(ii) restoration activities,~~
- ~~(iii) scientific research,~~
- ~~(iv) the sustainable harvest of sphagnum moss,~~
- ~~(v) the construction or maintenance of *wetland utility structures*,~~
- ~~(vi) the maintenance of operation of *specific infrastructure*, or *other infrastructure*,~~

³⁸⁵ FPI043.065 OWRUG, FPI009.008 COWA, FPI047.023 Horticulture NZ, FPI027.026 Contact, FPI022.006 Manawa Energy

³⁸⁶ Clause 16(2), Schedule 1, RMA

³⁸⁷ 00230.088 Forest and Bird

³⁸⁸ Clause 16(2), Schedule 1, RMA

³⁸⁹ FPI030.031 Kāi Tahu ki Otago

³⁹⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including definition of 'natural inland wetland'

³⁹¹ FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

~~(vii) natural hazard works, or~~

~~(b) the Regional Council is satisfied that:~~

~~(i) the activity is necessary for the construction or upgrade of specified infrastructure,~~

~~(ii) the specified infrastructure will provide significant national or regional benefits,~~

~~(iii) there is a functional need for the specified infrastructure in that location,~~

~~(iv) the effects of the activity on indigenous biodiversity are managed by applying either ECO-P3 or ECO-P6 (whichever is applicable), and~~

~~(v) the other effects of the activity (excluding those managed under (1)(b)(iv)) are managed by applying the effects management hierarchy, and~~

~~(2) not granting resource consents for activities under (1)(b) unless the Regional Council is satisfied that:~~

~~(a) the application demonstrates how each step of the effects management hierarchies in (1)(b)(iv) and (1)(b)(v) will be applied to the loss of values or extent of the natural wetland, and~~

~~(b) any consent is granted subject to conditions that apply the effects management hierarchies in (1)(b)(iv) and (1)(b)(v).~~

LF-FW-P10 – Restoring natural wetlands

Improve the ecosystem health, hydrological functioning, ~~water quality~~³⁹² and extent of natural wetlands that have been degraded or lost by requiring, ~~where possible to the greatest extent practicable:~~³⁹³

- (1) an increase in the extent and quality condition³⁹⁴ of habitat for indigenous species,
- (2) the restoration of hydrological processes,
- (3) control of pest species and vegetation clearance, and
- (4) the exclusion of stock.

LF-FW-P11 – Identifying Otago's outstanding water bodies³⁹⁵

Otago's outstanding water bodies are:

- (1) the Kawarau River and tributaries described in the Water Conservation (Kawarau) Order 1997,

³⁹² FPI024.030 DairyNZ

³⁹³ FPI045.018 Forest and Bird, FPI025.043 Beef + Lamb and DINZ, FPI035.015 Wise Response, FPI020.017 Silver Fern Farms, FPI022.008 Manawa Energy

³⁹⁴ FPI046.012 QLDC

³⁹⁵ Clause 16(2), Schedule 1, RMA

- (2) Lake Wanaka and the outflow and tributaries described in the Lake Wanaka Preservation Act 1973, and
- ~~(3) any *water bodies* identified as being wholly or partly within an outstanding natural feature or landscape in accordance with NFL P1, and³⁹⁶~~
- (4) any other *water bodies* identified in accordance with APP1.

LF-FW-P12 – ~~Protecting~~ Identifying and managing³⁹⁷ *outstanding water bodies*

The significant and outstanding values of *outstanding water bodies* are:

- ~~(1) identified in the relevant *regional* and *district plans*, and~~
- ~~(2) protected by avoiding adverse *effects* on those values.³⁹⁸~~

Identify *outstanding water bodies* and their significant and outstanding values in the relevant *regional plans* and *district plans* and protect those values.³⁹⁹

LF-FW-P13 – Preserving natural character and instream values⁴⁰⁰

Preserve the natural character and instream values⁴⁰¹ of *lakes* and *ivers* and the natural character of⁴⁰² their *beds* and margins by:

- (1) avoiding the *loss of values* or extent of a *river*, unless:
 - (a) there is a *functional need* for the activity in that location, and
 - (b) the *effects* of the activity are managed by applying:
 - (i) for *effects* on indigenous *biodiversity*, either ECO-P3 or the *effects management hierarchy (in relation to indigenous biodiversity)* in⁴⁰³ ECO-P6 (whichever is applicable), and
 - (ii) for other *effects* (excluding those managed under (1)(b)(i)),⁴⁰⁴ the *effects management hierarchy (in relation to natural wetlands and rivers)* in LF-FW-P13A,⁴⁰⁵
- (2) not granting *resource consent* for activities in (1) unless ~~Otago Regional Council~~ the consent authority⁴⁰⁶ is satisfied that:
 - (a) the application demonstrates how each step of the *effects management hierarchies hierarchy (in relation to indigenous biodiversity)*⁴⁰⁷ in (1)(b)(i) and

³⁹⁶ 00237.037 Beef + Lamb and DINZ, 00239.087 Federated Farmers

³⁹⁷ Clause 16(2), Schedule 1, RMA

³⁹⁸ 00230.091 Forest and Bird

³⁹⁹ 00230.091 Forest and Bird, 00119.011 Blackthorn Lodge, 00206.033 Trojan, 00411.045 Wayfare,

⁴⁰⁰ 00231.058 Fish and Game

⁴⁰¹ 00231.058 Fish and Game

⁴⁰² Clause 10(2)(b)(i), Schedule 1, RMA - consequential amendment arising from 00231.058 Fish and Game

⁴⁰³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

⁴⁰⁴ Clause 16(2), Schedule 1, RMA

⁴⁰⁵ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

⁴⁰⁶ 00137.074 DOC

⁴⁰⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

- the effects management hierarchy (in relation to natural wetlands and rivers) in (1)(b)(ii)⁴⁰⁸ will be applied to the *loss of values* or extent of the *river*, and
- (b) any consent is granted subject to conditions that apply the *effects management hierarchies hierarchy (in relation to indigenous biodiversity)*⁴⁰⁹ in (1)(b)(i) and the *effects management hierarchy (in relation to natural wetlands and rivers) in (1)(b)(ii)*⁴¹⁰ in respect of any *loss of values* or extent of the river,⁴¹¹
- (c) if aquatic offsetting or aquatic compensation is applied, the applicant has complied with principles 1 to 6 in Appendix 6 and 7 of the NPSFM, and has had regard to the remaining principles in Appendix 6 and 7 of the NPSFM, as appropriate, and
- (d) if aquatic offsetting or aquatic compensation is applied, any consent granted is subject to conditions that will ensure that the offsetting or compensation will be maintained and managed over time to achieve the conservation outcomes.⁴¹²
- (3) establishing environmental flow and level regimes and *water* quality standards that support the health and well-being of the *water body*,
- (4) ~~wherever possible~~ to the greatest extent practicable,⁴¹³ sustaining the form and function of a *water body* that reflects its natural behaviours,
- (5) recognising and implementing the restrictions in Water Conservation Orders,
- (6) preventing the impounding or control of the level of Lake Wanaka,
- (7) preventing modification that would permanently⁴¹⁴ reduce the braided character of a *river*, ~~and~~
- (8) controlling the use of *water* and *land* that would adversely affect the natural character of ~~the water body~~, and
- (9) maintaining or enhancing the values of riparian margins to support habitat and biodiversity and reduce ~~sedimentation of~~ contaminant loss to⁴¹⁵ *water bodies*.⁴¹⁶

LF-FW-P13A – Effects management hierarchy (in relation to natural inland⁴¹⁷ wetlands and rivers)⁴¹⁸

⁴⁰⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

⁴⁰⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

⁴¹⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

⁴¹¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00119.010 Blackthorn, 00206.031 Trojan, 00411.043 Wayfare

⁴¹² 00230.005 Forest and Bird

⁴¹³ 00318.015 Contact

⁴¹⁴ 00206.034 Trojan, 00411.046 Wayfare, 00119.012 Blackthorn Lodge

⁴¹⁵ Clause 16(2), Schedule 1, RMA

⁴¹⁶ 00226.187 Kāi Tahu ki Otago

⁴¹⁷ Clause 16(2), Schedule 1, RMA

⁴¹⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00315.014 Aurora Energy, 00235.125 OWRUG, 00511.012 PowerNet, 00320.012 Network Waitaki

The effects management hierarchy (in relation to natural inland⁴¹⁹ wetlands and rivers) referred to in LF-FW-P9 and LF-FW-P13 is the approach to managing adverse effects of activities that requires that:

- (1) adverse effects are avoided where practicable, then⁴²⁰
- (2) where adverse effects cannot be avoided, they are minimised where practicable, then⁴²¹
- (3) where adverse effects cannot be minimised, they are remedied where practicable, then⁴²²
- (4) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, aquatic offsetting is provided where possible, then⁴²³
- (5) if aquatic offsetting of more than minor residual adverse effects is not possible, aquatic compensation is provided, and then⁴²⁴
- (6) if aquatic compensation is not appropriate, the activity itself is avoided.

LF-FW-P14 – Restoring natural character and instream values⁴²⁵

Where the natural character or instream values⁴²⁶ of lakes and rivers and or the natural character of⁴²⁷ their margins has been reduced or lost, promote actions that:

- (1) restore a form and function that reflect the natural behaviours of the *water body*,
- (2) improve *water* quality or quantity where it is *degraded*,
- (3) increase the presence, *resilience* and abundance of indigenous flora and fauna, including by providing for fish passage within *river* systems and, where necessary and appropriate, creating fish barriers to prevent incursions from undesirable species⁴²⁸
- (4) improve *water body* margins by naturalising bank contours and establishing *indigenous vegetation* and habitat, and
- (5) restore ~~water pathways and~~⁴²⁹ natural connectivity between and within⁴³⁰ *water* systems.

LF-FW-P15 - Stormwater and wastewater⁴³¹ discharges

⁴¹⁹ Clause 16(2), Schedule 1, RMA

⁴²⁰ Clause 16(2), Schedule 1, RMA.

