

Section 42A Hearing Report

Proposed Otago Regional Policy Statement 2021

Chapter 5:

Submissions on Part 2 – Resource management overview

Jacqui Todd and James Adams



4 May 2022
(Updated 7 October 2022)

NOTE TO READERS

Grey shading added (7 October 2022)

This report was first published on 4 May 2022 and it covered all provisions included in the *SRMR – Significant resource management issues for the region* and *RMIA – Resource management issues of significance to iwi authorities*. As a result of the High Court declaration and subsequent renotification of the Freshwater Planning Instrument (explained below), this report now contains analysis that no longer has any legal weight.

On 4 October 2022 this report was amended so that all analysis that relates to provisions that are now contained in the Freshwater Planning Instrument is shaded grey.

Background

In June 2021, ORC publicly notified its proposed regional policy statement. At that time, the Council had determined that the whole of the PORPS was a freshwater planning instrument. In its Judgment (Otago Regional Council v Royal Forest and Bird Protection Society of New Zealand Incorporated [2022] NZHC 1777) dated 22 July 2022, the High Court declared that the Council's determination that the whole of the PORPS is a freshwater planning instrument was wrong.

The High Court instructed the Council to satisfy itself as to which parts of the proposed regional policy statement qualify are part of a freshwater planning instrument because they relate directly to the maintenance or enhancement of freshwater quality or quantity.

Since receiving the Judgment of the High Court, the ORC has applied the approach set out in the Judgment, and at its meeting on 15 September 2022 Council determined which parts of the Proposed Otago Regional Policy Statement 2021 directly relate to the maintenance or enhancement of the quality or quantity of freshwater as defined in Section 80A (2) of the Resource Management Act 1991 and therefore comprise a freshwater planning instrument. Those provisions were re-notified on 30 September 2022 and can be found on the Council's website:

<https://www.orc.govt.nz/news-and-events/news-and-media-releases/2022/september/public-notice-fpirps-21>

3. Submissions on Part 2: Resource Management Overview

3.6. Introduction

1. Part 2 of the pORPS contains three parts:
 - SRMR-Significant resource management issues for the region
 - RMIA – Resource management issues of significance to iwi authorities
 - IM – Integrated management
2. This report addresses the submissions made on the SRMR and RMIA provisions. The *IM – Integrated management* chapter is addressed in *Report 6: IM – Integrated management*.
3. A Regional Policy Statement must state the region’s significant resource management issues and the resource management issues of significance to iwi authorities in the region.¹ The Regional Policy Statement Structure standard in The National Planning Standards requires the two sets of issues to be set out separately in Part 2 of the RPS.²
4. Issues are either problems that must be resolved or opportunities to promote the purpose of the RMA. They can cover a broad swathe of conflicts, uses, and effects impacting on the environment, both direct and indirect (Ministry for the Environment, 2022)³. Issue statements form the basis for a regional policy statement’s policy approach and direction.
5. The RMA does not provide guidance on how the significance of an issue should be determined, and sector practice appears to vary widely. ORC determined the regionally significant issues for Otago by building an initial list of issues in Council workshops, further developing these issues in house, and then testing the resulting list of issues through Reference Group workshops.
6. Eleven issues were identified for Otago. The Significant Resource Management Issues for the Region (SRMR) section in Part 2 of the pORPS comprises a statement of these issues as well as a summary of their environmental, economic, and social impacts.
7. Te Runanga o Ngāi Tahu is the iwi authority for Otago. For the integrity of the process, Iwi authorities should have the prerogative to decide how the resource management issues of significance to them are best determined and described in the pORPS. This work was carried out by iwi consultancies Aukaha and Te Ao Marama, representing the views of papatipu runaka in both Otago and Southland with an interest in Otago.
8. Twenty issues were identified in this way, grouped into seven interdependent topics:
 - a. Wai Māori

¹ Resource Management Act 1991 s62(a) and (b).

² National Planning Standards, Table 2, p9.

³ <https://www.qualityplanning.org.nz/node/610>
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- b. Mahika kai and biodiversity
 - c. Wāhi tūpuna
 - d. Wāhi tapu and wāhi taoka
 - e. Air and atmosphere
 - f. Coastal environment (Taku tai moana me te wai Māori)⁴
 - g. Pounamu.
9. Unlike the s42A reports for other chapters, the notified and recommended provisions have not been included in the relevant introduction and recommendation sections. This is due to the volume of text that makes up these sections of the pORPS.
10. This report has two sections prepared by two authors:
- SRMR-Significant resource management issues for the region (prepared by Jacqui Todd), and
 - RMIA – Resource management issues of significance to iwi authorities in the region (prepared by James Adams).

3.7. Authors

3.7.1. Jacqui Todd (SRMR)

11. My name is Jacqueline Ann Todd and I am a Senior Resource Management Consultant employed by Incite, a planning consultancy. I hold a Bachelor of Science (Zoology)(First Class Honours) from the University of Otago and a Post-graduate Diploma in Resource Studies (with Distinction) from Lincoln University. I am a full member of the New Zealand Planning Institute and an accredited decision-maker under the Making Good Decisions programme.
12. I have over twenty years of resource management and planning experience in the private and public sector. I have experience in policy development and resource consenting in a wide range of resource management activities, with a particular focus on freshwater. I also have experience in Environment Court processes including expert conferencing, mediation and hearings.
13. I have been involved in the review of the pORPS, including the preparation of this s42A report, since March 2022.

3.7.2. James Adams (RMIA)

14. My name is James Adams and I am a Senior Policy Analyst employed by Otago Regional Council. I hold a Bachelor of Laws and a Bachelor of Arts from Otago University.

⁴ Note this is the notified title; amendments are recommended below.

15. I have around 8 years of resource management and planning experience, based at Otago Regional Council. During this time, I have worked mainly on Regional Policy Statements, both the Partially Operative Otago Regional Policy Statement 2019 and the proposed Otago Regional Policy Statement 2021. This has included associated section 32 evaluation reports, section 42A reports and participating in Environment Court processes such as expert conferencing and mediation.
16. I have been involved in the review of the Partially Operative Otago RPS 2019 and the preparation of the pORPS 2021 since late 2019. I have been involved in drafting various sections of the pORPS, the section 32 evaluation report, and this section 42A report, as well as being involved in community, stakeholder and mana whenua engagement processes.

3.8. Significant resource management issues for the region

3.8.1. Introduction

17. This chapter sets out the key regional issue statements to which the Regional Policy Statement responds. The chapter is contextual for the objectives, policies and methods which follow in other chapters of the Regional Policy Statement. It does not look to provide solutions or guiding language for subsequent regional plans, it is solely issue focused.
18. The Significant Resource Management Issues for the Region (SRMR) section in Part 2 of the pORPS 2021 comprises a statement of the issues as well as a summary of their environmental, economic, and social impacts. Eleven significant resource management issues have been identified. The identified issues are all interconnected, but they have been segregated to the extent possible for clarity.
19. The pORPS is focused on responding to these issues and establishing a future where they are resolved to the extent possible through the planning process. It is important to note that the complexity and significant interconnectedness across the issues requires the integrated approach that underpins the pORPS.
20. The table below sets out the final issue statements for the pORPS 2021.

SRMR-I1	Natural hazards pose a risk to many Otago communities.
SRMR-I2	Climate change is likely to impact our economy and environment.
SRMR-I3	Pest species pose an ongoing threat to indigenous biodiversity, economic activities and landscapes.
SRMR-I4	Poorly managed urban and residential growth affects productive land, treasured natural assets, infrastructure and community wellbeing.
SRMR-I5	<i>Freshwater</i> demand exceeds capacity in some places.
SRMR-I6	Declining water quality has adverse effects on the environment, our communities and the economy.

SRMR-I7	Biodiversity loss: rich and varied biodiversity has been lost and degraded due to human activities or the presence of pests and predators.
SRMR-I8	Otago's coast is a rich natural, cultural and economic resource that is under threat from a range of terrestrial and marine activities.
SRMR-I9	Otago lakes are subject to pressures from tourism and population growth.
SRMR-I10	Economic and domestic activities in Otago use natural resources but do not always properly account for the environmental stresses or the future impacts they cause.
SRMR-I11	Cumulative impacts and resilience – the environmental costs of our activities in Otago are adding up with tipping points potentially being reached.

3.8.2. General themes

21. There are common themes on the overall approach to the SRMR section of the pORPS as well as a range of general submissions on the provisions. This section addresses both of these.

3.8.2.1. Overall approach

22. There are some common submission themes across the 11 issues identified for the SRMR chapter, with submissions seeking more extensive detail including:
- Reference to a specific industry affected by an issue,
 - The addition of more examples to illustrate a statement, including locational examples,
 - Discussion on responses or solutions to an issue.
23. These submission themes are addressed collectively here rather than separately for each issue.
24. As outlined above, the purpose of the SRMR chapter is to outline the most significant resource management issues facing the Otago region. The intention is to provide a statement of each issue to the extent necessary for the issue to be understood and responded to by the objectives, policies and methods in the various chapters of the ORPS.
25. Given that the purpose of the SRMR chapter is to outline the issues at a high level, the issue statements are not meant to provide extensive detail or reference specific industries that can be discussed more appropriately elsewhere. For this reason, in most cases, I do not recommend adopting submissions seeking more extensive detail, including reference to specific industries.
26. For many of the issues, examples have been included to clarify the statements made. These examples are not intended to be an exhaustive list, but rather one or two examples are provided to illustrate the point. Therefore, in most cases I do not recommend the addition of more examples because I do not consider that they are necessary to illustrate

the point and they go into a greater level of detail than is necessary for a statement of the issues. This includes adding locational examples for issues such as hazards and climate change.

27. The SRMR chapter outlines the issues at a high level but does not provide solutions or responses to the issue, and for this reason I do not recommend adopting any submissions which seek to discuss responses or solutions. Solutions and responses will be established in the objectives, policies and methods of the ORPS, and implemented through the regional and district plans.

3.8.2.2. General submissions

Introduction

28. Eight submissions seeking a range of general amendments to Part 2 have been received and are grouped and summarised below.

Structure and formatting

29. Fish and Game understands the purpose of the Regional Policy Statement template detailed in the National Planning Standards is to ensure regionally significant issues are prioritised and discussed from a solutions-focussed perspective.⁵ They consider the notified chapter currently does not achieve this. They do not seek a specific amendment in relation to this but note that all of the relief sought is generally reflected as solutions within the SRMR chapter.
30. Trojan⁶ and Wayfare⁷ also consider the SRMR chapter is framed from a negative perspective and fails to consider potential beneficial resource management issues. To reflect the adverse effects of the notified resource management issues, they seek amendment of the heading 'Impact snapshot' to 'Adverse impact snapshot'.
31. The Yellow-eyed Penguin Trust considers the issues to be confused, ill-defined, poorly described and their impacts significantly overlapping.⁸ They do not seek specific amendments in regard to this, but request that the context and definitions of the impacts are clear, well defined and effectively cover all of the potential issues.
32. COES identifies the approach adopted by the pORPS is on addressing the 'symptom' of the issue rather than addressing the underlying cause of the problem.⁹ They specifically note a failure to address the drivers of declining water quality and loss of biodiversity as a result of inappropriate land use and management.
33. Ngāi Tahu ki Murihiku identifies across the suite of issues references to mana whenua, cultural values and cultural wellbeing is inconsistent.¹⁰ They do not specify particular amendments to address this concern but suggest providing linkages to relevant issues in

⁵ 00231.021 Fish and Game

⁶ 00206.079 Trojan

⁷ 00411.098 Wayfare

⁸ 00120.014 Yellow-eyed Penguin Trust

⁹ 00202.002 COES

¹⁰ 00223.038 Ngāi Tahu ki Murihiku

the following section on the Resource management issues of significance to iwi authorities in the region.

Biodiversity

34. Ngāi Tahu ki Murihiku understands biodiversity health indicators are broad and consider references to solely water quantity and water quality in relation to this issue is inadequate to determine the state of a waterbody and its impact on mana whenua values.¹¹ They seek the following wording amendment in the Introduction to the SRMR chapter and wherever the phrase 'water quantity and water quality' is used:

... Issues firstly considered include *natural hazards, climate change, pest species, water quantity*~~and, water quality~~ and the habitat of aquatic species, and biodiversity loss, collectively the "natural asset-based issues". ...

Carbon forestry

35. Waitaki DC state that they are disappointed that carbon forestry has not been recognised as a resource management issue in the Otago region through the provisions of the ORPS. They seek to include reference to carbon forestry as an issue, including in SRMR-I2, SRMR-I3 and SRMR-I4.¹² No specific amendments are sought.

3.8.2.3. Analysis

Structure and formatting

36. The National Planning Standards specify that Part 2 of a Regional Policy Statement is to include chapters on significant resource management issues for the region, along with resource management issues of significance to iwi authorities in the region. They do not specify a requirement for the issues to be prioritised and discussed from a solutions perspective, and I am not aware of any guidance to this effect. In the absence of a reference to this requirement, no amendments are recommended in response to the submission from Fish and Game.
37. In regard to the submissions from Trojan and Wayfare stating that the SRMR chapter is framed from a negative perspective, I note that the purpose of this chapter is to state the significant resource management issues for the region, and that issues are often phrased in the negative to assist with defining the various solutions. I do not agree that it is necessary to change the title of the impact snapshots and consider that the existing headings are appropriate.
38. COES notes that the approach taken in the SRMR chapter is to identify the symptom of the issue rather than the cause. I disagree and while I note that the purpose of the chapter is to outline the issue, some commentary is provided about the causes. More extensive detail about the causes of the issues is not appropriate in my opinion, and these can be taken into account and addressed through the regional and district planning processes.

¹¹ 00223.039 Ngāi Tahu ki Murihiku

¹² 00140.012 Waitaki DC

39. In regard to the remaining submissions from Ngai Tahu ki Murihiku and Yellow-eyed Penguin Trust, in the absence of specific amendments it is unclear to me what additional relief would address these concerns.

Biodiversity

40. Ngāi Tahu ki Murihiku seeks to include the term 'habitat of aquatic species' in the Introduction to the SRMR chapter and wherever the phrase water quantity and quality is used. I note that these terms are used in the Introduction in the context of outlining the eleven significant resource management issues for the region. Within the Issues statements themselves for water quality and quantity the relationship with habitats and ecosystems is acknowledged. Therefore, I do not consider it appropriate to include the term 'habitat of aquatic species' in the Introductory section of the SRMR chapter. Without specific reference to other sections of the SRMR chapter, I am unclear where else the addition of 'habitat of aquatic species' is needed to respond to this submission.

Carbon Forestry

41. In regard, to carbon forestry, without clarification about the amendments sought by Waitaki DC, I am unclear what amendments to SRMR-I2, SRMR-I3 and SRMR-I4, would satisfy the submitters concerns.

3.8.2.4. Recommendation

42. I do not recommend any amendments in response to the general submissions.

3.8.3. Introduction

43. The introduction to the SRMR section broadly explains the relationship between resources and users and introduces the eleven identified significant issues for the Otago region. It also highlights the importance of considering the issues as integrated and interconnected with one another due to the complexity of environmental, social, and economic factors.

3.8.3.1. Submissions

44. A total of 17 submissions were received on the Introduction seeking a range of general and specific amendments which are summarised below.
45. DOC raises concern that the Introduction prioritises the environment with respect to its resource value to people, which is inconsistent with Part 2 of the RMA and considers the value of the environment should be recognised in its own right through amendments to the first two paragraphs.¹³ No specific wording is provided.

¹³ 00137.032 DOC
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46. Similarly, Kāi Tahu ki Otago considers the current wording of the Introduction is inconsistent with the direction of the pORPS and seeks amendments to emphasise the hauora and the mana of the environment.¹⁴ No specific wording is provided.
47. Federated Farmers seeks to amend the RPS provisions to acknowledge and reflect the importance of Otago's natural resources to enabling people and communities to provide for their social, economic, and cultural wellbeing.¹⁵ No specific wording is provided.
48. Yellow-eyed Penguin Trust also seeks to include a reference to the health benefits of natural resources,¹⁶ and the addition of background information on biodiversity values and services as per IM-P2 which values the long-term life-supporting capacity and mauri of the natural environment in the first instance.¹⁷
49. Toitū Te Whenua seeks amendments to bring the interrelationship of all issues to the opening of the Introduction, by moving the final paragraph to the beginning.¹⁸ They also consider the Introduction should provide greater weight to activities that affect and disturb soil¹⁹. Horticulture NZ, OWRUG and Federated Farmers, also consider 'soil' should be specifically referenced as a natural resource.²⁰
50. Toitū Te Whenua also seeks inclusion of a reference to a "High country" place-based issue, acknowledging the significance, poor resilience and vulnerability of Otago's high country.²¹
51. Transpower considers the introductory text is too narrowly focused on the use of, and impacts on natural resources, and fails to recognise and provide for the use, development, and protection of important physical resources, such as the National Grid.²² They seek an amendment to the introductory text to address the use, development and protection of physical resources.
52. Trojan²³ and Wayfare²⁴ similarly seek amendments which identify and discuss the benefits of subdivision, use and development to people and the environment, particularly with respect to the wellbeing benefits of ensuring people can access and use the rural and natural environment.
53. Four submitters seek to amend Figure 2 as follows:
 - Matakanui Gold seeks to amend Figure 2 to clarify the relationship between the 'benefit's and 'impacts' of mining²⁵

¹⁴ 00226.057 Kāi Tahu ki Otago

¹⁵ 00239.019 Federated Farmers

¹⁶ 00120.012 Yellow-eyed Penguin Trust

¹⁷ 00120.013 Yellow-eyed Penguin Trust

¹⁸ 00101.002, 00101.005 Toitū Te Whenua

¹⁹ 00101.003 Toitū Te Whenua

²⁰ 00239.019 Federated Farmers, 00236.021 Horticulture NZ, 00235.021 OWRUG

²¹ 00101.004 Toitū Te Whenua

²² 00314.009 Transpower

²³ 00206.078 Trojan

²⁴ 00411.097 Wayfare

²⁵ 00021.005 Matakanui Gold

- Oceana Gold seeks to add “minerals” as a natural resource which provides economic benefits to the region²⁶
 - Rayonier seeks to add plantation forestry as a primary production activity in Figure 2²⁷
 - OWRUG and NZ Pork seek reference to food and fibre production.²⁸
54. Horticulture NZ, NZ Pork and OWRUG consider that food production requires greater consideration, given its importance to the Otago region.²⁹
55. John Highton seeks to include a reference to ongoing loss of wetlands and tussocks uplands.³⁰

3.8.3.2. Analysis

56. I agree with DOC and Kai Tahu ki Otago that the Introductory section does not explicitly recognise the value of the environment in its own right or emphasise the hauora and mana of the environment. I consider that this is partly because it is the introduction to the significant issues section of the pOPRS, and the matters the submitters raise are more matters to be taken into account when responding to the issues in other chapters of the pOPRS. However, I do consider that some acknowledgement of the value of the environment in its own right would be appropriate. In the absence of suggested amendments, I seek assistance from the submitters as to how this is best incorporated into the Introduction to address their concerns.
57. I do not consider that it is necessary to reference the health benefits as requested by Yellow-eyed Penguin Trust, as I consider this is covered more generally by the existing text.
58. In relation to changing the structure of the introduction, as raised by Toitū Te Whenua, I consider the structure of the notified provisions provides a logical path, introducing users of the pOPRS to the natural resources relevant to Otago. The use of these natural resources is then considered with their benefits and impacts highlighted. The eleven most significant resource management issues are then identified and the structure by which they will be considered in the chapter is set out. I therefore do not support moving the final paragraph of the introduction to the beginning.
59. In response to inserting reference to “High country” as an additional place-based issue to Otago’s coasts and lakes, I acknowledge the submitter’s concerns but highlight that the identified issues have been developed and refined through undertaking a lengthy process of stakeholder engagement and do not consider it is appropriate to add another place-based issue that was not identified during this consultation.

²⁶ 00115.005, 00115.006 Oceana Gold

²⁷ 00020.003 Rayonier

²⁸ 00235.023 OWRUG, 00240.004 NZ Pork

²⁹ 00236.021 Horticulture NZ, 00240.004 NZ Pork, 00235.021 OWRUG

³⁰ 00014.003 John Highton

60. I agree with the submissions seeking the inclusion of 'soil' in the list of natural resources given that soil is included in the *natural and physical resources* definition and is shown on Figure 2.
61. In regard to Figure 2:
- I consider the amendments which seek to insert reference to 'minerals' and 'plantation forestry' are appropriate considering the importance of mineral extraction and forestry activities to the Otago region.
 - I do not recommend the addition of 'Food and fibre' to Figure 2, given that this would overlap with the primary production activities already listed in Figure 2.
 - It is unclear to me how Figure 2 could be amended to provide the relief sought by Matakanui Gold to clarify further the relationship between the benefits and impacts of mining, given that Figure 2 already depicts both the benefits and impacts of the activities.
62. In my opinion the submissions from Federated Farmers, Transpower, Trojan and Wayfare are seeking more detail than is appropriate for the issues statement and the matters they raise are covered more generally in the existing text. In particular, the opening sentence of the introduction acknowledges that Otago's natural resources provide for the social, economic and cultural well-being of people and communities, and the importance of natural resources to infrastructure and energy generation are acknowledged in the second paragraph.
63. In regard to the submissions requesting specific reference to food production, I do not consider that this level of detail is necessary for the issues statement, noting that it is covered more generally by the statements in the first two paragraphs of the Introduction.
64. In my opinion the other matters raised in submissions, such as biodiversity values and services, wetlands, tussocks and soil management are too detailed for the Introduction, and where appropriate can be discussed or addressed in the issues themselves, or in the relevant chapters of the pORPS. Consequently, amending the introduction to specify these topics in greater detail is not recommended.

3.8.3.3. Recommendation

65. I recommend amendments to SRMR-Introduction as follows:

- a. Amend the second sentence as follows:

Otago's people and communities rely on the natural resources that Otago's *environment* provides to enable their social, economic, and cultural well-being. Natural resources include *freshwater* (i.e. surface and *groundwater*, *wetlands*, estuaries), *land and soil*³¹, terrestrial, and *freshwater* ecosystems, coastal and marine ecosystems, and air, landscapes, vegetation and natural landforms.

³¹ 00239.019 Federated Farmers, 00236.021 Horticulture NZ
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- b. Amend Figure 2 to include minerals as a natural resource and plantation forestry as a user.

3.8.4. SRMR-I1 – Natural hazards pose a risk to many Otago communities

3.8.4.1. Introduction

- 66. SRMR-I1 considers the significant natural hazards affecting the Otago Region, identifies potential consequences and risks and highlights the impacts these hazards may have on environmental, economic, and social wellbeing.

3.8.4.2. Submissions

- 67. A total of 18 submissions were received seeking a broad range of amendments across the entirety of SRMR-I1. For all issues, these submission points have been grouped into the following subsections: Statement, Context, Impact snapshot: Environment, Economic and Social.

Statement

- 68. DCC highlights that the current wording of the Statement does not encompass all the issues discussed in the context section and seeks amendments to improve consistency and clarity.³² No specific wording is provided.
- 69. Federated Farmers considers the current wording is too specific and seeks to have the entire Statement deleted and replaced with the following to provide a more general overview:

Otago is prone to a range of natural hazards that pose a risk to Otago communities, property, infrastructure, and the wider environment. A major event could cause significant damage and may isolate Otago communities for an extended time. For example, particular areas of Otago are prone to flooding (e.g: South Otago and the Taieri Plains). Also, an earthquake on the Alpine fault could potentially cause catastrophic impacts on the entire region. Other natural hazard risks include; tsunamis, sea level rise, coastal erosion, wild fires, and extreme weather events such as hail storms.³³

- 70. Three submitters seek amendments which recognise that natural hazards pose a risk to food production and supply.³⁴

Context

- 71. Horticulture NZ and OWRUG consider a reference to essential human health needs, such as housing, food and water is also required.³⁵

³² 00139.015 DCC

³³ 00239.020 Federated Farmers

³⁴ 00240.005 NZ Pork, 00236.022 Horticulture NZ, 00235.024 OWRUG

³⁵ 00236.022 Horticulture NZ, 00235.025 OWRUG

72. Trojan and Wayfare consider that natural hazard events occur all the time without any discernible impact and seek the following amendment to the second sentence to clarify ‘major’ natural hazards³⁶ as follows:

When a major natural hazard event occurs, it is usually difficult and costly for a community to recover.

73. DOC considers the responses to natural hazards needs to include managing human activities not just the hazards themselves and seeks to have the following sentence added:

The risk resulting from natural hazards is not just due to the hazards themselves, but also whether human activities are located and operated in ways which make them vulnerable to those hazards.³⁷

74. QLDC notes that a significant body of evidence supports the statement that natural hazards *will* be exacerbated by the impact of climate change and seeks phrasing amendments to support this.³⁸ QLDC and Lauder Creek both seek an amendment to include fire as a natural hazard.³⁹

75. DCC notes that key Otago risk areas are identified in the Context section and requests that it is amended to also include the communities/areas most likely to be impacted to improve clarity.⁴⁰

76. Waitaki DC also seeks amendments to paragraph 2 of the Context to:

- Replace ‘agriculture’ with the generic descriptor “primary production”, highlighting that horticulture and viticulture are included within the generic primary production definition.
- Include the Waitaki River in the bracketed naming of specific rivers, as it is not referenced as a risk from flooding disrupting floodplains.⁴¹

77. OWRUG⁴² and Federated Farmers⁴³ consider that the impact of a natural hazard goes beyond agriculture being ‘disrupted’. Three submitters consider that natural hazards pose a risk to food production and events can disrupt food supply. They seek amendments to the first two paragraphs of the Context to reflect this.⁴⁴

78. Federated Farmers seeks the following specific amendments to the second paragraph of the Context:

Frequent heavy rainstorms, the steep gradients of many river catchments and human occupation of floodplains combine to make flooding the most frequently

³⁶ 00206.080 Trojan, 00411.099 Wayfare

³⁷ 00137.033 DOC

³⁸ 00138.002 QLDC

³⁹ 00138.002 QLDC, 00406.001 Lauder Creek Farming

⁴⁰ 00139.016 DCC

⁴¹ 00140.010 Waitaki DC

⁴² 00235.025 OWRUG

⁴³ 00239.020 Federated Farmers

⁴⁴ 00236.022 Horticulture NZ, 00240.005 NZ Pork, 00235.025 OWRUG

occurring natural hazard event in the Otago region. For example, flooding can affect Otago's main urban centres causing damage to housing and business disruption and can significantly impact agricultural and other food production businesses and housing ~~agriculture can be disrupted~~ in Otago's floodplains (including lower Clutha and Taieri).⁴⁵

79. OWRUG requests that a sentence be added to the end of the second paragraph as follows:

... For example, flooding can affect Otago's main urban centres causing damage to housing and business disruption. It can disrupt food and fibre production which can compromise food supply chains. It also creates animal welfare issues and damages productive land resulting in the likes of crop and infrastructure damage which takes considerable time and effort to reinstate. Recovering from these events can take a number of years.⁴⁶

80. Waitaki DC raises concern that coastal erosion in the Waitaki district has been downplayed and seeks amendments to replace the term 'risk' with 'issue' and delete reference to 'potentially' in the final paragraph of the Context to read:

Coastal erosion is an risk issue in Waitaki District, Dunedin City and along the Clutha River Delta, ~~potentially~~ affecting communities and infrastructure near the coast.⁴⁷

Environmental

81. One submission was received from Ngāi Tahu ki Murihiku which seeks a grammatical amendment to change 'coast erosion' in the second sentence to 'coastal erosion'.⁴⁸

Economic

82. OWRUG and Horticulture NZ consider the notified text does not adequately reflect the scale of economic impacts following a natural hazard event.⁴⁹ OWRUG seeks the following amendments to the final paragraph of the Economic sub-section:

For industry, hazards can damage production assets and *infrastructure* with associated costs, disrupt service delivery and limit availability and access to goods and services, and cause decline in sales and increased costs. Loss or changes in production flows can be either temporary or permanent depending on financial *resilience* of businesses, which is a function of their existing loan commitments, credit worthiness and insurance cover and/or the speed at which normal service can resume (if at all). This will often depend on the ability for lifeline utilities to maintain or re-establish normal levels of service quickly.

