SUPPLEMENTARY EVIDENCE OF FELICITY BOYD
FPI (matters raised during closing) and non-FPI (NPSIB)
26 September 2023

Introduction

1 This supplementary statement of evidence addresses both the Freshwater Planning Instrument (FPI) and non-FPI parts of the proposed Otago Regional Policy Statement (pORPS).

2 In relation to the FPI part, this statement responds to three matters raised by the panel during closing on 18 September:

2.1 Whether the clause regarding hydro-electricity generation in the North Otago freshwater vision should adopt the same language as the comparable clauses in the Taiari and Clutha visions,

2.2 The difference between the effects management hierarchies in the National Policy Statement for Freshwater Management (NPSFM) and the National Policy Statement for Indigenous Biodiversity (NPSIB), and

2.3 A request for a 'clean' and renumbered copy of the LF chapter.

3 In relation to the non-FPI part, this statement provides my final recommendations to the non-FPI provisions in the LF chapter as a result of my recommended amendments to FPI provisions and the amendments recommended in Mr Maclennan's supplementary evidence,[1] in accordance with Minute 19 of the non-freshwater hearing panel dated 13 September 2023.

4 I also address three additional matters raised by the panel in its Minute 10 dated 20 September:

4.1 Amendments to the definition of 'natural wetland',

[1] Evidence of Andrew Maclennan: Implications of the NPSIB dated 8 September 2023.

4.2 Amendments to LF-FW-P9, and

4.3 The relationship between amendments to LF-FW-P9 and LF-FW-P13A.

5 Attached to this statement are two documents:

5.1 **Attachment 1:** Post-reply recommended amendments

5.2 **Attachment 2:** Clean copy of LF chapter including all recommended amendments to date

6 An updated copy of the pORPS showing all of the recommended amendments to date will be filed on Friday 29 September 2023 with ORC's response on the possible implications of the *Port Otago Limited v EDS & Ors* Supreme Court decision.

FPI parts

Hydro-electricity generation

7 During closing, Commissioner Cubitt queried whether it was deliberate that the clause recognising hydro-electricity generation in the North Otago FMU vision differed from comparable clauses in other visions:

7.1 **North Otago FMU vision:**[2] "the national significance of the Waitaki hydroelectricity generation scheme is recognised"

7.2 **Clutha Mata-au FMU vision:**[3] "the national significance of the Clutha hydro-electricity generation scheme is recognised and its operation, maintenance, and upgrading is provided for,"

7.3 **Taiari FMU:**[4] "the national significance of the Waipoūri 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"

[2] LF-VM-O3 (track changes) or LF-FW-O4 (clean copy)
[3] LF-VM-O2 (track changes) or LF-FW-O3 (clean copy)
[4] LF-VM-O4 (track changes) or LF-FW-O5 (clean copy)

8 In response, I stated that the difference was not deliberate. I have now reread the relevant submission[5] (which did not seek to include reference to operation, maintenance, or upgrading of the Waitaki scheme) and section of the s42A report[6] and changed my view.

9 Although the Waitaki River is influenced by Meridian's Waitaki hydro-electricity generation scheme, none of the assets are located in the Otago region. The operation, maintenance, or upgrading of the scheme(s) is therefore not a matter for the pORPS to address in the same way as it is for the Clutha, Waipōuri, Deep Stream, Paerau/Patearoa scheme, which are all located in Otago. The difference in the clauses is therefore deliberate.

Effects management hierarchies: NPSFM v NPSIB

10 I have previously maintained[7] that the effects management hierarchy for managing adverse effects on indigenous biodiversity in the NPSIB was more stringent than the hierarchy in the NPSFM for managing adverse effects on the extent and values of rivers and natural inland wetlands. This was primarily because the principles for offsetting in the NPSIB refer to "net gain" whereas the principles for offsetting in the NPSFM refer to "no net loss and preferably a net gain".

11 During closing, Commissioner Crosby pointed out that the wording of the relevant principle in the NPSIB reads (my emphasis added):

> *Net gain: This principle reflects a standard of acceptability for demonstrating, and then achieving, a net gain in indigenous biodiversity values. Net gain is demonstrated by a like-for-like quantitative loss/gain calculation of the following, and is achieved when the indigenous biodiversity values at the offset site are equivalent to or exceed those being lost at the impact site:*
>
> *(a) types of indigenous biodiversity, including when indigenous species depend on introduced species for their persistence; and*

[5] 0306 Meridian
[6] Paras 1067 and 1082, s42A report: FPI
[7] Evidence of Felicity Ann Boyd: FPI – Implications of the NPSIB dated 11 August 2023, paras 95-111

(b) amount; and

(c) condition (structure and quality).