⁴²¹ Clause 16(2), Schedule 1, RMA.

⁴²² Clause 16(2), Schedule 1, RMA.

⁴²³ Clause 16(2), Schedule 1, RMA.

⁴²⁴ Clause 16(2), Schedule 1, RMA.

⁴²⁵ 00230.093 Forest and Bird, 00231.059 Fish and Game

⁴²⁶ 00230.093 Forest and Bird, 00231.059 Fish and Game

⁴²⁷ Clause 19(1)(b)(i), Schedule 1, RMA - consequential amendment arising from 00230.093 Forest and Bird, 00231.059 Fish and Game

⁴²⁸ 00223.088 Ngāi Tahu ki Murihiku

⁴²⁹ Clause 16(2), Schedule 1, RMA

⁴³⁰ 00509.080 Wise Response

⁴³¹ FPI044.019 DOC

Minimise the adverse *effects* of direct and indirect *discharges* of *stormwater* and *wastewater*⁴³² to *fresh water* by:

(1) ~~except as required by LF-VM-O2 and LF-VM-O4, preferring discharges of wastewater to land over discharges to water, unless adverse effects associated with a discharge to land are greater than a discharge to water, and~~⁴³³

(2) requiring:

~~(a) all sewage, industrial or trade waste to be discharged into a reticulated wastewater system, where one is available,~~⁴³⁴

~~(ab) integrated catchment management plans for management of *stormwater* in urban areas,~~⁴³⁵

~~(b) all *stormwater* to be discharged into a reticulated system, where one is made available by the operator of the reticulated system, unless alternative treatment and disposal methods will result in the same or⁴³⁶ improved outcomes for *fresh water*,~~⁴³⁷

~~(c) implementation of methods to progressively reduce stormwater inflows to and infiltration of the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring for reticulated stormwater and wastewater systems,~~⁴³⁸

~~(d) on-site wastewater systems to be designed and operated in accordance with best practice standards,~~⁴³⁹

~~(e) that any *stormwater* and *wastewater discharges* do not prevent water bodies from ~~to~~⁴⁴⁰ meeting any applicable water quality standards set for FMUs and/or rohe, and~~

~~(f) the use of water sensitive urban⁴⁴¹ design techniques to avoid or mitigate the potential adverse effects of contaminants on receiving water bodies from the subdivision, use or development of land,~~⁴⁴² wherever practicable, and

(3) ~~promoting to the greatest extent practicable, requiring~~⁴⁴³ the reticulation of *stormwater* and *wastewater*⁴⁴⁴ in *urban areas* where appropriate, and⁴⁴⁵

⁴³² FPI044.019 DOC

⁴³³ FPI001.021 DCC, FPI017.022 Ravensdown

⁴³⁴ FPI001.021 DCC, FPI017.022 Ravensdown, FPI030.033 Kāi Tahu ki Otago

⁴³⁵ FPI030.033 Kāi Tahu ki Otago

⁴³⁶ FPI013.003 Transpower

⁴³⁷ FPI001.021 DCC, FPI017.022 Ravensdown

⁴³⁸ FPI001.024 DCC

⁴³⁹ FPI019.009 Fonterra, FPI017.022 Ravensdown

⁴⁴⁰ FPI001.021 DCC, FPI017.022 Ravensdown

⁴⁴¹ FPI017.022 Ravensdown

⁴⁴² Out of scope recommendation in accordance with clause 49(2)(a)

⁴⁴³ FPI046.013 QLDC

⁴⁴⁴ FPI019.009 Fonterra, FPI017.022 Ravensdown

⁴⁴⁵ FPI046.013 QLDC

(4) promoting source control as a method for reducing *contaminants in discharges and the use of good practice guidelines for management of stormwater*.⁴⁴⁶

LF-FW-P16 – *Discharges containing animal effluent, sewage, and industrial and trade waste*⁴⁴⁷

Minimise the adverse *effects* of direct and indirect *discharges* containing animal effluent, *sewage*, and *industrial and trade waste* to *fresh water* by:

(1) phasing out existing *discharges* containing *sewage* or *industrial and trade waste* directly to water to the greatest extent possible,

(2) requiring:

(a) new *discharges* containing *sewage* or *industrial and trade waste* to be to *land*, unless adverse *effects* associated with a *discharge* to *land* are demonstrably greater than a *discharge* to *fresh water*,

(b) *discharges* ~~containing~~ of animal effluent *from land-based primary production* to be to *land*,⁴⁴⁸

(c) that all *discharges* containing *sewage* or *industrial and trade waste* are discharged into a reticulated *wastewater* system, where one is made available by its owner, unless alternative treatment and disposal methods will result in improved outcomes for *fresh water*,

(d) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring ~~into~~ *from* reticulated *wastewater* systems,

(e) on-site *wastewater* systems and animal effluent systems to be designed and operated in accordance with best practice standards,

(f) that any *discharges* do not prevent *water bodies* from meeting any applicable water quality standards set for FMUs and/or rohe,

(3) to the greatest extent practicable, requiring the reticulation of *wastewater* in *urban areas*, and

(4) promoting source control as a method for reducing *contaminants in discharges*.

Methods

LF-VM-M3 – Community involvement

Otago Regional Council must work with Kāi Tahu and⁴⁴⁹ communities to achieve the objectives and policies in this chapter, including by:

⁴⁴⁶ FPI001.021 DCC, FPI017.022 Ravensdown, FPI030.033 Kāi Tahu ki Otago, FPI034.003 The Fuel Companies

⁴⁴⁷ FPI019.009 Fonterra, FPI017.011 Ravensdown, FPI030.033 Kāi Tahu ki Otago

⁴⁴⁸ FPI001.021 DCC

⁴⁴⁹ 00226.175 Kāi Tahu ki Otago

- (1) engaging with Kāi Tahu,⁴⁵⁰ communities and stakeholders⁴⁵¹ to identify values and⁴⁵² environmental outcomes for Otago's *FMUs* and rohe and the methods to achieve those outcomes,
- (2) encouraging community stewardship of *water* resources and programmes to address *freshwater* issues at a local catchment level, including through catchment groups,⁴⁵³
- (3) supporting community initiatives, industry-led guidelines, codes of practice and environmental accords⁴⁵⁴ that contribute to maintaining or improving the health and well-being of *water bodies*, ~~and~~
- ~~(4) supporting industry-led guidelines, codes of practice and environmental accords where these would contribute to achieving the objectives of this RPS.~~⁴⁵⁵

LF-VM-M4 – Other methods

In addition to method LF-VM-M3, the methods in the LF-WAI, LF-FW, and LF-LS sections are also applicable.

LF-FW-M5 – Outstanding water bodies

No later than 31 December 2023, Otago Regional Council must:

- (1) undertake a review based on existing information and develop a list of *water bodies* likely to contain outstanding values, including those *water bodies* listed in ~~LF-VM-P6~~ LF-FW-P11,⁴⁵⁶
- (2) identify the outstanding values of those *water bodies* (if any) in accordance with APP1,
- (3) consult with the public and relevant local authorities⁴⁵⁷ during the identification process,
- (4) map *outstanding water bodies* and identify their outstanding and significant values in the relevant *regional plan(s)*, and
- (5) include provisions in *regional plans* that protect ~~to avoid the adverse effects of activities on~~⁴⁵⁸ the significant and outstanding values of *outstanding water bodies*.

LF-FW-M6 – Regional plans

Otago Regional Council must publicly notify a Land and Water *Regional Plan* no later than ~~31 December 2023~~ 30 June 2024⁴⁵⁹ and, after it is made operative, maintain that *regional plan* to:

⁴⁵⁰ 00226.175 Kāi Tahu ki Otago

⁴⁵¹ 00139.096 DCC

⁴⁵² 00237.031 Beef + Lamb and DINZ

⁴⁵³ 00014.052 John Highton, 00235.089 OWRUG

⁴⁵⁴ 00231.051 Fish and Game

⁴⁵⁵ 00231.051 Fish and Game

⁴⁵⁶ 00013.012 ECan, 00213.020 Waitaki Irrigators

⁴⁵⁷ 00013.012 ECan

⁴⁵⁸ 00230.091 Forest and Bird, 00119.011 Blackthorn Lodge, 00206.033 Trojan, 00411.045 Wayfare,

⁴⁵⁹ Clause 16(2), Schedule 1, RMA

~~(1A) implement the required steps in the NOF process in accordance with the NPSFM,⁴⁶⁰~~

~~(1) identify the compulsory and, if relevant, other values for each *Freshwater Management Unit*,⁴⁶¹~~

~~(2) state *environmental outcomes* as objectives in accordance with clause 3.9 of the NPSFM,⁴⁶²~~

~~(3) identify *water bodies* that are *over-allocated* in terms of either their *water quality or quantity*⁴⁶³ and the methods and timeframes for phasing out that *over-allocation* (including through environmental flows and levels and *limits*) within the timeframes required to achieve the relevant *freshwater vision*,⁴⁶⁴~~

~~(4) include environmental flow and level regimes for *water bodies* (including *groundwater*) that give effect to *Te Mana o te Wai* and provide for:~~

~~(a) the behaviours of the *water body* including a base flow or level that provides for variability,~~

~~(b) healthy and resilient mahika kai,~~

~~(c) the needs of indigenous fauna, including taoka species, and aquatic species associated with the *water body*,~~

~~(d) the hydrological connection with other *water bodies*, estuaries and coastal margins,~~

~~(e) the traditional and contemporary relationship of Kāi Tahu to the *water body*, and~~

~~(f) community *drinking water* supplies, and⁴⁶⁵~~

~~(5A) provide for the allocation and use of *fresh water* in accordance with LF-FW-P7A,⁴⁶⁶~~

~~(5) include *limits on resource use* that:~~

~~(a) differentiate between types of uses, including *drinking water*, and social, cultural and economic uses, in order to provide long term certainty in relation to those uses of available *water*,~~

~~(b) for *water bodies* that have been identified as *over-allocated*, provide methods and timeframes for phasing out that *over-allocation*,~~