⁴⁵ 00239.020 Federated Farmers

⁴⁶ 00235.025 OWRUG

⁴⁷ 00140.010 Waitaki DC

⁴⁸ 00223.040 Ngāi Tahu ki Murihiku

⁴⁹ 00235.026 OWRUG, 00236.022 Horticulture NZ

Food security and fibre sector production systems can also be affected impacting on the regional economy with immediate effect on jobs longer-term effects on production value and domestic and export returns.⁵⁰

83. Horticulture NZ seeks the following text amendment to the final sentence of the Economic sub-section:

...Food security production systems can also be affected impacting on the regional economy with immediate effect on jobs and longer-term effects on production value and domestic and export returns.⁵¹

84. NZ Pork also considers that food security is not just an economic impact and seeks amendments to recognise the interrelationship with social impacts.⁵² No specific wording is provided.

85. Federated Farmers generally supports the notified text which considers the impact of natural hazards on the primary industries, however the following wording amendments are sought to the second and third paragraphs for completeness:

86. Second paragraph:

For individuals and households this can result in changes to employment, income, assets and consumption patterns, disruption to social protection, services, social safety net mechanisms and institutions, including access to health care via rural roading networks.

- Third paragraph

For industry, ... Loss or changes in production flows can be either temporary or permanent depending on financial resilience of businesses and their ability to access a skilled workforce, which is a function of their existing loan commitments, credit worthiness and insurance cover. Food security can also be affected. Whilst the primary industry has substantial resilience to severe weather events and supply chain disruptions, the cumulative impact of repeated events must be acknowledged.⁵³

87. Meridian seeks amendments to recognise that if renewable electricity generation activities are disrupted, it is likely to affect the supply of electricity to areas beyond Otago.⁵⁴

Social

88. Toitū Te Whenua considers the impacts of a natural hazard on people's wellbeing should take precedence over the other impacts and seeks amendments to the first sentence to prioritise these ahead of other 'social impacts'.⁵⁵

⁵⁰ 00235.026 OWRUG

⁵¹ 00236.022 Horticulture NZ

⁵² 00240.005 NZ Pork

⁵³ 00239.020 Federated Farmers

⁵⁴ 00306.014 Meridian

⁵⁵ 00101.006 Toitū Te Whenua

89. QLDC seeks amendments to acknowledge the impacts associated with the unique transient population of Queenstown Lakes District.⁵⁶ No specific wording is provided.

90. Federated Farmers considers recognition of the impacts on physical and mental health wellbeing, and the vulnerability of small rural communities is required.⁵⁷ They seek the following amendments to the first and second paragraphs of the Social impact snapshot:

Physical impacts and community dislocation can also cause long term psychological stresses affecting people's coping mechanisms, recovery sources and capacity which can test the *resilience* of a community. The cumulative impact of events on physical and mental health must be acknowledged and planned for, along with the potential for there to be a rural and urban disparity in the severity of physical and mental health challenges.

Social impacts of events can result in immediate impacts on livelihoods for individuals and families, particularly for lower socio – economic groups and on small rural communities.⁵⁸

91. Horticulture NZ and OWRUG both seek amendments which recognise the impact natural hazards would have on food production and supply chains.⁵⁹ They also consider that amendments are needed to highlight that disruptions can impact the security of essential human health needs.⁶⁰

92. Meridian seeks amendments to recognise that if renewable electricity generation activities are disrupted, it is likely to affect the supply of electricity to areas beyond Otago.⁶¹

3.8.4.3. Analysis

Statement

93. The Statement serves to provide a general introduction to the issue which is further elaborated in the Context and Impact snapshots. I agree with Federated Farmers that the Statement as notified is limited in scope and does not reflect the range of natural hazards addressed in the proceeding text. I consider the revised Statement sought by Federated Farmers is mostly appropriate, identifying a wide range of hazards and their impacts on the region. However, I consider that locational references narrow the general focus of the Statement and I do not agree that all the matters listed by Federated Farmers, such as sea level rise and hailstorms, should be included as major events of concern. Consequently, I recommend amendments to the Statement similar to those suggested by Federated Farmers, excluding the locational references and with a smaller list of hazards of concern.

⁵⁶ 00138.002 QLDC

⁵⁷ 00239.020 Federated Farmers

⁵⁸ 00239.020 Federated Farmers

⁵⁹ 00236.022 Horticulture NZ, 00235.027 OWRUG

⁶⁰ 00236.022 Horticulture NZ, 00235.027 OWRUG

⁶¹ 00306.014 Meridian

94. Given that the Statement provides a general introduction which is then elaborated on further in the following sub-sections, I do not agree with DCC that the Statement needs to encompass all of the detail discussed in the Context section.
95. In regard to the submissions seeking recognition of the impact of hazards on food production and supply, I do not consider that this level of detail is necessary in the Statement and note that the Context and Impacts sub-sections provide more detail on the impacts of natural hazards. I do not recommend that this submission be adopted.

Context

96. Horticulture NZ and OWRUG seek amendments to include reference to human health needs such as housing, food and water in the Context. However, I consider these elements to be adequately covered in the first sentence of the Context which refers to impacts on people, property and infrastructure.
97. I agree with Trojan and Wayfare that not all natural hazards have an impact on communities, but do not agree that it is always the scale of the hazard that determines whether it will be difficult and costly for a community to recover. I recommend adopting their submission in part by changing the second sentence of the context to clarify that when a natural hazard occurs it is sometimes difficult and costly for a community to recover.
98. I agree that the amendment suggested by DOC provides useful clarification and recognises that the risk from natural hazards is not only due to the hazards themselves but how human activities are managed in relation to the hazards.
99. Waitaki DC seeks to replace 'agriculture' with 'primary production' in the last sentence of paragraph 2, recognising the range of activities related to the sector. As notified, the pORPS defines primary production as:
- ...
- (a) *an aquaculture, agricultural, pastoral, horticultural, mining, quarrying or forestry activities; and*
 - (b) *includes initial processing, as an ancillary activity, of commodities that result from the listed activities in a);*
 - (c) *includes any land and buildings used for the production of the commodities from a) and used for the initial processing of the commodities in b); but*
 - (d) *excludes further processing of those commodities into a different product*
100. I recognise this definition encompasses a diverse range of activities, including agriculture and therefore agree with this amendment. Given that the Lower Waitaki River is a floodplain I also recommend adopting WDC's submission seeking to add the Lower Waitaki to the list of floodplains at the end of paragraph two.

101. I agree with QLDC that there is a growing body of technical evidence that demonstrates changes in climate are impacting certain natural hazards. I make reference to the Australasia chapter of the IPCC WGII Sixth Assessment Report⁶² which states:

Ongoing climate trends have exacerbated many extreme events (very high confidence) ... The New Zealand trends include further warming and sea-level rise, more hot days and heatwaves, less snow, more rainfall in the south, less rainfall in the north, and more extreme fire weather in the east.

102. I understand that climate change has and will continue to have an impact on some natural hazards but given that it will not impact on all natural hazards (for example, earthquakes), I do not recommend adopting the submission seeking to replace 'may' with 'will' in the sentence about the impacts of climate change on natural hazards. I agree that there should be a reference to wildfire and note that it is part of the recommended amendment to the Statement.
103. In relation to the identification of and reference to communities and areas most at risk from natural hazards as requested by DCC, I consider this level of detail is inappropriate for the SRMR section of the pORPS. Rather, this can be addressed in regional and district plans when giving effect to s67 and s75 of the RMA.
104. I acknowledge the amendment sought by Waitaki DC to the final paragraph of the Context to strengthen the language used in reference to coastal erosion. I agree that coastal erosion is an ongoing issue in this area, presenting an ongoing risk to parts of the coastline and that replacing 'risk' with 'issue' and deleting the word 'potentially' will not change the intent of this sentence.
105. In regard to the remaining submissions from OWRUG and Federated Farmers seeking additional clarification in the Context about the impacts of hazards, including on food production and supply, and animal welfare, I consider that this is an inappropriate level of detail for this paragraph. References to the impacts of flooding on urban centres and agriculture are intended to provide examples of the impacts, rather than a complete list of all impacts. Consequently, I do not recommend that the Context is amended to go into a greater level of detail about flooding impacts. I do recommend adopting Federated Farmers suggestion to add the word 'including' to the references to floodplains at the end of the second paragraph to clarify that this is only referring to some of the floodplains in Otago.

Environmental

106. I agree with the amendment sought by Ngāi Tahu ki Murihiku to change 'coast erosion' to 'coastal erosion'.

Economic

107. OWRUG, Horticulture NZ and NZ Pork have all sought amendments providing a greater level of detail about the scale of economic impacts due to natural hazard events, including more detail about the recovery from these events and the impacts on the regional

⁶² https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_Chapter11.pdf

economy. I do not agree that this level of detail is appropriate for the impact snapshot and consequently, I do not recommend adopting these amendments.

108. In regard to the amendments sought by Federated Farmers I do not agree that it is necessary to add reference to access to healthcare via rural roading networks, as this is captured at a higher level by the existing reference to disruption to services and institutions. Similarly, I do not agree that the issue of accessing a skilled workforce is an appropriate level of detail for the Economic Impact Snapshot. Consequently, I do not support the amendments sought by Federated Farmers.
109. I do agree with Federated Farmers that it is appropriate to acknowledge the cumulative impacts on communities and businesses from repeated hazard events and recommend adding a sentence to like effect to the end of the Economic impact snapshot.
110. In regard to the submission from Meridian, I do not consider that it is necessary to state that the economic impacts of natural hazards can extend beyond the boundary if renewable electricity generation activities are disrupted, as this is covered more generally by the last sentence in the first paragraph with acknowledges the subsequent impacts on electricity generation capacity.

Social

111. It is not recommended to amend the text to identify the communities and areas most at risk from natural hazards, as requested by QLDC. In my opinion the level of detail is inappropriate for the SRMR section and identifying all the communities and areas at risk from an array of hazards would not be useful in a statement focussing on the issue itself. In my opinion identification of communities and areas at risk is a matter for the regional and district plans.
112. Regarding Toitū Te Whenua's submission that the social impacts on people's wellbeing should take precedence over other impacts, I consider that the use of the word 'secondary' in the first sentence of the Social impact statement is confusing. I do not consider that it was intended to prioritise impacts, as the sentence acknowledges that the direct and indirect impacts are equally as important. I consider that removing the reference to secondary impacts would avoid this confusion and clarify that direct and indirect social impacts are equally important.
113. As I have discussed for the Economic impact sub-section, I do not agree with Meridian's suggested amendment to acknowledge the cross-boundary social impacts if renewable electricity generation activities are disrupted, as I consider that this is covered more generally by the existing text.
114. As I have outlined for the economic impact snapshot, I consider that further detail about the impacts of hazards on food production and supply, as requested by Horticulture NZ and OWRUG, is not appropriate for the statement of issues, which is intended to be a statement of the issue in relation to natural hazards rather than a more detailed description in relation to one particular industry.
115. Finally, in relation to the cumulative impacts from events on physical and mental health I recommend adopting Federated Farmers submission in part, by adding a sentence

acknowledging this impact at the end of the first paragraph of the Social impact subsection.

3.8.4.4. Recommendation

116. I recommend the following amendments:

a. Replace the existing issue statement with the following:

Otago is prone to a range of natural hazards that pose a risk to Otago communities, property, infrastructure, and the wider environment. A major event could cause severe damage and may isolate Otago communities for an extended time. Major events of concern include flooding, an earthquake on the Alpine fault, tsunami, coastal erosion, wildfires, and extreme weather events.⁶³

b. In the Context subsection:

i. Amend the second sentence as follows:

When a natural hazard even occurs, it is ~~usually~~ sometimes⁶⁴ difficult and costly for the community to recover.

ii. Add the following line to the end of the first paragraph:

The risk resulting from natural hazards is not just due to the hazards themselves, but also whether human activities are located and operated in ways which make them vulnerable to those hazards.⁶⁵

iii. Amend the final sentence of the second paragraph as follows:

For example, flooding can affect Otago's main urban centres causing damage to housing and business disruption, and ~~agriculture~~ primary production⁶⁶ can be disrupted in Otago's floodplains (including⁶⁷ lower Clutha, Lower Waitaki⁶⁸ and Taieri).

iv. Amend the final sentence as follows:

Coastal erosion is an ~~risk~~ issue⁶⁹ in Waitaki District, Dunedin City and along the Clutha River Delta, ~~potentially~~⁷⁰ affecting communities and *infrastructure* near the coast.

c. In the Environmental impact snapshot, amend the second sentence as follows:

⁶³ 00239.020 Federated Farmers

⁶⁴ 00206.080 Trojan, 00411,099 Wayfare

⁶⁵ 00137.033 DOC

⁶⁶ 00140.010 Waitaki DC

⁶⁷ 00239.020 Federated Farmers

⁶⁸ 00140.010 Waitaki DC

⁶⁹ 00140.010 Waitaki DC

⁷⁰ 00140.010 Waitaki DC

Seismic events result in liquefaction of land and associated soil disturbance, elevated sea levels and associated flooding, potential permanent inundation and coastal⁷¹ erosion.

d. In the Economic impact snapshot:

i. Add the following sentence at the end of the subsection:

Whilst the community and its businesses have substantial resilience to severe weather events and supply chain disruptions, there can be cumulative impacts from repeated events.⁷²

e. In the Social impact snapshot:

i. Amend the first sentence as follows:

Social impacts can be direct (e.g. physical destruction of housing or transport route, human physical harm) but equally important are indirect ~~and secondary~~⁷³ impacts of disasters, including the destruction of communities and the negative impacts on people.

ii. Add the following line to the end of the first paragraph:

There can also be cumulative impacts from events on physical and mental health.⁷⁴

3.8.5. SRMR-I2 – Climate change is likely to impact our economy and environment

3.8.5.1. Introduction

117. SRMR-I2 considers the potential impacts of climate change on the Otago Region. The issue addresses the tensions and risks climate change poses to environmental, economic, and social wellbeing.

3.8.5.2. Submissions

118. A total of 28 submissions were received, including one from CIAL which requests that SRMR-I2 be retained as notified,⁷⁵ and the remaining submissions seeking a range of general and specific amendments which are summarised below.

Statement

119. DOC recognises that particular reference is given to South Dunedin in the Statement, but considers the Taieri Plains, including the nationally important Lakes Waipori and Waiholā

⁷¹ 00223.040 Ngāi Tahu ki Murihiku

⁷² 00239.020 Federated Farmers

⁷³ 00101.006 Toitū Te Whenua

⁷⁴ 00239.020 Federated Farmers

⁷⁵ 00307.002 CIAL

wetland are also at risk from changes in sea level.⁷⁶ They therefore seek to insert the following text:

...have been identified as being at risk, such as South Dunedin and the Taieri Plains.

120. Contact seeks amendments to recognise the critical role of Otago's renewable energy facilities in achieving New Zealand's climate change and decarbonisation requirements.⁷⁷ Similarly, Meridian considers that the potential effects of climate change on renewable electricity generation activities in the Otago region should be identified and seeks the following text amendment to the third sentence of the Statement:

...This will be compounded by stronger winds, increased temperatures and longer dry periods, which may affect the number and types of crops and animals that the land can sustain, and the potential for renewable electricity generation.⁷⁸

121. Federated Farmers seeks to amend the statement to add an additional sentence as follows or similar:

Climate change brings an increased risk of wildfire. With changing landscape use (increased forestry and afforestation) the risk of fire is increased. Another potential impact comes from increased pests and diseases associated with changing or warming climates, risking the health of livestock, vegetation and biodiversity.⁷⁹

122. The Yellow-eyed Penguin Trust also expresses concern about an increase in pests and disease as a result of climate change. They consider that changes in climate mean increased storm events and temperatures on land which increases the prevalence of diseases.⁸⁰ The Trust seeks to ensure that the gravity of climate impacts in relation to increased pests and diseases are understood.

123. Horticulture NZ and OWRUG seek to amend the statement to reference the impact climate change will have on food production systems and not to create barriers to adaptation.⁸¹

124. Waitaki DC seeks amendments to include 'Hampden Beach' as a locational reference in the climate change statement.⁸²

125. John Highton considers that 'reduced water reliability' is too vague and suggests that it specify reduced river flows instead⁸³, and suggests the inclusion of 'increased algal growth and algal blooms' as recognised hazards.⁸⁴

⁷⁶ 00137.034 DOC

⁷⁷ 00318.003 Contact

⁷⁸ 00306.015 Meridian

⁷⁹ 00239.021 Federated Farmers

⁸⁰ 00120.015 Yellow-eyed Penguin Trust

⁸¹ 00236.023 Horticulture NZ, 00235.028 OWRUG

⁸² 00140.011 Waitaki DC

⁸³ 00014.004 John Highton

⁸⁴ 00014.005 John Highton

Context

126. Federated Farmers considers there is information missing from the text and seeks amendments to include the following text:

Rainfall and temperature change may result in drier soils and changes to river flow (low flow and floods), as well as increased occurrence of slips/landslides. Sea level rise will have impacts on coastal communities, infrastructure and habitats, while the risk of wildfire will also increase. Changing climate also risks increased biosecurity issues of increased plant, fungal and animal pests and diseases (e.g. facial eczema), as well as disease vectors (e.g. Mosquitos).⁸⁵

127. OWRUG and Horticulture NZ consider the Context would be improved by noting that the region has an opportunity to reduce emissions including through land use change and seek the following amendment:

The rate of future climate change depends on how fast greenhouse gas concentrations increase. The region has an important role to play to reduce emissions including through land use production system adaptation and change.⁸⁶

Environmental

128. OWRUG raises concern that incentivisation of plantation forestry may reduce water flows into rainfall dependent catchments and seeks recognition of this risk.⁸⁷ No specific wording is provided.

129. Forest and Bird seeks amendments to the second paragraph to capture the issues related to hard protection structures and other infrastructure which impairs the ability for coastal habitats and ecosystems to migrate.⁸⁸ No specific wording is provided.

130. Fish and Game seeks clarity regarding reference to 'native ecosystems' and related terms. They consider the focus on 'native' species and ecosystems unnecessarily and inaccurately narrows the scope of the issue and seeks amendments to remove the word 'native' throughout SRMR-I2 text.⁸⁹ They also seek an additional sentence in the Environment section which reads:

Human adaptation to climate change, such as building or expanding dams or flood protection schemes, may impose adverse impacts upon ecosystems in addition to those imposed by climate change itself.⁹⁰

131. QLDC highlights that climate change is likely to have impacts on the visual appearance and recreational enjoyment of Otago's environment and seeks reference to such effects.⁹¹

⁸⁵ 00239.021 Federated Farmers

⁸⁶ 00235.029 OWRUG, 00236.023 Horticulture NZ

⁸⁷ 00235.031 OWRUG

⁸⁸ 00230.023a Forest and Bird

⁸⁹ 00231.023 Fish and Game

⁹⁰ 00231.024 Fish and Game

⁹¹ 00138.003 QLDC

132. John Highton suggests the inclusion of ‘increased algal growth and algal blooms’ as recognised hazards in the third paragraph.⁹² With reference to the final paragraph, John Highton considers the effects of climate change and the impacts of melting glacier ice shelves on lakes and zooplankton need to be recognised and seeks amendments accordingly.⁹³

Economic

133. Federated Farmers seeks insertion of the following text in the ‘Regional Industry’ subsection to recognise that poor climate change response management can also have impacts:

Some of the responses to mitigate climate change such as increased afforestation for carbon offsetting, lead to other risks, such as further drying out of catchments, increased risk of wildfire, fragmentation of pastoral systems, increased pest numbers, and a resultant decline in rural communities.⁹⁴

134. NZ Pork requests that indoor and outdoor pig farming is added to the list of key industries likely to be impacted by climate change.⁹⁵
135. OWRUG and Horticulture NZ both seek similar amendments to provide for diversification of horticulture⁹⁶ or different farm systems⁹⁷ to support reduction in emissions while increasing food production.
136. QLDC seeks to include reference to the effects of climate change on Otago’s significant tourism industry.⁹⁸ Additionally they consider that while the impacts of flooding from climate change on the built environment has been given attention, equal weight needs to be given to *‘the range of natural hazards that are likely to be exacerbated by the effects of climate change, such as fire, wind, and mass movement (i.e. debris flow and landsliding)’*.
137. Toitū Te Whenua considers the notified provisions are overly focused on natural hazards that result from climate change and seeks more context surrounding the need to future proof regional industries.⁹⁹ They also seek commentary on the potential of increased climate induced urban drift.¹⁰⁰
138. Trustpower considers SRMR-I2 should outline the national commitments to climate change and the role of renewable electricity generation activities and seeks the following additional paragraph:

A number of hydroelectric power schemes are located within the Otago Region. The current Government has set a target for increasing renewable electricity to

⁹² 00014.005 John Highton

⁹³ 00014.006 John Highton

⁹⁴ 00239.021 Federated Farmers

⁹⁵ 00240.006 NZ Pork

⁹⁶ 00236.023 Horticulture NZ

⁹⁷ 00235.030 OWRUG

⁹⁸ 00138.003 QLDC

⁹⁹ 00101.007, 00101.008 Toitū Te Whenua

¹⁰⁰ 00101.009 Toitū Te Whenua

100% by 2030. Alongside that sits New Zealand’s commitment to the Paris Climate Change Agreement – to reduce greenhouse gas emissions to 30% below the 2005 levels, and a domestic ‘net zero’ commitment of all greenhouse gas emissions (except methane) by 2050. For these commitments to be achieved, rapid electrification of the economy will be required, and this will require a significant increase in the installed capacity of emissions free renewable electricity generation.¹⁰¹

139. Trojan and Wayfare both consider the notified text is misleading as it suggests ‘snow days’ are the same as ‘skiing days’. They provide reference to the MfE website which does not link reduced snowfall to skiing and seek the following amendments:

For Some tourism activities may be affected. For example, the amount of natural snowfall is expected to reduce meaning ski fields will be more reliant on snowmaking, there will be negative impacts on skiing where the number of snow days experienced annually could decrease by as much as 30 – 40 days in some parts of the region. The duration of snow cover is also likely to decrease, particularly at lower elevations. This will also lead to reduced summer waterflows.¹⁰²

140. Wise Response does not support references to economic benefits resulting from climate change and seeks to remove the associated text suggesting there will be benefits.¹⁰³

Social

141. One submission raises concern that climate change responses may be unfairly distributed and seeks the following additional text:

There is also the potential for inequality between rural and urban dwellers, as responses to climate change may focus on the areas with greatest population density, and climate change mitigation strategies such as increased afforestation for carbon offsetting may directly impact rural communities.¹⁰⁴

General

142. Four submitters seek to amend the title. Three of those submitters seek to amend the title as follows:

“SRMR-I2 – Climate change ~~is likely to~~ will impact our economy and environment”¹⁰⁵.

143. Ngāi Tahu ki Murihiku seeks to amend the title as follows:

SRMR-I2 – Climate change is likely to impact our ~~economy~~ environment and ~~environment~~ ~~economy~~ well-being”¹⁰⁶.

¹⁰¹ 00311.005 Trustpower Limited

¹⁰² 00206.082 Trojan, 00411.101 Wayfare

¹⁰³ 00509.025 Wise Response

¹⁰⁴ 00239.021 Federated Farmers

¹⁰⁵ 00236.023 Horticulture NZ, 00235.028 OWRUG, 00230.023a Forest and Bird

¹⁰⁶ 00223.041 Ngāi Tahu ki Murihiku

144. WAI Wanaka highlights that the pORPS does not mention the Government's Climate Emergency declared in December 2020 and seeks its acknowledgement as they consider this is likely have an impact on the Council's policy and planning.¹⁰⁷

3.8.5.3. Analysis

Statement

145. I agree with Meridian that it is appropriate to acknowledge the effects of climate change on renewable electricity generation activities and I recommend adopting their submission regarding this. However, I do not agree that is necessary in an overview of the issue to discuss the role of Otago's renewable energy facilities in achieving New Zealand's climate change and decarbonisation requirements, and do not recommend adopting Contact's submission.
146. Several submissions seek additional references to the impacts of climate change, including wildfire and increased pests and diseases. I do not consider this level of detail is necessary for a statement of the issue. These matters are covered more generally in the Statement, and also acknowledged in the Context.
147. In regard to the Horticulture NZ and OWRUG submissions seeking reference to the impacts on food production systems, this is covered more generally in the Statement by the sentence acknowledging that climate change may affect the number and types of crops and animals that the land can sustain. I do not consider that more detail is needed and do not recommend adopting this submission. I do not recommend adopting their submission seeking an additional statement about not creating barriers to adaptation as I do not consider that this is a good fit for the issues statement. In my opinion this is more relevant to the response to climate change, to be addressed in other parts of the pORPS.
148. For the reasons discussed in the Introduction to this report, I do not recommend adopting the submissions from DOC and Waitaki DC seeking to add more locational examples to the Statement.
149. I do not agree with John Highton that the reference to 'reduced water reliability' should be changed to 'reduced river flow'. Use of the phrase 'reduced water reliability' is deliberate because it covers issues associated with reduced water volumes and access to water that are not adequately captured by only a reduced river flow. Consequently, I recommend rejecting this submission.

Context

150. I agree in part with the additional text suggested by Federated Farmers, adding context across a broad range of climate change related topics. The amendment seeks to provide detail on additional climate change scenarios and hazards such as the effects on soils, coastal environment, and the threat of wildfires. These are useful additions that provide additional context and I recommend accepting the amendment in part, excluding the

¹⁰⁷ 00222.006 WAI Wanaka
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suggested examples at the end of the paragraph. This also addresses some of the amendments sought for the Statement.

151. In regard to the OWRUG and Horticulture NZ submissions about reducing emissions through land use change and adaptation, I do not consider that references to solutions to climate change are appropriate in the issues statement.

Environmental

152. I agree with Fish and Game that the reference to native ecosystems in the first sentence narrows the focus unnecessarily, and that very few ecosystems do not have introduced species intertwined with natives. I recommend that the submission to remove the word 'native' from the first sentence be adopted. However, I consider that the reference to native species in the second sentence is appropriate, as it is referring to the threats to native species from invasive species and pests, and in this context, it is intentional to refer to native species only. Consequently, I do not recommend that the word 'native' be removed from the second sentence of the first paragraph.
153. I also agree with Fish and Game's suggestion of an additional sentence at the end of the Environment section acknowledging that human adaptation to climate change may result in further environmental harm, particularly flood protection schemes and expansion of dams. I agree it is important to consider the effects of climate change mitigation and the potential effects these may have on the environment. I recommend adopting this amendment to like effect.
154. I agree with QLDC that climate change may have an impact on the visual appearance and recreational enjoyment of Otago's environment and recommend adopting this submission. However, I consider that this amendment is most appropriate in the Social impact snapshot rather than the Environmental impact snapshot.
155. The remaining submissions from Forest and Bird, John Highton and OWRUG seek to add a level of detail that is not appropriate for the issues statement in my opinion, or are about solutions and responses to climate change, rather than the issue of climate change itself, and I do not recommend adopting these submissions.

Economic

156. The risks associated with adaptation and response to climate change are acknowledged in the Environmental impact snapshot and I do not consider that they need to be raised again in the economic impact snapshot, as requested by Federated Farmers.
157. The second sentence of the Economy impact statement identifies the key industries likely to be impacted by climate change. Without further information about why pig farming will be a key industry that is impacted, I do not recommend adopting NZ Pork's submission to add pig farming to the list of key industries.
158. The impacts of climate change on tourism are acknowledged in the second sentence of the Economic impact snapshot and I do not consider that further detail about this is necessary as part of this overview of the issue. Therefore, I do not recommend adopting QLDC's submission to add more detail about impacts on the tourism industry. In regard to their submission seeking more detail about the impacts of climate change on natural

hazards, this is covered in the issue statement for hazards, and in my opinion does not need to be repeated here.