12 In summary, although the principle refers to 'net gain', it goes on to state that this can occur when an offset is 'equivalent to' what is being lost. I agree with Commissioner Crosby that this is 'no net loss', rather than a 'net gain.' This is consistent with the objective of the NPSIB which is, in part, to "maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity".[8] It is also consistent with clause 1.7 of the NPSIB which states that maintaining indigenous biodiversity requires "the maintenance and at least no overall reduction of [listed matters]".[9]

13 This issue arises from both NPSs using the same terminology, in the same contexts, but apparently to mean different things. The NPSFM is clear that there is a difference between 'no net loss' and a 'net gain' in the definition of 'aquatic offsetting', which reads (my emphasis added):

> ***aquatic offset*** *means a measurable conservation outcome resulting from actions that are intended to:*
>
> *(a) redress any more than minor residual adverse effects on a wetland or river after all appropriate avoidance, minimisation, and remediation, measures have been sequentially applied; and*
>
> *(b) achieve no net loss, and preferably a net gain, in the extent and values of the wetland or river, where:*
>
> *(i) **no net loss** means that the measurable positive effects of actions match any loss of extent or values over space and time, taking into account the type and location of the wetland or river; and*
>
> *(ii) **net gain** means that the measurable positive effects of actions exceed the point of no net loss.*

[8] Clause 2.1(1)(a), NPSIB
[9] Clause 1.7(1)(a), NPSIB

14 There is no such clarification in the NPSIB, and so the meaning of 'net gain' must be read in the context of the principle which describes its purpose. 'Net gain', therefore, has different meanings in the two NPSs.

15 The consequence of this for the FPI provisions is that I no longer recommend differentiating between the effects management hierarchies in LF-FW-P9 (track changes) / LF-FW-P11 (clean copy). For natural inland wetlands, I recommend amendments that simply require the relevant part of the NPSFM to be implemented.

16 The amendments I recommend to the reply version of provisions are shown in **Attachment 1**.

Clean copy of the LF chapter

17 During closing, Commissioner Crosby requested that I provide a clean copy of the LF chapter as I recommend it be amended in my reply report, including making all of the provision numbering sequential. This is included as **Attachment 2**.

18 Despite being separated into three sections, the objectives and policies across the LF chapter are numbered sequentially from start to finish. This is required by the National Planning Standards.[10]

19 When preparing this, I made the following editorial changes which largely arise from combining the LF-VM and LF-FW sections:

19.1 Deleting the references to the LF-VM section in LF-WAI-M2 (both copies), LF-FW-M10 (track changes) / LF-FW-M11 (clean copy) and LF-LS-M14 (track changes) / LF-LS-M16 (clean copy).

19.2 Deleting LF-VM-M4 (track changes) as it repeated the content of LF-FW-M10 (track changes) / LF-FW-M10 (clean copy).

19.3 Replacing the reference to "the LF-VM section" in LF-FW-AER6 (both copies) with a reference to "the objectives in the LF-FW section".

[10] Mandatory direction 41 in Standard 10 (Format)

19.4 Amending the section heading "Anticipated environmental outcomes" in LF-FW to "Anticipated environmental results" for consistency with the rest of the pORPS.

20 In my view, these are all amendments of minor effect in accordance with clause 16(2) of Schedule 1 of the RMA. They either remove duplication or correct cross-references or errors.

21 I also noted that despite agreeing with Mr Hodgson's proposed amendment to LF-FW-M6 (track changes) / LF-FW-M5 (clean copy) in my reply report,[11] I had omitted to incorporate the changes recommended into the pORPS itself. I have now done so.

22 Finally, in a memorandum dated 21 July 2023 to the non-freshwater hearing panel, counsel for ORC recommended removing the timeframe referenced in HAZ-NH-M2. I had omitted to make this amendment in the reply report version of the pORPS. I have now done so (in the updated copy to be filed on Friday 29 September 2023).

Implications of the NPSIB for non-FPI provisions

Amendments for consistency with FPI provisions

23 In the same way that LF-FW-P9 (track changes) / LF-FW-P11 (clean copy) differentiated between the two effects management hierarchies for natural inland wetlands/rivers and indigenous biodiversity, so too did LF-FW-P13 (track changes) / LF-FW-P15 (clean copy). For the same reason, I also recommend amending this policy so it refers only to the NPSFM effects management hierarchy.

Consequential amendments arising from Mr Maclennan's evidence

24 In his evidence on the NPSIB, Mr Maclennan recommends including the effects management hierarchy from the NPSIB in the definition of "effects management hierarchy (in relation to indigenous biodiversity)" rather than the definition referring back to a policy (previously ECO-P6). I consider that is sensible drafting and recommend adopting the same approach in the LF chapter. That would mean moving the content of LF-

[11] See section 8.3, FPI Reply Report

FW-P13A (track changes) into the definition of "effects management hierarchy (in relation to natural inland wetlands and rivers)". With a minor amendment to incorporate the bracketed words, that returns this definition to its notified state.

25 As notified, and as previously recommended, the term read (my emphasis added) 'effects management hierarchy (in relation to natural wetlands and rivers)'. As a result of my FPI recommendations, I consider this should be amended to refer to 'natural inland wetlands' rather than 'natural wetlands', in accordance with the NPSFM.

Additional matters from Minute 10

Definition of 'natural wetland'

26 The panel is correct that the amendments I proposed to this definition in my supplementary evidence on the NPSIB were not shown in the reply report version of the pORPS dated 15 September 2023. That was an omission and the amendments as proposed in my supplementary evidence will be incorporated in an updated copy of the pORPS showing all amendments to date, which will be filed on Friday 29 September 2023.