~~(c) control the *effects* of existing and potential future development on the ability of the *water body* to meet, or continue to meet, *environmental outcomes*,~~

~~(d) manage the adverse *effects* on *water bodies* that can arise from the use and development of *land*, and⁴⁶⁷~~

⁴⁶⁰ FPI025.030 Beef + Lamb and DINZ

⁴⁶¹ FPI025.030 Beef + Lamb and DINZ

⁴⁶² FPI025.030 Beef + Lamb and DINZ

⁴⁶³ FPI001.028 DCC

⁴⁶⁴ FPI012.007 Minister for the Environment

⁴⁶⁵ FPI025.030 Beef + Lamb and DINZ

⁴⁶⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including LF-FW-P7A

⁴⁶⁷ FPI025.030 Beef + Lamb and DINZ

~~(6) provide for the off-stream storage of surface water where storage will:~~

~~(a) support *Te Mana o te Wai*,~~

~~(b) give effect to the objectives and policies of the LF chapter of this RPS, and~~

~~(c) not prevent a surface water body from achieving identified environmental outcomes and remaining within any limits on resource use, and⁴⁶⁸~~

(7) identify and manage *natural wetlands* in accordance with LF-FW-P7, ~~LF-FW-P8~~ and⁴⁶⁹ LF-FW-P9 and LF-FW-P10⁴⁷⁰ while recognising that some activities in and around *natural wetlands* are managed under the NESF and the NESPF,⁴⁷¹ ~~and~~

(8) manage the adverse effects of *stormwater* and ~~wastewater~~ discharges containing animal effluent, sewage, or industrial and trade waste in accordance with LF-FW-P15 and LF-FW-P~~15A.16~~, and⁴⁷²

(9) recognise and respond to Kāi Tahu cultural and spiritual concerns about mixing of water between different catchments.⁴⁷³

LF-FW-M7 – District plans

Territorial authorities must prepare or amend and maintain their *district plans* ~~no later than 31 December 2026~~⁴⁷⁴ to:

(1) map *outstanding water bodies* and identify their outstanding and significant values using the information gathered by Otago Regional Council in LF-FW-M5, and

(2) include provisions to ~~avoid the adverse effects of activities on~~ protect⁴⁷⁵ the significant and outstanding values of *outstanding water bodies*,

(2A) include provisions to preserve the natural character of lakes and rivers and their margins from the adverse effects of land use and development and activities on the surface of water,⁴⁷⁶

(3) require, wherever practicable, the adoption of water sensitive ~~urban~~⁴⁷⁷ design techniques when managing the *subdivision*, use or development of *land*, and

(4) reduce the adverse effects of *stormwater discharges* by managing the *subdivision*, use and development of *land* to:

(a) minimise the peak volume of *stormwater* needing off-site disposal and the load of *contaminants* carried by it,

⁴⁶⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including new clause (5A) and new policy LF-FW-P7A

⁴⁶⁹ Clause 16(2), Schedule 1, RMA

⁴⁷⁰ FPI035.017 Wise Response

⁴⁷¹ FPI014.003 Rayonier Matariki

⁴⁷² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from FPI019.009 Fonterra, FPI017.011 Ravensdown, FPI030.033 Kāi Tahu ki Otago

⁴⁷³ FPI030.034 Kāi Tahu ki Otago

⁴⁷⁴ FPI001.002 DCC

⁴⁷⁵ FPI047.026 Horticulture NZ

⁴⁷⁶ FPI030.035 Kāi Tahu ki Otago, FPI044.021 DOC

⁴⁷⁷ Clause 16(2), Schedule 1, RMA

- (b) minimise adverse *effects* on *fresh water* and *coastal water* as the ultimate receiving environments, and the capacity of the *stormwater* network,
- (c) encourage on-site storage of rainfall to detain peak *stormwater* flows, and
- (d) promote the use of permeable surfaces.

LF-FW-M8 – Action plans

Otago Regional Council:

- (1) must prepare an action plan for achieving any target *attribute* states for *attributes* described in Appendix 2B of the NPSFM,
- (2) may prepare an action plan for achieving any target *attribute* states for *attributes* described in Appendix 2A of the NPSFM, and
- (2A) may prepare an action plan for any other purpose set out in the NPSFM, and⁴⁷⁸
- (3) must prepare any action plan in accordance with clause 3.15 of the NPSFM.

LF-FW-M8A – Identifying and managing species interactions between trout and salmon and indigenous species

- (1) When making decisions that might affect the interactions between trout and salmon and indigenous species, *local authorities* will have particular regard to the recommendations of the Department of Conservation, the Fish and Game Council for the relevant area, Kāi Tahu, and the matters set out in LF-FW-M8A(2)(a) to (c), and
- (2) Otago Regional Council will work with the Department of Conservation, the relevant Fish and Game Council and Kāi Tahu to:
 - (a) describe the habitats required to provide for the protection of indigenous species for the purposes of 2(a), (b), and (c),
 - (b) identify areas where the protection of the habitat of trout and salmon, including fish passage, will be consistent with the protection of the habitat of indigenous species and areas where it will not be consistent,
 - (c) for areas identified in (b), develop provisions for any relevant action plans(s) prepared under the NPSFM, including for fish passage, that will at minimum:
 - (i) determine information needs to manage the species,
 - (ii) set short-, medium- and long-term objectives for the species involved,
 - (iii) identify appropriate management actions that will achieve the objectives determined in (ii), including measures to manage the adverse effects of trout and salmon on indigenous species where appropriate, and

⁴⁷⁸ FPI034.007 The Fuel Companies

- (iv) consider the use of a range of tools, including those in the Conservation Act 1987 and the Freshwater Fisheries Regulations 1983, as appropriate.⁴⁷⁹

LF-FW-M9 – Monitoring

Otago Regional Council, for every *FMU*, must:

- (1) establish a long-term monitoring programme that incorporates cultural health monitoring,
- (2) record information (including monitoring data) about the state of *water bodies* and *freshwater* ecosystems and the challenges to their health and well-being, and⁴⁸⁰
- (3) regularly prepare reports on the matters in (1) and (2) and publish those reports in accordance with clause 3.30 of the NPSFM-, and⁴⁸¹
- (4) where the results of monitoring show the objectives of this regional policy statement are not being met, take the necessary action to achieve the objectives.⁴⁸²

LF-FW-M10 – Other methods

In addition to methods LF-FW-M5 to LF-FW-M9, the methods in the LF-WAI, LF-VM and LF-LS sections are also applicable.

Explanation

LF-VM-E2 – Explanation

This section of the LF chapter outlines how the Council will manage *fresh water* within the region. To give effect to *Te Mana o te Wai*, the *freshwater* visions, and the policies set out the actions required in the development of *regional plan* provisions to implement the NPSFM. [Note to reader: originally LF-FW-E3 para 1]

Implementing the NPSFM requires Council to identify *Freshwater Management Units (FMUs)* that include all *freshwater bodies* within the region. Policy LF-VM-P5 identifies Otago's five *FMUs*: Clutha Mata-au *FMU*, Taieri *FMU*, North Otago *FMU*, Dunedin & Coast *FMU* and Catlins *FMU*. The Clutha Mata-au *FMU* is divided into five sub-*FMUs* known as 'rohe'. Policy LF-VM-P6 sets out the relationship between *FMUs* and rohe which, broadly, requires rohe provisions to be no less stringent than the parent *FMU* provisions. This is to avoid any potential for rohe to set lower standards than others which would affect the ability of the *FMU* to achieve its stated outcomes.

The outcomes sought for *natural wetlands* are implemented by requiring identification, protection and restoration. The first two policies reflect the requirements of the NPSFM for identification and protection but apply that direction to all *natural wetlands*, rather than only inland natural wetlands (those outside the *coastal marine area*) as the NPSFM directs. This reflects the views of *takata mana*⁴⁸³ *_whenua* and the community that *fresh*

⁴⁷⁹ 00231.003 Fish and Game

⁴⁸⁰ Clause 16(2) Schedule 1, RMA

⁴⁸¹ Clause 16(2) Schedule 1, RMA

⁴⁸² 00226.194 Kāi Tahu ki Otago

⁴⁸³ 00226.196 Kāi Tahu ki Otago

and *coastal water*, including *wetlands*, should be managed holistically and in a consistent way. While the NPSFM requires promotion of the restoration of natural inland wetlands, the policies in this section take a stronger stance, requiring improvement where *natural wetlands* have been *degraded* or lost. This is because of the importance of restoration to Kāi Tahu and in recognition of the historic loss of *wetlands* in Otago and the indigenous biodiversity and hydrological values of wetland systems.⁴⁸⁴ [Note to reader: originally LF-FW-E3 para 2]

The policies respond to the NPSFM by identifying a number of *outstanding water bodies* in Otago that have previously been identified for their significance through other processes. Additional *water bodies* can be identified if they are wholly or partly within an outstanding natural feature or landscape or if they meet the criteria in APP1 which lists the types of values which may be considered outstanding: cultural and spiritual, ecology, landscape, natural character, recreation and physical. The significant values of *outstanding water bodies* are to be identified and protected from adverse *effects*. [Note to reader: originally LF-FW-E3 para 3]

Preserving the natural character of *lakes* and *rivers*, and their *beds* and margins, is a matter of national importance under section 6 of the RMA 1991. The policies in this section set out how this is to occur in Otago, reflecting the relevant direction from the NPSFM but also a range of additional matters that are important in Otago, such as recognising existing Water Conservation Orders, the Lake Wanaka Act 1973 and the particular character of braided *rivers*. Natural character has been reduced or lost in some *lakes* or *rivers*, so the policies require promoting actions that will restore or otherwise improve natural character. [Note to reader: originally LF-FW-E3 para 4]

The impact of *discharges* of *stormwater* and *wastewater* on *freshwater bodies* is a significant issue for *mana whenua* and has contributed to *water* quality issues in some *water bodies*. The policies set out a range of actions to be implemented in order to improve the quality of these *discharges* and reduce their adverse *effects* on receiving environments.