159. In regard to Toitu Te Whenua's request for commentary about the potential for climate induced urban drift, in the absence of more detail about this, and suggested amendments, I do not recommend adopting this submission.
160. In regard to the submission by Trustpower, I do not agree that it is necessary to acknowledge the role of Otago's hydroelectric schemes in meeting national targets for renewable electricity in the issues statement as this is more relevant to the solutions to the issue rather than the issue itself. The impact of climate change on renewable electricity generation is acknowledged in the Statement.
161. I do not recommend adopting the suggested amendments to the final paragraph of the 'regional industry' sub-section of the economic impact snapshot, which discusses reduced snowfall. While I agree that 'snow days' are not necessarily the same as 'skiing days', I consider that the existing statement is appropriate as a general statement that there could be less snow, and consequently an impact on skiing. In addition, the second part of that paragraph is about the impacts of less snow on water flows, rather than skiing, and I do not agree that it is appropriate to delete that sentence.
162. Wise Response seeks to remove references to the economic benefits resulting from climate change. However, without further information as to why they disagree that there will be benefits, I do not recommend adopting this submission.

Social

163. The only submission on the Social impact sub-section seeks to add a statement about the potential for inequality between rural and urban dwellers as a result of responses to climate change. I do not consider that this level of detail is appropriate for the statement of issues, or that this is a matter that the ORPS can address.

General

164. I agree with the submitters requesting an amendment to the title to state that climate change will impact our economy and environment and recommend adopting these submissions.
165. Ngāi Tahu ki Murihiku seeks to remove the reference to climate change impacting the economy. Considering that climate change will impact the environment and social well-being, I consider that it is safe to include a reference to economic impact due to the integrated relationship the economy has with both the environment and social wellbeing. I do not recommend accepting this amendment.
166. Finally, regarding the request to reference to the Government's Climate Emergency declaration (2020), without further detail about how this will assist in defining the issue in the Otago region I do not recommend adopting this submission.
167. I note that the Impact Snapshot includes an abbreviation for the Otago Climate Change Risk Assessment Phase 1 Report: OCCRA report. This abbreviation is, however, not used

anywhere in the document so I recommend its deletion as an alteration of minor effect in accordance with clause 16 (2) of Schedule 1 of the RMA.

3.8.5.4. Recommendation

168. I recommend the following amendments:

a. Amend the title of SRMR-I2 as follows:

SRMR-I2 – Climate change ~~is likely to~~ will¹⁰⁸ impact our economy and environment.

b. In the Statement, amend the third sentence as follows:

This will be compounded by stronger winds, increased temperatures and longer dry periods, which may affect the number and types of crops and animals that the land can sustain, and the potential for renewable electricity generation.¹⁰⁹

c. In the Context, add the following paragraph to the end of the subsection:

Rainfall and temperature change may result in drier soils and changes to river flow (low flow and floods), as well as increased occurrence of slips/landslides. Sea level rise will have impacts on coastal communities, infrastructure and habitats, while the risk of wildfire will also increase. Changing climate also risks increased biosecurity issues of increased plant, fungal and animal pests and diseases.¹¹⁰

d. In the Impact snapshot, delete “OCCRA report”,

e. In the Environmental impact snapshot:

i. Remove the word ‘native’ from the first sentence as follows:

For terrestrial ~~native~~¹¹¹ ecosystems and species, higher frequency of severe events (e.g. high/low temperatures, intense rainfall, drought, fire weather) could reduce *resilience* of ~~native~~¹¹² terrestrial ecosystems and species over time with adverse impacts on biodiversity.

ii. Add the following sentence to the end of the subsection:

Human adaptation to climate change, such as building or expanding dams or flood protection schemes, may give rise to adverse impacts

¹⁰⁸ 00236.023 Horticulture NZ, 00235.028 OWRUG, 00230.023a Royal Forest and Bird Protection Society of New Zealand Incorporated

¹⁰⁹ 00306.014 Meridian

¹¹⁰ 00239.021 Federated Farmers

¹¹¹ 00231.023 Fish & Game

¹¹² 00231.023 Fish & Game

on ecosystems, in addition to those imposed by climate change itself, and may also exacerbate the original risk.¹¹³

- f. In the Social impact snapshot, add the following sentence to the end of the first paragraph:

Additionally, the visual and recreational values of Otago's landscape may be adversely impacted by the effects of climate change.¹¹⁴

3.8.6. SRMR-I3 – Pest species pose an ongoing threat to indigenous biodiversity, economic activities and landscapes

3.8.6.1. Introduction

169. SRMR-I3 considers pest species in Otago and the significant impacts these species have on the region's environment, economy, and social wellbeing.

3.8.6.2. Submissions

170. A total of 21 submissions were received seeking a broad range of amendments across the whole of SRMR-I3.

Statement

171. A number of submitters seek amendments to the Statement to provide more detail about pest species in the region and the risks they pose.

172. Federated Farmers seeks the following amendments or similar to provide further detail about pest species and their impacts:

- Amend the first sentence as follows:
Pest species can be found throughout Otago, from alpine to marine environments. In Otago, pest species include organisms from terrestrial species, diseases, to freshwater and marine aquatic pest species. For example, Rabbits are changing Central Otago's landscape, eroding soils and affecting agriculture.¹¹⁵; and
- Amend the third sentence as follows:
Wilding conifers threaten high country and tussock grassland, changing the landscape and impacting on primary production, soil quality, recreational values, hydrological and conservation values.¹¹⁶

173. Horticulture NZ and OWRUG seek an amendment to acknowledge that climate change will compound the impacts of existing pests and provide opportunities for new pests to

¹¹³ 00231.024 Fish & Game

¹¹⁴ 00138.003 Queenstown Lakes District Council

¹¹⁵ 00239.022 Federated Farmers

¹¹⁶ 00239.022 Federated Farmers

establish themselves, and the impact this will have on food production and supply. They seek the addition of the following sentence at the end of the Statement:

Climate change will compound the impacts of existing pests and provide opportunities for new pests to establish themselves due to changed conditions potentially threatening food production systems and food supply.¹¹⁷

174. NZ Pork seeks an amendment to note that pest species pose a risk to biosecurity and food production¹¹⁸.

175. OWRUG seeks the following addition to the third sentence of the Statement to recognise the risk that wallabies pose in the Otago Region:

For example, rabbits are changing Central Otago's landscape, eroding soils and affecting agriculture. Wallabies are an increasing risk with incursion beyond their containment zone and illegal liberations resulting in an expanding range within Otago, particularly Waitaki, Central Otago and Queenstown Lakes.¹¹⁹

Context

176. Federated Farmers seeks two amendments to the Context. They note that using the word invertebrate as a catch all term for diseases like foot and mouth, and pine needle disease does not work, given that foot and mouth is a virus. They seek an amendment to clarify the terminology in relation to this. In addition, they seek acknowledgement of the impact on rural communities and economies. The following amendments are sought:

- Amend the first sentence as follows or similar:
Otago's landscape, water, and climate support many organisms ~~plants and animals~~ considered to be pests. This includes weeds, vertebrate pests (e.g. rabbits), invertebrate pests, and diseases (e.g. foot and mouth disease, pine needle diseases)), ...
- Amend the second sentence of the fourth paragraph as follows:
Strategy priorities provide for protection of indigenous biodiversity, protection of landscape, recreation, cultural and amenity values and minimising the impact on agricultural production and rural communities and economies.¹²⁰

Environmental

177. Federated Farmers seeks a number of amendments to improve readability, add reference to pest impacts on waterways, note the cost of weed control to New Zealand's pastoral, arable and forestry sectors and include the impacts on soil nutrient cycling in the wilding pines example.¹²¹

¹¹⁷ 00236.024 Horticulture NZ, OWRUG 00235.033

¹¹⁸ 00240.007 NZ Pork

¹¹⁹ 00235.033 OWRUG

¹²⁰ 00239.022 Federated Farmers

¹²¹ 00239.022 Federated Farmers

178. Ngāi Tahu ki Murihiku requests that the Environmental impact snapshot recognises that wild goats are impacting on culturally significant lands and taoka species in parts of the region in a similar manner to deer and wallabies.¹²²

Economic

179. Federated Farmers seeks a number of amendments to the Economic impact snapshot to:
- Add 'lost animal production' to the first sentence about economic losses.
 - Add reference to weeds impacting on the quality of leather.
 - Acknowledge the impact of biosecurity failure on primary sector export markets.
 - Clarify that the primary sector affected by weeds includes pastoral, arable and forestry.¹²³
180. Meridian seeks an amendment to the final sentence to replace the words 'power systems (e.g. generation penstock, gates, valves, surge tanks, transmission lines)' with 'renewable electricity generation activities'.¹²⁴
181. NZ Pork seeks an amendment to identify an additional regionally significant value and resource management issue relating to Otago's food production capacity and to note that the effects of pests and biosecurity on primary production extend beyond economics.¹²⁵
182. OWRUG seeks an amendment to refer to the food and fibre sector instead of agriculture in both the Environmental impact snapshot and throughout the whole of the pORPS.¹²⁶
183. Wayfare seeks to amend the third sentence of the third paragraph as follows:
- Weeds, including didymo and lake snow can also adversely impact infrastructure, for example...¹²⁷

Social

184. Federated Farmers seeks to amend the Social impact snapshot as follows or similar:
- Recreation values can be impacted through loss of amenity, access or landscape values. Pests can also cause human health problems and have a related economic cost. For example, some weed pollens can induce asthma and cause allergies (e.g. hay fever). Zoonoses (bacterium, viruses, parasites, prions) can result in diseases being transferred from animals to humans and include, for example, leptospirosis and campylobacter. These diseases also have costs in terms of employee absence from work and necessary disease treatment.¹²⁸

¹²² 00223.042 Ngāi Tahu ki Murihiku

¹²³ 00239.022 Federated Farmers

¹²⁴ 00306.016 Meridian

¹²⁵ 00240.007 NZ Pork

¹²⁶ 00235.034 OWRUG

¹²⁷ 00411.103 Wayfare

¹²⁸ 00239.022 Federated Farmers

185. OWRUG¹²⁹ and Horticulture NZ¹³⁰ seek amendments to recognise the impact that pests and biosecurity incursions have on food production, supply and security.

General

186. A range of general submissions were received on SRMR-I3 including a submission from Fish and Game supporting the SRMR section and requesting that it be retained as notified.¹³¹ Other submissions seek specific amendments throughout SRMR-I3.
187. Beef + Lamb and DINZ support the SRMR section in part, but request that the issue be amended to recognise and support the pest management measures already being implemented by private landowners. They consider that landowners play an integral part in pest management and recognition of this helps validate the investment and efforts made and portrays the issue as something that benefits from collective input to ensure buy in from the public.¹³² No specific wording is provided.
188. Horticulture NZ and OWRUG seek explicit acknowledgment and discussion of how pests will impact food production and food security, particularly the food and fibre sectors including amendments to the issue title and throughout SRMR-I3 to add reference to food production and food security.¹³³
189. A number of submitters seek changes in relation to pest species as follows:
- Port Blakely seeks to change the reference from 'wilding pines' to 'wilding conifers' whereas Wayfare seeks to change it from 'wilding pines' to 'wilding tree species'¹³⁴.
 - OWRUG seeks to include reference to wallabies throughout SRMR-I3.
 - Toitū Te Whenua seeks to acknowledge that in some cases pest species can be native and that the economic and social values may also be adversely affected by undesirable native species such as *Coriaria arborea* or *Wiseana cervinata*.¹³⁵
 - Wise Response seeks to include coastal marine pests in the issue¹³⁶
190. Additionally, Toitū Te Whenua seeks commentary on how pest species may affect the abiotic environment (the non – living part of the ecosystem)¹³⁷ and landscapes¹³⁸ and acknowledgement of the impacts of poor practice and land use change on pest species.¹³⁹ No specific wording is provided.

¹²⁹ 00235.033 OWRUG

¹³⁰ 00236.024 Horticulture NZ

¹³¹ 00231.025 Fish and Game

¹³² 00237.009 Beef + Lamb and DINZ

¹³³ 00236.024 Horticulture NZ, 00235.032 OWRUG

¹³⁴ 00033.002 Port Blakely, 00411.102 Wayfare

¹³⁵ 00101.011 Toitū Te Whenua

¹³⁶ 00509.026 Wise Response

¹³⁷ 00101.011 Toitū Te Whenua

¹³⁸ 00101.012 Toitū Te Whenua

¹³⁹ 00101.010 Toitū Te Whenua

191. Yellow-Eyed Penguin Trust seeks to ensure that the gravity of climate impacts and increased pests and diseases are understood (particularly for already declining endemic species).¹⁴⁰

3.8.6.3. Analysis

Statement

192. I agree with the amendment sought by Federated Farmers to provide further detail about the impacts of pests on primary production. Without supporting evidence about the impacts of pine trees on soil acidity I do not recommend adding a reference to the impacts of wilding conifers on soil quality. I do not agree that their suggested amendment to the first sentence improves clarity, and consider that the matters that they seek to add are captured more generally in the first sentence of the statement, and by the examples given in the Statement.
193. I agree with OWRUG that wallabies are of increasing concern in Otago and I agree that a reference in the statement to reflect this adds regional context.
194. I do not agree that the impacts of climate change on pests needs to be added to SRMR-I3 as this is already covered in SRMR-I2 which outlines the issue of climate change in the region.
195. The impacts of pest species on biosecurity and food production are acknowledged in the Environmental and Economic impact snapshots. Therefore I do not consider that it is necessary to add reference to this in the Statement, as requested by NZ Pork.

Context

196. In my opinion some of the amendments sought by Federated Farmers to the first sentence do assist in correcting the terminology in relation to pests and I recommend adopting these amendments in part. I do not consider that any amendments to the second sentence of the fourth paragraph are necessary as it is implicit that any impacts on agricultural production will impact on rural communities and economies.

Environmental

197. Federated Farmers seeks amendments to the environmental section of SRMR-I3 to provide additional references to the impact of weeds on waterways, spread of disease, impacts of weeds, and impacts on stock and soil. It is recommended to adopt the proposed amendments in part, with the addition of the word 'waterways' in the third sentence. In my opinion the reference to the costs of weeds is at a national level and not appropriate in the regional context, and the impact on stock welfare and production is not the appropriate focus of the environmental subsection, and I do not recommend adopting these amendments.

¹⁴⁰ 00120.016 Yellow – eyed Penguin Trust
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198. I agree that it is appropriate to acknowledge the impact of wild goats on culturally significant land and taoka species and recommend adopting the amendment sought by Ngāi Tahu ki Murihiku.

Economic

199. I consider that some of the amendments sought by Federated Farmers add more contextual value. In particular the addition of references to the impacts of pest species on animal production and animal and leather quality and I recommend accepting these amendments. I do not recommend adopting the section about the impacts on the export market because this theme is already covered broadly in the first paragraph of the economic subsection. I do not agree that it is necessary to clarify that the primary sector affected by weeds include the pastoral, arable and forestry sectors, and consider that the reference to the cost to the New Zealand economy is the appropriate level of detail.
200. In relation to the other amendments sought I agree that the amendment sought by Wayfare provides useful clarification and recommend adopting these amendments.
201. Meridian seeks a clearer and more comprehensive way of referring to the impacts that weeds have on electricity generation activities. I agree that a more succinct reference would be clearer but consider that 'renewable electricity generation activities' suggested by Meridian is not a good fit for the sentence, which is describing infrastructure, and instead recommend referring to 'electricity generation infrastructure'.
202. Regarding NZ Pork's request to note that the effects of pests extend beyond economic impacts, I do not agree that this is appropriate in the economic impact snapshot, which is focussed on economic impacts, noting that other impacts are addressed in the Environmental and Social impact snapshots.
203. Finally, I do not consider it is necessary to refer specifically to the impacts on food and fibre production and security, as I consider that this is covered more generally by the statements in the first two paragraphs of the Economic impact snapshot.

Social

204. Federated Farmers seeks to amend the text in the social section to refer to the economic impacts of pests on human health. I agree that there can be an economic cost associated with health problems caused by pests but recommend that this is acknowledged in the economic section rather than the social section.

General

205. I agree that private landowners play an integral part in pest management, and this is acknowledged in part by the final sentence of the Context which states that collaborative partnership models are increasingly being developed in conjunction with community groups and land holders. I do not consider that any further amendments are needed to acknowledge this issue.
206. I agree that reference to 'wilding pines' should be changed to '*wilding conifers*' as this is a more comprehensive and widely used term (including in the ORC Regional Pest Management Plan 2019-2029) and is consistent with the definition in the pORPS.

207. Other general issues raised are now recommended to be addressed in SRMR-I3 or have been addressed in other issues including:
- Reference to wallabies has been added to the Statement for SRMR-I3 as submitted by OWRUG.
 - Coastal marine pests have been included in the Statement and acknowledged in the Context.
 - Climate impacts on pests and diseases are addressed in SRMR-I2.
208. In regard to native pest species, I do not consider that it is necessary to specifically reference native pest species and note that the two native species referred to by Toitu Te Whenua are not listed as pests in the Otago Pest Management Plan 2019-2029.
209. In regard to Toitū Te Whenua's submission seeking amendments about the impacts on the abiotic environment, and landscapes, the submitter has not provided any drafting or suggestions, and I am unsure what amendments would satisfy the concerns. Therefore, I do not recommend accepting these submission points.

3.8.6.4. Recommendation

210. I recommend the following amendments:

a. In the Statement:

i. Amend the first paragraph as follows:

...

Wallabies are an increasing risk with incursion beyond their containment zone and illegal liberations resulting in an expanding range within Otago, particularly Waitaki, Central Otago and Queenstown Lakes.¹⁴¹ *Wilding conifers* threaten high country and tussock grassland, changing the landscape and impacting ~~on~~ primary production¹⁴² recreational, hydrological and conservation values. Aquatic pests and weeds such as didymo, lake snow and *lagarosiphon* affect our *lakes* and *rivers*. Invasive marine species affect our marine waters. Native aquatic plants are displaced, impacting ecosystem and indigenous biodiversity health and recreation activities.

b. In the Context, amend the first two sentences as follows:

Otago's landscape, water¹⁴³ and climate support many plants and animals considered to be pests. This includes weeds, vertebrate pests (e.g. rabbits), invertebrate pests, and diseases¹⁴⁴ (e.g. pathogenic pest diseases

¹⁴¹ 00235.033 OWRUG

¹⁴² 00239.022 Federated Farmers

¹⁴³ 00239.022 Federated Farmers

¹⁴⁴ 00239.022 Federated Farmers

(e.g. foot and mouth disease, pine needle diseases)), and *freshwater* and marine pests which are all biosecurity threats in the Otago region.

c. In the Environmental impact snapshot:

i. Amend the first paragraph as follows:

Otago is one of the most biodiverse regions in New Zealand, with high levels of endemism. It is also one of the most modified regions in New Zealand. Both plant and animal species pests have significant impacts on biodiversity. Pests can also adversely impact waterways,¹⁴⁵ natural features and landscapes.

ii. Amend the second paragraph as follows:

Vertebrate browsing pests such as rabbits, ~~and wallabies~~ and goats¹⁴⁶ cause erosion and damage to land in both introduced pastures and native tussock communities, impacting significant lands and taoka species.¹⁴⁷ Severe erosion can have adverse *effects* on *water* quality. Rats and stoats predate on native birds, while deer destroy native vegetation, and possums compete with native birds for hollows and have also been known to predate on chicks. Possums spread viruses and diseases such as bovine tuberculosis, which can have severe impacts on stock.

iii. Amend the third paragraph as follows:

... For example, ~~wilding pines-conifers~~¹⁴⁸ are a significant issue for the Otago region as well as nationally, where they threaten high country and tussock grassland, increase fire *risk*, and reduce *water* yield in *water* short catchments, impact soil nutrient cycling,¹⁴⁹ change the landscape and negatively impact recreational, hydrological and conservation values.

d. In the Economic impact snapshot:

i. Amend the first paragraph as follows:

Pests can cause economic losses because of reduction in production, quality, efficiency and or functionality. This can include lost crop or animal¹⁵⁰ production, higher *water* requirements and reductions in animal health. Weeds can affect wool quality, impact the quality of

¹⁴⁵ 00239.022 Federated Farmers

¹⁴⁶ 00223.042 Te Ao Marama

¹⁴⁷ 00223.042 Te Ao Marama

¹⁴⁸ 00033.002 Port Blakely NZ Ltd

¹⁴⁹ 00239.022 Federated Farmers

¹⁵⁰ 00239.022 Federated Farmers

leather,¹⁵¹ taint meat and milk, damage the feet of stock and, in some instances, be toxic.

- ii. Amend the last sentence of the second paragraph as follows:

Pests also adversely affect tourism through loss of landscape values (e.g. wilding ~~pin~~es~~-conifers~~¹⁵²) and *amenity values* (e.g. didymo compromising fishing) which lead to reduced visitor experiences.

- iii. Add the following sentence to the end of the second paragraph:

Human health problems caused by pests can have a related economic cost.¹⁵³

- iv. Amend the third paragraph as follows:

... Weeds, including didymo and lake snow,¹⁵⁴ can also adversely impact *infrastructure*, for example, *water* systems including irrigation, dams, and levies; ~~power systems (e.g. generation penstock, gates, valves, surge tanks, transmission lines);~~ electricity generation infrastructure¹⁵⁵ and transportation systems (e.g. *road* beds, *lake* and *river* transportation, airstrips).

3.8.7. SRMR-I4 – Poorly managed urban and residential growth affects productive land, treasured natural assets, infrastructure and community well-being

3.8.7.1. Introduction

211. SRMR-I4 considers the impacts of poorly managed urban and residential growth on environmental, economic, and social wellbeing.

3.8.7.2. Submissions

212. A total of 20 submissions have been received in relation to SRMR-I4 seeking a broad range of amendments and these are summarised below:

Statement

213. Federated Farmers considers the Statement omits discussion regarding the aged housing stock which they consider is poorly designed and unlikely to meet modern-day standards.¹⁵⁶ They seek the following relief to encourage regeneration of existing urban areas and manage greenfield urban growth:

¹⁵¹ 00239.022 Federated Farmers

¹⁵² 00033.002 Port Blakely NZ Ltd

¹⁵³ 00239.021 Federated Farmers

¹⁵⁴ 00411.103 Wayfare Group Ltd

¹⁵⁵ 00306.016 Meridian

¹⁵⁶ 00239.023 Federated Farmers

It is better to regenerate existing urban areas than it is to unnecessarily expand into rural areas.¹⁵⁷

214. Horticulture NZ generally supports the Statement's intent but considers specific reference to Cromwell's increasing urban growth is required, as this threatens high value productive land in the area.¹⁵⁸

215. Wayfare does not agree that the majority of urban growth has occurred in the 'natural landscape', but rather a modified rural landscape, and seeks the following amendments to the third sentence of the Statement:

The growth of Wanaka and Queenstown is changing the ~~natural~~ landscape.¹⁵⁹

Context

216. Beef + Lamb and DINZ generally support the SRMR-I4 Statement which focuses on urban growth encroaching onto productive soils but note the impact snapshots appear to concentrate on the effects of this issue from an urban perspective.¹⁶⁰ Given this issue impacts the whole region, they seek amendments to the Context to recognise urban growth also has an impact on rural populations. No specific wording was provided.

217. Horticulture NZ echoes the concerns of Beef + Lamb and DINZ and seeks the following text insertion to recognise productive land and rural areas:

The productive land in Otago contributes to the social and economic wellbeing of the community through production of food and other rural production-based products. Otago has areas of highly productive land which are particularly valuable for food production. The rural character of the rural area is also an attribute that contributes to the importance of the rural area. However, where development occurs in a place or manner that removes or reduces the potential to use productive land, including through reverse sensitivity effects, the productive capacity of the land is compromised and not available for the benefit of society.¹⁶¹

218. Toitū Te Whenua seeks amendments to acknowledge the drivers of urban and residential development, specifically in areas of high amenity and recreational value.¹⁶² Additionally they note that areas of high recreational value often contain important 'natural resource values'.

219. Similarly, Wayfare considers the text fails to discuss the unmodified naturalness of many parts of non-urban areas and seeks the following amendments to the last sentence of the second paragraph of the Context:

The open space and landscapes provided in rural and unmodified natural areas additionally ~~also~~ drives demand for rural residential/lifestyle living, particularly in

¹⁵⁷ 00239.023 Federated Farmers

¹⁵⁸ 00236.025 Horticulture NZ

¹⁵⁹ 00411.104 Wayfare

¹⁶⁰ 00237.010 Beef + Lamb and DINZ

¹⁶¹ 00236.025 Horticulture NZ

¹⁶² 00101.013 Toitū Te Whenua

areas with these qualities that are similarly ~~also~~ in relative proximity to urban services.¹⁶³

220. Furthermore, Wayfare considers the last sentence of the discussion adds little value to the narrative and seeks its deletion as follows:

Urban growth, especially if it exceeds *infrastructure* capacity (either through sheer pace and scale or by lack of planning) or if it occurs in a way or at a rate that mean that appropriate *infrastructure* is not provided, is lagging or is inefficient, can result in adverse impacts on the *environment*, existing residents, business and wider society. ~~Quality urban environments are those that maximise the positive aspects of urban areas and minimise the negative.~~¹⁶⁴

221. Fulton Hogan states reverse sensitivity effects from urban growth can be significant for activities such as quarrying and seeks recognition of this as follows in the final paragraph:

~~Where Urban growth, especially if it exceeds~~ *infrastructure* capacity (either through sheer pace and scale or by lack of planning) or if it occurs in a way or at a rate that mean that appropriate *infrastructure* is not provided, is lagging or is inefficient, or encroaches on lawfully established activities or land valued for primary production, can result in adverse impacts (including reverse sensitivity effects) on the *environment*, existing residents, business and wider society. Quality urban environments are those that maximise the positive aspects of urban areas and minimise the negative.¹⁶⁵

222. Ngāi Tahu ki Murihiku identifies a grammatical error in the second sentence of paragraph two and seek an amendment to remove the second parenthesis.¹⁶⁶

Environmental

223. Five submitters raise concern the notified text neglects to acknowledge the fact that urban development can lead to reverse sensitivity effects on existing or potential primary production related activities.¹⁶⁷ They also highlight that these activities can be often functionally or operationally constrained.

224. To address this issue, AgResearch and Rural Contractors NZ seek the following wording amendment to the beginning of the second paragraph:

Urban development can also lead to reverse-sensitivity effects on existing or potential ~~whereby traditional methods of pest management or the undertaking of rural~~ primary production activities in rural areas or supporting activities that have an operational need to locate in these areas (e.g. rural research, rural industry)

¹⁶³ 00411.105 Wayfare

¹⁶⁴ 00411.105 Wayfare

¹⁶⁵ 00322.005 Fulton Hogan

¹⁶⁶ 00223.043 Ngāi Tahu ki Murihiku

¹⁶⁷ 00208.004 AgResearch, 00237.010 Beef + Lamb and DINZ, 00322.005 Fulton Hogan, 00410.002 Rural Contractors NZ, 00101.014 Toitū Te Whenua

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~~cannot be deployed due to the proximity of new urban populations and the potential for adverse impacts on those populations.~~¹⁶⁸

225. Beef + Lamb and DINZ seek a number of amendments, specifically:
- Recognise the loss of productive soil to urban growth is irreversible, and that productive land is a finite resource that needs protecting,
 - Highlight the link between the loss of productive soil with loss of biodiversity, ecosystem services, natural landscapes, and amenity values,
 - Identify its rural functions as essential and highly beneficial to the regional environment.¹⁶⁹
226. Toitū Te Whenua considers the discussion of reverse sensitivity effects focuses too heavily on pest control and seeks amendments to detail other potential effects.¹⁷⁰ They highlight the impacts of noise and smell generated from agricultural operations, and the visual and noise impacts from urban sprawl in areas valued for their high landscape values.
227. Fulton Hogan recognises the term ‘rural production activities’ and ‘productive land’ is used in reference to reverse sensitivity effects and other issues associated with urban growth but seeks amendments to substitute these terms for ‘primary production’ to clarify what activities the issues relate to.¹⁷¹
228. Horticulture NZ seeks amendments to insert the following additional text to recognise the productive capacity of land:
- Urban or rural lifestyle expansion onto highly productive land removes the land resource from production, including the production of food.¹⁷²
229. Additionally, Horticulture NZ and OWURG identify that water can also be adversely affected by poorly managed urban growth and development, impairing its allocation and use and availability for food production and seek amendments accordingly.¹⁷³
230. QLDC raises concern that there is no consideration of the impact of urban growth on climate emissions and climate change, highlighting the tension between a need to increase residential housing stock and a need to meet carbon reduction targets.¹⁷⁴ They seek amendments to recognise the issue accordingly.