Amendments to LF-FW-P9

27 As the panel notes, in my supplementary evidence, I recommended including a new clause (1) in LF-FW-P9 to manage natural wetlands (in addition to natural inland wetlands).[12]

28 That new clause was the subject of submissions and evidence at the hearing. As a result, I revised the wording I recommended in my reply report. When updating the provision, I noted that the clause regarding the application of the NZCPS appeared in the wrong part of the policy (i.e. only in relation to natural inland wetlands). In my reply report, I recommended moving this to become clause (1) and including my new clause as clause (2). This is set out at paragraphs 135-140 of the report.

[12] Supplementary evidence of Felicity Ann Boyd: FPI – Implications of the NPSIB dated 11 August 2023, paras 80-90

29 I confirm that those same amendments will be included in the updated copy of the pORPS, which will be filed on Friday 29 September 2023.

The relationship between amendments to LF-FW-P9 and LF-FW-P13A.

30 LF-FW-P13A sets out the effects management hierarchy in relation to natural inland wetlands and rivers and mirrors the hierarchy in the NPSFM. In the reply report version of the pORPS, LF-FW-P9(3) required, in relation to natural inland wetlands:

30.1 For managing the adverse effects of activities on indigenous biodiversity, applying the effects management hierarchy (in relation to indigenous biodiversity), which is the hierarchy from the NPSIB, and

30.2 For all other adverse effects, applying the effects management hierarchy (in relation to natural inland wetlands and rivers) set out in LF-FW-P13A.

31 This approach was also adopted in LF-FW-P13 which applies to rivers and referenced the two hierarchies in the same way as outlined above.

32 The approach in the pORPS (i.e. one effects management hierarchy but different policy direction for natural inland wetlands and rivers, respectively) is consistent with the approach in the NPSFM.[13] Both documents apply the same effects management hierarchy, but the direction to do so appears in different policies for the different water bodies.

[13] Clause 3.22 for natural inland wetlands and clause 3.24 for rivers.

33 As outlined above in paragraph 23, I now recommend amending both LF-FW-P9 and LF-FW-P13 so that only the effects management hierarchy (in relation to natural inland wetlands and rivers) is applied.

Felicity Ann Boyd

26 September 2023

Attachment 1: Recommended amendments to provisions since reply

Key

Black underline or strike-out: amendments included in reply report version (15 September 2023)

Red underline or ~~strike-out~~: amendments recommended post-reply (26 September 2023)

Provisions

Effects management hierarchy (in relation to natural inland wetlands and rivers)[14]	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) ~~and in this RPS also applies to natural wetlands~~[15] in relation to natural inland wetlands and rivers, means an approach to managing the adverse effects of an activity on the extent or values of a wetland or river (including cumulative effects and loss of potential value) that requires that: (a) adverse effects are avoided where practicable, (b) where adverse effects cannot be avoided, they are minimised where practicable, (c) where adverse effects cannot be minimised, they are remedied where practicable, (d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, aquatic offsetting is provided, and (e) if aquatic compensation is not appropriate, the activity itself is avoided
~~**Effects management hierarchy (in relation to *natural inland wetlands* and rivers)**~~[16]	~~means the effects management hierarchy set out in LF-FW-P13A.~~

[14] 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

[15] 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

[16] 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

LF-WAI-M2 – Other methods

In addition to method LF-WAI-M1, the methods in the ~~LF-VM,~~[17] LF-FW~~,~~ and LF-LS sections are also applicable.

LF-FW-P9 – Protecting *natural wetlands*

Protect *natural wetlands by*:

(1) in the coastal environment, managing them in accordance with the NZCPS in addition to (2) or (3) below,

(2) except as provided for by (3), managing activities to ensure they maintain or enhance the ecosystem health, indigenous biodiversity values, and hydrological functioning of *natural wetlands*,[18]

(3) for *natural inland wetlands*,[19] implementing clause 3.22(1) to (3) of the NPSFM~~, except that when managing the adverse *effects* of an activity on *indigenous biodiversity* other than the development, operation, maintenance, and upgrade of *renewable electricity generation* and *electricity transmission network infrastructure*, the *effects management hierarchy (in relation to indigenous biodiversity)* or ECO-P6A applies instead of the *effects management hierarchy (in relation to natural inland wetlands and rivers).*~~[20]

~~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*,~~

~~(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*,~~

[17] Clause 16(2), Schedule 1, RMA
[18] FPI030.031 Kāi Tahu ki Otago
[19] Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including definition of 'natural inland wetland'
[20] FPI001.019 DCC, FPI026.031 Federated Farmers, FPI027.027 Contact

~~(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-P13 – Preserving natural character and instream values[21]

Preserve the natural character and instream values[22] of *lakes* and *rivers* and the natural character of[23] 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 ECO-P6 (whichever is applicable), and~~

~~(ii) for other *effects*~~ the *effects management hierarchy* *(in relation to natural inland wetlands and rivers),*[24]