Principal reasons

LF-VM-PR2 – Principal reasons

To support the implementation of the NPSFM, the Council is required to develop long-term visions for *fresh water* across the Otago region. *Fresh water* visions for each *FMU* and *rohe* have been developed through engagement with Kāi Tahu and communities. They set out the long-term goals for the *water bodies* (including *groundwater*) and *freshwater* ecosystems in the region that reflect the history of, and environmental pressures on, the *FMU* or *rohe*. They also establish ambitious but reasonable timeframes for achieving these goals. The Council must assess whether each *FMU* or *rohe* can provide for its long-term vision, or whether improvement to the health and well-being of *water bodies* (including *groundwater*) and *freshwater* ecosystems is required to achieve the visions. The result of that assessment will then inform the development of *regional plan*

⁴⁸⁴ 00226.196 Kāi Tahu ki Otago

provisions in the *FMU*, including *environmental outcomes*, *attribute states*, target *attribute states* and *limits (in relation to freshwater)*.⁴⁸⁵

Otago's *water bodies* are significant features of the region and play an important role in Kāi Tahu beliefs and traditions. They support people and communities to provide for their social, economic, and cultural well-being.⁴⁸⁶ A growing population combined with increased *land* use intensification has heightened demand for *water*, and increasing nutrient and sediment contamination impacts *water* quality. The legacy of Otago's historical mining privileges, coupled with contemporary urban and rural⁴⁸⁷ *land* uses, contribute to ongoing *water* quality and quantity issues in some *water bodies*, with significant cultural effects. [Note to reader: originally LF-FW-PR3 para 1]

This section of the LF chapter ~~contains more specific direction on managing fresh water to give effect to Te Mana o te Wai and contributes to achieving the long-term freshwater visions for each FMU and rohe.~~ It also⁴⁸⁸ reflects key direction in the NPSFM for managing the health and well-being of *fresh water*, including *wetlands* and *rivers* in particular, and matters of national importance under section 6 of the RMA 1991. The provisions in this section will underpin the development of the Council's *regional plans* and provide a foundation for implementing the requirements of the NPSFM, including the development of *environmental outcomes*, *attribute states*, target *attribute states* and *limits*. [Note to reader: originally LF-FW-PR3 para 2]

Anticipated environmental outcomes

LF-VM-AER3 The *freshwater* visions in this section underpin Otago's planning framework implement Te Mana o Te Wai according to the particular characteristics of FMUs and rohe,⁴⁸⁹ and the outcomes they seek are achieved within the timeframes specified.

LF-FW-AER4 *Fresh water* is allocated within limits that contribute to achieving specified *environmental outcomes* for *water bodies* within timeframes set out in *regional plans* that are no less stringent than the timeframes in the LF-VM section of this chapter.

LF-FW-AER5 *Specified rivers* and *lakes* are suitable for primary contact within the timeframes set out in LF-FW-P7.

LF-FW-AER6 *Degraded water* quality is improved so that it meets specified *environmental outcomes* within timeframes set out in *regional plans* that are no less stringent than the timeframes in the LF-VM section of this chapter.

⁴⁸⁵ 00231.009 Fish and Game

⁴⁸⁶ FPI009.010 COWA

⁴⁸⁷ FPI030.038 Kāi Tahu ki Otago

⁴⁸⁸ FPI030.038 Kāi Tahu ki Otago

⁴⁸⁹ 00223.087 Ngāi Tahu ki Murihiku

LF-FW-AER7	<i>Water</i> in Otago's aquifers is suitable for human consumption, unless that <i>water</i> is naturally unsuitable for consumption. ⁴⁹⁰
LF-FW-AER8	Where <i>water</i> is not <i>degraded</i> , there is no reduction in <i>water</i> quality.
LF-FW-AER9	<u>Direct discharges of wastewater to water are phased out to the greatest extent practicable and the</u> The ⁴⁹¹ frequency of <i>wastewater</i> overflows is reduced.
LF-FW-AER10	The quality of <i>stormwater discharges</i> from existing <i>urban areas</i> is improved.
LF-FW-AER11	There is no reduction <u>an improvement</u> ⁴⁹² in the extent or quality <u>condition</u> ⁴⁹³ of Otago's <i>natural wetlands</i> .
LF-FW-AER11A	<u>The economic, social, and cultural well-being of communities is sustained.</u> ⁴⁹⁴

⁴⁹⁰ FPI047.027 Horticulture NZ, FPI026.035 Federated Farmers, FPI020.023 Silver Fern Farms

⁴⁹¹ FPI032.026 Te Rūnanga o Ngāi Tahu, FPI030.040 Kāi Tahu ki Otago

⁴⁹² FPI020.027 Silver Fern Farms

⁴⁹³ FPI046.023 QLDC

⁴⁹⁴ FPI043.054 OWRUG

~~LF-FW – Fresh water~~

Note to readers: As a result of reporting officer recommendations, the provisions of this chapter have been moved into the previous chapter (notified LF-VM)

LF-LS – Land and soil

Note to readers: As a result of reporting officer recommendations, the following provisions have been moved to the LF-LS chapter:

- UFD-O4 – Development in rural areas
- UFD-P7 – Rural areas
- UFD-P8 – Rural lifestyle and rural residential zones
- UFD-M2(8) and (9)
- UFD-E1 – Explanation (third paragraph)
- UFD-PR1 – Principal reasons (sixth paragraph)

The notified numbering of UFD-O4, UFD-P7, and UFD-P7 has been retained in the LF-LS chapter as an interim measure so that it is easier to link submission points to provisions. The numbering of both chapters will be updated and made chronological following a final decision by Council.

Objectives

LF-LS-O11 – Land and soil

~~The life-supporting capacity of Otago’s soil resources is safeguarded and the availability and productive capacity of highly productive land for primary production is maintained now and for future generations.~~

Otago’s land and soil resources support healthy habitats for indigenous species and ecosystems.⁴⁹⁵

LF-LS-O12 – Use, development, and protection of land

~~The use of land in Otago maintains soil quality and contributes to achieving environmental outcomes for fresh water.~~

The use, development, and protection of land and soil:

- (1) safeguards the life-supporting capacity of soil,
- (2) contributes to achieving environmental outcomes for fresh water, and
- (3) recognises the role of these resources in providing for the social, economic, and cultural well-being of Otago’s people and communities.⁴⁹⁶

UFD-O4 – Development in rural areas⁴⁹⁷

Development in Otago’s rural areas occurs in a way that:

- ~~(1) avoids impacts on significant values and features identified in this RPS,~~⁴⁹⁸

⁴⁹⁵ 00411.006 Wayfare, 00137.084 DOC

⁴⁹⁶ 00236.096 Horticulture NZ, 00239.197 Federated Farmers, 00115.034 Oceana Gold

⁴⁹⁷ 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁴⁹⁸ 00137.154 DOC, 00226.310 Kāi Tahu ki Otago

- ~~(2) avoids as the first priority, land and soils identified as highly productive by LF-LS-P19 unless there is an *operational need* for the development to be located in *rural areas*,⁴⁹⁹~~
- ~~(3) only provides for urban expansion, rural lifestyle and rural residential development and the establishment of *sensitive activities*, in locations identified through strategic planning or zoned within *district plans* as suitable for such development; and⁵⁰⁰~~
- ~~(4) outside of areas identified in (3),⁵⁰¹ maintains and enhances provides for the ongoing use of *rural areas* for *primary production* and *rural industry*, and⁵⁰²~~
- ~~(4A) does not compromise the *natural and physical resources* that support the⁵⁰³ productive capacity,⁵⁰⁴ rural character,⁵⁰⁵ and long-term viability of *primary production* the rural sector⁵⁰⁶ and rural communities.~~

Policies

LF-LS-P16A – Managing pests⁵⁰⁷

Reduce the impact of *pests*, including *wilding conifers*, by:

- (1) avoiding *afforestation* and *replanting* of *plantation forests* with *wilding conifer* species listed in APP5 within:
- (a) areas identified as outstanding natural features, outstanding natural landscapes, or *significant natural areas*, and
- (b) buffer zones adjacent to the areas listed in (a) where it is necessary to protect those areas,
- (2) outside *plantation forests*, avoiding the planting of *wilding conifer* species listed in APP5 and any other *pest* plants in a way that is consistent with the Otago Pest Management Plan 2019-2029,
- (3) enabling the control of *pests* on *land*, and
- (4) supporting initiatives to control *pests* and limit their further spread.

LF-LS-P16 – Integrated management Maintaining soil quality⁵⁰⁸

⁴⁹⁹ 00139.001, 00139.253 DCC

⁵⁰⁰ 00211.045, 00211.048 & 00211.049 LAC, 00210.045, 00210.048 & 00210.049 Lane Hocking, 00209.045, 00209.048 & 00209.049 Universal Developments, 00118.066 Maryhill Ltd, 00014.066 Mt Cardrona Station, 00139.001, 00139.253 DCC

⁵⁰¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00139.001, 00139.253 DCC

⁵⁰² 00322.038 Fulton Hogan, 00410.007 Rural Contractors NZ (in part)

⁵⁰³ 00236.099 Horticulture NZ

⁵⁰⁴ 00236.005 Horticulture NZ

⁵⁰⁵ 00139.262 DCC, 00211.050 LAC, 00210.050 Lane Hocking, 00118.066 Maryhill Limited, 00014.066 Mt Cardrona Station, 00209.050 Universal Developments

⁵⁰⁶ 00322.038 Fulton Hogan, 00230.144 Forest and Bird

⁵⁰⁷ 00411.006 Wayfare, 00137.084 DOC

⁵⁰⁸ 00226.201 Kāi Tahu ki Otago, 00121.0062 Ravensdown

~~Recognise that maintaining~~ Maintain soil quality requires the integrated management of by managing both⁵⁰⁹ *land* and *freshwater* resources, including the interconnections between soil health, vegetative cover and *water* quality and quantity.