Economic

231. Horticulture NZ and Fulton Hogan both generally support the identification of loss of productive land as an economic impact arising from poorly managed urban growth and

¹⁶⁸ 00208.004 AgResearch, 00410.002 Rural Contractors NZ

¹⁶⁹ 00237.010 Beef + Lamb and DINZ

¹⁷⁰ 00101.014 Toitū Te Whenua

¹⁷¹ 00322.005 Fulton Hogan

¹⁷² 00236.025 Horticulture NZ

¹⁷³ 00236.025 Horticulture NZ, 00235.037 OWRUG

¹⁷⁴ QLDC (not captured on SODR)

development.¹⁷⁵ Fulton Hogan however seeks amendments to reference 'primary production' in place of 'productive land' for clarification, as discussed above.¹⁷⁶

232. Beef + Lamb and DINZ consider poor management of productive land by urban expansion can lead to issues of reverse sensitivity and compromise its existing rural function.¹⁷⁷ They also consider the economic implications of loss of productive soil on rural communities and the wider region is currently missing from the notified text. They seek amendments to:

- Acknowledge the issue of reverse sensitivity which needs to be avoided, and
- Expand the text to consider the implications of poorly managed urban growth on both urban *and* rural communities.

233. Fonterra also highlights that reverse sensitivity issues can result from poor management of urban and residential growth which can affect the viability of large-scale commercial assets (i.e. industry facilities).¹⁷⁸ They seek an additional bullet point stating:

Conflict arising from the location of incompatible activities within proximity of each other, including the potential for reverse sensitivity effects on the continued operation and growth of regionally significant industry.

234. QLDC considers references to affordable housing in Otago does not reflect the realities for the Queenstown Lakes District community and seeks amendments to draw attention to the increasing housing affordability challenges.¹⁷⁹

Social

235. Horticulture NZ and OWURG consider the loss of productive land is not just an economic issue, but also has social impacts on food production and food security. They seek insertion of the following text:

The loss of productive land (either directly though building on it, or indirectly though reverse sensitivity effects) affects the production of food and food security and hence the health needs of people.¹⁸⁰

236. Beef + Lamb and DINZ raises concern the focus of the text concentrates on the effects of urban development on urban populations and highlight the loss of productive land to urban development has social impacts on rural communities.¹⁸¹ They seek amendments to expand the text to discuss the implications of urban development on rural communities and the wider region. No specific wording is provided.

¹⁷⁵ 00236.025 Horticulture NZ, 00322.006 Fulton Hogan

¹⁷⁶ 00322.006 Fulton Hogan

¹⁷⁷ 00237.010 Beef + Lamb and DINZ

¹⁷⁸ 00213.016 Fonterra

¹⁷⁹ 00138.004 QLDC

¹⁸⁰ 00236.025 Horticulture NZ, 00235.037 OWRUG

¹⁸¹ 00237.010 Beef + Lamb and DINZ

237. QLDC seeks amendments to accurately reflect the growing housing affordability challenges present in the Queenstown Lakes District, including constrained supply and diversity of housing, and the use of housing for short-term visitor accommodation.¹⁸²
238. DCC states there are safety issues in urban areas for vulnerable users and specifically make reference to serious injuries sustained on local rural and urban roads.¹⁸³ They seek amendment to recognise this issue but do not provide any further detail.

General

239. Fonterra seeks amendments to include reference to 'industry' in the SRMR-I4 heading.¹⁸⁴
240. John Highton considers an emphasis on the value of urban waterways is required throughout the pORPS and seeks specific provisions for this in SRMR-I4.¹⁸⁵

3.8.7.3. Analysis

Statement

241. In relation to the submissions from Federated Farmers and Horticulture NZ, which seek amendment to acknowledge the issues associated with urban growth expanding into rural areas, I agree in part with the suggested amendments. I agree with the Horticulture NZ submission that specific reference to Cromwell's increasing urban growth is appropriate. However, I disagree with the general statement suggested by Federated Farmers as this general statement is drafted as a response to the issue rather than an issue itself.
242. In relation to the submission from Wayfare, I disagree an amendment is required. I note that both Wanaka and Queenstown are surrounded by landscapes that are identified as outstanding natural landscapes or rural character landscapes both of which contain a level of naturalness. Therefore, I consider the notified drafting is appropriate.

Context

243. In relation to the submitters seeking amendment to better recognise that urban growth in rural areas can have a detrimental effect on highly productive land, I agree in part. I agree that the Context section largely focuses on the issue from an urban perspective and there needs to be better recognition of the effects on highly productive land. I largely support the addition proposed by Horticulture NZ and have recommended an additional paragraph be added as sought by the submitter.
244. In relation to the Wayfare submission seeking the addition of 'unmodified natural areas', I note that the definition of 'Rural area'¹⁸⁶ within the pORPS is very broad and therefore 'unmodified natural areas' are captured within this definition and the addition is not required. I agree with the Wayfare submission that the final sentence within the Context

¹⁸² 00138.004 QLDC

¹⁸³ 00139.017 DCC

¹⁸⁴ 00213.015 Fonterra

¹⁸⁵ 00014.006 John Highton

¹⁸⁶ means any area of land that is not an urban area

section is not necessary. I consider this sentence goes beyond identifying an issue as it describes the features of a quality urban environment.

245. I disagree the amendments proposed by Toitū Te Whenua and Fulton Hogan are necessary and the intent of the suggested additions are already captured within the Context section.

Environmental

246. The majority of the submissions on this section seek amendments to better acknowledge the reverse sensitivity effects that can be created by the expansion of urban development into rural areas. I agree that the reverse sensitivity effects of urban expansion could be better reflected within the issue statement. I have suggested a number of amendments to this section which reflect the amendments sought by AgResearch, Rural Contractors NZ, Beef + Lamb and DINZ, Fulton Hogan, Toitū Te Whenua. I note that the issues associated with the loss of natural landscapes and biodiversity are set out in the paragraph above.
247. In relation to the submissions from QLDC, I agree that poorly managed urban growth can lead to additional carbon emissions, and this can create tensions between the need to increase residential housing stock and the need to meet carbon reductions. I also note that this particular issue has not been picked up within the broader issues associated with climate change that are set out within SRMR-I2. As such, I have recommended an amendment to the 'Environmental' Section of SRMR-I4 to reflect this.

Economic

248. In relation to the submitters seeking greater recognition of the economic impacts associated with reverse sensitivity, I note that the effects of reverse sensitivity are already captured broadly within the notified text. Therefore, I disagree additional amendments are required.
249. In relation to the submission from QLDC, I acknowledge that the Queenstown Lakes District has housing affordability challenges that are not shared by other parts of the region. In my opinion the references to housing affordability statistics on a regionwide basis are unhelpful as they do not reflect high growth areas in the region and can quickly become out of date. As such, I have recommended deletion of this paragraph.

Social

250. In relation to the submissions seeking acknowledgement of the social effects in rural areas caused by urban expansion such as food security, I consider this issue has been adequately captured within the Economic section.
251. In relation to the submissions from QLDC and DCC, I disagree any amendments are required. I note that the submissions raise several specific issues but do not propose any suggestions as to how these issues can be resolved. Therefore, it is difficult to determine what drafting changes would resolve the submitters' concerns.

General

252. In relation to the submission from Fonterra, I disagree that ‘industry’ should be added into the SRMR-I4 heading. I consider the addition of ‘industry’ is vague as to which industries are captured by this addition.

253. Finally, in relation to the submission from John Highton, I consider this is adequately captured more generally within SRMR-I6.

3.8.7.4. Recommendation

254. I recommend the following amendments:

a. Amend the Statement as follows:

Natural resources used for urban development are permanently transformed – with the opportunity cost of removing urban activity being too high for land to revert to productive uses. Frequently, places that are attractive for urban growth also have landscape and productive values all of which must be balanced and where possible protected. The growth of ~~Wanaka~~ Wānaka¹⁸⁷ and Queenstown is changing the natural landscape. Mosgiel’s Cromwell’s¹⁸⁸ growth is occurring on some of Otago’s most highly productive soil, which removes the option for agriculture. Towns like Arrowtown, Clyde and Milton experience poor air quality in winter, while experiencing pressure to grow.

b. In the Context Section:

i. Amend the fourth paragraph as follows:

Urban growth, especially if it exceeds infrastructure capacity (either through sheer pace and scale or by lack of planning) or if it occurs in a way or at a rate that mean that appropriate infrastructure is not provided, is lagging or is inefficient, can result in adverse impacts on the environment, existing residents, business and wider society. ~~Quality urban environments are those that maximise the positive aspects of urban areas and minimise the negative.~~¹⁸⁹

ii. Add a new paragraph as follows:

In addition, the productive land in Otago contributes to the social and economic wellbeing of the community through production of food and other rural production-based products. However, where development occurs in a place or manner that removes or reduces the

¹⁸⁷ 00226.024 Kāi Tahu ki Otago

¹⁸⁸ 00236.025 Horticulture NZ

¹⁸⁹ 00411.105 Wayfare

potential to use productive land, including through reverse sensitivity effects, the productive capacity of the land is compromised.¹⁹⁰

c. In the Environmental impact snapshot:

i. Amend the first paragraph as follows:

Poorly managed urban growth can lead to additional carbon emissions, this can create tensions between the need to increase residential housing stock and the need to meet carbon reduction targets.¹⁹¹

ii. Amend the second paragraph as follows:

Urban development growth within rural areas can also lead to reverse-sensitivity effects on existing primary production activities, because urban activities can be sensitive to the effects generated by primary production activities. whereby traditional methods of pest management or the undertaking of rural production activities cannot be deployed due the proximity of urban populations and the potential for adverse impacts on those populations.¹⁹²

...

d. In the Economic impact snapshot:

i. Amend the first bullet point of the 'Economic' section as follows:

- the loss of land for primary production activities ~~productive land~~¹⁹³ (either directly though building on it, or indirectly though reverse sensitivity effects);

ii. Remove the first paragraph below the bullet points as follows:

~~In Otago, housing has been more affordable for homeowners than the NZ average in recent years, however house value growth has been higher in Otago (12.6% per annum) than the NZ average (7%) since 2017.~~¹⁹⁴

3.8.8. SRMR-I5 – Freshwater demand exceeds capacity in some places

3.8.8.1. Introduction

255. SRMR-I5 considers the issue of freshwater usage in the region and the tensions between demand, ecological capacity, economic utilities, and social wellbeing. This issue primarily

¹⁹⁰ 00236.025 Horticulture NZ

¹⁹¹ QLDC (not captured on SODR)

¹⁹² 00208.004 AgResearch, 00410.002 Rural Contractors NZ

¹⁹³ 00208.004 AgResearch, 00410.002 Rural Contractors NZ

¹⁹⁴ 00138.004 QLDC

addresses the demand for water resources rather than the quality of those water resources. Water quality is considered as a separate issue.

3.8.8.2. Submissions

256. A total of 33 submissions have been received in relation to SRMR-I5, including one submission from Forest and Bird seeking it be retained as notified.¹⁹⁵ The remaining submissions seek a broad range of amendments across the whole of SRMR-I5 and these are summarised below.

Statement

257. WDC identifies the term ‘water-short catchments’ is referred to in SRMR-I5 and other resource management issue statements within the pORPS but notes a definition for this term is lacking and seeks amendments to address this.¹⁹⁶
258. Lynne Stewart and OWRUG consider that the Statement presents a tension between environmental and economic freshwater goals in the region despite earlier commentary within the pORPs that highlights economic goals can only be met if environmental standards are first upheld. To address this matter Lynne Stewart seeks insertion of the following text to the first sentence:

In *water-short catchments*, *freshwater* availability may not be able to meet competing demands from the health and well-being needs of the *environment*, the health and well-being needs of people, and the ability of people and communities to provide for their social, economic and cultural well-being ecological capacity may not allow for consumptive uses to be met.¹⁹⁷

259. Horticulture NZ¹⁹⁸ and OWRUG¹⁹⁹ seek the following similar wording amendment to the first sentence to recognise that rural land-uses are responding to increasing food production demands and climate change:

In *water-short catchments*, *freshwater* availability may not be able to meet competing demands from the health and well-being needs of the ~~environment~~*freshwater*, the health and well-being needs of people, and the ability of people and communities to provide for their social, economic and cultural well-being. Many of these catchments are also experiencing urban growth, changes in rural *land uses*, ~~and to meet food and fibre supply demands from growing populations and the need to implement change to respond to climate change, including~~ increased demand for hydro-electric generation.

¹⁹⁵ 00230.024 Forest and Bird

¹⁹⁶ 00140.013 WDC

¹⁹⁷ 00030.001 Lynne Stewart, 00202.003 OWRUG

¹⁹⁸ 00236.026 Horticulture NZ

¹⁹⁹ 00235.038 OWRUG

Context

260. Three submitters seek amendments related to the matter of 'deemed permits'.²⁰⁰ DCC²⁰¹ and John Highton²⁰² both support reference to this issue, but raise concern there is no clear identification of this matter as a key issue for Otago. They seek amendments to the text which elaborate this issue further, noting locations most affected²⁰³ and detailing policy and plan processes involved.²⁰⁴
261. Federated Farmers considers most of Otago's catchments have evolved in their resource management practice voluntarily and references to deemed permits and a 'permissive water resource management regime' is unhelpful.²⁰⁵ They therefore seek the following specific amendments to the Context which delete references to deemed permits and further amend text to support clarification:

Freshwater, including rivers and streams, lakes, groundwater systems, and wetlands, is a finite resource, critical to the environment, society and the economy. In Otago, access to, allocation, and use of freshwater reflects current demands and historical development and associated demands. with "deemed permits" (water permits under the RMA 1991) and a permissive water resource management regime. The deemed permits originated from mining licences issued under historic mining legislation and which enable water to continue to be used for a range of uses until October 2021.

Population growth and land-use intensification in urban and rural environments can create increased demand for freshwater for human consumption, recreation, other social and cultural uses, irrigation and other economic uses. Freshwater resources in some places are reaching, or are beyond, their sustainable abstraction replenishment limits. However, there continues to be debate in the community about how historical freshwater allocations can be adjusted to achieve a balance of economic, environmental, social and cultural needs, and critical to that is the need to provide for sufficient transitioning for any required change in resource use.

On 3 September 2020, new National Environmental Standards for Freshwater (NESF) and a new National Policy Statement for Freshwater Management (NPSFM)²⁰⁶ came into force. They have a goal of improving freshwater quality within five years, reversing past damage degradation and bringing New Zealand's freshwater resources, waterways and ecosystems to a healthy state within a generation. The NPS-FM also clarified the need to provide first for the health and well-being of water bodies and freshwater ecosystems; then health and needs of people (such as drinking water); and finally then the ability of people and

²⁰⁰ 00139.018 DCC, 00014.008 John Highton, 00239.024 Federated Farmers

²⁰¹ 00139.018 DCC

²⁰² 00014.008 John Highton

²⁰³ 00139.018 DCC

²⁰⁴ 00014.008 John Highton

²⁰⁵ 00239.024 Federated Farmers

²⁰⁶ <https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management> (accessed 26 May 2021)

communities to provide for their social, economic, and cultural well-being, now and in the future.

262. Ngāi Tahu ki Murihiku believes the Context requires further discussion regarding the overallocation of water resources in Otago.²⁰⁷ They also advise the text as notified incorrectly interprets the hierarchy of obligations with the NPS-FM by referring to ‘balancing’ when legislation requires ‘prioritisation’ and seeks specific wording amendments to the second paragraph as follows:

... *Freshwater* resources in some places are reaching, or are beyond, their sustainable abstraction limits. However, there continues to be debate in the community about how historical *freshwater* allocations can be adjusted to ~~achieve a balance of~~ prioritise protection of the mauri of water bodies, meet the health needs of people, and provide for economic, ~~environmental~~, social and cultural ~~needs well-being~~.²⁰⁸

263. Wayfare also considers the use of the word ‘balancing’ is inappropriate in this context and seeks the following text amendments to the same paragraph:

Freshwater, including *rivers* and streams, *lakes*, groundwater systems, and *wetlands*, is a finite non-exclusive resource, critical to the natural environment, society and the economy. ...

... However, there continues to be debate in the community about how historical *freshwater* allocations can be adjusted to achieve a sustainable outcome ~~balance of economic, environmental, social and cultural needs~~.²⁰⁹

264. QLDC²¹⁰ and AWA²¹¹ consider the Context fails to acknowledge that different water uses impact the environment in different ways and seek wording amendments to address this omission. They also seek insertion of explanatory text to the second paragraph to highlight Council’s legislative powers in managing this issue.²¹²

Population growth and land-use intensification in urban and rural environments can create increased demand for *freshwater* for human consumption, irrigation and other economic uses. Some of these uses have largely beneficial effects on the environment and communities; in contrast, others uses of water can have unacceptable adverse effects. *Freshwater* resources in some places are reaching, or are beyond, their sustainable abstraction limits. ~~However,~~ There continues to be debate in the community about how historical *freshwater* allocations can be adjusted to achieve a balance of economic, environmental, social and cultural needs. The RMA enables regional councils to add rules to their plans to allocate

²⁰⁷ 00223.044 Ngāi Tahu ki Murihiku

²⁰⁸ 00223.044 Ngāi Tahu ki Murihiku

²⁰⁹ 00411.106 Wayfare

²¹⁰ 00138.005 QLDC

²¹¹ 00502.001 AWA

²¹² 00138.005 QLDC, 00502.001 AWA

water amongst competing activities. This approach will be adopted in the Regional Water Plan.

265. Horticulture NZ,²¹³ NZ Pork²¹⁴ and OWRUG²¹⁵ highlight the interrelationship between water and food production, noting population growth increases food supply and demand and is essential for human health. These submitters seek insertion of a reference to food production acknowledging the importance of this issue.
266. OWRUG also raises concern that the pORPS fails to acknowledge the long-term complexities of managing water use issues on the community, whilst still giving effect to the NPS-FM and recognising other climate change challenges.²¹⁶ They seek further amendments to the second paragraph as follows:

... However, there continues to be debate in the community about how historical freshwater allocations can be adjusted to achieve a balance of economic, environmental, social and cultural needs. Whatever the outcome of those debates there will need to be significant change implemented over appropriate timeframes to adjust to the new allocation regime. Managing this transition carefully will be necessary to manage the impacts that will affect the social, economic and cultural wellbeing, including mental health of the community.

267. Toitū Te Whenua raises concern that the issue of arid and semi-arid environments resulting from decisions surrounding water allocation has been overlooked and seeks discussion of this within the text.²¹⁷
268. Beef + Lamb and DINZ consider the NPS-FM and the NESF have been misinterpreted and do not agree with the statement, *‘they have a goal of improving freshwater quality within 5 years’*.²¹⁸ Rather, they understand the goal is to halt further decline of freshwater from 2017, which requires Council to identify where improvements are required and set a timeframe in which they must respond. They therefore seek deletion of the reference from the text.
269. UCAC submits comment regarding the term ‘healthy state’ as part of the goals of the NPS-FM and NESF.²¹⁹ They consider the term provides an important benchmark which needs a quantifiable and measurable definition and seeks amendments to this effect.
270. Ernslaw One²²⁰ and Rayonier²²¹ state the Context fails to recognise the controls introduced by the NESPF on plantation forestry and seeks amendments to:

- Insert reference to the NESPF,

²¹³ 00236.026 Horticulture NZ

²¹⁴ 00240.008 NZ Pork

²¹⁵ 00235.039 OWRUG

²¹⁶ 00235.039 OWRUG

²¹⁷ 00101.015 Toitū Te Whenua

²¹⁸ 00237.011 Beef + Lamb and DINZ

²¹⁹ 00220.001 UCAC

²²⁰ 00412.005 Ernslaw One

²²¹ 00020.006 Rayonier

- Detail the effect of these regulations, and
- Explain and justify where plan provisions may be more stringent.

Environmental

271. Federated Farmers considers the Environmental commentary is unnecessarily detailed and seeks the following specific text amendments to provide a more succinct dialogue:

Freshwater abstraction can reduce *water* level or flow and connections between different *water bodies*. This can negatively impact freshwater ecosystems by affecting *freshwater* habitat, water quality, water quantity, and ecological processes. ~~size and the shape and condition of the *water body*, including *bed*, *banks*, *margin*, *riparian vegetation*, *connections to groundwater*, *water chemistry* (for example by increasing concentrations of pollutants), and interaction between species and their habitat.~~²²²

272. To align SRMR-15 with the Te Mana o te Wai priority on the health and well-being of water bodies and freshwater ecosystems, Fish and Game seeks insertion of the following text:

Freshwater abstraction can reduce *water* level or flow and connections between different *water bodies*. This can negatively impact ecosystems by affecting *freshwater* habitat size and the shape and condition of the *water body*, including *bed*, *banks*, *margin*, *riparian vegetation*, *connections to groundwater*, *water chemistry* (for example by increasing concentrations of pollutants), and interaction between species and their habitat. The sum of these impacts affects the overall health, well-being and resilience of the water body. How much an ecosystem is affected by taking *freshwater* is determined by departure from natural flow regimes, taking into account magnitude, frequency, timing, duration and rate of change, and ecosystem capacity to recover.²²³

273. OWRUG considers the Environmental commentary is incomplete as it omits to acknowledge that certain catchments have been irrevocably modified with subsequent value to the community.²²⁴ They seek the following amendment:

How much an ecosystem is affected by taking *freshwater* is determined by departure from natural flow regimes, taking into account magnitude, frequency, timing, duration and rate of change, and ecosystem capacity to recover.

However, in parts of Otago the flow regime that exists has been significantly altered due to the establishment of dams for water storage and hydro-electricity generation. In many cases these structures have been in place for many years (i.e. 80 to 100 years) and have values (including environmental, social and economic values) associated with them. These factors will in some instances affect the degree to which natural flow regimes can or should be restored. Further, exotic freshwater species, particularly salmonids are widespread with Otago's waterbodies. They are valued by the community as a source of food and for their

²²² 00239.024 Federated Farmers

²²³ 00231.026 Fish and Game

²²⁴ 00235.042 OWRUG

sports fishing values. However, they also can have adverse effects on indigenous species. In some cases flow regimes induced by abstractions have protected indigenous species from predation. Changes to flow regimes will need to be carefully managed to ensure that these interactions do not give rise to significant loss of vulnerable indigenous species. These factors will in some instances affect the degree to which natural flow regimes can or should be restored.

274. Toitū Te Whenua considers the text as notified fails to consider the effect of land use change on the quality of freshwater resources available in some areas, citing high concentration levels of nitrogen from agricultural practices. They seek amendments to reflect this.²²⁵

275. Lauder Creek Farming seeks provision of a clear definition for ‘natural flow regimes’.²²⁶ The reason for this amendment has not been provided.

Economic

276. Waitaki Irrigators recognises that a future lack of freshwater can be mitigated by efficiency and innovation.²²⁷ Storage and water harvesting will be required to support climate change adaptation, not solely for urban expansion and seeks the following specific wording amendment after the third sentence:

Lack of *freshwater* can negatively impact economic output of those industries that rely on *water* in the production process. To varying degrees these impacts can be mitigated through *water* efficiency measures and innovation. New and additional freshwater storage may also be required in the future.²²⁸

277. With regard to freshwater being recognised as ‘a factor of production’ three submitters raise concern that commentary does not specifically reference:

- ‘Industry, including rural industry’,²²⁹ and
- ‘Tourism (for example water supply for visitor destinations and snowmaking).’²³⁰

Social

278. With reference to ‘*ensuring appropriate freshwater supply for human use is available as part of planned urban growth*’, FENZ consider this includes availability of water for firefighting.²³¹ They seek involvement in determining what is safe, suitable, and appropriate development from the emergency services/fire perspective.

279. Federated Farmers raises concern that the text concentrates on freshwater requirements as part of ‘urban growth’ and highlights rural communities also require ‘appropriate freshwater supply’. They seek the following amendments to the first sentence:

²²⁵ 00101.016 Toitū Te Whenua

²²⁶ 00406.002 Lauder Creek Farming

²²⁷ 00213.003 Waitaki Irrigators

²²⁸ 00213.003 Waitaki Irrigators

²²⁹ 00213.017 Fonterra

²³⁰ 00206.083 Trojan, 00411.107 Wayfare

²³¹ 00219.014 FENZ

Ensuring appropriate *freshwater* supply for human use is available as part of planned urban growth, and to support rural communities and households, is essential.

280. Trojan²³² and Wayfare²³³ seek amendments to the first paragraph to add reference to providing for people's wellbeing and to improve the readability of the sentence.

General

281. The Minister for the Environment considers the issue of over-allocation and deemed mining permits is insufficient and seeks the addition of a discussion about this issue.²³⁴ Although he does not clarify which part of the SRMR this statement relates to, I consider that it is most relevant to SRMR-I5.

282. OWRUG seeks amendments related to recognising the importance of water for food and fibre production across the Environmental, Economic and Social impact snapshots as follows²³⁵:

a. Environmental (final sentence)

... How much an ecosystem is affected by taking *freshwater* is determined by departure from natural flow regimes, taking into account magnitude, frequency, timing, duration and rate of change, species composition and ecosystem capacity to recover.²³⁶

b. Economic (first sentence)

Freshwater in the Otago region is a factor of production that directly contributes to human needs (urban *water* supply and food production), agriculture food and fibre production (including irrigation), hydro-electric power supply, and mineral extraction.²³⁷

c. Add to the Social impact snapshot

...

Many communities in Otago are heavily reliant on the food and fibre sector which generates significant economic activity, as well as providing product to both the domestic and export market. Reduction in water allocation will adversely impact on the productive capacity of the food and fibre sector with significant downstream economic consequences. These economic consequences will manifest as reduced social cohesion in small communities as people move away to find other sources of employment, or the availability of locally grown food diminishes. However, there are also opportunities for increased employment associated with the transition to new land use types that may be precipitated by

²³² 00206.084 Trojan

²³³ 00411.109 Wayfare

²³⁴ 00136.002 Minister for the Environment

²³⁵ 00235.040, 00235.041 OWRUG

²³⁶ 00235.040 OWURG

²³⁷ 00235.040 OWURG

changes to allocation regimes and/or climate change adaption. Managing this transition carefully will be necessary to manage the impacts that will arise for the social, economic and cultural wellbeing, including mental health of the community and seeking out opportunities that will improve these well-beings. In order to address these issues, providing certainty to resource users, including the food and fibre sector and a clear and integrated transition framework is necessary.²³⁸

3.8.8.3. Analysis

Statement

283. In regard to the request to add a definition for water-short catchments, I do not agree that this is necessary in relation to the issues statement. As part of providing a statement of the issue in relation to freshwater demand, I consider that the meaning of ‘water-short catchments’ is sufficiently clear. The matter of defining or identifying these catchments can be addressed at the regional plan level if appropriate.
284. The remaining submissions seeking amendments to the Statement for SRMR-5 are not appropriate in my opinion because they either seek a level of detail greater than is necessary for the SRMR chapter, or amendments that are too specific or restrictive relative to the broader terms provided in the existing narrative.