(2) not granting *resource consent* for activities in (1) unless ~~Otago Regional Council~~ the consent authority[25] is satisfied that:

(a) the application demonstrates how each step of the ~~*effects management hierarchies* in (1)(b)~~ *effects management hierarchy (in relation to natural inland wetlands and rivers)* will be applied to the *loss of values* or extent of the *river*, and

[21] 00231.058 Fish and Game
[22] 00231.058 Fish and Game
[23] Clause 10(2)(b)(i), Schedule 1, RMA - consequential amendment arising from 00231.058 Fish and Game
[24] 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
[25] 00137.074 DOC

(b) any consent is granted subject to conditions that apply the ~~*effects management hierarchies in (1)(b)*~~ *effects management hierarchy (in relation to natural inland wetlands and rivers)* in respect of any *loss of values* or extent of the *river*,[26]

…

~~**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.~~[27]

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 2024[28] and, after it is made operative, maintain that *regional plan* to:

…

(5A) provide for the allocation and use of *fresh water* in accordance with LF-FW-P7A, including by providing for off-stream water storage,[29]

…

LF-FW-M10 – Other methods

In addition to methods LF-FW-M5 to LF-FW-M9, the methods in the LF-WAI~~, LF-VM~~[30] and LF-LS sections are also applicable.

Anticipated environmental ~~outcomes~~ results[31]

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~~ objectives in the LF-FW[32] section of this chapter.

LF-LS-M14 – Other methods

In addition to methods LF-LS-M11 to LF-LS-M13, the methods in the LF-WAI~~, LF-VM~~[33] and LF-FW sections are also applicable.

[26] Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from 00119.010 Blackthorn, 00206.031 Trojan, 00411.043 Wayfare
[27] Clause 16(2), Schedule 1, RMA
[28] Clause 16(2), Schedule 1, RMA
[29] Clause 10(2)(b)(i), Schedule 1, RMA – consequential amendment arising from including LF-FW-P7A
[30] Clause 16(2), Schedule 1, RMA
[31] Clause 16(2), Schedule 1, RMA
[32] Clause 16(2), Schedule 1, RMA
[33] Clause 16(2), Schedule 1, RMA

Attachment 2: Clean copy of LF chapter including all recommended amendments to date

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,

(2) there is an integral kinship relationship between *water* and Kāi Tahu whānui, and this relationship endures through time, connecting past, present and future,

(3) each *water body* has a unique whakapapa and characteristics,

(4) *fresh water*, *land*, and *coastal water* have a connectedness that supports and perpetuates life,

(5) protecting the health and well-being of *water* protects the wider *environment*,

(6) Kāi Tahu exercise rakatirataka, manaakitaka and their *kaitiakitaka* duty of care and attention over wai and all the life it supports, and

(7) all people and communities have a responsibility to exercise stewardship, care, and respect in the management of *fresh water*.

Policies

LF-WAI-P1 – Prioritisation

In all decision-making affecting *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 to the health and well-being of the *environment* (te hauora o te taiao), together with the exercise of *mana whenua* to uphold these,[1]

(2) second, health needs of people (te hauora o te tangata) interacting with *water* through ingestion (such as *drinking water* and consuming resources harvested from the *water body*) and immersive activities (such as harvesting resources and primary contact), 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:

[1] 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.

(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,* specific to each *water body*,

(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.

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

Manage the use of *freshwater* and *land* using an integrated approach that is consistent with tikaka and kawa that:

(1) sustains and, to the greatest extent practicable, restores or improves:

  (a) the natural connections and interactions between *water bodies* (large and small, surface and ground, fresh and coastal, permanently flowing, intermittent and ephemeral),

  (b) the natural connections and interactions between *land* and *water,* from the mountains to the sea,

  (c) the habitats of *mahika kai* and indigenous species, including taoka species associated with the *water bodies*,

(2) manages the *effects* of the use and development of *land* to maintain or enhance the health and well-being of *freshwater*, *coastal water* and associated ecosystems,

(3) encourages the coordination and sequencing of regional or urban growth to ensure it is sustainable,

(4) has regard to foreseeable *climate change risks* and the potential effects of *climate change* on *water bodies*, including on their natural functioning,

(5) has regard to cumulative *effects*, and

(6) applies a precautionary approach where there is limited available information or uncertainty about potential adverse *effects*, in accordance with IM-P6.

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 – Kāi Tahu rakatirataka

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) and supporting the establishment of *freshwater* mātaitai,

(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*,

(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.

LF-WAI-M2 – Other methods

In addition to method LF-WAI-M1, the methods in the 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 and Takaroa met and had children after which Takaroa took a long absence. Papatūānuku 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, the 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, the 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) 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. Giving effect to Te Mana o te Wai upholds the mauri of the wai and is consistent with this value base.

To Kāi Tahu, each *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. *Water* is valued by the community. 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*. Access to *water*, within *limits* (in relation to *water*), is an important contributor achieving social, cultural and economic well-being within Otago.

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 that 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 people is sustained that *water* can be used for economic purposes. When *water* is available for use, different uses may be prioritised in different *FMUs* or rohe depending on the values identified by communities and the environmental outcomes seeking to be achieved. Giving effect to *Te Mana o te Wai* requires actively involving *mana 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* gathering and recreational uses such as swimming and kayaking.