LF-LS-P17 – Soil values

Maintain the mauri, health and productive potential of soils by managing the use and development of *land* in a way that is suited to the natural soil characteristics and that sustains healthy:

- (1) soil biological activity and *biodiversity*,
- (2) soil structure, and
- (3) soil fertility.

LF-LS-P18 – Soil erosion

Minimise soil erosion, and the associated risk of sedimentation in water bodies, resulting from *land* use activities by:

- (2) maintaining vegetative cover on erosion-prone *land*, and
- (1) where vegetation removal is necessary or there is no vegetative cover,⁵¹⁰ implementing effective management practices to retain topsoil ~~in-situ~~⁵¹¹ and minimise the potential for soil to be *discharged* to *water bodies*, including by controlling the timing, duration, scale and location of soil exposure, and
- (3) promoting activities that enhance soil retention.

LF-LS-P20 – Land use change

Promote changes in *land* use or *land* management practices that support and⁵¹² improve:

- (1) the sustainability and efficiency of *water* use,
- (2) *resilience* to the impacts of *climate change*, ~~or~~
- (3) the health and quality of soil, ~~or~~
- (4) *water* quality.⁵¹³

LF-LS-P21 – Land use and fresh water

~~Achieve the improvement or maintenance of *fresh water* quantity, or quality~~ The health and well-being of *water bodies* is maintained⁵¹⁴ or, if *degraded*, improved⁵¹⁵ to meet *environmental outcomes* set for *Freshwater Management Units* and/or rohe by:

⁵⁰⁹ 00226.201 Kāi Tahu ki Otago, 00121.0062 Ravensdown

⁵¹⁰ FPI017.013 Ravensdown

⁵¹¹ FPI027.036 Contact

⁵¹² 00223.096 Ngāi Tahu ki Murihiku

⁵¹³ 00409.015 Ballance

⁵¹⁴ 00121.066 Ravensdown

⁵¹⁵ 00226.206 Kāi Tahu ki Otago

- (1) ~~reducing or otherwise managing the adverse effects of⁵¹⁶ direct and indirect discharges of contaminants to water from the use and development of land, and~~
- (2) ~~managing land uses that may have adverse effects on the flow of water in surface water bodies or the recharge of groundwater, and~~
- (2A) recognising the drylands nature of much of Otago and the resulting low water availability, and
- (3) ~~maintaining or, where degraded, enhancing the habitat and biodiversity values of riparian margins.⁵¹⁷~~

LF-LS-P19 – Rural land and highly⁵¹⁸ productive land

~~Maintain~~ Protect⁵¹⁹ the availability of rural land⁵²⁰ and the productive capacity of highly productive land by:

- (1) identifying *highly productive land* based on the following criteria:
 - ~~(a) the capability and versatility of the land to support primary production based on the Land Use Capability classification system,~~
 - ~~(b) the suitability of the climate for primary production, particularly crop production, and~~
 - ~~(c) the size and cohesiveness of the area of land for use for primary production, and~~
 - (d) land must be identified as *highly productive land* if:
 - (i) it is in a general rural zone or rural production zone, and
 - (ii) it is predominantly LUC 1, 2, or 3 land, and
 - (iii) it forms a large and geographically cohesive area,
 - (e) land may be identified as *highly productive land* if:
 - (i) it is in a general rural zone or rural production zone, and
 - (ii) it is not LUC 1, 2, or 3 land, and
 - (iii) it is or has the potential to be highly productive for *land-based primary production* in Otago, having regard to the soil type, the physical characteristics of the land and soil, and the climate, and
 - (f) land must not be identified as *highly productive land* if it was *identified for future urban development* on or before 17 October 2022, and⁵²¹

⁵¹⁶ FPI029.037 Contact, FPI017.014 Ravensdown, FPI021.006 Ballance

⁵¹⁷ FPI029.037 Contact, FPI017.014 Ravensdown, FPI044.022 DOC

⁵¹⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.004 Horticulture NZ

⁵¹⁹ 00236.005 Horticulture NZ

⁵²⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.004 Horticulture NZ

⁵²¹ 00101.044 Tōitu Te Whenua

- (2) prioritising the use of *highly productive land* for land-based primary production in accordance with the NPSHPL ahead of other land uses, and⁵²²
- ~~(2A) until clause 3.5(1) of the NPSHPL has been implemented, protecting land that is suitable for horticulture or viticulture from uses that are not *land-based primary production or rural industry*.~~⁵²³
- ~~(3) managing urban development in rural areas, including rural lifestyle and rural residential areas, in accordance with UFD-P4, UFD-P7 and UFD-P8.~~⁵²⁴

UFD-P7 – Rural areas

The management of development in⁵²⁵ *rural areas*:

- ~~(1) provides for the maintenance and, wherever possible, enhancement of important features and values identified by this RPS,~~⁵²⁶
- (2) ~~outside areas identified in (1),~~⁵²⁷ maintains the productive capacity, amenity and character of⁵²⁸ *rural areas*, as places where people live, work and recreate and where a range of activities and services are required to support these rural functions, and provide for social and economic wellbeing within rural communities and the wider region,⁵²⁹
- (3) ~~enables prioritises~~⁵³⁰ land-based⁵³¹ *primary production* ~~particularly on land or soils identified as~~⁵³² on highly productive land⁵³³ in accordance with the NPS-HPLLF-LS-P19,⁵³⁴
- (4) ~~facilitates~~ provides for⁵³⁵ *primary production,*⁵³⁶ *rural industry* and supporting activities, and recognises:

⁵²² 00413.004 New Zealand Cherry Corp, 00414.002 Infinity Investment Group

⁵²³ 00236.004 Horticulture NZ

⁵²⁴ Clause 10(2)(b)(i) – consequential amendment arising from 00101.044 Tōitu Te Whenua

⁵²⁵ Responds to submissions seeking that management of rural areas more broadly is not contained in this chapter, by aligning it more closely with UFD-O4 and therefore making it more clearly limited to 'development'. e.g. 00240.033 New Zealand Pork Industry Board, 00239.172 Federated Farmers, 00236.096 Horticulture New Zealand

⁵²⁶ 00226.318 Kāi Tahu ki Otago, 00139.262 DCC, 00411.135 Wayfare, 00206.072 Trojan

⁵²⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00226.318 Kāi Tahu ki Otago, 00139.262 DCC, 00411.135 Wayfare, 00206.072 Trojan

⁵²⁸ 00139.262 Dunedin City Council, 00211.050 LAC Properties Trustees Limited, 00210.050 Lane Hocking, 00118.066 Maryhill Limited, 00014.066 Mt Cardrona Station, 00209.05 Universal Development Limited

⁵²⁹ 00235.152 OWRUG, 00015.032 Oceana Gold

⁵³⁰ 00226.318 Horticulture NZ, Kai Tahu ki Otago, 00015.032 Oceana Gold, 00235.152 OWRUG, 00410.009 Rural Contractors NZ, 00016.024 Alluvium and Stoney Creek

⁵³¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00021.002 Matakanui Gold Limited, 00016.009 Alluvium Limited and Stoney Creek Mining, 00017.007 Danny Walker and others, 00226.033 Kāi Tahu ki Otago, 00223.094 Ngāi Tahu ki Murihiku

⁵³² 00236.102 Horticulture NZ, 00226.318 Kai Tahu ki Otago, 00015.032 Oceana Gold, 00235.152 OWRUG, 00410.009 Rural Contractors NZ, 00016.024 Alluvium and Stoney Creek

⁵³³ 00236.102 Horticulture NZ, 00226.318 Kai Tahu ki Otago, 00015.032 Oceana Gold, 00235.152 OWRUG, 00410.009 Rural Contractors NZ, 00016.024 Alluvium and Stoney Creek

⁵³⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00226.318 Kai Tahu ki Otago, 00235.153 OWRUG

⁵³⁵ 00236.102 Horticulture New Zealand

⁵³⁶ 00226.310 Kāi Tahu ki Otago, and General Themes Section, in response to 00235.008 OWRUG and consequential to amendment to subclause 2

- (a) the importance of *mineral* and *aggregate* resources for the social and economic well-being of Otago's communities, including the provision of *infrastructure*, and
- (b) that mining and aggregate activities can only be located where those resources are present,⁵³⁷ and
- ~~(5) directs rural residential and rural lifestyle development to areas zoned for that purpose in accordance with UFD-P8,⁵³⁸~~
- (6) restricts the establishment of ~~residential~~ non-rural activities, *sensitive activities*, and non-rural businesses⁵³⁹ which could adversely affect, including by way of reverse sensitivity or fragmentation, the productive capacity of highly productive land, or existing or anticipated⁵⁴⁰ primary production and rural industry activities, unless those activities are undertaken in accordance with MW-P4⁵⁴¹ or the NPSHPL.⁵⁴² and
- ~~(7) otherwise limits the establishment of residential activities, *sensitive activities*, and non-rural businesses to those that can demonstrate an *operational need* to be located in *rural areas*.⁵⁴³~~

UFD-P8 – Rural lifestyle and rural residential zones⁵⁴⁴ development⁵⁴⁵

The establishment, development or expansion of rural lifestyle and rural residential⁵⁴⁶ ~~zones~~ development⁵⁴⁷ only occurs where:

- ~~(1) the *land* is adjacent to existing or planned *urban areas* and ready access to employment and services is available,⁵⁴⁸~~
- (2) ~~despite the direction in (1), also it⁵⁴⁹~~ avoids *land identified for future urban development* in a relevant plan or *land* reasonably likely to be required for its future urban development potential, where the rural lifestyle or rural residential

⁵³⁷ 00115.007 Oceana Gold

⁵³⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00025.004 Boxer Hills Trust, 00023.005 Waterfall Park Developments Limited

⁵³⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00213.009 Fonterra Co-operative Group Limited.