Context

285. In regard to the submissions seeking amendments to the statements about deemed permits, I do not consider that any of the requested amendments are necessary. Firstly, I consider that further elaboration on deemed permits is not required for the issues statement. The Context already acknowledges the impact that deemed permits have had on the allocation and use of water in the region and make a brief statement about their history. This is an appropriate level of detail for the issues statement in my opinion. I note that the reference to deemed permits is intended to provide historical context but given that they no longer apply (as of October 2021), it is not useful to detail specific problem areas associated with deemed permits in this body of text.
286. Equally, I do not agree with Federated Farmers that the historical context should be deleted, as it provides useful context for the current situation in Otago with respect to water allocation.
287. In regard to the other amendments to the Context sought by Federated Farmers I agree that ‘degradation’ is a more appropriate word than ‘damage’ and I recommend adopting this change. I do not consider that the other changes sought improve the wording or convey the same intent and do not recommend adopting the remainder of the submission.
288. I also consider that Ngāi Tahu ki Murihiku makes a valid point in regard to the NPS-FM hierarchy of obligations and agree that their suggested amendments more correctly

²³⁸ 00235.041 OWRUG

	interpret the prioritisation required under the Te Mana o te Wai framework. Therefore, I recommend adopting this submission.
289.	Beef and Lamb seeks to remove the reference to a five-year timeframe goal, however the goal is set out as a national direction through the NPSFM. It is not recommended to remove this reference.
290.	UCAC seeks a quantified and measurable definition for 'healthy state'. In my opinion it is more appropriate to set the parameters of what is considered a healthy state respective to specific aspects of the environment in subsequent regional plans. Any broad definition provided in the context of the existing narrative will not accurately capture all the nuances and parameters across all aspects of the environment. Therefore, it is not recommended to provide an overarching, hard definition for what constitutes a 'healthy state' at this time.
291.	Ernslaw One and Rayonier seek reference to the NESPF 2017, including an explanation of the effect of these regulations in relation to plan provisions. I do not consider that this is relevant to the issues statements and is more a matter to be taken into account when preparing the regional and district plans. I do not recommend adopting this submission.
<u>Environmental</u>	
292.	Federated Farmers seeks to delete text from the Environmental impact snapshot. In my opinion the matters they seek to delete are all relevant in terms of impacts of changing levels and flows on water bodies, and I do not recommend adopting this submission.
293.	In regard to inserting a definition for natural flow regimes, I do not consider that this is necessary to define the environmental issues in relation to water demand and is a matter that could be addressed in the regional plan.
294.	The remaining submissions on the Environmental impact snapshot seek a level of detail that is not appropriate for a statement of the issue, is already covered more generally in the existing text, or they seek amendments about solutions and responses to the issue, and I do not recommend adopting these amendments.
<u>Economic</u>	
295.	Fonterra seeks reference to 'industry' in the first sentence of the Economic impact snapshot and I agree that this is relevant, and I recommend adopting this submission.
296.	The amendment sought by Waitaki Irrigators is more relevant to solutions and responses to the issue, rather than a statement about the issue itself, and I do not recommend adopting this submission.
297.	I do not consider that any amendments need to be made in relation to the reference to tourism, as I consider that this is already covered by the first two sentences which already acknowledge water supply more generally, and freshwater assets relevant to tourism and commercial recreation.

Social

298. I agree with FENZ that freshwater supply for human use includes water for firefighting purposes, but do not consider any amendments are needed to explicitly reference this particular use, noting that no other human uses are explicitly referenced.
299. Federated Farmers seeks to add reference to freshwater being available for rural communities and households. I consider that this is adequately covered by the first sentence of the Social impact snapshot which acknowledges that an appropriate freshwater supply for human use is essential.
300. Finally, I agree with Trojan and Wayfare that reduced environmental flows can impact on people's wellbeing, but I consider that this is covered more generally by the statement about reduced environmental flows impacting on social and cultural values, and I do not consider that any amendments are necessary.
301. OWRUG's submission seeking to add a significant body of text to the social section provides some insights into potential impacts, both negative and positive, on communities as a result of less water availability. However, considering the SRMR section is issue focused, in my opinion it is not appropriate to discuss the potential benefits as it detracts from the purpose of the statement and adds no additional value. I do not recommend adopting this submission.

3.8.8.4. Recommendation

302. I recommend the following amendments:

a. In the Context:

i. Amend the final sentence of the second paragraph as follows:

However, there continues to be debate in the community about how historical freshwater allocations can be adjusted to ~~achieve a balance of~~ prioritise protection of the mauri of water bodies, meet the health needs of people, and provide for economic, environmental, social and cultural needs well-being.²³⁹

ii. Amend the second sentence of the last paragraph as follows:

They have a goal of improving *freshwater* quality within five years, reversing past ~~damage~~ degradation²⁴⁰ and bringing New Zealand's *freshwater* resources, waterways and ecosystems to a healthy state within a generation.

b. In the Economic impact snapshot, amend the first sentence as follows:

²³⁹ 00223.044 Te Ao Marama

²⁴⁰ 00239.024 Federated Farmers

Freshwater in the Otago region is a factor of production that directly contributes to human needs (urban water supply) agriculture, industry,²⁴¹ hydro-electric power supply, and mineral extraction.

c. In the Social impact snapshot, amend the first sentence as follows:

Ensuring appropriate freshwater supply for human use is available is essential, including²⁴² as part of planned urban growth ~~is essential~~.²⁴³

3.8.9. SRMR-I6 – Declining water quality has adverse effects on the environment, our communities, and the economy

3.8.9.1. Introduction

303. SRMR-I6 considers the issues associated with declining water quality on the environment, economic utility of water resources, and social wellbeing.

3.8.9.2. Submissions

304. A total of 31 submissions have been received in relation to SRMR-I6, including one submission from Forest and Bird seeking it be retained as notified.²⁴⁴ The remaining submissions seek a broad range of amendments across the whole of SRMR-I6 and these are summarised below.

Statement

305. COES²⁴⁵ and Lynne Stewart²⁴⁶ consider water extraction for irrigation purposes causes a lack of flushing and dilution of discharge, impacting water quality. They seek amendments for this to be acknowledged in the opening Statement.

306. Federated Farmers highlights the efforts of the rural communities to improve water quality and seeks greater acknowledgment of these.²⁴⁷ Specifically they seek the following wording amendment to the first paragraph:

While the pristine areas of Otago generally maintain good *water* quality, some areas of Otago demonstrate poorer quality and declining trends in *water* quality which can often be attributed to *discharges* from *land use* intensification (both rural and urban) and *land* management practices. Some areas are seeing the beginnings of a turnaround with some improving trends, but there is still much work to be done.

²⁴¹ 00213.017 Fonterra

²⁴² 00206.084 Trojan, 00411.109 Wayfare

²⁴³ 00206.084 Trojan, 00411.109 Wayfare

²⁴⁴ 00230.025 Forest and Bird

²⁴⁵ 00202.004 COES,

²⁴⁶ 00030.002 Lynne Stewart

²⁴⁷ 00239.025 Federated Farmers

307. OWRUG considers the Statement is too general and fails to recognise pest incursion and lower intensity land-use activities as contributors to deteriorating water quality and seeks amendments to the first paragraph to reflect this as follows:²⁴⁸

While the pristine areas of Otago generally maintain good *water* quality, some areas of Otago demonstrate poorer quality and declining trends in *water* quality which can be attributed to discharges from land use activities (both rural and urban), land management practices and aquatic pest species.

308. John Highton agrees that water quality has declined and considers this is in part due to the poor management of Council.²⁴⁹ He seeks amendments to reflect this.

309. Trojan²⁵⁰ and Wayfare²⁵¹ consider minor editorial amendments are required to support clarification and seek to insert 'very' as a qualifier in the opening sentence:

While the pristine areas of Otago generally maintain very good *water* quality, ...

Context

310. COES²⁵² and Lynne Stewart²⁵³ consider the extraction of water for irrigation should also be acknowledged as a contributing factor to deteriorating water quality, particularly in dryer parts of Central Otago and seek amendments to reflect this.

311. OWRUG²⁵⁴ and Horticulture NZ²⁵⁵ both support the identification of a wide range of environmental health factors and seek specific amendments to reference human 'health and' survival to support clarification of the context.

312. OWRUG also considers the notified text requires the following amendment to the last sentence in the first paragraph:

Population growth and poorly managed land-use intensification in urban and rural environments has impacted the quality of *water*, ...²⁵⁶

313. Furthermore, while supportive of references to the NPS-FM and NESF, OWRUG considers these should be elaborated on and seeks the following additional text to be included at the end of the Context:

The direction in this higher order document is significant and will precipitate changes within the Otago Region. The direction of travel required by these documents has broad community support, however the detail regarding the degree of change and over what timeframe remain as points of contention within some communities. Whatever the outcome affected communities face a period of significant change which will be very challenging and may have adverse

²⁴⁸ 00235.043 OWRUG

²⁴⁹ 00014.009 John Highton

²⁵⁰ 00206.086 Trojan

²⁵¹ 00411.111 Wayfare

²⁵² 00202.005 COES

²⁵³ 00030.003 Lynne Stewart

²⁵⁴ 00235.044 OWRUG

²⁵⁵ 00236.027 Horticulture NZ

²⁵⁶ 00235.044 OWRUG

consequences for people and communities. This transition requires careful management in order to maintain social, cultural and economic wellbeing, including mental wellbeing.²⁵⁷

314. Federated Farmers queries the use of the term, 'reverse past damage' as written in the notified text, highlighting its use is inconsistent with the NPS-FM.²⁵⁸ For accuracy and clarification they seek the following text amendment to the third paragraph:

On 3 September 2020, new National Environmental Standards (NESF) and a new National Policy Statement (NPSFM)²⁵⁹ came into force to improve *water* quality within five years; and reverse past ~~damage~~ degradation as soon as practicable, and bring New Zealand's *freshwater* resources, waterways and ecosystems to a healthy state within a generation.

315. Rayonier highlights the Context fails to recognise the controls introduced by the NESPF on plantation forestry and seeks amendments to insert reference to this and detail regarding the effect of its regulations. Additionally, they seek further explanation and justification where plan provisions may be more stringent.²⁶⁰

316. Wayfare²⁶¹ seeks the following editorial amendments to support clarification:

- a. First sentence of Context:

The health of *water* is vital for the health of the natural environment, people and the economy. ...

- b. Last sentence of first paragraph

... Population growth and land-use intensification in urban and ~~rural~~ non-urban environments has impacted the quality of *water*, increasing contamination from nutrients and sediment.

- c. Second sentence of second paragraph

... Some of the biggest adverse impacts on *water* quality in Otago are considered to come from agriculture and urbanisation, through diffuse *discharges* and point source *discharges*.

Environmental

317. COES²⁶² and Lynne Stewart²⁶³ understand that the Manuherekia River has some of the most rapidly deteriorating water quality indicators in Otago and raise concern that no mention is made of this. They seek amendments to the text to address this matter.

²⁵⁷ 00235.044 OWRUG

²⁵⁸ 00239.025 Federated Farmers

²⁵⁹ <https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management> (accessed 26 May 2021)

²⁶⁰ 00020.007 Rayonier

²⁶¹ 00411.112 Wayfare

²⁶² 00202.006 COES

²⁶³ 00030.004 Lynne Stewart

318. Additionally, in reference to the issue of sedimentation, COES²⁶⁴ and Lynne Stewart²⁶⁵ acknowledge the notified text cites urban development as a major generator of sediment into lakes and rivers in Central Otago' but they consider sediment generated from intensive agriculture is greater and seek amendments to expand the text.
319. Similarly, Rayonier considers 'pastureland or farming' also contribute to the generation of sediment not just agriculture intensification as noted in the text and seeks amendments to recognise this as a contributor before agriculture intensification.²⁶⁶
320. City Forests states including plantation forestry in the list of activities that contribute to sedimentation in Otago without qualification is inaccurate and seeks wording amendments to support accuracy and qualify that 'poorly managed' forestry harvesting 'may' contribute to sedimentation.²⁶⁷
321. Federated Farmers opposes the ordering of the paragraphs contained within the Environmental snapshot discussion, stating 'it is ideological rather than fact-based'.²⁶⁸ The submitter also notes the 'State of the Environment Surface Water Quality in Otago 2006 to 2017' report is cited but consider the wording of the pORPS does not accurately reflect this report as written.²⁶⁹ They seek the following text amendments to the first two paragraphs to improve alignment:

Despite the region's lakes and rivers being highly valued by Otago communities, reports indicate there are reasons for concern in specific areas about water quality and its trends with consequent potential impact on ecosystems and people.

Water quality across Otago is variable with some areas such as the Upper Clutha and the Taieri having excellent water quality, with other areas, such as urban streams in the Dunedin locale, intensified catchments in North Otago and some tributaries of the Pomahaka having poorer water quality. River water quality is best at river and stream reaches located at high or mountainous elevations under predominantly native vegetation cover, ~~and mostly good in the upper areas of large river catchment and outlets from large lakes.~~ These sites tend to be associated with the upper catchments of larger rivers (e.g. Clutha River/Matau - Au, Taieri River and Lindis River) and the outlets from large lakes (e.g. Hawea, Wakatipu and Wanaka).

Water quality is generally poorer in smaller low-elevation streams and coastal shallow lakes where they receive water from upstream pastoral areas or urban catchments. For example, catchments such as the Waiareka Creek (North Otago), Kāikorai Stream (Dunedin), and sub-catchments within the lower Clutha

²⁶⁴ 00202.007 COES

²⁶⁵ 00030.004 Lynne Stewart

²⁶⁶ 00020.004 Rayonier

²⁶⁷ 00024.001 City Forests Limited

²⁶⁸ Federated Farmers (not captured on SODR)

²⁶⁹ 00239.025 Federated Farmers

catchment, have some of the ~~worst~~ poorest water quality in the region. The Waikouaiti River has the best water quality of the lowland site. ...

322. With regard to stock entering water bodies, Federated Farmers notes that work to determine the state of the freshwater resource and contaminant sources is yet to be undertaken in Otago and believe citing a 'science staff survey, 2020' with no other supporting information is both inappropriate and unsatisfactory.²⁷⁰ They therefore seek deletion of the paragraph in its entirety.
323. Beef + Lamb and DINZ also seek deletion of specific references to stock access and winter grazing, highlighting these activities are regulated under the Resource Management (Stock Exclusion) Regulations 2020 and Intensive Winter Grazing Regulations under the NESF.²⁷¹
324. If not deleted in its entirety, Beef + Lamb and DINZ seek acknowledgment within the text that stock access and winter grazing are regulated under the Resource Management Stock Exclusion Regulations 2020 and National Environment Standard for Freshwater as part of the wider Essential Freshwater Package 2020.²⁷² Additionally, they consider the effects of urban development should be further described and distinguished to the same extent as agriculture.²⁷³
325. OWRUG echoes submissions which highlight the inadequacy of the text to accurately reflect the 'State of the Environment Surface Water Quality in Otago 2006 to 2017' report relied upon.²⁷⁴ They recognise the impact of aquatic pests have been overlooked in relation to water quality indicators and consider linking water quality issues to agricultural intensification is an oversimplification.²⁷⁵ They seek the following specific wording amendments:

a. Opening sentence

Despite the region's *lakes* and *rivers* being highly valued by Otago communities, reports indicate there are reasons for concern about *water* quality and its trends in some areas with consequent potential impact on ecosystems and people.

b. Second last sentence of second paragraph

... Otago's central lakes are impacted by increased population, urban development, aquatic pests and tourism demand; ...

c. Last sentence of paragraph 7

... Activities such as agricultural ~~intensification~~ land-use, mining, and forestry also contribute.

d. Paragraph 8

²⁷⁰ 00239.025 Federated Farmers

²⁷¹ 00237.012 Beef + Lamb and DINZ

²⁷² 00237.012 Beef + Lamb and DINZ

²⁷³ 00237.012 Beef + Lamb and DINZ

²⁷⁴ OWRUG (not captured on SODR)

²⁷⁵ 00235.045 OWRUG

Poorly managed Agricultural intensification land-use also contributes to nutrients (nitrogen and phosphorus) leaching into underlying *groundwater* or running off into surface *water bodies*, and can also increase the risk of *E.coli* contamination from animal waste.

326. Lloyd McCall²⁷⁶ and PWCG²⁷⁷ consider citing data taken from 'between 2006 and 2017' is outdated and seek amendments which reference the most recent water quality testing information available.

327. Horticulture NZ recognises that water is necessary to meet essential human health needs and seeks amendments to recognise health and safety issues associated with water quality, including drinking, sanitation, and food production.²⁷⁸

328. Toitū Te Whenua considers reference to 'agricultural intensification' is insufficient and seeks amendments to provide greater context to the specific agricultural activities in Otago that are driving the degradation of water quality, such as irrigation and unregulated fertiliser uses.²⁷⁹

Economic

329. Federated Farmers notes the data cited has been sourced from the United States Environmental Protection Authority and seeks amendments to draw on contextualised New Zealand data to support validity²⁸⁰ and seeks wording amendments to the first paragraph as follows:

Water pollution (from contaminants, nutrients, chemicals, pathogens and sediment) can have far-reaching *effects* potentially impacting the primary sector, tourism, property values, commercial fishing, recreational businesses, and many other sectors that depend on clean *water*.²⁸¹

330. OWRUG and Horticulture NZ consider the Economics discussion fails to acknowledge the interconnection between water pollution and human health needs and seek the following amendment to the first paragraph:

Water pollution (from nutrients, chemicals, pathogens and sediment) can have far-reaching *effects* potentially impacting tourism, property values, commercial fishing, recreational businesses, human health, food production and many other sectors that depend on clean *water*.²⁸²

331. To support decision making which does not 'sacrifice economic for environmental outcomes', Toitū Te Whenua seeks greater consideration of the economic benefits of certain activities affecting water quality.²⁸³

²⁷⁶ 00319.001 Lloyd McCall

²⁷⁷ 00207.001 PWCG

²⁷⁸ 00236.027 Horticulture NZ

²⁷⁹ 00101.017 Toitū Te Whenua

²⁸⁰ Federated Farmers (not captured on SODR)

²⁸¹ 00239.025 Federated Farmers

²⁸² 00235.046 OWRUG, 00236.027 Horticulture NZ

²⁸³ 00101.018 Toitū Te Whenua

Social

332. Federated Farmers cites data from Land, Air, Water, Aotearoa (LAWA) – River Quality which indicates water quality in Otago lakes and rivers is better than other regions and seeks the following amendments to the third sentence of the first paragraph to acknowledge this:

... Eighty-two per cent of Otago's *rivers* and *lakes* are swimmable, which is very high on a nationwide comparison. However, ~~W~~where water quality cannot support these activities, the lifestyle of those living in Otago is impacted.²⁸⁴

333. Horticulture NZ²⁸⁵ and OWRUG²⁸⁶ note the Social impacts discussion covers freshwater needs with regard to essential urban growth needs and recreational uses. Horticulture NZ seeks amendments to insert additional discussion on water as an essential human health need and its link to food production.²⁸⁷

334. OWRUG similarly seeks reference to human health needs as well as amendments to acknowledge the social and cultural benefits arising from clean water.²⁸⁸ They seek the following specific text amendments:

~~For the wider community, w~~Water is a source of kai for harvesting and food production. and Water is also a source of recreation, including swimming, fishing and water sports. Otago's *rivers*, *lakes*, estuaries and bays are important destinations for recreational use including swimming, ~~fishing~~ and *water* sports. Eighty – two per cent of Otago's *rivers* and *lakes* are swimmable. Where *water* quality cannot support these activities, the lifestyle of those living in Otago is impacted. Thriving rural communities are also supported by the use of good quality water for food and fibre production.

Where *water* quality ~~reduces~~ is degraded the taoka habitats and species supported by the water may be adversely affected and the mauri of the water reduced. and the habitats and species it supports, therefore also negatively affecting mahika kai and taoka species and places. This Loss of mahika kai and taoka species ~~constitutes~~ is a loss of Kāi Tahu culture, affecting the intergenerational transfer of knowledge handed down from tūpuna over hundreds of years; and ~~it culminates in~~ a loss of rakatirataka and mana.

335. Ngāi Tahu ki Murihiku seeks amendments which correct and clarify cultural references and seeks the following text amendment to the final sentence:

... This constitutes a loss of Kāi Tahu culture, affecting the intergenerational transfer of knowledge handed down from tūpuna over hundreds of years; and it culminates in ~~loss diminishing of rakatirataka and~~ mana.²⁸⁹

²⁸⁴ 00239.025 Federated Farmers

²⁸⁵ Horticulture NZ (not captured on SODR)

²⁸⁶ 00235.047 OWRUG

²⁸⁷ Horticulture NZ (not captured on SODR)

²⁸⁸ 00235.047 OWRUG

²⁸⁹ 00223.045 Ngāi Tahu ki Murihiku

General

336. Trojan²⁹⁰ and Wayfare²⁹¹ consider SRMR-I6 heading requires the following minor editorial amendments to support clarification and interpretation:

Declining *water* quality has adverse *effects* on the natural *environment*, our communities, and the economy.

337. Yellow-eyed Penguin Trust raises concern that SRMR-I6 fails to consider the concept of ki uta ki tai, highlighting that declining water quality has impacts on the coastal and marine environments as well as freshwater.²⁹² They seek amendments to the text to reflect this.

338. Horticulture NZ seeks amendments to link the impact snapshot to the FMU vision statements whereby innovative and sustainable land and water management practices support food production and improve resilience to the effects of climate change.

3.8.9.3. Analysis

Statement

339. Several submitters request that the issue statement is amended to include reference to other factors contributing to poor water quality, including aquatic pest species, low flows in water bodies and poor management from the Council. I note that there are many contributing factors to declining water quality in Otago and that the issue statement is a concise summary of the key influences. The submissions from COES²⁹³ and Lynne Stewart²⁹⁴ correctly identify that lower flows in waterbodies (as a result of abstraction) may exacerbate poor water quality. I note that SRMR-I6 typically describes the causes of poor water quality, and that SMRM-I5 addresses the relationship between low flows and water quality. I do not consider that SMRM-I6 needs to repeat the content of SMRM-I5, and therefore, do not recommend these submissions are accepted.

340. The relationship between pest species and water has been highlighted in SRMR-I3, and without further evidence about the particular impacts of pest species on water quality, I do not recommend accepting the submission from OWRUG²⁹⁵ to include reference to pest species as a contributor to deteriorating water quality. I also do not consider that it is appropriate to highlight the role the regional council has played in relation to the current state of water quality, over and above any other group or industry. I do not recommend accepting submissions requesting this addition.²⁹⁶

341. I consider that the request from Federated Farmers²⁹⁷ to acknowledge the efforts of the rural communities to improve water quality has merit, however the amendments sought by the submitter do not appear to achieve that outcome. The specific amendments

²⁹⁰ 00206.085 Trojan

²⁹¹ 00411.110 Wayfare

²⁹² 00120.017 Yellow-eyed Penguin Trust

²⁹³ 00202.004 COES,

²⁹⁴ 00030.002 Lynne Stewart

²⁹⁵ 00235.043 OWRUG

²⁹⁶ 00014.009 John Highton

²⁹⁷ 00239.025 Federated Farmers

sought by the submitter include a statement about water quality trends and a statement describing actions required to resolve the issue. Firstly, it is my view that it is inappropriate to include commentary about water quality trends without an evidence base. Without verification, I do not recommend this submission point is accepted. Secondly, I do not recommend accepting any submissions that include actions to resolve the issue statement. The resolution of the issue occurs through various objectives, policies and methods set out in subsequent chapters of the RPS.

342. I consider the amendment sought by Trojan²⁹⁸ and Wayfare²⁹⁹ to insert 'very' as a qualifier in the opening sentence results in a better reflection of the water quality in the pristine areas of Otago. I recommend these submissions are accepted.

Context

343. Similar to the submission on the Statement for SRMR-I6, COES³⁰⁰ and Lynne Stewart³⁰¹ consider the extraction of water for irrigation should also be acknowledged as a contributing factor to deteriorating water quality. For the reasons set out in the above section on the Statement, I recommend rejecting this submission point.
344. I recommend accepting the submissions from OWRUG³⁰² and Horticulture NZ³⁰³ where they seek reference be included to human health. This amendment represents an improvement to the description of the issue, and better aligns with known effects of poor water quality (i.e. poor water quality may impact human health without necessarily impacting on human survival).
345. I do not agree with the submission point from OWRUG³⁰⁴ requesting amendment to the last sentence in the first paragraph to quality land uses impacting the quality of water as being "poorly managed". From my understanding, the loss of contaminants to water is not always related to poorly managed land use, as there may be circumstances where certain land uses are incompatible with achieving good water quality outcomes, irrespective of whether that land use is well or poorly managed. I do not recommend accepting this submission point. In regard to OWRUG's request for more substantive additions to the context statement in relation to the NPS-FM and NESF, I consider there is merit in acknowledging that the direction in these higher order documents is significant and will result in changes in the region. However, I do not consider it is appropriate to include in an issue statement a description of the actions required to resolve the issue, or the impacts of those future actions on the community. I recommend rejecting the submission from OWRUG.³⁰⁵

²⁹⁸ 00206.086 Trojan

²⁹⁹ 00411.111 Wayfare

³⁰⁰ 00202.005 COES

³⁰¹ 00030.003 Lynne Stewart

³⁰² 00235.044 OWRUG

³⁰³ 00236.027 Horticulture NZ

³⁰⁴ 00235.044 OWRUG

³⁰⁵ 00235.044 OWRUG

346. Federated Farmers queries the use of the term, ‘reverse past damage’ as written in the notified text, highlighting its use is inconsistent with the NPS-FM.³⁰⁶ I recommend accepting the submission from Federated Farmers in part, as it provides better alignment with the requirements of the NPS-FM.
347. Rayonier highlights the Context fails to recognise the controls introduced by the NESPF on plantation forestry and seeks amendments to insert reference to this and detail regarding the effect of its regulations. Additionally, they seek further explanation and justification where plan provisions may be more stringent.³⁰⁷ As I have outlined for SRMR-15, I do not consider that it is necessary to refer to the NESPF in the issues statements, as it a matter to be taken into account when preparing the regional and district plans. I do not recommend adopting this submission.
348. Wayfare³⁰⁸ seeks several editorial amendments to support clarification of the context statement. While the amendments suggested will not necessarily change the intent of the statement, they may be inconsistent with terminology used elsewhere in the RPS. I do however recommend adopting the amendments sought by the submitter to the second sentence of the second paragraph: “... Some of the biggest adverse impacts on *water* quality in Otago are considered to come from...” . I consider that the addition of the word “adverse” appropriately qualifies the types of effects that are described in the paragraph.