Anticipated environmental results

LF-WAI-AER1	The mauri of Otago's water bodies and the health and well-being of *water bodies* and *freshwater* ecosystems is protected, and restored where degraded.
LF-WAI-AER2	Kāi Tahu are actively involved in the management of *freshwater* and able to effectively exercise their rakatirataka, manaakitaka and *kaitiakitaka*.

LF-FW – Fresh water

Objectives

LF-FW-O2 – Visions set for each FMU and rohe

In each FMU and rohe in Otago and within the timeframes specified in the *freshwater* visions in LF-FW-O3 to LF-FW-O7:

(1) healthy *freshwater* and estuarine ecosystems support healthy populations of indigenous species (including non-diadromous galaxiids and Canterbury mudfish) and plentiful *mahika kai* that are safe for consumption,

(2) the interconnection of *land*, *freshwater* (including springs, *groundwater*, ephemeral *water bodies*, *wetlands*, *rivers*, and *lakes*) and *coastal water* is recognised,

(3) indigenous species migrate easily within and between catchments,

(4) the natural form, function and character of *water bodies* reflects their natural characteristics and natural behaviours to the greatest extent practicable,

(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:

  (a) support pastoral, arable, and horticultural production and the continued social, economic, and cultural well-being of Otago's people and communities, and

  (b) improve the resilience of communities to the *effects* of *climate change*, and

(8) direct *discharges* of *wastewater* to *water bodies* are phased out to the greatest extent practicable.

LF-FW-O3 – Clutha Mata-au *FMU* vision

In the Clutha Mata-au *FMU*, and in addition to the matters in LF-FW-O2:

(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 to the top of the mauka and into the awa,

(2) sustainable abstraction occurs from *lakes*, *river* main stems or *groundwater* in preference to tributaries,

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

(4) *water bodies* support a range of outdoor recreation opportunities,

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

(6) in the Lower Clutha rohe, opportunities to restore the natural form and function of *water bodies* are promoted wherever possible, and

(7) the outcomes sought are to be achieved within the following timeframes:

(a) by 2030 in the Upper Lakes rohe,

(b) by 2045 in the Dunstan and Roxburgh rohe, and

(c) by 2050 in the Manuherekia and Lower Clutha rohe.

LF-FW-O4 – North Otago *FMU* vision

By 2050 in the North Otago *FMU*, and in addition to the matters in LF-FW-O2:

(1) the Waitaki River is managed holistically, ki uta ki tai, despite its catchments spanning the Canterbury and Otago regions,

(2) the national significance of the Waitaki hydroelectricity generation scheme is recognised,

(3) healthy riparian margins, *wetlands*, estuaries and lagoons support the health of downstream coastal ecosystems.

LF-FW-O5 – Taiari *FMU* vision

By 2050 in the Taiari *FMU*, and in addition to the matters in LF-FW-O2:

(1) upper and lower catchment *wetland* complexes, including the Waipōuri/Waihola wetland complex, Upper Taiari wetland complex, and connected tussock areas are protected, restored or enhanced where they have been degraded or lost,

(2) the gravel *bed* of the lower Taiari is restored and sedimentation of the Waipōuri/Waihola wetland complex is reduced,

(3) the national significance of the Waipoūri 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, and

(4) creative ecological approaches contribute to reduced occurrence of didymo.

LF-FW-O6 – Dunedin & Coast *FMU* vision

By 2040 in the Dunedin & Coast *FMU*, and in addition to the matters in LF-FW-O2:

(1) healthy riparian margins, *wetlands*, estuaries, and lagoons support the health of downstream coastal ecosystems, and

(2) opportunities to restore the natural form and function of *water bodies* are promoted wherever possible.

LF-FW-O7 – Catlins *FMU* vision

By 2035 in the Catlins *FMU*, and in addition to the matters in LF-FW-O2:

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

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

LF-FW-O8 – *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,

(2) there is no net decrease, and preferably an increase, in the extent and diversity of indigenous ecosystem types and habitats in *natural wetlands*,

(3) there is no reduction and, where degraded, there is an improvement in wetland ecosystem health, hydrological functioning, *amenity values*, extent or *water* quality, and

(4) their flood attenuation and water storage capacity is maintained or improved.

Policies

LF-FW-P5 – *Freshwater Management Units* (*FMU*s) 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, and

(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
Taiari	n/a
North Otago	n/a
Dunedin & Coast	n/a
Catlins	n/a

LF-FW-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,

(2) any additional rohe-specific *environmental outcomes*:

(a) must 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, 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 plan set for the parent *FMU* for the same *attribute*, and

(c) must not conflict with any *limit* set or action plan developed for the parent *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 – Transitions over time

Provide for ambitious and reasonable transitions in the use of *land* and *water* to achieve the long-term visions by:

(1) recognising that changes to practices and activities will need to occur over time; and

(2) managing the adverse impacts of implementing these changes on people and communities, including by phasing implementation of new requirements and building on actions undertaken by catchment and other community groups, and

(3) enabling innovation and the development of new practices.