⁵⁴⁰ 0015.032 Oceana Gold

⁵⁴¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00139.264 Dunedin City Council

⁵⁴² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00014.031 Mt Cardrona Station, 00209.01 Universal Developments, 00210.012 Lane Hocking, 00211.01 LAC Properties

⁵⁴³ 00208.011 AgResearch Ltd, 00414.005 Infinity Investment Group Holdings Ltd, 00413.007 NZ Cherry Corp, 00410.009 Rural Contractors NZ.

⁵⁴⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00221.016 Silver Fern Farms, 00236.103 Horticulture NZ.

⁵⁴⁵ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00025.004 Boxer Hills Trust, 00023.005 Waterfall Park Developments Limited

⁵⁴⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00221.016 Silver Fern Farms, 00236.103 Horticulture NZ.

⁵⁴⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00025.004 Boxer Hills Trust, 00023.005 Waterfall Park Developments Limited

⁵⁴⁸ 00025.004 Boxer Hills Trust, 00023.005 Waterfall Park Developments Limited

⁵⁴⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from Boxer Hills Trust, 00023.005 Waterfall Park Developments Limited

development would foreclose or reduce efficient realisation of that urban development potential,

- (3) ~~it~~⁵⁵⁰ minimises impacts on existing or anticipated *primary production, rural industry and other rural activities*⁵⁵¹ ~~_rural production potential, amenity values~~⁵⁵² and avoids⁵⁵³ the potential for *reverse sensitivity effects* to arise in adjoining rural production zones⁵⁵⁴,
- (4) ~~it~~⁵⁵⁵ ~~avoids, as the first priority, highly productive land identified in accordance with LF-LS-P16~~ except as provided for in the NPS-HPL,⁵⁵⁶
- (5) the suitability of the area to accommodate the proposed development is demonstrated, including
 - (a) capacity for servicing by existing or planned *development infrastructure* (including self-servicing requirements),
 - (b) particular regard is given to the individual and cumulative impacts of ~~domestic~~⁵⁵⁷ *water supply, wastewater disposal, and stormwater management* including self-servicing, on the receiving or supplying *environment* and impacts on capacity of *development infrastructure*, if provided, to meet other planned *urban area* demand, and
 - (c) likely future demands or implications for publicly funded services including emergency services⁵⁵⁸ and *additional infrastructure*, ~~and~~
- ~~(6) provides for the maintenance and wherever possible, enhancement, of important features and values identified by this RPS.~~⁵⁵⁹

LF-LS-P22 – Public access

Provide for public access to and along *lakes* and *rivers* by:

- (1) maintaining existing public access,
- (2) seeking opportunities to enhance public access, including access⁵⁶⁰ by *mana whenua* in their role as kaitiaki and for gathering of ~~mahika kai~~ *mahika kai*⁵⁶¹, and

⁵⁵⁰ Clause 16(2), Schedule 1, RMA

⁵⁵¹ 00236.103 Horticulture NZ, 00208.012 AgResearch, 00235.153 OWRUG, 00410.010 Rural Contractors NZ

⁵⁵² 00211.050 LAC Properties Trustees Limited, 00210.050 Lane Hocking, 00118.066 Maryhill Limited, 00014.066 Mt Cardrona Station, 00209.05 Universal Development Limited

⁵⁵³ 00322.042 Fulton Hogan Limited, 00236.103 Horticulture New Zealand, 00235.153 OWRUG, 00221.016 Silver Fern Farms

⁵⁵⁴ 00236.103 Horticulture NZ, 00208.012 AgResearch, 00235.153 OWRUG, 00410.010 Rural Contractors NZ

⁵⁵⁵ Clause 16(2), Schedule 1, RMA

⁵⁵⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00014.031 Mt Cardrona Station, 00209.01 Universal Developments, 00210.012 Lane Hocking, 00211.01 LAC Properties.

⁵⁵⁷ 00219.019 FENZ

⁵⁵⁸ 00219.018 FENZ

⁵⁵⁹ 00226.319 Kāi Tahu ki Otago, 00411.087 Wayfare

⁵⁶⁰ 00226.206 Kāi Tahu ki Otago

⁵⁶¹ Clause 10(2)(b)(i) – consequential amendment arising from 00226.038 Kāi Tahu ki Otago

- (3) encouraging landowners to ~~only~~ avoid restricting access ~~where~~ unless⁵⁶² it is necessary to protect:⁵⁶³
- (a) ~~public~~⁵⁶⁴ health and safety,
 - (b) *significant natural areas*,
 - (c) areas of outstanding natural character,
 - (d) outstanding natural features and landscapes,
 - (e) places or areas with special or outstanding *historic heritage* values, ~~or~~
 - (f) places or areas of significance to ~~takata whenua~~ Kāi Tahu, including wāhi taoka,⁵⁶⁵ wāhi tapu and *wāhi tūpuna*;
 - (g) establishing vegetation, or⁵⁶⁶
 - (h) a level of security consistent with the operational requirements of a lawfully established activity.⁵⁶⁷

Methods

LF-LS-M11A – Identification of highly productive land⁵⁶⁸

- (1) In collaboration with territorial authorities and in consultation with mana whenua, Otago Regional Council must identify highly productive land in Otago in accordance with LF-LS-P19(1), and
- (2) Otago Regional Council must include maps of the highly productive land identified in accordance with (1) in the Regional Policy Statement by 17 October 2025.

LF-LS-M11 – Regional plans

Otago Regional Council must publicly notify a Land and Water *Regional Plan* no later than ~~31 December 2023~~ 30 June 2024⁵⁶⁹ and then, when it is made operative, maintain that *regional plan* to:

- (1) manage *land* uses that may affect the ability of *environmental outcomes* for water quality to be achieved by requiring:
- (a) the development and implementation of *certified freshwater farm plans*, ~~as required by the RMA and any regulations,~~⁵⁷⁰
 - (b) the adoption of practices that avoid or minimise ~~reduce~~⁵⁷¹ the *risk* of sediment and nutrient loss to *water*, including by minimising the area and

⁵⁶² 00231.065 Fish and Game

⁵⁶³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendments arising from 00314.028 Transpower

⁵⁶⁴ 00239.094 Federated Farmers

⁵⁶⁵ 00226.207 Kāi Tahu ki Otago

⁵⁶⁶ 00206.041 Trojan, 00411.053 Wayfare

⁵⁶⁷ 00237.047 Beef + Lamb and DINZ

⁵⁶⁸ 00201.018 CODC, 00201.019 CODC, 00206.040 Trojan, 00235.110 OWRUG

⁵⁶⁹ Clause 16(2), Schedule 1, RMA

⁵⁷⁰ FPI037.022 Fish & Game, FPI030.043 Kāi Tahu ki Otago

⁵⁷¹ FPI037.022 Fish and Game

- duration of exposed soil, using buffers, and actively managing critical source areas,
- (c) effective management of effluent storage and applications systems, and
- (d) *earthworks* activities to implement effective sediment and erosion control practices and setbacks from *water bodies* to reduce the *risk* of sediment loss to *water*, and
- (2) provide for changes in *land* use that improve the sustainable and efficient ~~allocation and~~ use of *fresh water* and that reduce water demand where there is existing over-allocation, and⁵⁷²
- (2A) enable the discharge of contaminants to land for pest control, and⁵⁷³
- (3) implement policies LF-LS-P16 to LF-LF-P22.

LF-LS-M12 – District plans

Territorial authorities must prepare or amend and maintain their *district plans* no later than 31 December 2026 to:

- (1) manage *land* use change by:
- (aa) avoiding the planting of pest plants in accordance with LF-LS-P16A,⁵⁷⁴
- (a) controlling the establishment of new or any spatial extension of existing *plantation forestry activities or permanent forestry activities*⁵⁷⁵ where necessary to give effect to an objective developed under the NPSFM, and
- (b) minimising the removal of montane⁵⁷⁶ tall tussock grasslands, to recognise their ability to capture and hold precipitation,⁵⁷⁷
- (2) provide for and ~~encourage~~ promote⁵⁷⁸ the creation and enhancement of vegetated riparian margins and constructed *wetlands*, and maintain these where they already exist, ~~and~~
- (3) facilitate public access to and along⁵⁷⁹ *lakes* and *rivers* by:
- (a) requiring the establishment of *esplanade reserves* and *esplanade strips*, and
- (b) promoting the use of legal *roads*, including paper *roads*, and any other means of public access rights,⁵⁸⁰ that connect with *esplanade reserves* and *esplanade strips*, and

⁵⁷² FPI030.043 Kāi Tahu ki Otago

⁵⁷³ FPI044.023 DOC

⁵⁷⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00411.006 Wayfare, 00137.084 DOC (insertion of new LF-LS-P16A)

⁵⁷⁵ 00226.209 Kāi Tahu ki Otago,

⁵⁷⁶ Clause 16(2), Schedule 1, RMA

⁵⁷⁷ 00509.092 Wise Response

⁵⁷⁸ 00509.092 Wise Response

⁵⁷⁹ 00206.042 Trojan, 00411.054 Wayfare, 00231.097 Fish and Game

⁵⁸⁰ 00206.042 Trojan, 00411.054 Wayfare, 00231.067 Fish and Game

- (4) maintain the availability and *productive capacity*⁵⁸¹ of highly productive land identified and mapped under LF-LS-M11A⁵⁸² in accordance with LF-LS-P19, and⁵⁸³
- (8) manage development in *rural areas* in accordance with UFD-P7,⁵⁸⁴
- (9) manage ~~rural residential and~~ rural lifestyle activities development⁵⁸⁵ in ~~rural areas~~⁵⁸⁶ in accordance with UFD-P8.⁵⁸⁷

LF-LS-M13 – Management of *beds* and riparian margins

Local authorities must prepare or amend and maintain their *regional plans*⁵⁸⁸ and *district plans* to manage the condition of the *bed* and banks of *water bodies*, riparian margins and associated *lands*, including vegetative cover, to:

- (1) maintain or enhance⁵⁸⁹ existing indigenous⁵⁹⁰ *biodiversity* values,
- (2) increase the presence, *resilience* and abundance of indigenous flora and fauna, particularly taoka species, including by providing for wetlands and⁵⁹¹ *biodiversity* corridors within *river* systems, and requiring riparian buffers that are sufficient to maintain indigenous *biodiversity*,
- (3) support improvement in the functioning of catchment processes where these have been adversely affected by changes in margins and connected *lands* over time, and
- (4) reduce unnatural sedimentation of *water bodies*.