Environmental

349. Federated Farmers opposes the ordering of the paragraphs, stating ‘it is ideological rather than fact-based’.³⁰⁹ I note that the order of the paragraphs in this section of the RPS is not intended to represent a hierarchy or order of priorities. I do not recommend any changes to the order of the paragraphs in response to this submission.
350. Several submitters raise concerns about the description of water quality in Otago and, in particular, how it aligns with the “State of the Environment Surface Water Quality in Otago 2006 to 2017’ report. I agree with submitters³¹⁰ that the wording used in the issue statement could better align with the report cited and recommend accepting the submissions in part. In this instance, I recommend that the wording suggested by OWRUG is adopted.
351. In response to the submitters³¹¹ that state data taken from between 2006 and 2017 is outdated, I note that this information was the best information available at the time the PORPS 2021 was prepared. I do not recommend any amendments to the references in response to these submissions. I also do not recommend including more specific examples of deteriorating water quality in the issues statement, unless that information

³⁰⁶ 00239.025 Federated Farmers

³⁰⁷ 00020.007 Rayonier

³⁰⁸ 00411.112 Wayfare

³⁰⁹ Federated Farmers (not captured on SODR)

³¹⁰ OWRUG (not captured on SODR)

³¹¹ 00319.001 Lloyd McCall; 00207.001 PWCG

- can be verified and referenced. Without these references, I do not recommend accepting the submissions from COES³¹² and Lynne Stewart³¹³.
352. Several submitters seek amendments to the paragraph describing the causes of sedimentation, either by including reference to other types of land uses or placing less emphasis on specific industry types. The submissions from COES³¹⁴ and Lynne Stewart³¹⁵ consider that sediment generated from intensive agriculture is greater and seeks amendments to reflect their understanding. Without specific information supporting this position, I do not recommend accepting this submission point.
353. In response to the submission from City Forests³¹⁶ seeking amendments to qualify that ‘poorly managed’ forestry harvesting ‘may’ contribute to sedimentation, I note that similar types of amendments could be relevant to all industry types. I do not consider it is appropriate to make amendments to place less emphasis on one industry type, over and above other industries. I recommend rejecting this submission point.
354. I agree with the submission from Rayonier that it is not just agriculture intensification that contributes to sediment in waterways, as there may be existing agricultural land uses that have a similar effect. I consider that “agriculture intensification” is likely a typographical error, and that the correct reference should be “agricultural land-use”. I recommend accepting Rayonier’s submission in part,³¹⁷ and accepting the submission from OWRUG.³¹⁸ I consider that these amendments are likely to address the concerns raised by Toitū Te Whenua³¹⁹ regarding the reference to ‘agricultural intensification’.
355. I note that the adverse effects of stock entering waterbodies is well understood, hence the introduction of stock exclusion regulations at the national level. I consider it is still appropriate to retain reference to this as an issue for, and contributing factor to, poor water quality, regardless of the information source. I recommend the submission from Federated Farmers³²⁰ be rejected.
356. While stock access and winter grazing are activities managed by national regulations³²¹, there may be a need to introduce additional restrictions or rules that are more appropriate in the Otago region, and necessary to achieve freshwater outcomes. I also note that many landowners are yet to comply with the regulations, and therefore the effects from these activities are still relevant to this issue. I therefore recommend rejecting the submissions from Beef + Lamb and DINZ seeking that specific reference to

³¹² 00202.006 COES

³¹³ 00030.004 Lynne Stewart

³¹⁴ 00202.007 COES

³¹⁵ 00030.004 Lynne Stewart

³¹⁶ 00024.001 City Forests Limited

³¹⁷ 00020.004 Rayonier

³¹⁸ 00235.045 OWRUG

³¹⁹ 00101.017 Toitū Te Whenua

³²⁰ 00239.025 Federated Farmers

³²¹ Resource Management (Stock Exclusion) Regulations 2020 and Intensive Winter Grazing regulations under the NESF

stock access and winter grazing are deleted, or if not deleted, that the regulations are acknowledged in the text³²².

357. I also disagree with the request from Beef + Lamb and DINZ to distinguish the effects of urban development to the same extent as agriculture.³²³ It is unclear from the submissions what further amendments are requested to provide for the relief sought, however I consider that the Environmental impact snapshot already provides a description of the effects of urban development on water quality and no further amendments are necessary. I recommend these submissions are rejected.

358. I consider that it is unclear from Horticulture NZ's submission what specific amendments would be required to amend the Environmental Impact snapshot to recognise health and safety issues associated with water quality. Without further information, I recommend rejecting this submission point.³²⁴

359. Without further evidence or information about the relationship between pest species and water quality, I do not recommend accepting the submission from OWRUG³²⁵ to include reference to pest species as a contributor to deteriorating water quality.

Economic

360. In response to Federated Farmers request to include New Zealand specific citation, I consider the economic impacts of degraded water quality are likely to be consistent with those experienced globally. I note that the information on the benefits and costs for the Essential Freshwater package contains New Zealand specific information on the costs of poor water quality, however without any specific requests to include this document as a reference, I recommend rejecting the submission³²⁶.

361. Several submitters request amendments to the types of industries and sectors affected by water pollution, by including reference to human health, the primary sector and food production. I do not consider that it is necessary to expand on the list included in the Economic Impact Statement on the basis that the list is non-exhaustive by referring to "and many other sectors that depend on clean water". I do not recommend accepting these submissions.³²⁷

362. Toitū Te Whenua seeks amendments that provide greater consideration of the economic benefits of certain activities affecting water quality.³²⁸ In my view, such amendments would pre-empt the outcome of any regional plan review process to implement the NPS-FM and Te Mana o Te Wai, and strays into the resolution of the issue. I do not recommend this submission is accepted.

³²² 00237.012 Beef + Lamb and DINZ

³²³ 00237.012 Beef + Lamb and DINZ

³²⁴ 00236.027 Horticulture NZ

³²⁵ 00235.045 OWRUG

³²⁶ Federated Farmers (not captured on SODR)

³²⁷ 00235.046 OWRUG, 00236.027 Horticulture NZ; 00239.025 Federated Farmers

³²⁸ 00101.018 Toitū Te Whenua

Social

363. Several submitters on the Social Impact Statement request amendments to include reference to the other social aspects of rural communities affected by water quality, including food production and human health. I consider these points of detail and clarification are suitable amendments, and recommend these submissions are accepted in part.³²⁹
364. I do not recommend accepting the submission from Federated Farmers³³⁰ requesting to amend the text to state that water quality in many parts of the region is 'very high' compared to the rest of the nation. In my view, this statement detracts from the issue that water quality is declining and subject to cumulative degradation. Additionally, this section deals with Otago's significant resource management issues and should not be subject to comparisons regarding a wide variety of other regional contexts, situations and factors.
365. I recommend the submission from Ngāi Tahu ki Murihiku is accepted, on the basis that it provides a more appropriate reference to the cultural impacts associated with poor water quality.³³¹

General

366. Regarding the submissions from Trojan³³² and Wayfare³³³, I disagree that the SRMR-I6 heading requires an editorial amendment to refer to the "natural environment". The impact of poor water quality extends to the broader environment, as captured by the RMA definition of the *environment*, and I therefore recommend these submissions are rejected.
367. The submission from Yellow-eyed Penguin Trust³³⁴ requests that SRMR-I6 includes reference to the impacts of declining water quality on the coastal and marine environments. I agree with the submitter that including this reference would be a better reflection of the concept of *ki uta ki tai*, however it is unclear from the submission what specific amendments would be required. Without further clarification from the submitter, I do not recommend accepting the submission point.
368. Horticulture NZ seeks amendments to link the impact snapshot to the FMU vision statements whereby innovative and sustainable land and water management practices support food production and improve resilience to the effects of climate change. I note the FMU Visions are driven solely by the NPSFM and considered community driven aspirations for specific *rohe*. It does not add value to cross reference the FMU visions in the SRMR section that deals with the description of significant regional issues. I do not think it is suitable to make the requested amendments on the basis that the Visions are

³²⁹ Horticulture NZ (not captured on SODR); 00235.047 OWRUG

³³⁰ 00239.025 Federated Farmers

³³¹ 00223.045 Ngāi Tahu ki Murihiku

³³² 00206.085 Trojan

³³³ 00411.110 Wayfare

³³⁴ 00120.017 Yellow – eyed Penguin Trust

a solution to the existing issues and therefore do not recommend accepting this submission point.

Recommendation

369. I recommend the following amendments:

a. Amend the first sentence of the Statement as follows:

While the pristine areas of Otago generally maintain very³³⁵ good *water* quality...

b. In the Context:

i. Amend the second paragraph as follows:

Water quality affects a wide range of environmental health factors, human health and³³⁶ survival needs, and cultural, social, recreational, and economic uses. Some of the biggest adverse³³⁷ impacts on *water* quality...

ii. Amend the third paragraph as follows:

On 3 September 2020, a new ~~N~~national ~~E~~environmental ~~S~~standards (NESF) and a new ~~N~~national ~~P~~policy ~~S~~statement³³⁸ (NPSFM)³³⁹ came into force to improve *water* quality within five years; and reverse past ~~damage~~ degradation³⁴⁰ and bring New Zealand's *freshwater* resources, waterways and ecosystems to a healthy state within a generation.

c. In the Environmental Impact Snapshot:

i. Amend the first paragraph as follows:

Despite the region's *lakes* and *rivers* being highly valued by Otago communities, reports indicate that in some areas³⁴¹ there are reasons for concern about *water* quality...

ii. Amend paragraphs 7 and 8 as follows:

Activities such as agricultural land use intensification,³⁴² mining, and forestry also contribute.

Agricultural land use intensification³⁴³ also contributes to nutrients (nitrogen and phosphorus) leaching into underlying *groundwater* or

³³⁵ 00206.086 Trojan, 00411.111 Wayfare

³³⁶ 00235.044 OWRUG

³³⁷ 00411.112 Wayfare

³³⁸ Clause 16(2), Schedule 1, RMA

³³⁹ <https://www.mfe.govt.nz/fresh-water/freshwater-acts-and-regulations/national-policy-statement-freshwater-management> (accessed 26 May 2021)

³⁴⁰ 00239.025 Federated Farmers

³⁴¹ 00235.045 OWRUG

³⁴² 00020.004 Rayonier; 00235.045 OWRUG

³⁴³ 00235.045 OWRUG

running off into surface *water bodies*, and agricultural intensification³⁴⁴ can also increase the risk of *E.coli* contamination from animal waste.

d. Amend the last paragraph of Social Impact Snapshot as follows:

...culminates in ~~loss~~ diminishing of rakatirataka and mana.³⁴⁵

3.8.10. SRMR-I7 – Rich and varied biodiversity has been lost or degraded due to human activities and the presence of pests and predators

3.8.10.1. Introduction

370. SRMR-I7 considers the issues associated the loss of biodiversity in the region, with habitat loss, land use change, vegetation clearance and pests identified as the contributors to this loss.

3.8.10.2. Submissions

371. A total of 24 submissions have been received seeking a broad range of amendments across the whole of SRMR-I7 and these are summarised below.

Statement

372. Federated Farmers notes that the biodiversity mapping reports referred to in the Statement text are unavailable to the public which makes it difficult to submit comment on the Statement, however they seek the following text amendments to the first paragraph:

a. Delete the second sentence:

... ~~Biodiversity mapping indicates Otago is one of the most modified regions in New Zealand...~~

b. Amend the last sentence:

Leadership and coordination of the various initiatives to address *biodiversity* loss has also been lacking-, along with incentives, support and advice to assist landowners to protect and/or restore biodiversity where it remains or where it has been lost.³⁴⁶

373. Te Waihangā considers infrastructure could provide solutions to resolving modification concerns related to the Otago region and seeks amendments to recognise the benefits that infrastructure can provide to the environment.³⁴⁷

³⁴⁴ Consequential amendment from 00235.045 OWRUG

³⁴⁵ 00223.045 Te Ao Marama

³⁴⁶ 00239.026 Federated Farmers

³⁴⁷ 00321.014 Te Waihangā

374. Beef and Lamb NZ and DINZ question the appropriateness of the reference to Otago as ‘one of the most modified regions in New Zealand’ with no context provided and seek this be deleted from the text.³⁴⁸

Context

375. Toitū Te Whenua considers a number of factors influence biodiversity degradation and seeks greater context regarding the leading causes of biodiversity loss in the Otago region.³⁴⁹
376. Federated Farmers considers the list of threats to biodiversity is incomplete and seeks the following amendments to the third and fourth paragraphs:

The health of New Zealand’s biodiversity has declined significantly since the arrival of humans. Environment Aotearoa 2019 found that our indigenous biodiversity is under significant pressure from introduced species and diseases, urban growth, human activities, pollution, physical changes to habitat from climate, landscape changes, environment and harvesting of wild species.

~~Almost 4,000 native species are currently threatened with, or at risk of, extinction. Around 1,065 native species across New Zealand are currently threatened with extinction. A further 3,589 are in a second tier of risk, with 3,009 considered ‘naturally uncommon’. The information available indicates Otago’s biodiversity faces the same challenges.~~³⁵⁰

377. Additionally, they state they are unclear about what is meant by ‘wild species’ and seek clarification.³⁵¹
378. Yellow-eyed Penguin Trust notes that Hoiho (yellow-eyed penguins) are not only found on the Otago Peninsula, but also in the Catlins and North Otago and seeks amendments to include these other areas as well.³⁵²

Environmental

379. Ngāi Tahu ki Murihiku identifies the word ‘koura’ should be read ‘kōura’ in all instances of the word and seeks editorial amendments to correct this typographic error.³⁵³
380. Wayfare and Forest and Bird consider reference to ‘62 ecosystems in the Otago region’ has neglected to specify the ecosystem value and seek to insert either ‘units’³⁵⁴ or ‘types’³⁵⁵ after the word ecosystem for accuracy.
381. Forest and Bird and Fish and Game both seek amendments to the third sentence of the third paragraph. Forest and Bird considers that it fails to recognise the impacts of

³⁴⁸ 00237.013 B+LNZ and DINZ

³⁴⁹ 00101.019 Toitū Te Whenua

³⁵⁰ 00239.026 Federated Farmers

³⁵¹ 00239.026 Federated Farmers

³⁵² 00120.020 Yellow-eyed Penguin Trust

³⁵³ 00223.046 Ngāi Tahu ki Murihiku

³⁵⁴ 00411.115 Wayfare

³⁵⁵ 00230.026 Forest and Bird

pollution from land use and discharges on native fish varieties and impounding of fish passage from dams and structures and seeks the following text amendments

Inland Otago has degraded native fish communities, due to degraded water quality from pollution from land use change and discharges, over abstracted water bodies, the presence of ~~the Clutha~~ dams and their effects on eel populations and trout predation on native galaxiids.³⁵⁶

382. Fish and Game considers the text is incorrect to imply that it is only trout and dams which cause loss of aquatic biodiversity and believe other land use changes contribute to the decline of freshwater species.³⁵⁷ They seek the following wording amendment to support clarification and interpretation:

Inland Otago has degraded native fish communities, due to anthropogenic alteration of waterways, such as damming, abstraction, bed manipulation, draining wetlands and the discharge of contaminants, ~~the presence of the Clutha dams and their effects on eel populations~~ and trout predation on native galaxiids.

383. Fisheries NZ and Otago Rock Lobster question the accuracy of the term ‘downward trends’ and consider this is an inaccurate portrayal of the status of local fisheries.³⁵⁸ Fisheries NZ also states the literature showing evidence of trophic cascades from fishing pressure in kelp forests in the Otago region is difficult to find. In response, Otago Rock Lobster seeks further consultation to be undertaken by Council to provide additional evidence to inform policy and planning decisions,³⁵⁹ and Fisheries NZ seeks specific text amendments to the final paragraph of the environmental impact snapshot as follows:

The extent of impacts on marine species and environments is not well understood. Sedimentation is known to have contributed to the loss of kelp forests. In addition to sedimentation, other human impacts on kelp forests in the Otago region may include land-based nutrient inputs, rising sea surface temperatures associated with climate change ~~and trophic cascades from fishing pressure; together with downward trends in fish and crayfish catches,~~ the introduction of invasive species like *Undaria pinnatifida* (Suárez -Jiménez et al. 2017) and fishing. There has also been a 70% decline in the abundance of hoiho (yellow-eyed penguin) on the Otago coast since 2008 ~~and downward trends in ngoi (fish) and koura (crayfish) catches.~~ although the factors causing this are not fully understood. The effects of *climate* change will add significantly to *risks* of continuing *biodiversity* decline.³⁶⁰

384. OWRUG cautions that the degradation of biodiversity is complex and highlights there are circumstances where human land-use activities support the persistence of indigenous

³⁵⁶ 00230.026 Forest and Bird

³⁵⁷ 00231.027 Fish and Game

³⁵⁸ 00303.001 Fisheries NZ, 00125.023 Otago Rock Lobster

³⁵⁹ 00125.023 Otago Rock Lobster

³⁶⁰ 00303.001 Fisheries NZ

biodiversity by resisting further incursion of pest species.³⁶¹ They therefore seek the following text is added to the Environmental discussion:

Despite the above, in some cases land management or water use practices are enabling indigenous species to persist. It is therefore important to carefully manage significant changes in such practices where they might give rise to unintended consequences.³⁶²

385. QLDC notes that while the impact of climate change on biodiversity decline has been recognised, the positive contribution that biodiversity makes to climate change mitigation and adaptation has not been acknowledged and seeks amendments to revise the text accordingly.³⁶³
386. Otago Rock Lobster and Yellow-eyed Penguin Trust generally agree that the extent of impacts on marine species and environments is not well understood,³⁶⁴ but Yellow-eyed Penguin Trust considers refinement is necessary and seeks amendments which reference the Ministry for the Environment's publication, 'Our Marine Environment 2019'.³⁶⁵
387. Yellow-eyed Penguin Trust also considers information is currently lacking in relation to the six ecosystems which have less than less than 10 hectares remaining and seeks further explanation and clarification.³⁶⁶

Economic

- ~~388.~~ Federated Farmers considers references to 'agriculture' fail to encompass the breadth of the primary sector.³⁶⁷
- ~~389.~~ They also highlight that much of the primary sector exports rely on the global consumer perception of the country's environment, which is defined by NZ Treasury as 'natural capital'. They seek the following wording amendments to the first paragraph of the Economic impact snapshot:

Biodiversity and ecosystem services underpin agriculture the primary sector (ecosystem services such as *water*, soil *biodiversity*, pest protection, pollination) and tourism (the "clean green" image of "pure New Zealand" is related to a public/consumer perception of Otago's healthy *environment* and biodiversity).

...

390. Additionally, Federated Farmers seeks adoption of the term 'natural capital' as defined by NZ Treasury.³⁶⁸

³⁶¹ 00235.048 OWRUG

³⁶² 00235.048 OWRUG

³⁶³ 00138.006 QLDC

³⁶⁴ 00125.024 Otago Rock Lobster, 00120.018 Yellow-eyed Penguin Trust

³⁶⁵ 00120.018 Yellow-eyed Penguin Trust

³⁶⁶ 00120.021 Yellow-eyed Penguin Trust

³⁶⁷ 00239.026 Federated Farmers

³⁶⁸ 00239.026 Federated Farmers

391. Similarly, OWRUG seeks to replace references to ‘agriculture’ with ‘the food and fibre sector’.³⁶⁹

392. NZ Pork recognises the loss of biodiversity is likely to impact the economy by lost productivity but considers these economic impacts are likely to have flow-on effects on people and communities and seeks amendments to the text to reflect this.³⁷⁰

Social

393. Forest and Bird considers the negative impact of introduced species on native ecosystems and species is well established and known and seeks deletion of the qualifier ‘may’ as follows to the final sentence:

Some introduced species such as trout, deer and pigs have social and recreation values but ~~may~~ also have impacts on native ecosystems and species.³⁷¹

General

394. Horticulture NZ³⁷² and NZ Pork³⁷³ both raise concern that the issues of regional food production, supply and security have been inadequately addressed and seek amendments to include an additional Issue Statement for these matters that also considers biosecurity.

395. Trojan³⁷⁴ and Wayfare³⁷⁵ consider that there is a need to restore and enhance biodiversity rather than just maintaining and protecting what is left and seek further discussion within the text to reflect this.

396. Furthermore, Wayfare notes the impacts of hydroelectricity generation is missing from the notified text and seeks amendments to acknowledge the effects of this activity on for example, coastal erosion.³⁷⁶

397. Yellow-eyed Penguin Trust considers that there are overlaps with SRMR-I3 which addresses risks from pest species.³⁷⁷ They therefore seek amendments which refine the focus of SRMR-I7 to other human activities affecting the environment, excluding those related to pests.

398. WAI Wanaka highlights that throughout the pORPS, multiple references are made to biodiversity, its restoration and protection.³⁷⁸ However, they note references to the National Policy Statement for Indigenous Biodiversity are lacking despite them being necessary to direct the process of turning policy and planning documents into meaningful actions.

³⁶⁹ 00235.049 OWRUG

³⁷⁰ 00240.009 NZ Pork

³⁷¹ 00230.026 Forest and Bird

³⁷² 00236.028 Horticulture NZ

³⁷³ 00240.009 NZ Pork

³⁷⁴ 00206.087 Trojan

³⁷⁵ 00411.113 Wayfare

³⁷⁶ 00411.114 Wayfare

³⁷⁷ 00120.019 Yellow-eyed Penguin Trust

³⁷⁸ 00222.021 WAI Wanaka

3.8.10.3. Analysis

Statement

399. In regard to the submissions querying the statement about Otago being one of the most modified regions in New Zealand, I recommend adding a reference to the Wildland Mapping Report (Wildlands, 2020)³⁷⁹ which was made available as an appendix to the Section 32 Report, to verify the source of this statement.
400. Federated Farmers seeks inclusion of a reference to a lack of incentives, support and advice for landowners in the protection and restoration of biodiversity. While I agree that this may be the case in some situations, I consider that the statement about lack of leadership or coordination of initiatives covers this more generally, and I do not recommend adopting this submission.
401. Te Waihangaseeks acknowledgment that infrastructure can benefit the environment. No further detail, context or text is provided. I do not consider that an amendment to this effect would be appropriate considering the SRMR section focuses on descriptions of the issues rather than highlighting benefits or solutions.

Context

402. Regarding Toitū Te Whenua's submission seeking greater context about the leading causes of biodiversity loss in the Otago region, I note that this is outlined in the Environmental impact snapshot and do not consider it is necessary to add any further detail on this to the Context section.
403. Federated Farmers seeks changes to the paragraphs summarising Environment Aotearoa 2019, however I consider that the existing text is an appropriate high-level summary of that report, and do not agree with the changes sought by Federated Farmers. In regard to wild species, in my opinion it is clear what 'harvesting of wild species' is intended to mean. Overall, the submission does not add any value to the subsection in my opinion and I do not recommend that it be adopted.
404. I acknowledge that hoiho (yellow-eyed penguins) are also found in the Catlins and North Otago but I consider that the sentence about hoiho on the Otago Peninsula is intended to illustrate the enormous diversity in Otago, rather than providing a complete list of where all species are found. Given that the sentence is already quite lengthy and contains numerous examples of Otago's diversity, I do not recommend adopting the amendment sought by Yellow-Eyed Penguin Trust.

Environmental

405. Yellow-Eyed Penguin Trust requests more information about the statement that there are six ecosystems with less than 10 hectares remaining. I have reviewed the Wildlands report referenced in the second paragraph of the Environmental impact snapshot and have not been able to confirm the statement. Therefore, I recommend deleting this sentence. In addition, in considering submissions on this paragraph and reviewing the

³⁷⁹ Wildlands (2020). Unpublished Consultancy Report to Otago Regional Council R5015a. Mapping of potential natural ecosystems and current ecosystems in Otago region.
Proposed Otago Regional Policy Statement 2021

Wildlands report, I note that the correct number of ecosystems listed in that report is 61, not 62. I recommend making this change and consider that both changes are correcting minor errors in accordance with clause 16(2) of Schedule 1 of the RMA.

406. Te Ao Marama seeks amendment to the word 'koura' as it should have a macron on the 'o'. I agree that this amendment should be adopted for all instances where this word occurs but note that in this instance I am recommending that the sentence which includes kōura is deleted.
407. Fish and Game and Forest and Bird both seek amendments to the third sentence of the third paragraph. I agree that the existing text does not adequately capture all of the factors which contribute to a loss of aquatic biodiversity. In my opinion the amendments suggested by Fish and Game improve the clarity of this sentence and provide a more comprehensive statement about the causes. I recommend adopting their submission with a minor amendment to the wording.
408. I acknowledge the positive contribution that biodiversity makes to climate change mitigation and adaptation but do not consider that it is appropriate to reference that in the issue statement for SRMR-17, which is about the loss and degradation of biodiversity rather than its positive impacts on climate change.
409. I agree with Yellow-Eyed Penguin Trust that the statement about the impacts on marine species and environments is brief but consider that this is appropriate for a statement of the issue, and in the absence of more detail about what information to adopt from the MfE publication that they refer to, I do not recommend adopting this submission.
410. Otago Rock Lobster and Fisheries NZ both seek amendments to the fourth paragraph, including removal of the references to downward trends in fish and crayfish catches and trophic cascades from fishing pressure, citing a lack of evidence to support these statements. I agree that no evidence has been provided to verify these statements, and their removal does not change the overall intent. Therefore, I recommend that this submission be adopted and reference to the downwards trends in fish and crayfish and trophic cascades from fishing pressure be removed. I also agree in part with the other amendments suggested by Fisheries NZ which help to clarify the impacts on marine species and environments, and I recommend that amendments to like effect be adopted.
411. In regard to the remaining submissions seeking minor amendments to the Environmental impact snapshot, I consider that these amendments are too detailed for the issues statement, change the intent of the statement, or refer to responses to the issue rather than the issue itself and I do not recommend adopting these amendments.

Economic

412. In my opinion Federated Farmer's submission seeking to replace references to 'agriculture' with 'primary sector' is a useful amendment and covers a wider scope of activities which is appropriate in the context of this sentence, however it is recommended to adopt the term 'primary production' for consistency with pORPS definitions. I do not consider that it is appropriate to replace references to 'agriculture' with 'food and fibre' as submitted by OWRUG, because it is too specific for the issue statement.

413. The remaining submissions on the Economic impact snapshot seek amendments which are not appropriate for the issue statement in my opinion because they are too specific or seek amendments that I do not consider add any value for a statement of the issue, and I do not recommend adopting these submissions.

Social

414. I agree with Forest and Bird that the negative impacts of introduced species are well known and recommend adopting their submission to delete the word 'may' from the final sentence of the Social impact snapshot.

General

415. In regard to Wayfare's request to add reference to the impacts of hydroelectricity generation on biodiversity, I note that there is some reference already to the impact of human activities, dams and other alterations to waterways. I consider that this is sufficient for the issue statement and do not recommend any additions to specifically reference hydroelectricity generation.
416. I acknowledge that SRMR-I3 is relevant to pests, as identified by Yellow-Eyed Penguin Trust. However, I do not think it is necessary to remove the reference to pests in SRMR-I7. Acknowledging that there are interrelationships between many of the issues, I consider that it is important to ensure that the statement for each of the 11 issues includes all of the relevant matters for that issue.
417. I acknowledge that regional policy statements and plans need to give effect to National Policy Statements. However, the NPS for Indigenous Biodiversity is not yet in effect and has no legal weight. In addition, I consider that it will guide the policy direction of the ORPS chapters responding to the issues raised in the SRMR chapter, and the regional and district plans, and do not consider that it needs to be referenced in the issue statement. Therefore, I do not recommend adopting the submission by WAI Wanaka.
418. The remaining submissions on SRMR-I7 are not considered appropriate because they either seek reference to solutions, or are too specific for the issue statements, and I do not recommend adopting these submissions.

3.8.10.4. Recommendation

419. I recommend the following amendments:
- a. Amend the Statement to add reference to the Wildland Mapping Report in the second sentence.³⁸⁰
 - b. In the Environmental impact snapshot:
 - i. Amend the first sentence of the second paragraph as follows:

There are ~~62~~ 61³⁸¹ ecosystems in the Otago region.

³⁸⁰ 00239.026 Federated Farmers

³⁸¹ Clause 16(2), Schedule 1, RMA

- ii. Delete the last sentence of the second paragraph.³⁸²
- iii. Amend the third sentence of the third paragraph as follows:

Inland Otago has degraded native fish communities, due to anthropogenic alteration of waterways (such as damming, abstraction, bed manipulation, draining wetlands), the discharge of contaminants~~the presence of the Clutha dams and their effects on eel populations~~³⁸³ and trout predation on native galaxiids.

- iv. Amend the fourth paragraph as follows:

The extent of impacts on marine species and environments is not well understood. Sedimentation and nutrients entrapped in land run-off³⁸⁴ is known to have contributed to the loss of kelp forests.³⁸⁵ In addition to sedimentation, other human impacts on kelp forests include rising sea surface temperatures associated with climate change, the introduction of invasive species and fishing~~and trophic cascades from fishing pressure;~~³⁸⁶ ~~together with downward trends in fish and crayfish catches.~~³⁸⁷ There has been a 70% decline in the abundance of hoiho (yellow-eyed penguin) on the Otago coast since 2008.³⁸⁸ ~~and downward trends in ngohi (fish) and kōura koura~~³⁸⁹ ~~(crayfish) catches.~~³⁹⁰

...