LF-FW-P8 – *Fresh water*

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

(1) the health and well-being of *water bodies* and *freshwater* ecosystems is maintained or, if *degraded,* improved,

(2) the habitats of indigenous species with life stages dependent on *water* bodies are protected and sustained,

(3) the habitats of trout and salmon are protected insofar as this is consistent with (2),

(4) 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,

(5) *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

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

LF-FW-P9 – Water allocation and use

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:

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

(2) allocating *fresh water* efficiently to support the social, economic, and cultural well-being of people and communities, including for:

(a) community drinking water supplies,

(b) *renewable electricity generation*,

(c) *mana whenua* needs and aspirations, and

(d) *land-based primary production*,

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

(4) ensuring that the efficiency of *freshwater* abstraction, storage, and conveyancing *infrastructure* is improved,

(5) enabling the harvesting and storage of *fresh water* to meet increasing demand for *water*, to manage *water* scarcity conditions and to provide resilience to the *effects* of *climate change*, and

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

LF-FW-P10 – Identifying *natural inland wetlands*

By 3 September 2030, identify and map *natural inland 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-P11 – Protecting *natural wetlands*

Protect *natural wetlands by*:

(1) in the coastal environment, managing them in accordance with the NZCPS in addition to (2) or (3) below,

(2) except as provided for by (3), managing activities to ensure they maintain or enhance the ecosystem health, indigenous biodiversity values, and hydrological functioning of *natural wetlands*,

(3) for *natural inland wetlands*, implementing clause 3.22(1) to (3) of the NPSFM.

LF-FW-P12 – Restoring *natural wetlands*

Improve the ecosystem health, hydrological functioning and extent of *natural wetlands* that have been degraded or lost by requiring, to the greatest extent practicable:

(1) an increase in the extent and condition 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-P13 – Otago's *outstanding water bodies*

Otago's *outstanding water bodies* are:

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

(2) Lake Wanaka and the outflow and tributaries described in the Lake Wanaka Preservation Act 1973, and

(3) any other *water bodies* identified in accordance with APP1.

LF-FW-P14 – Identifying and managing *outstanding water bodies*

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

LF-FW-P15 – Preserving natural character and instream values

Preserve the natural character and instream values of *lakes* and *rivers* and the natural character of 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 the *effects management hierarchy (in relation to natural wetlands and rivers),*

(2) not granting *resource consent* for activities in (1) unless the consent authority is satisfied that:

  (a) the application demonstrates how each step of the *effects management hierarchy (in relation to natural wetlands and rivers)* 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 hierarchy (in relation to natural wetlands and rivers)* in respect of any *loss of values* or extent of the *river,*

  (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,

(3) establishing environmental flow and level regimes and *water* quality standards that support the health and well-being of the *water body,*

(4) to the greatest extent practicable, 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 permanently reduce the braided character of a *river*,

(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 *contaminant* loss to *water bodies*.

LF-FW-P16 – Restoring natural character and instream values

Where the natural character or instream values of *lakes* and *rivers* or the natural character of 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 species,

(4) improve *water body* margins by naturalising bank contours and establishing *indigenous vegetation* and habitat, and

(5) restore natural connectivity between and within *water* systems.

LF-FW-P17 – *Stormwater discharges*

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

(1) requiring:

(a) integrated catchment management plans for management of *stormwater* in *urban areas*,

(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 or improved outcomes for *fresh water*,

(c) implementation of methods to progressively reduce unintentional stormwater inflows to wastewater systems,

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

(f) the use of water sensitive design techniques wherever practicable, and

(2) promoting the reticulation of *stormwater* in *urban areas* where appropriate, and

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

LF-FW-P18 – *Discharges* containing animal effluent, *sewage*, and *industrial and trade waste*

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*,

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

(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 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-FW-M3 – Community involvement

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

(1) engaging with Kāi Tahu, communities and stakeholders to identify values and *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,

(3) supporting community initiatives, industry-led guidelines, codes of practice and environmental accords that contribute to maintaining or improving the health and well-being of *water bodies*.

LF-FW-M4 – *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-FW-P13,

(2) identify the outstanding values of those *water bodies* (if any) in accordance with APP1,

(3) consult with the public and relevant local authorities 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 the significant and outstanding values of *outstanding water bodies*.

LF-FW-M5 – *Regional plans*

Otago Regional Council must publicly notify a Land and Water *Regional Plan* no later than 30 June 2024 and, after it is made operative, maintain that *regional plan* to:

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

(2) identify *water bodies* that are *over-allocated* 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,

(3) provide for the allocation and use of *fresh water* in accordance with LF-FW-P9, including by providing for off-stream water storage,

(4) identify and manage *natural wetlands* in accordance with LF-FW-P10, LF-FW-P11 and LF-FW-P12 while recognising that some activities in and around *natural wetlands* are managed under the NESF and the NESPF,

(5) manage the adverse *effects* of *stormwater* and *discharges* containing animal effluent, *sewage*, or *industrial and trade waste* in accordance with LF-FW-P17 and LF-FW-P18, and

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

LF-FW-M6 – *District plans*

Territorial authorities must prepare or amend and maintain their *district plans* to:

(1) map *outstanding water bodies* and identify their outstanding and significant values using the information gathered by Otago Regional Council in LF-FW-M4, and

(2) include provisions to protect the significant and outstanding values of *outstanding water bodies*,

(3) 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,

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

(5) 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,

(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-M7 – 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

(3) may prepare an action plan for any other purpose set out in the NPSFM, and

(4) must prepare any action plan in accordance with clause 3.15 of the NPSFM.