LF-LS-M14 – Other methods

In addition to methods LF-LS-M11 to LF-LS-M13, the methods in the LF-WAI, LF-VM and LF-FW sections are also applicable.

Explanation

LF-LS-E4 – Explanation

The policies in this section of the LF chapter seek to maintain the health of Otago’s soils, reduce the impacts of pests⁵⁹² and manage *land* uses as part of an integrated approach to sustaining soil and *water* health and maintaining the *productive capacity* of rural land. The connections and interactions between these resources require a holistic approach to management.

⁵⁸¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00014.031 Mt Cardrona Station, 00209.01 Universal Developments, 00210.012 Lane Hocking, 00211.01 LAC

⁵⁸² Clause 16(2), Schedule 1, RMA

⁵⁸³ 00140.023 Waitaki DC

⁵⁸⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁵⁸⁵ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00221.016 Silver Fern Farms, 00236.103 Horticulture NZ

⁵⁸⁶ 00206.074 Trojan, 00411.136 Wayfare

⁵⁸⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁵⁸⁸ Clause 16(2), Schedule 1, RMA

⁵⁸⁹ 00509.093 Wise Response

⁵⁹⁰ 00137.079 DOC

⁵⁹¹ 00509.093 Wise Response

⁵⁹² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00411.006 Wayfare, 00137.084 DOC (insertion of new LF-LS-P16A)

Managing soil resources, in particular, cannot be undertaken in isolation. The policies require managing the use and development of *land* and *fresh water* to maintain soil values, recognising that soil can be valued for more than its productive use and those values should be maintained. Soil erosion is problematic ~~for~~ and has adverse impacts on both soil and *water* health. The policies provide direction ~~on~~ for managing erosion resulting from *land* use activities to, ~~primarily, retain~~ ensure soil is retained and to prevent its discharge to water.⁵⁹³

In addition, this chapter seeks to manage development in Otago's rural areas, maintain the character and amenity values of Otago's rural areas, including by facilitating the use of the natural and physical resources that to⁵⁹⁴ support the viability of the rural sector. Otago's rural and urban areas also contain significant natural, cultural and historic values as identified by other parts of this RPS. In all cases while facilitating urban development and managing rural productive activities these values must also be identified, maintained and, wherever possible, enhanced.⁵⁹⁵ This approach includes direction on different types of development within *rural areas*, ~~managing the expansion and location of urban areas, and including~~⁵⁹⁶ rural lifestyle and rural residential⁵⁹⁷ development, ~~and directing that growth be enabled in urban areas to minimise the need for development to occur within rural areas,~~⁵⁹⁸ other than what is needed to facilitate rural community and rural productive activities.⁵⁹⁹ These provisions work closely with those in the UFD chapter, which include direction on managing the impacts of urban growth on rural areas.⁶⁰⁰

Highly productive land is *land* used for land-based primary production ~~primary production~~⁶⁰¹ that provides economic and employment benefits. Providing for and managing such *land* types is essential to ensure its sustainability. The policies seek to identify and prioritise *land* used for productive purposes managing urban encroachment into rural *environments* where appropriate.

Responding to *climate change* and achieving *freshwater* visions is likely to require changes in *land* uses and *land* management practices in parts of Otago. This is recognised in the policies which seek to promote changes in *land* use or management that improve efficient and sustainable⁶⁰² use of *water*, *resilience to climate change* ~~and,~~

⁵⁹³ 00226.212 Kāi Tahu ki Otago

⁵⁹⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendments arising from 00240.033 New Zealand Pork Industry Board, 00239.172 Federated Farmers, 00236.096 Horticulture New Zealand, 00211.050 LAC Properties Trustees Limited, 00210.050 Lane Hocking, 00118.066 Maryhill Limited, 00014.066 Mt Cardrona Station, 00209.05 Universal Development Limited

⁵⁹⁵ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00137.151 Director General of Conservation, 00226.307 Kāi Tahu ki Otago.

⁵⁹⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁵⁹⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00221.016 Silver Fern Farms, 00236.103 Horticulture NZ.

⁵⁹⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁵⁹⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁶⁰⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00236.096 Horticulture NZ, 00237.063 Beef + Lamb and DINZ

⁶⁰¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00021.002 Matakanui Gold Limited, 00016.009 Alluvium Limited and Stoney Creek Mining, 00017.007 Danny Walker and others, 00226.033 Kāi Tahu ki Otago, 00223.094 Ngāi Tahu ki Murihiku

⁶⁰² 00226.212 Kāi Tahu ki Otago

the health and quality of soil, and *water quality*.⁶⁰³ The policies also require reducing *discharges to water* from the use and development of *land* and managing *land* uses that are unsupportive of *environmental outcomes for fresh water* as identified by each *FMU*.

Maintaining public access to and along *lakes* and *rivers* is a matter of national importance under section 6 of the RMA 1991.⁶⁰⁴ The policies in this section seek to maintain existing public access opportunities⁶⁰⁵ and where appropriate promote enhanced⁶⁰⁶ public access to and along *lakes* and *rivers*. Circumstances which restrict public access are set out where, for example, ~~public~~⁶⁰⁷ health and safety is at *risk* or valued parts of the *environment* may be compromised.

Principal reasons

LF-LS-PR4 – Principal reasons

*Pests, including wilding conifers, pose a range of threats to Otago’s environment. While the regional pest management plan is the primary tool for controlling pests under the Biosecurity Act 1993, it is important that the management of land works alongside that tool to reduce the impacts of pests.*⁶⁰⁸

Population growth and *land* use intensification in urban and rural *environments* has increased demand for *land* and soil resources. It has also impacted on the quality of our *water*, increasing contamination such as by nutrients and sediment and harming ecosystems. In Otago, historical and contemporary *land* uses have *degraded* some *water bodies*, both in terms of their quantity and quality, leading to adverse *effects* on the *mauri of water* and the diversity and abundance of ~~maihika kai~~ *maihika kai*⁶⁰⁹ resources.

Soil health is vital to wider ecological health, human health, and economic *resilience*. Otago has a rich and long history of varied forms of *land-based primary production*~~primary production~~⁶¹⁰ on a wide range of soil types and in variable climatic conditions. Otago’s highest quality soils (in terms of suitability for *land-based primary production*~~primary production~~)⁶¹¹ are mainly on the Taieri Plain, North Otago downlands, South Otago lowlands, parts of Central Otago and the Strath Taieri, and along some *river* margins. Their extent is limited and use of these soils can be constrained by external factors such as economics, erosion, natural and human induced hazards, animal, and plant *pests*.

⁶⁰³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00409.015 Ballance

⁶⁰⁴ Clause 16(2), Schedule 1, RMA

⁶⁰⁵ 00226.212 Kāi Tahu ki Otago

⁶⁰⁶ 00226.212 Kāi Tahu ki Otago

⁶⁰⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00239.094 Federated Farmers

⁶⁰⁸ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00411.006 Wayfare, 00137.084 DOC (insertion of new LF-LS-P16A)

⁶⁰⁹ Clause 10(2)(b)(i) – consequential amendment arising from 00226.038 Kāi Tahu ki Otago

⁶¹⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00021.002 Matakanui Gold Limited, 00016.009 Alluvium Limited and Stoney Creek Mining, 00017.007 Danny Walker and others, 00226.033 Kāi Tahu ki Otago, 00223.094 Ngāi Tahu ki Murihiku

⁶¹¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00021.002 Matakanui Gold Limited, 00016.009 Alluvium Limited and Stoney Creek Mining, 00017.007 Danny Walker and others, 00226.033 Kāi Tahu ki Otago, 00223.094 Ngāi Tahu ki Murihiku

Managing *land* uses is a critical component of implementing the NPSFM due to the *effects* of *land* use on the health and well-being of *water*. This chapter assists the Council to recognise and provide for the connections and interactions between Otago's *land* and *fresh water*, while managing the use and development of this *land*, and its *effects* on *fresh water*.

~~Rural areas are attractive as residential living areas, and for other non-rural activities. However, they contain areas, activities and resources critical for rural production. There is pressure from non-rural activities and rural lifestyle development to locate within the rural area, but these activities that can be impacted by sensitive to primary production or rural industry and can adversely affect rural production activities⁶¹². Non-urban areas also contain a wide range of other values that can be negatively impacted by the impacts of rural residential and other activities, that do not have a functional need to be in rural areas.⁶¹³ The provisions in this chapter focus on managing where rural living opportunities and other non-rural activities are provided for, so that⁶¹⁴ the potential effects of development on the rural character,⁶¹⁵ productive potential and the wide range of environmental values, features and resources that rural areas also contain are appropriately managed.⁶¹⁶ The supply of rural lifestyle opportunities to meet demand should be directed to suitably located and zoned areas to minimise impacts on values in rural areas. In designing and planning for rural residential and rural⁶¹⁷ lifestyle development, local authorities will need to be aware of the potential future constraints on future urban expansion and development, including the cumulative impacts of infrastructure servicing irrespective of whether this is onsite, community or through connections to urban reticulated schemes.~~

Riparian areas, in particular, play a key role in supporting the water quality and ecosystem values of water bodies, and it is important that this role is maintained.⁶¹⁸

Anticipated environmental results

LF-LS-AER12A The area of *land* vegetated by *wilding conifers* is reduced.⁶¹⁹

LF-LS-AER12B The extent and distribution of *pests* does not increase.⁶²⁰

⁶¹² 00236.106 Horticulture New Zealand

⁶¹³ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from changes recommended to UFD-P7 and UFD-P8.

⁶¹⁴ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from changes recommended to UFD-P7 and UFD-P8.