- c. Amend the first sentence of the Economic impact snapshot to replace 'agriculture' with 'primary production'
- d. Delete the word 'may' from the final sentence of the Social impact Snapshot as follows:

Some introduced species such as trout, deer and pigs have social and recreation values but ~~may~~³⁹¹ also have impacts on native ecosystems and species.

³⁸² Clause 16(2), Schedule 1, RMA

³⁸³ 00231.027 Fish & Game

³⁸⁴ 00303.001 Fisheries New Zealand

³⁸⁵ Schiel et al. 2006, Sediment on rocky intertidal reefs: Effects on early post-settlement stages of habitat-forming seaweeds, Journal of Experimental Marine Biology and Ecology 331(2):158-172 (reference provided by Department of Conservation)

³⁸⁶ 00303.001 Fisheries New Zealand

³⁸⁷ 00125.023 Otago Rock Lobster

³⁸⁸ Department of Conservation, 2008, Unpublished data.

³⁸⁹ 00223.046 Te Ao Marama

³⁹⁰ 00125.023 Otago Rock Lobster

³⁹¹ 00230.026 Forest and Bird

3.8.11. SRMR-I8 – Otago’s coast is a rich natural, cultural and economic resource that is under threat from a range of terrestrial and marine activities

3.8.11.1. Introduction

420. SRMR-I8 considers the nature of the Otago coast, and the threats to its values.

3.8.11.2. Submissions

421. Ten submissions were received in relation to SRMR-I8, including two seeking it be retained as notified.³⁹² The remaining seven submissions seek a broad range of amendments across the whole of SRMR-I8 and these are summarised below.

Statement

422. Wayfare considers the opening sentence of the Statement warrants minor wording amendments to support clarification and interpretation and seeks to insert the word ‘natural’ in reference to outstanding ‘natural’ landscapes.³⁹³

Context

423. DOC opposes SRMR-I8 as notified, considering the description of the coastal environment conflicts with Policy 1 of the NZCPS and therefore seeks the following text amendments to the first paragraph of the Context:

Otago’s coastal environment ~~is generally considered to extend from the land that forms the first significant ridgeline~~ includes land adjoining the coast where coastal factors apply (as outlined in NZCPS Policy 1), and the coastal marine area out to the twelve nautical mile seaward limit.³⁹⁴

424. Three submissions consider the notified Context fails to reference specific matters and seek wording amendments to include reference to:

- Carbon forestry³⁹⁵
- Food and fibre production,³⁹⁶ and
- Food production and other farming industries.³⁹⁷

425. Horticulture NZ asserts that food production appears an oversight in several of the other Regional Issue Statements and seeks an additional issue statement on food production, food supply and food security.³⁹⁸

426. Wayfare seeks the following text amendments to the second paragraph to support clarification:

³⁹² 00125.025 Otago Rock Lobster, 00122.004 Sanford

³⁹³ 00411.116 Wayfare

³⁹⁴ 00137.035 DOC

³⁹⁵ 00239.027 Federated Farmers,

³⁹⁶ 00235.050 OWRUG

³⁹⁷ 00236.030 Horticulture NZ

³⁹⁸ 00236.030 Horticulture NZ

Activities occurring within or affecting the coastal environment include urban development, recreational activities, transport infrastructure, energy generation and transmission, land and marine based (e.g. aquaculture) food production industries and other rural industry activities, carbon forestry and plantation forestry, fishing, tourism, and mineral extraction. Such activities ~~are~~^{can be} important contributors to the ~~existing and future~~ health and well – being of people and communities, ~~when they are located and managed appropriately.~~³⁹⁹

Environmental

427. Ngāi Tahu ki Murihiku seeks to clarify the relationship with freshwater management by amending the first sentence as follows:

Impacts of hazards, climate change, pests, fresh water, and biodiversity loss, which have been discussed above, all impact the coast.⁴⁰⁰

428. Yellow-eyed Penguin Trust seeks clarification regarding the reference to ‘beach erosion at St Clair in Dunedin’, noting St Clair beach is just one example and not the only one.⁴⁰¹

3.8.11.3. Analysis

Statement

429. In relation to the submission from Wayfare, I agree an amendment is required. I note that the addition of ‘natural’ in reference to outstanding ‘natural’ landscapes is consistent with the drafting within the Section 6(b) of the RMA.

Context

430. In relation to the submission from DOC, I agree with the suggested amendment. I agree that the Context section should refer to Policy 1 of the NZCPS and the coastal marine area as this adds clarity to the issue. I have suggested a slight amendment to the drafting to refer to ‘characteristics’ as opposed to ‘factors’ to better align with Policy 1 of the NZCPS.
431. In relation to the submitters seeking reference to additional industries, I note that the Context section already includes reference to ‘food production industries and other rural industry activities’. Therefore, I disagree additional reference to ‘Food and fibre production’, or ‘Other farming activities’ is required. However, I agree with the submission from Federated Farmers seeking the addition of a reference to carbon forestry. I note that carbon forestry is not captured by the broad reference to ‘forestry activities’ given it is not harvested. As such, it is recommended that reference to ‘carbon forestry’ is included as this is an industry that is growing and has the ability to affect the natural values of the coastal environment if not located and managed appropriately.
432. I disagree that the amendment sought by Wayfare is required. I consider it is helpful that the issue retains the qualifier that these activities can be important contributors to the health and well-being of communities when they are located and managed appropriately.

³⁹⁹ 00411.117 Wayfare

⁴⁰⁰ 00223.047 Ngāi Tahu ki Murihiku

⁴⁰¹ 00120.022 Yellow-eyed Penguin Trust

Environmental

433. I agree with the submission from the Yellow-eyed Penguin Trust that St Clair beach is only one example of beach erosion in the region. I consider the reference to St Clair should be removed from the issue to ensure the statement applies more generally.
434. In relation to Ngāi Tahu ki Murihiku submission seeking an amendment to specify ‘...pests, fresh water, and biodiversity loss’, I consider the addition is useful as it provides clarity as SRMR I6 discusses issues related to freshwater.

Economic

435. No submissions were received on the Economic section.

Social

436. No submissions were received on the Social section.

3.8.11.4. Recommendation

437. I recommend the following amendments:

- a. Amend the first sentence of the Statement section as follows:

Otago’s coast provides habitat for rare species (including toroa and hoiho), comprises some of the region’s outstanding natural⁴⁰² landscapes...

- b. Amend the first sentence of the ‘Context’ section as follows:

Otago’s coastal environment includes land adjoining the coast where coastal characteristics apply (as outlined in NZCPS Policy 1), and the coastal marine area is generally considered to extend from the land that forms the first significant ridgeline⁴⁰³ out to the twelve nautical mile seaward limit. The coastal environment is a finite resource which is sensitive to change. Recent rapid expansion of some types of coastal development is a significant issue for the sustainable management of the coastal environment of Otago.

Activities occurring within or affecting the coastal environment include urban development, recreational activities, transport *infrastructure*, energy generation and transmission, land and marine based (e.g. aquaculture) food production industries and other rural industry activities, carbon forestry and⁴⁰⁴ *plantation forestry*, fishing, tourism, and *mineral* extraction...

- c. Amend the ‘Impact snapshot’ section as follows:

⁴⁰² 00411.116 Wayfare

⁴⁰³ 00137.035 DOC

⁴⁰⁴ 00239.027 Federated Farmers

Impacts of hazards, climate change, pests, fresh⁴⁰⁵ water, and biodiversity loss, which have been discussed above, all impact the coast. Urban development and population pressure can amplify these effects.

d. Amend the last sentence of the 'Environmental' section as follows:

Around Dunedin, for example, impacts include nutrients and contaminants from Dunedin stormwater which impact on coastal waters and estuaries; declining hoiho (yellow-eyed penguins) numbers due to introduced predators and domestic pets; whilst recovering seal and sealion numbers can create conflict with recreational *uses* on the coast; and beach erosion ~~at St. Clair in Dunedin~~⁴⁰⁶ can impact social values and beach recreation use.

3.8.12.	SRMR-I9 – Otago lakes are subject to pressures from tourism and population growth
3.8.12.1.	Introduction
438.	SRMR-I9 considers the importance of Lakes Wānaka, Wakatipu, Hāwea and Dunstan and how activities can degrade the environment that underpins their attractiveness.
3.8.12.2.	Submissions
439.	13 submissions were received on SRMR-I9, including one from Beef + Lamb and DINZ seeking it be retained as notified. ⁴⁰⁷ The remaining submissions seek a broad range of amendments across the whole of SRMR-I9 and are summarised below.
<u>Statement</u>	
440.	Wayfare seeks the following amendment to the second sentence of the Statement to provide improved clarification:

This influx brings economic benefit through urban growth and tourism opportunities, but ~~the activities and services created to take advantage of it~~ can degrade the natural environment and undermine the experience that underpins their attractiveness."⁴⁰⁸

<u>Context</u>	
441.	Wayfare also seeks the following wording amendments to the first paragraph of the Context for clarification:

Healthy lakes are one of Otago's most valued natural resources and for the most part *water* quality is very good. ~~The~~ Values assigned to *lakes* include the natural features and natural landscapes, the quality and quantity of *water* accessible to the Otago communities, the accessibility of these resources for recreation and

⁴⁰⁵ 00223.047 Ngāi Tahu ki Murihiku

⁴⁰⁶ 00120.022 Yellow – eyed Penguin Trust

⁴⁰⁷ 00237.014 Beef + Lamb and DINZ

⁴⁰⁸ 00411.119 Wayfare

transport, the health of native flora and fauna associated with Otago's *rivers* and *lakes*, and renewable energy production.⁴⁰⁹

Environmental

442. Trojan⁴¹⁰ and Wayfare⁴¹¹ consider statements regarding 'tourism demand' are unsubstantiated and seek deletion of the term while inserting reference to tourism 'development' which they believe improves clarification and interpretation.
443. Contact raises concern that the adverse impacts of energy production on environmental values, such as natural features and landscapes have been highlighted within the notified text but the positive effects of such a resource have not been acknowledged. They seek the following text amendments at the end of the last paragraph:

Natural features and landscape values ~~are also~~ can be adversely impacted by tourism and urban growth, and energy production.

A number of hydroelectric power schemes are located within the Otago Region. Some of these have directly influenced the surrounding environment in which they operate. These assets are significant to the region in providing renewable electricity generation, contributing to economic development and also attracting visitors to the area.⁴¹²

Economic

444. Trojan⁴¹³ and Wayfare⁴¹⁴ again raise concern that the statements within the text are unfounded and seek amendments which delete the following text in the second paragraph due to the lack of evidence:

...

For example, the clean green image of New Zealand, of which the Otago Lakes area is symbolic, is at *risk* of being compromised ~~because of over – crowding if the quality of lakes becomes degraded or visitor numbers exceed the servicing capacity of the district. in peak tourism seasons. This has the potential to adversely affect the existing regional economy and future economic development; and the tourism industry's social licence to operate. At the same time tourism can negatively impact on how agriculture can operate, potentially limiting its contribution to the regional economy.~~⁴¹⁵

⁴⁰⁹ 00411.120 Wayfare

⁴¹⁰ 00206.088 Trojan

⁴¹¹ 00411.121 Wayfare

⁴¹² 00318.004 Contact

⁴¹³ 00206.089 Trojan

⁴¹⁴ 00411.122 Wayfare

⁴¹⁵ 00206.089 Trojan, 00411.122 Wayfare

Social

445. Trojan⁴¹⁶ and Wayfare⁴¹⁷ seek minor amendments to the text to improve clarification and better recognise the implications of tourism and population growth on outdoor recreation.

General

446. Wayfare seeks to amend the heading of SRMR-I9 to clarify that only 'Central' Otago lakes are subject to pressures from tourism and population growth"⁴¹⁸
447. John Highton considers that a number of activities impact Otago's lakes, including hydroelectricity generation, camping and motorboating and seeks amendments to recognise and manage these.⁴¹⁹
448. OWRUG recognises SRMR-I9 acknowledges the potential impact tourism can have on 'agriculture' but considers the term may not capture all types of primary production activity and is inconsistently used throughout the pORPS.⁴²⁰ To improve certainty they seek to replace references to 'agriculture' with 'primary production'.

3.8.12.3. Analysis

Statement

449. I do not consider the amendment sought by Wayfare further clarifies the issues statement beyond the notified version. Based on this, I recommend no changes to the statement.

Context

450. In general, I do not consider the amendment sought by Wayfare further clarifies the context of the issue beyond the notified version. However, I consider the reference to 'transport' in the final sentence of the context section is a useful addition as the use of lakes for transport is a likely contributor to pressures on Otago's lakes as a result of tourism and population growth.

Environmental

451. I do not consider the relief sought by Wayfare and Trojan to remove reference to 'tourism demand' is appropriate. Tourism demand, increased population and urban development are contributors to adverse impacts on the water quality of Otago's lakes and I consider this is adequately captured in the issues statement as notified. I do not recommend any changes to this subsection of the issues statement based on the submissions from Wayfare and Trojan.
452. With respect to the relief sought by Contact, I consider hydroelectric power schemes are already acknowledged in a more general sense by reference to 'energy production' and such activities resulting in effects on natural features and landscape values of Otago

⁴¹⁶ 00206.090 Trojan

⁴¹⁷ 00411.123 Wayfare

⁴¹⁸ 00411.118 Wayfare

⁴¹⁹ 00014.010 John Highton

⁴²⁰ 00235.051 OWRUG

lakes. Based on this this, I do not recommend adopting the more specific relief proffered by Contact.

Economic

453. I consider the relief sought by Trojan and Wayfare in part provides some additional clarity to the economic impact snapshot. In particular, I consider replacing ‘because of over-crowding in peak tourism seasons’ with ‘if the quality of lakes become degraded or visitor numbers exceed the servicing capacity of the district’ results in a more generalised statement which I consider to be more appropriate for an issues statement. I do not recommend the additional relief sought by Trojan and Wayfare to delete the remaining text in the impact snapshot. I consider the text that is sought to be deleted clarifies the economic components of the issue and should be retained.

Social

454. In my view the minor amendments in part sought by both Trojan and Wayfare are helpful additions to the social impact snapshot. I consider the inclusion of ‘poorly managed activities’ in addition to ‘over-crowding impacts’ in the first sentence assists with describing the issues for lakes with more clarity. I have recommended this change and associated grammatical changes to accommodate this change accordingly. I do not consider the additions to the second portion of the first sentence, or the final sentence provide any additional value beyond the notified version and I have not recommended the adoption of these changes.

General

455. I do not recommend the relief sought by Wayfare to amend the heading of SRMR-I9 to limit its application to only ‘Central’ Otago lakes. While the examples provided in SRMR-I9 are mostly related to lakes located within Central Otago, the issue is intended to apply to other lakes within the Region and the effect of the proposed change would limit the breadth of the issue. Based on this, I recommend no changes.
456. In consider the relief sought by John Highton is already provided within the issue, and I have not recommended any further changes to accommodate the relief sought.
457. I consider the relief sought by OWRUG to replace the term ‘agriculture’ with ‘primary production’ is appropriate and will clarify the types of activities intended to be captured given the term is defined in the pORPS. I recommend that all references to the term ‘agriculture’ in SRMR-I9 are replaced with ‘primary production’.

3.8.12.4. Recommendation

458. I recommend the following amendments:

- a. Amend the final sentence in the first paragraph of the Context as follows:

Healthy *lakes* are one of Otago’s most valued natural resources and for the most part *water* quality is good. The values assigned to *lakes* include the natural features and landscapes, the quality and quantity of *water* accessible to the Otago communities, the accessibility of these resources for recreation

and transport,⁴²¹ the health of native flora and fauna associated with Otago's rivers and lakes, and renewable energy production.

b. In the Economic impact snapshot:

- i. Replace the term 'agriculture' in the first sentence of the first paragraph and the third sentence of the second paragraph with 'primary production',
- ii. Amend the first sentence of the second paragraph in the as follows:

For example, the clean green image of New Zealand, of which the Otago Lakes area is symbolic, is at *risk* of being compromised ~~because of over-crowding~~ if the quality of lakes becomes degraded or visitor numbers exceed the servicing capacity of the district ~~because of overcrowding in peak tourism seasons.~~⁴²²

c. Amend the first sentence in the Social impact snapshot as follows:

~~Poorly managed activities and Over-crowding~~ impacts can adversely affect recreation experiences of both tourists and residents,⁴²³

3.8.13. SRMR-I10 – Economic and domestic activities in Otago use natural resources but do not always properly account for the environmental stresses or the future impacts they cause

3.8.13.1. Introduction

459. SRMR-I10 considers the issues associated with economic and domestic activities on natural resources, such as development, water abstraction, discharges, primary production, transport and tourism.

3.8.13.2. Submissions

460. A total of 29 submissions were received in relation to SRMR-I10, including one from Beef + Lamb and DINZ seeking it to be retained as notified.⁴²⁴ The remaining submissions seek a broad range of amendments across the whole of SRMR-I10 and these are summarised below.

Statement

461. Five submissions were received seeking amendments to the SRMR-I10 'Statement' related to forestry.⁴²⁵ These submitters raise concern that general references to forestry and its contribution to sedimentation in Otago is used frequently without qualification and is inaccurate. They note that plantation forestry must give effect to the NESPF and

⁴²¹ 00411.120 Wayfare

⁴²² 00206.089 Trojan, 00411.122 Wayfare

⁴²³ 00206.090 Trojan, 00411.123 Wayfare

⁴²⁴ Beef + Lamb and DINZ

⁴²⁵ 00412.007, 00412.018 Ernslaw One, 00033.003 Port Blakely, 00020.005 Rayonier, 00140.014 WDC, 00024.002 City Forests

seek amendments to acknowledge the stringent controls introduced to manage forestry activities. Specifically, the submitters seek amendments to:

- Provide more nuanced and conditional statements,⁴²⁶
- Clarify sedimentation ‘may’ arise where forestry is ‘poorly managed’,⁴²⁷ and
- Recognise the stringent controls introduced by the NESPF.⁴²⁸

462. Rayonier also considers the opening sentence appears to state that sediment effects on the marine area originate from development and forestry activities, which they note is contrary to other statements of the pORPS.⁴²⁹ They seek amendments to delete reference to ‘forestry’ and to replace the term with ‘primary production’.

463. WDC recognises carbon forestry land use bypasses existing national regulatory provisions, including the NESPF, and considers there is scope to promote the sustainable management of carbon forestry through the RPS.⁴³⁰

464. Additionally, WDC raises concern that the pORPS does not adequately recognise and provide for existing physical resources such as the Macraes mining operation which is a significant activity within the Waitaki District and wider Otago region.

465. Harbour Fish⁴³¹ and Southern Inshore Fisheries⁴³² consider it is inappropriate to combine fishing activities with land-based activities and seek amendments to remove references to ‘fishing’ in the third sentence of the statement.

466. The potential conflict between the port’s operations and the environment has been recognised by Port Otago who seeks to amend the statement to acknowledge necessary port activities may have adverse environmental impacts.⁴³³ Specifically they seek the following text amendments to the final sentence in the Statement:

Otago’s port moves freight to and from Otago and Southland, but operates alongside sensitive environments, including the Aramoana saltmarsh meaning the necessity for the port to operate safely and efficiently may have adverse environmental effects.

467. With regard to water abstraction, COES⁴³⁴ and Lynne Stewart⁴³⁵ consider it does not cause all stresses and adverse impacts listed in the second sentence of the statement and seek amendments to specifically reference ‘water abstraction particularly for irrigation’. The submitters consider this wording provides for both the effect of reduced flows in the river and the effect of intensive agriculture that results from irrigation.

⁴²⁶ 00024.002 City Forests

⁴²⁷ 00412.007, 00412.018 Ernslaw One, 00024.002 City Forests

⁴²⁸ 00033.003 Port Blakely, 00412.007, 00412.018 Ernslaw One, 00020.005 Raynoir

⁴²⁹ 00020.005 Rayonier

⁴³⁰ 00140.014 WDC

⁴³¹ 00126.001 Harbour Fish

⁴³² 00124.001 Southern Inshore Fisheries

⁴³³ 00301.009 Port Otago

⁴³⁴ 00202.008 COES

⁴³⁵ 00030.005 Lynne Stewart

468. DCC considers water abstraction, wastewater and stormwater discharge activities contribute to community wellbeing by providing flood protection and safeguarding public health and safety. The following specific amendments to the second sentence of the Statement are sought:

Water abstraction and wastewater and stormwater discharges can adversely affect the natural environment, cultural and amenity values, and recreation if not well managed.⁴³⁶

469. NZ Pork considers the Statement as notified fails to identify the value and contribution of food production in Otago and seeks amendments to provide for domestic food supply.⁴³⁷

Context

470. OWRUG⁴³⁸ considers the Context as notified fails to acknowledge and provide for other activities such as recreational activities that can also have adverse effects. OWRUG seeks the deletion of the first sentence of the Context and insertion of the following wording amendment:

Activities that rely on natural and physical resources can adversely impact those resources if not appropriately managed or controlled. If these impacts are not managed or controlled the sustainability of the regions natural resources can be threatened. Equally long-term economic, social and cultural values can be compromised or threatened ~~The Otago regional economy GDP totals \$13.2 billion and supports a population of 236,200 residents (over half of which are in Dunedin.~~

471. QLDC raises concern that the text currently underestimates the reliance that tourism has on the natural values of the region and seeks text amendments to better recognise and acknowledge this.⁴³⁹

472. Similar to their submission above, NZ Pork considers the Context as notified fails to identify the value and contribution of food production in Otago and seeks amendments to provide for domestic food supply.⁴⁴⁰

473. Trojan⁴⁴¹ and Wayfare⁴⁴² both seek the following minor text amendments to the final sentence of the Context to improve clarity:

Where business and social activity does not account for its impacts on natural resources in the long term, ~~not only is~~ the sustainability of the region's natural resources ~~threatened, but equally the associated long term~~ and economic, social and cultural values are ~~also~~ threatened.

⁴³⁶ 00139.019 DCC

⁴³⁷ 00240.010 NZ Pork

⁴³⁸ 00235.053 OWRUG

⁴³⁹ 00138.007 QLDC

⁴⁴⁰ 00240.010 NZ Pork

⁴⁴¹ 00206.091 Trojan

⁴⁴² 00411.124 Wayfare

Environmental

474. Trojan⁴⁴³ and Wayfare⁴⁴⁴ seek minor text amendments to the Environmental snapshot to improve clarity.

Economic

475. COES,⁴⁴⁵ QLDC,⁴⁴⁶ and Lynne Stuart⁴⁴⁷ seek amendments to highlight the adverse economic impact degraded natural environments can have on the region, including effects on the tourism industry and the ability to attract skilled personnel.

Social

476. OWRUG⁴⁴⁸ seeks deletion of the word 'business' from the text with no specific reasoning provided.
477. Trojan⁴⁴⁹ and Wayfare⁴⁵⁰ consider the use of the term 'social license' is not a good fit in the context of an RMA policy document and seeks the following wording amendment:

Damage to or loss of natural features and natural landscapes can compromises amenity values. Failure of business to ~~sustainably~~ manage their impact on natural resources can compromises the social licence of a business sector to operate. This can adversely impacts social capital (trust) and can create community division. In extreme cases it can lead to calls for reduced access to resources.

General

478. Two submitters raise concern over the wording of SRMR-I10 heading and consider focus should be on the planning framework required to protect against adverse effects.⁴⁵¹ They therefore seek to delete the heading as notified and replace it with the following:

SRMR-I10 – The planning framework in Otago has failed to manage and protect Otago's natural and physical resources, resulting in environmental stresses and unknown future impacts ~~Economic and domestic activities in Otago use natural resources but do not always properly account for the environmental stresses of the future impacts they cause~~

479. Fonterra agrees that the wellbeing of future generations is dependent on the enduring resilience of the natural environment but also considers continued access to natural resources is necessary.⁴⁵² They therefore seek that this be acknowledges and provided for.

⁴⁴³ 00206.092 Trojan

⁴⁴⁴ 00411.125 Wayfare

⁴⁴⁵ 00202.009 COES

⁴⁴⁶ 00138.007 QLDC

⁴⁴⁷ 00030.006 Lynne Stewart

⁴⁴⁸ 00235.054 OWRUG

⁴⁴⁹ 00206.093 Trojan

⁴⁵⁰ 00411.126 Wayfare

⁴⁵¹ 0236.031 Horticulture NZ, 00235.052 OWRUG

⁴⁵² 00213.019 Fonterra

480. John Highton considers industry bodies should be held accountable for the adverse environmental effects they create in the region and seeks amendments which require hydro-electricity generation to have increased mitigation measures.⁴⁵³

3.8.13.3. Analysis

Statement

481. I do not recommend the amendments sought by a number of submitters to provide additional specificity in relation to plantation forestry in the Statement section of SRMR-I10. I consider that these amendments are too detailed for a statement of the issue facing the Otago region. Therefore, I do not recommend additional specificity is included in the issues section. I consider the amendment sought by Rayonier to replace the term 'forestry' with 'primary production' is appropriate given the term is defined in the pORPS and other primary production activities, aside from forestry, are likely to contribute to sediment loss.
482. I do not recommend the changes sought by WDC to promote the sustainable management of carbon forestry. SRMR -I10 is a statement of the issues facing the Region and is not the appropriate place to promote or provide solutions to the issues faced. I consider the additional relief sought by WDC to include specific reference to Macraes mining operation is already provided at a high level by way of reference to 'minerals extraction'. Given this, I do not recommend any changes.
483. I agree with the concern raised by Harbour Fish and Southern Inshore Fisheries and consider reference to 'fishing' should be deleted from the third sentence of the statement.
484. I do not consider the amendments sought by Port Otago, COES, Lynne Stewart and DCC to include specific information relevant to port operations, water abstraction or discharges respectively, provides any additional value to the statement beyond the notified version. Given this, I have not recommended changes to include further specificity for activities on this basis.
485. In relation to the relief sought by NZ Pork, I note that this is a statement of issues for the Otago region, and I do not consider it to be an appropriate section of the pORPS to identify the value and contribution of food production in the Otago Region.

Context

486. I consider the relief sought by OWRUG provides a solution to the SRMR-I10, given the purpose of this section is to provide a high-level overview of the issues facing the Otago Region, I do not recommend the proposed change be adopted.
487. In relation to the amendments sought by QLDC, I consider the general reference to tourism in the final sentence of the Statement provides the relief sought by the submitter and I do not recommend any further changes beyond the notified version.

⁴⁵³ 00014.012 John Highton
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488. As mentioned in the analysis above in relation to NZ Pork, I consider this is a statement of issues for the Otago region, and I do not consider it to be an appropriate section of the pORPS to identify the value and contribution of food production in the Otago Region.

489. I do not consider the additions proposed by Trojan and Wayfare provide further clarity beyond the notified version and I do not recommend any changes.

Environmental

490. I do not consider the amendments proposed by Trojan and Wayfare provide further clarity beyond the notified version and I do not recommend any changes.

Economic

491. I consider the relief sought by COES, QLDC and Lynne Stewart is already provided more generally in the final sentence of the Statement subsection and the final sentence of the first paragraph of the 'Context' subsection. At this stage, I do not consider there is value in including additional acknowledgement of tourism within SRMR-I10. Accordingly, I recommend no changes.

Social

492. The reason for the deletion of 'business' from the second sentence of the Social subsection sought by OWRUG is unclear and I consider that such a change to the statement would not make sense in the context of the remaining sentence, accordingly I do not recommend any changes.

493. I acknowledge the submission made by Trojan and Wayfare and agree the term 'social licence' does not tend to be referred to in RMA policy documents. However, I consider there is tension between the relief sought by the submitters and the reasons for that relief. I consider the inclusion of some aspects of the relief sought provides clarity to the statement and have recommended these changes accordingly.