LF-FW-M8 – Integrated catchment management

Otago Regional Council may:

(1) develop and implement an integrated catchment management programme for the region, and

(2) work in partnership with mana whenua and in collaboration with communities to develop catchment action plans that:

(a) collate and build on existing work in the catchments,

(b) incorporate science and mātauraka Māori, and

(c) identify and target effective environmental management actions.

LF-FW-M9 – 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-M9(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

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

LF-FW-M10 – 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,

(3) regularly prepare reports on the matters in (1) and (2) and publish those reports in accordance with clause 3.30 of the NPSFM, and

(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.

LF-FW-M11 – Other methods

In addition to methods LF-FW-M3 to LF-FW-M10, the methods in the LF-WAI and LF-LS sections are also applicable.

Explanation

LF-FW-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.

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 *mana whenua* and the community that *fresh* 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.

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*.

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.

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

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. 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 rural *land* uses, contribute to ongoing *water* quality and quantity issues in some *water bodies*, with significant cultural effects.

This section of the LF chapter 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. 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.

Anticipated environmental results

LF-FW-AER3	The *freshwater* visions in this section implement *Te Mana o Te Wai* according to the particular characteristics of FMUs and rohe, 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-P8.
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 objectives in the LF-FW section of this chapter.
LF-FW-AER7	*Water* in Otago's aquifers is suitable for human consumption, unless that *water* is naturally unsuitable for consumption.
LF-FW-AER8	Where *water* is not *degraded*, there is no reduction in *water* quality.
LF-FW-AER9	Direct *discharges* of *wastewater* to *water* are phased out to the greatest extent practicable and the frequency of *wastewater* overflows is reduced.
LF-FW-AER10	The quality of *stormwater discharges* from existing *urban areas* is improved.
LF-FW-AER11	There is an improvement in the extent or condition of Otago's *natural wetlands*.
LF-FW-AER12	The economic, social, and cultural well-being of communities is sustained.

LF-LS – *Land* and soil

Objectives

LF-LS-O9 – *Land* and soil

Otago's *land* and soil resources support healthy habitats for indigenous species and ecosystems.

LF-LS-O10 – Use, development, and protection

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.

LF-LS-O11 – Development in *rural areas*

Development in Otago's *rural areas* occurs in a way that:

(1) provides for the ongoing use of *rural areas* for *primary production* and *rural industry*, and

(2) does not compromise the long-term viability of *primary production* and rural communities.

Policies

LF-LS-P19 – Managing *pests*

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-P20 – Maintaining soil quality

Maintain soil quality by managing both *land* and *freshwater* resources, including the interconnections between soil health, vegetative cover and *water* quality and quantity.

LF-LS-P21 – 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-P22 – Soil erosion

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

(1) maintaining vegetative cover on erosion-prone *land*, and

(2) where vegetation removal is necessary or there is no vegetative cover, implementing effective management practices to retain topsoil 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-P23 – *Land* use change

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

(1) the sustainability and efficiency of *water* use,

(2) *resilience* to the impacts of *climate change,*

(3) the health and quality of soil, or

(4) *water* quality.

LF-LS-P24 – *Land* use and *fresh water*

The health and well-being of *water bodies* is maintained or, if *degraded*, improved to meet *environmental outcomes* set for *Freshwater Management Units* and/or rohe by:

(1) reducing or otherwise managing the adverse effects of direct and indirect *discharges* of *contaminants* to *water* from the use and development of *land*,

(2) managing *land* uses that may have adverse *effects* on the flow of *water* in surface *water bodies* or the recharge of *groundwater*, and

(3) recognising the drylands nature of much of Otago and the resulting low *water* availability, and

(4) maintaining or, where degraded, enhancing the values of riparian margins.

LF-LS-P25 – Rural land and *highly productive land*

Protect the availability of rural land and the *productive capacity* of *highly productive land* by:

(1) identifying *highly productive land* based on the following criteria:

  (a) 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,

(b) 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

(c) land must not be identified as *highly productive land* if it was *identified for future urban development* on or before 17 October 2022, and

(2) prioritising the use of *highly productive land* for *land-based primary production* in accordance with the NPSHPL, and

(3) 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*.

LF-LS-P26 – *Rural areas*

The management of development in *rural areas*:

(1) maintains *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,

(2) prioritises *land-based primary production* on *highly productive land* in accordance with the NPS-HPL

(3) provides for *primary production, rural industry* and supporting activities, and recognises:

(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, and

(4) restricts the establishment of non-rural activities which could adversely affect, including by way of *reverse sensitivity* or fragmentation, the *productive capacity* of *highly productive land*, or existing or anticipated *primary production* and *rural industry* activities, unless those activities are undertaken in accordance with MW-P4 or the NPSHPL.