⁶¹⁵ 00211.050 LAC Properties Trustees Limited, 00210.050 Lane Hocking, 00118.066 Maryhill Limited, 00014.066 Mt Cardrona Station, 00209.05 Universal Development Limited

⁶¹⁶ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from changes recommended to UFD-P7 and UFD-P8.

⁶¹⁷ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00221.016 Silver Fern Farms, 00236.103 Horticulture NZ.

⁶¹⁸ 00226.213 Kāi Tahu ki Otago

⁶¹⁹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00411.006 Wayfare, 00137.084 DOC (insertion of new LF-LS-P16A)

⁶²⁰ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00411.006 Wayfare, 00137.084 DOC (insertion of new LF-LS-P16A)

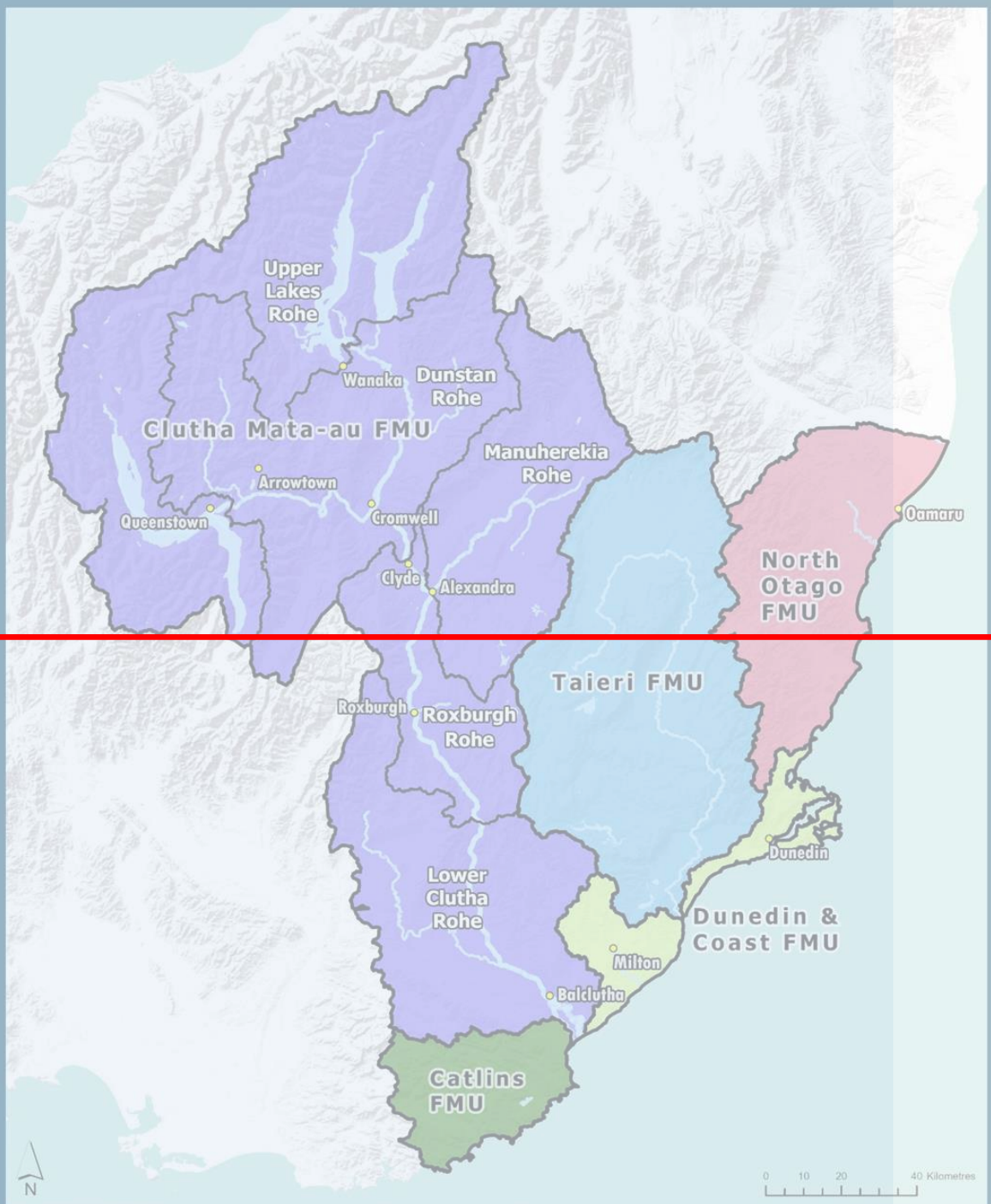
LF-LS-AER12	The life-supporting capacity of soil is maintained or improved throughout Otago.
LF-LS-AER13	The availability and capability of Otago's <i>highly productive land</i> is maintained.
LF-LS-AER14	The use of <i>land</i> supports the achievement of <i>environmental outcomes</i> and objectives in Otago's <i>FMUs</i> and rohe.
UFD-AER11	All n New rural residential or rural ⁶²¹ lifestyle development occurs within areas zoned <u>appropriate</u> for this use. ⁶²²
LF-LS-AER15	<u>The establishment of activities within <i>rural areas</i> does not result in adverse <i>effects</i> on activities functionally dependent on rural resources and rural surroundings.</u> ⁶²³

⁶²¹ Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00221.016 Silver Fern Farms, 00236.103 Horticulture NZ.

⁶²² Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00025.004 Boxer Hills Trust, 00023.005 Waterfall Park Developments Limited

⁶²³ 00237.064 Beef & Lamb, 00236.107 Horticulture NZ, 00239.180 Federated Farmers

MAP1 – Freshwater Management Units



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Freshwater Management Units

1:1,300,000 @ A4

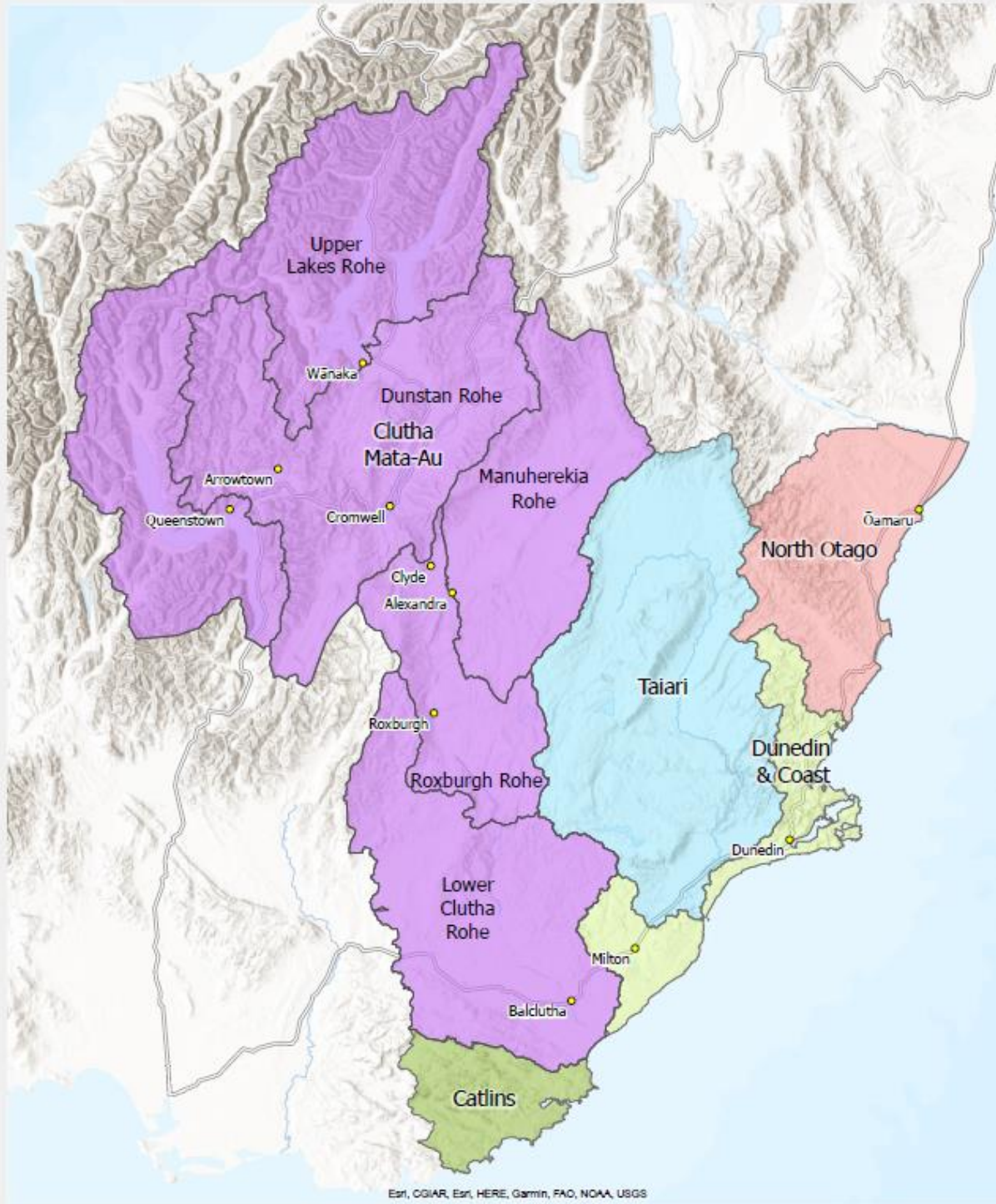
Level 1 FMU:	 Clutha Mata-Au	 Taieri	 Dunedin & Coast	 Significant Otago Lakes
	 North Otago	 Catlins	 Otago Placenames	 Main Rivers
Level 2 Rohe:	Upper Lakes Rohe Dunstan Rohe Manuherekia Rohe Roxburgh Rohe Lower Clutha Rohe			

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Otago FMU and Rohe

Otago Freshwater Management Units and Rohe



- | | | |
|----------------|-----------------|------------------|
| FMUs | Dunedin & Coast | Rohe |
| Catlins | North Otago | Otago Placenames |
| Clutha Mata-Au | Taiari | |

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