LF-LS-P27 – Rural lifestyle development

The establishment, development or expansion of rural lifestyle development only occurs where:

(1) it 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 development would foreclose or reduce efficient realisation of that urban development potential,

(2) it minimises impacts on existing or anticipated *primary production, rural industry* and other rural activities and avoids the potential for *reverse sensitivity effects* to arise in adjoining rural production zones,

(3) it avoids *highly productive land* except as provided for in the NPS-HPL,

(4) 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 *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 services and *additional infrastructure.*

LF-LS-P28 – 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 access by *mana whenua* in their role as kaitiaki and for gathering of *mahika kai*, and

(3) encouraging landowners to avoid restricting access unless it is necessary to protect:

  (a) 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,

  (f) places or areas of significance to Kāi Tahu, including wāhi taoka, wāhi tapu and *wāhi tūpuna*,

  (g) establishing vegetation, or

  (h) a level of security consistent with the operational requirements of a lawfully established activity.

Methods

LF-LS-M12 – Identification of *highly productive land*

(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-P20(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-M13 – *Regional plans*

Otago Regional Council must publicly notify a Land and Water *Regional Plan* no later than 30 June 2024 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,*

  (b) the adoption of practices that avoid or minimise 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,

  (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 use of *fresh water* and that reduce water demand where there is existing over-allocation, and

(3) enable the *discharge* of *contaminants* to *land* for *pest* control, and

(4) implement policies LF-LS-P19 to LF-LF-P28.

LF-LS-M14 – *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:

  (a) avoiding the planting of *pest* plants in accordance with LF-LS-P19,

  (b) controlling the establishment of new or any spatial extension of existing *plantation forestry activities* or permanent forestry activities where necessary to give effect to an objective developed under the NPSFM, and

  (c) minimising the removal of montane tall tussock grasslands, to recognise their ability to capture and hold precipitation,

(2) provide for and promote the creation and enhancement of vegetated riparian margins and constructed *wetlands*, and maintain these where they already exist,

(3) facilitate public access to and along *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, that connect with *esplanade reserves* and *esplanade strips*, and

(4) maintain the availability and *productive capacity* of *highly productive land* identified and mapped under LF-LS-M12 in accordance with LF-LS-P25,

(5) manage development in *rural areas* in accordance with LF-LS-P26, and

(6) manage rural lifestyle development in accordance with LF-LS-P27.

LF-LS-M15 – Management of *beds* and riparian margins

Local authorities must prepare or amend and maintain their *regional plans* 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 enhance existing indigenous *biodiversity* values,

(2) increase the presence, *resilience* and abundance of indigenous flora and fauna, particularly taoka species, including by providing for *wetlands* and *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-M16 – Other methods

In addition to methods LF-LS-M12 to LF-LS-M15, the methods in the LF-WAI and LF-FW sections are also applicable.

Explanation

LF-LS-E3 – Explanation

The policies in this section of the LF chapter seek to maintain the health of Otago's soils, reduce the impacts of pests 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.

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 and has adverse impacts on both soil and *water* health. The policies provide direction for managing erosion resulting from *land* use activities to ensure soil is retained and to prevent its *discharge* to *water*.

In addition, this chapter seeks to manage development in Otago's *rural areas*, to support the viability of the rural sector. This includes direction on different types of development within *rural areas*, including rural lifestyle development. These provisions work closely with those in the UFD chapter, which include direction on managing the impacts of urban growth on *rural areas*.

Highly productive land is *land* used for *land-based primary production* 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 sustainable use of *water*, *resilience* to *climate change*, the health and quality of soil, and *water* quality. 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. The policies in this section seek to maintain existing public access opportunities and where appropriate promote enhanced public access to and along *lakes* and *rivers*. Circumstances which restrict public access are set out where, for example, health and safety is at *risk* or valued parts of the *environment* may be compromised.

Principal reasons

LF-LS-PR3 – 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*.

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 *mahika kai* 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* 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*) 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*.

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 contain 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 can be sensitive to *primary production* or *rural industry* and can adversely affect rural production. The provisions in this chapter focus on managing the potential *effects* of development on productive potential and the wide range of environmental values, features and resources that *rural areas* contain 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 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.

Anticipated environmental results

LF-LS-AER13	The area of *land* vegetated by *wilding conifers* is reduced.
LF-LS-AER14	The extent and distribution of *pests* does not increase.
LF-LS-AER15	The life-supporting capacity of soil is maintained or improved throughout Otago.
LF-LS-AER16	The availability and capability of Otago's *highly productive land* is maintained.
LF-LS-AER17	The use of *land* supports the achievement of *environmental outcomes* and objectives in Otago's *FMUs* and rohe.
LF-LS-AER18	New rural lifestyle development occurs within areas appropriate for this use.
LF-LS-AER19	The establishment of activities within *rural areas* does not result in adverse *effects* on activities functionally dependent on rural resources and rural surroundings.