General

494. I do not recommend changes to the heading of SRMR-I10. I consider the heading as currently drafted articulates the issue and is consistent with the drafting style of the pORPS. Based on this I recommend no changes.

495. In response to the relief sought by Fonterra and John Highton, I do not consider the amendments would provide additional value in describing the issue. Therefore, I recommend no further changes.

3.8.13.4. Recommendation

496. I recommend the following amendments:

a. In the Statement:

i. Replace the term 'forestry' with 'primary production' in the first sentence as follows:

Sediment from development and primary production forestry⁴⁵⁴ activities flow into streams and builds up in the coastal environment, smothering kelp forests and affecting rich underwater habitats.

- ii. Delete the term 'fishing' in the third sentence as follows:

Agriculture, ~~fishing~~⁴⁵⁵ and mineral extraction support employment and economic well-being but also change landscapes and habitats.

- b. Amend the second sentence of the 'Social' subsection as follows:

Failure of business to sustainably manage their impact on natural resources can compromises⁴⁵⁶ the social licence of a business sector to operate.

3.8.14. SRMR-I11 – Cumulative impacts and resilience – the environmental costs of our activities in Otago are adding up with tipping points potentially being reached.

3.8.14.1. Introduction

497. SRMR-I11 considers the cumulative impacts on the environment in Otago as consequences of resource use, economic and social activities. The issue considers that the cumulative impacts of these activities on the environment may push environmental capacities past the point of continued provision for environmental, economic and social wellbeing.

3.8.14.2. Submissions

498. A total of 23 submissions were received seeking a broad range of amendments across the whole of SRMR-I11. These are summarised below:

Statement

499. As notified, Federated Farmers considers the Statement to be overly ideological and seeks the following minor structural amendments to the first sentence to improve readability:

How and/or where we currently live is likely to change significantly in coming years. To respond to all the issues identified in this RPS, ~~it is essential to we may~~ need to consider changes to how we travel, ...⁴⁵⁷

500. Three submitters consider improvements can be made by inserting a reference to essential human health needs.⁴⁵⁸ NZ Pork seeks to explicitly recognise the relationship between the value of food production and human health.⁴⁵⁹

⁴⁵⁴ 00020.005 Rayonier

⁴⁵⁵ 00126.001 Harbour Fish, 00124.001 Southern Inshore Fisheries

⁴⁵⁶ 00206.093 Trojan, 00411.126 Wayfare

⁴⁵⁷ 00239.028 Federated Farmers

⁴⁵⁸ 00236.032 Horticulture NZ, 00235.055 OWURG, 00240.011

⁴⁵⁹ 00240.011 NZ Pork

Context

501. Wayfare and Trojan consider the following wording amendments to the second sentence in the first paragraph are necessary to improve the Context clarity:

This requires *resilient* frameworks that take account of the dynamic relationship between the natural environment, economy and people while acknowledging that the future is always uncertain, and knowledge is imperfect.⁴⁶⁰

502. Forest and Bird considers the text as notified fails to give effect to either the NPSFM or the NZCPS and seeks inclusion of text which recognises the requirement and potential for environmental restoration.⁴⁶¹

503. Horticulture NZ considers reference to ‘the health and safety of people and communities’ is required in the first sentence⁴⁶²

Environmental

504. Three submitters consider that information about the Otago environment is still unknown and seek amendments to reflect this in the text.⁴⁶³ While COES and Lynne Stewart request reference to a ‘precautionary approach’,⁴⁶⁴ Federated Farmers seeks the inclusion of the following sentence:

There is much that remains unknown about the functioning of the Otago environment at a holistic and integrated level.⁴⁶⁵

505. Beef + Lamb and DINZ consider the text as written urges unsubstantiated actions to advance recovery and resilience whilst ‘stifling innovation and locking in damaging practices’.⁴⁶⁶ They seek amendments which clarify and emphasise increasing knowledge, innovation, and flexibility to ensure resilience although no specific amendments are suggested.⁴⁶⁷

506. Wayfare and Trojan both seek amendments to support clarification and interpretation and submit the following editorial changes:

- a. First sentence of first paragraph

While many ecosystems have a degree of *resilience*, increasing pressures on the natural environment, typically as a result of human activities (for example economic development), can have an adverse cumulative *effect*.

- b. First sentence of second paragraph

~~The first and best response is to ensure sustainable management of our natural resources and a~~Avoiding immediate and long-term cumulative *effects* ~~that~~

⁴⁶⁰ 00411.128 Wayfare, 00206.095 Trojan

⁴⁶¹ 00230.027 Forest and Bird

⁴⁶² 00236.032 Horticulture NZ

⁴⁶³ 00202.01 COES, 00239.028 Federated Farmers, 00030.007 Lynne Stewart

⁴⁶⁴ 00202.01 COES, 00030.007 Lynne Stewart

⁴⁶⁵ 00239.028 Federated Farmers

⁴⁶⁶ 00237.016 Beef + Lamb and DINZ

⁴⁶⁷ 00237.016 Beef + Lamb and DINZ

~~degrade the on~~ environmental values which are already degraded is required to achieve sustainable management of our natural resources.⁴⁶⁸

507. Meridian submits that the impact snapshot needs to be expanded to address the correlation between greenhouse gas emissions, the impact of climate change with a focus on the Otago region, and the role of renewable electricity generation and seeks the following wording amendment to the first paragraph:⁴⁶⁹

While many ecosystems have a degree of resilience, increasing pressures on the environment, typically as a result of human activities (for example economic development), can have an adverse cumulative effect. A key tipping point is the pending effects of climate change that are resulting from greenhouse gas emissions. Some of these effects Climate change also has are already being experienced in the Otago region, and further climate change has the potential to seriously challenge ecosystem adaptive capacity and the location and functioning of business and communities in the region. Decarbonising our economy is a priority for mitigating the scale of climate change and the associated economic and social disruption that can result. Key to reducing greenhouse gas emissions is increasing renewable electricity generation. ~~Much work is being undertaken to address this challenge, but it is still possible that permanent changes may occur (tipping point).~~⁴⁷⁰

Social and Economic

508. Beef + Lamb and DINZ consider the direction of the Impact snapshot which emphasises community resilience to “adapt and nimbly respond to future challenges” enables flexibility in responses but believe science and research should also be provided for.⁴⁷¹
509. OWRUG seeks to have the Social and Economic impact snapshot redrafted to ensure that the intent is clear and consistent language is used to avoid uncertainty.⁴⁷²
510. Trojan and Wayfare seek the following minor wording amendments to support clarification:

The well-being of Otago’s people and communities in the long term will be ~~sustained~~ protected by the enduring ecological health and *resilience* of the natural environment and by human activity providing for the natural environment in equal or greater measure than is taken from it (in other words, net impact determines net well – being). It will also be ~~sustained~~ protected through community *resilience* so that it can adapt and nimbly respond to future challenges.⁴⁷³

⁴⁶⁸ 00206.096 Trojan, 00411.130 Wayfare

⁴⁶⁹ 00306.017 Meridian

⁴⁷⁰ 00306.017 Meridian

⁴⁷¹ 00237.016 Beef + Lamb and DINZ

⁴⁷² 00235.056 OWRUG, 00235.057 OWRUG

⁴⁷³ 00411.130 Wayfare, 00206.097 Trojan

General

511. Waitaki Irrigators seeks amendments to the Title as they consider that as written it fails to reflect the Statement which makes no reference to cumulative impacts, resilience, or tipping points.⁴⁷⁴
512. A number of submitters raise concern regarding the term ‘tipping point’,⁴⁷⁵ and six of these seek its clarification as follows:⁴⁷⁶
- Federated Farmers,⁴⁷⁷ Horticulture NZ,⁴⁷⁸ and OWURG⁴⁷⁹ seek the deletion of the term and insertion of the term ‘thresholds’, highlighting this terminology is consistent with other provisions within the pORPS, specifically the Integrated Management policies.
 - Waitaki Irrigators similarly seeks deletion of references to ‘tipping point’ and instead seeks insertion of the word ‘limits’.⁴⁸⁰
 - Forest and Bird questions the ‘tipping point’ terminology and states work should be progressed towards restoring and improving ecosystem health rather than working towards a tipping point.⁴⁸¹
513. In relation to other points of clarification:
- Trojan and Wayfare seek a minor amendment of the Issue title by making reference to ‘the natural environmental’, though no reasons have been provided,⁴⁸² and
 - Federated Farmers highlights the word ‘impacts’ is inconsistent with the RMA and seeks for this to be addressed by replacing it with the word ‘effects’ in the Statement and Context.⁴⁸³
514. Fonterra considers SRMR-I11 draws from issues identified in SRMR-I6 and SRMR-I10 which adds no additional basis for the suite of objectives and policies that must follow.⁴⁸⁴ They therefore seek deletion of SRMR-I11.⁴⁸⁵
515. John Highton considers that a lack of monitoring and testing has resulted in tipping points being reached and seeks amendments to provide for this.⁴⁸⁶

⁴⁷⁴ 00213.004 Waitaki Irrigators

⁴⁷⁵ 00237.016 Beef + Lamb and DINZ, 00239.028 Federated Farmers, 00213.020 Fonterra, 00236.032 Horticulture NZ, 00235.055 OWURG, 00230.027 Forest and Bird, 00213.004 Waitaki Irrigators

⁴⁷⁶ 00237.016 Beef + Lamb and DINZ, 00239.028 Federated Farmers, 00213.020 Fonterra, 00236.032 Horticulture NZ, 00235.055 OWURG, 00213.004 Waitaki Irrigators

⁴⁷⁷ 00239.028 Federated Farmers

⁴⁷⁸ 00236.032 Horticulture NZ

⁴⁷⁹ 00235.022, 00235.055 OWURG

⁴⁸⁰ 00213.004 Waitaki Irrigators

⁴⁸¹ 00230.027 Forest and Bird

⁴⁸² 00206.094 Trojan, 00411.127 Wayfare

⁴⁸³ 00239.028 Federated Farmers

⁴⁸⁴ 00213.020 Fonterra

⁴⁸⁵ 00213.020 Fonterra

⁴⁸⁶ 00014.013 John Highton

516. Wise Response considers the Issue important but not sufficiently pro-active and seeks recognition of the difficulties in, and reliability of identifying thresholds.⁴⁸⁷ They consider the insertion of 'buffers are needed to allow for misidentification of thresholds' achieves this outcome but have not stated where this should be inserted.⁴⁸⁸

3.8.14.3. Analysis

Statement

517. Four submitters seek amendments to the Statement, which in my opinion are too specific for a statement of the issues, reference a specific industry, or do not convey the same intent as the existing statement. Consequently, I do not recommend that any of these submissions are adopted.

Context

518. In regard to the submission from Wayfare and Trojan seeking insertion of the word 'natural' before environment, I consider that the meaning of 'natural environment' is too narrow in the context of this sentence. The definition of *environment* is broader than the natural environment, and I consider that the broader meaning is more appropriate for this statement about the relationship between the '*environment*, economy and people'. I do not recommend that this submission be adopted.
519. I consider that Forest and Bird's submission to acknowledge the requirement and potential for environmental restoration strays into solutions and is not appropriate for the statement of issues.
520. Finally, regarding the submission from Horticulture NZ, I do not consider that it is necessary to add reference to the health and safety of people and communities, which is covered more generally by the reference to 'environmental, economic and social well-being'. Therefore, I do not recommend that any of the submissions seeking amendments to the Context be adopted.

Environmental

521. A number of submitters seek amendments to reflect that much that is unknown about the Otago environment and/or refer to a precautionary approach. In my opinion uncertainty and lack of knowledge has been acknowledged in the Context. I do not consider that further detail on this is required and consider that any reference to the precautionary approach strays into solutions and predetermines policy direction which is better addressed through the regional and district plans. Therefore, I do not recommend adopting these submissions.
522. Regarding Beef + Lamb and DINZ's submission, it is not clear to me how the Environmental impact snapshot urges unsubstantiated action and stifles innovation, and without further clarification or suggested amendments to remedy these concerns, I do not recommend adopting this submission.

⁴⁸⁷ 00509.027 Wise Response

⁴⁸⁸ 00509.027 Wise Response

523. For the same reasons that I have discussed for the Statement, I do not agree that it is appropriate to insert the word 'natural' before the term '*environment*' in the first sentence because I consider that this is a narrower meaning than what is intended. In the context of that sentence, I consider that the broader meaning of *environment*, as defined in the RMA and this policy statement, is appropriate.
524. I also do not agree with the amendments suggested by Wayfare and Trojan for the first sentence of the second paragraph, as I consider that they change the meaning of the sentence and offer no additional value. As currently worded, this sentence is about avoiding immediate and long-term effects that degrade the *environment*, whereas the wording proposed by the submitters narrows the statement to avoiding effects on values which are already degraded. Therefore, I do not recommend that the submissions from Trojan and Wayfare be adopted.
525. Meridian seeks some detailed amendments to the Environmental impact snapshot, and I consider that they are too specific for a statement of the issue and stray into solutions to the issue. I do not recommend that this submission be adopted.

Social and Economic

526. In regard to the social and economic impact snapshots, I consider that the submission from Beef + Lamb and DINZ seeks reference to solutions which is not appropriate.
527. I do not agree that 'protected' is a better word than 'sustained' in the first paragraph, and as I have already discussed, I consider that inserting the word 'natural' before 'environment' in that same paragraph narrows the meaning and is contrary to what is intended given the context of the sentence. Therefore, I do not recommend adopting the submissions by Trojan and Wayfare.
528. In regard to OWRUG's submission about redrafting to make sure that the intent is clear, in the absence of suggested amendments I am unclear how their concerns could be addressed.

General

529. A number of submitters do not agree with the use of the term 'tipping point' and either seek its clarification or that it is replaced with other terms such as 'thresholds' or 'limits'. Forest and Bird considers that work should be progressed towards restoring and improving ecosystem health rather than working towards tipping points.
530. In my opinion, 'tipping point' is a suitable term in the context of the issue statement, and a valid term as defined in common English. I agree with Waitaki Irrigators who outline in their submission that the concept of an environmental tipping point is generally understood to mean a point at which an ecosystem can no longer cope with environmental change, and the ecosystem suddenly shifts from one state to another. I consider that this is exactly what the issue statement is intending to convey when it refers to tipping point, and that thresholds and limits have a different meaning that are not a good fit for this issue statement. In my view thresholds and limits are implemented to avoid reaching a tipping point. Therefore, I do not recommend that these submissions be adopted.

531. I do not agree with Forest and Bird that SRMR-11 encourages working towards a tipping point, rather it seeks to avoid reaching tipping points. I agree that restoration and enhancement may be desirable goals, but reference to restoration and enhancement is straying into solutions to issues and is a more appropriate consideration for policy development rather than the issues statement.
532. Regarding Federated Farmer's submission, I do not agree that changing 'impacts' to 'effects' is appropriate because 'effects' has a defined meaning that is better suited at the provision level rather than in the statement of the issue.
533. Regarding Fonterra's submission to delete SRMR-I11, I note that the 11 issues were identified as a result of a public consultation process, and I do not consider that it is appropriate to delete an Issue that came out of that process in response to this submission. While it is interrelated to many of the other issues, SRMR-I11 is still a relevant issue in its own right which draws together the threads of a number of issues. Therefore, I do not recommend adopting this submission.
534. In regard to the submission from John Highton about monitoring and testing and a proactive approach to feedback from the community, these are possible solutions to the issue and are not appropriate in the issues statement. I do not recommend adopting this submission.
535. Finally, I consider that the amendments sought by Wise Response are too detailed and do not assist in clarifying the issue and I do not recommend adopting this submission.
- 3.8.14.4. [Recommendation](#)
536. I do not recommend any amendments to SRMR-I11.
- 3.8.15. [New provisions](#)
- 3.8.15.1. [Introduction](#)
537. Twelve submitters consider the SRMR chapter as notified is incomplete and seek the addition of new issue statements, ranging in subject matter.⁴⁸⁹ These submissions are summarised below.

⁴⁸⁹ 00322.004 Fulton Hogan, 00314.009 Transpower, 00315.015 Aurora, 00310.003 The Telecommunication Companies, 00242.001 Cosy Homes, 00213.018 Fonterra, 00236.029 and 00236.033 Horticulture NZ, 00231.022 Otago Fish and Game, 00235.058 OWRUG, 00411.097 Wayfare
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3.8.15.2. Submissions

538. Six submitters believe the SRMR chapter is too narrowly focussed on the use of and impacts on natural resources and little consideration is given to the use, development and protection of physical resources, which benefit people and communities.⁴⁹⁰
539. Aurora Energy⁴⁹¹ and Fonterra⁴⁹² seek amendments which consider resource use within sustainable limits. Specifically, Aurora seeks an additional issue statement that focuses on addressing the extent to which the aspirations, challenges and resource management issues are supported by a well-functioning electricity distribution network.⁴⁹³
540. The Telecommunications Companies seek the addition of an issue statement that acknowledges the importance of maintaining functional infrastructure.⁴⁹⁴
541. Cosy Homes Charitable Trust seeks the addition of an issue statement that focuses on how ambient air quality is negatively impacting human health.⁴⁹⁵
542. Fonterra seeks the addition of an issue statement that acknowledges the importance of the dependence of regional communities' social and economic well-being on:
- a. Resource use and the need to provide for that use within sustainable limits, and
 - b. the importance of regionally significant industry and infrastructure to economic and social well-being and the need to protect it from the effects of reverse sensitivity.⁴⁹⁶
543. Fulton Hogan seeks a new issue statement describing the importance of quarrying.⁴⁹⁷
544. Horticulture NZ seeks the addition of an issue statement for Food Production, Food Security and Food Supply that includes consideration of biosecurity matters.⁴⁹⁸
545. OWRUG and Horticulture NZ both seek the addition of an issue statement that addresses how Food production systems are coming under increased pressure from population growth, competing resource use, climate change, and the need to improve environmental outcomes.⁴⁹⁹
546. Fish and Game seeks the addition of an issue statement that discusses the positive issue of the ways in which people interact with the environment in Otago for recreation and amenity, including but not limited to how resource management decisions impact upon this capability.⁵⁰⁰

⁴⁹⁰ 00315.015 Aurora Energy, 00310.003 The Telecommunication Companies, 00213.018 Fonterra, 00411.097 Wayfare, 00322.004 Fulton Hogan, 00314.009 Transpower

⁴⁹¹ 00315.015 Aurora Energy

⁴⁹² 00213.018 Fonterra

⁴⁹³ 00315.015 Aurora Energy

⁴⁹⁴ 00310.003 The Telecommunications Companies

⁴⁹⁵ 00242.001 Cosy Homes Charitable Trust

⁴⁹⁶ 00213.018 Fonterra

⁴⁹⁷ 00322.004 Fulton Hogan

⁴⁹⁸ 00236.029 Horticulture NZ

⁴⁹⁹ 00236.033 Horticulture NZ, 00235.058 OWRUG

⁵⁰⁰ 00231.022 Fish and Game

547. Transpower seeks to include a new issue that addresses the need to operate, maintain, develop and upgrade the National Grid as regionally important.⁵⁰¹
548. Wayfare seeks the addition of an issue statement that identifies and discusses, in a positive frame, the benefits to people and the environment from subdivision, use and development of natural and physical resources.⁵⁰²
549. OWRUG note that Te Mana o te Wai requires changes to the management of freshwater in the region which could impact the social, economic and cultural wellbeing of community depending on the changes required.⁵⁰³ They seek this be included as a significant resource management issue with acknowledgement that a transition period is required to provide for achievement of environmental outcomes sought.

3.8.15.3. Analysis

550. The existing issue statements have been workshopped and widely consulted on, including public consultation and Reference Group workshops. I do not consider that it is appropriate to add significant resource management issues to the existing suite when they have not been through the same consultation process as the eleven issues that have been identified.
551. In addition, I consider that most of the requested issue statements deal with industry specific concerns and do not warrant a dedicated issue statement in a Regional Policy Statement. The requested language is solution focused rather than issue focused. Additionally, the key issues associated with the requested issue statements are addressed through one or more existing issues statements.

3.8.15.4. Recommendation

552. I do not recommend adopting any of the requested amendments.

⁵⁰¹ 00314.009 Transpower

⁵⁰² 00411.097 Wayfare

⁵⁰³ 00235.002 OWRUG

3.9. RMIA – Resource management issues of significance to iwi authorities in the region

3.9.1. Introduction

553. A regional policy statement must state the resource management issues of significance to iwi authorities in the region.⁵⁰⁴ Only mana whenua can make such statements with authenticity in Otago.

554. Iwi consultancies Aukaha and Te Ao Marama Incorporated (as agents of, and in consultation with, Otago’s mana whenua) have led preparation of the corresponding section of the PORPS 2021. The issues presented represent Kāi Tahu’s key concerns with resource management in Otago.

555. These are issue statements from a Kāi Tahu perspective as mana whenua. Submissions that are not from a mana whenua perspective and that seek to change an issue’s focus face a high bar for acceptance.

556. The pORPS explores the context for each issue from a Kāi Tahu perspective. This content is not repeated here. The issues are complete statements which speak for themselves, so introductory material for each issue is not included.

3.9.2. General Submissions

3.9.2.1. Introduction

557. There are three general submissions on this section.

3.9.2.2. Submissions

558. Fish and Game expresses support for the section as a whole.⁵⁰⁵

559. Ngāi Tahu ki Murihiku supports the parts it has not proposed changes for⁵⁰⁶ and also seeks that ORC ensure that issues of significance identified by Kāi Tahu are addressed in the pORPS. Just as the pORPS directs regional and district plans to respond to these issues, the pORPS needs to ‘lead by example’ in providing the overarching resource management direction for the Otago region.

3.9.2.3. Analysis

560. In response to Ngāi Tahu ki Murihiku’s submission, the RPS has been written with Kāi Tahu’s concerns very much in mind and aims to provide a framework within which Kāi Tahu values will be properly supported through to district and regional plan level. I

⁵⁰⁴ Section 62(1)(b) of the RMA

⁵⁰⁵ 00231.028 Fish and Game

⁵⁰⁶ 00223.048 Ngāi Tahu ki Murihiku

recommend accepting this submission in part, insofar as the parts that Ngāi Tahu ki Murihiku supports remain as notified.

561. I recommend accepting in part Fish and Game's submission supporting this chapter in respect of those parts that remain as notified.

3.9.2.4. Recommendations

562. I do not recommend any amendments in response to general submissions.

3.9.3. Introduction

3.9.3.1. Introduction

563. The introduction describes the relationship between Kāi Tahu and the natural world.

3.9.3.2. Submissions

564. Kāi Tahu ki Otago supports the Introduction.⁵⁰⁷

3.9.3.3. Analysis

565. I recommend accepting Kāi Tahu ki Otago's submission.

3.9.3.4. Recommendation

566. I do not recommend any amendments.

3.9.4. RMIA-WAI-Wai Māori

567. Introduction

568. This set of five issues describes Kāi Tahu concerns relating to fresh water. The introductory section sets context for the issues that follow.

3.9.4.1. Submissions

569. Kāi Tahu ki Otago supports the introduction.⁵⁰⁸

3.9.4.2. Analysis

570. I recommend accepting Kāi Tahu ki Otago's submission.

⁵⁰⁷ 00226.058 Kāi Tahu ki Otago

⁵⁰⁸ 00226.05 Kāi Tahu ki Otago

3.9.4.3. Recommendation

571. I do not recommend any amendments.

3.9.5. RMIA-WAI-I1 – The loss and degradation of water resources through, drainage, abstraction, pollution, and damming has resulted in material and cultural deprivation for Kāi Tahu ki Otago

3.9.5.1. Submissions

572. Kāi Tahu ki Otago supports the issue as notified.⁵⁰⁹

573. Federated Farmers seeks deletion, stating that it is unclear what material and cultural deprivation has occurred and how this has not been addressed through other RPS provisions.⁵¹⁰

574. Note a submission from Oceana Gold has been incorrectly logged in the SODR against RMIA-WAI-I1.⁵¹¹ It relates to RMIA-WTA-I1 and will be assessed in the relevant section.

3.9.5.2. Analysis

575. The accompanying text in the issue adequately explains the material and cultural deprivation experienced. Whether or not it is stated elsewhere is irrelevant, as it forms a part of Kāi Tahu's concerns about fresh water. I therefore recommend declining Federated Farmers submission.

576. I recommend accepting Kāi Tahu ki Otago's supporting submission.

3.9.5.3. Recommendation

577. I do not recommend any amendments.

3.9.6. RMIA-WAI-I2 – Current water management does not adequately address Kāi Tahu cultural values and interests

3.9.6.1. Submissions

578. Kāi Tahu ki Otago supports the issue.⁵¹²

579. John Highton suggests amending the issue to include separate recognition regarding the current water management not meeting other cultural expectations within the community.

⁵⁰⁹ 00226.060 Kāi Tahu ki Otago

⁵¹⁰ 00239.029 Federated Farmers

⁵¹¹ 00115.008 Oceana Gold

⁵¹² 00226.061 Kāi Tahu ki Otago

3.9.6.2. Analysis

580. While I acknowledge John Highton’s concerns, this issue relates to concerns of iwi authorities. Other cultural expectations are dealt with elsewhere in the SRMR section. I recommend declining John Highton’s submission on this point.

581. I recommend accepting Kāi Tahu ki Otago’s supporting submission.

3.9.6.3. Recommendation

582. I do not recommend any amendments.

3.9.7. RMIA-WAI-13 – The effects of land and water use activities on freshwater habitats have resulted in adverse effects on the diversity and abundance of mahika kai resources and harvesting activity.

3.9.7.1. Submissions

583. Two submitters support this issue.⁵¹³

584. Ngāi Tahu ki Murihiku seeks the following change to the third to last sentence in the explanatory text, on the basis that rakatirataka cannot be lost in the way described. In addition, the word “loss” implies something is gone, and this cannot happen to mana:

“[...] It represents a significant loss for mana whenua and a diminishing of rakatirataka and of mana. [...]”⁵¹⁴

585. Wayfare seeks amendments to the explanatory text by adding “overfishing” and “pollution” as issues or reasons for loss of access.⁵¹⁵

3.9.7.2. Analysis

586. Ngāi Tahu ki Murihiku’s submission clarifies proper understanding of Te Reo terms and Kāi Tahu concepts and more clearly expresses the scale of loss. I consider these changes make the issue clearer and recommend accepting this submission.

587. Regarding Wayfare’s submission, I do not know whether overfishing is a particular issue in Otago’s freshwater environments, though I am open to including it if information to this effect is produced through the hearings process and is supported by mana whenua. I consider pollution is captured in the existing wording “reduced water quality” in the explanatory text. I recommend declining this submission.

588. I recommend accepting in part all submissions supporting this provision, in respect of those parts that remain as notified.

⁵¹³ 00014.015 John Highton; 00226.062 Kāi Tahu ki Otago

⁵¹⁴ 00223.049 Ngāi Tahu ki Murihiku

⁵¹⁵ 00411.131 Wayfare

3.9.7.3. Recommendation

589. I recommend amending the provision as follows:

a. In the third to last sentence of the explanatory text:

i. add “significant” before “loss”

ii. Replace “~~of rakatirataka and~~” with “for mana whenua and a diminishing”

3.9.8. RMIA-WAI-I4 – Effective participation of Kāi Tahu in freshwater management is hampered by poor recognition of mātauraka

3.9.8.1. Submissions

590. Two submitters support the issue as notified.⁵¹⁶

3.9.8.2. Analysis

591. I recommend accepting the submissions in support.

3.9.8.3. Recommendation

592. I do not recommend any amendments.

3.9.9. RMIA-WAI-I5 – Poor integration of water management, across agencies and across a catchment, hinders effective and holistic freshwater management

3.9.9.1. Submissions

593. Waitaki Irrigators supports the issue as notified.⁵¹⁷

594. The Manuherekia Catchment Group says that it does not support a vision, policy, or timeframe excluding water being utilised outside the catchment. It submits this practice is crucial in some dry areas and may be a part of an integrated and holistic water management approach.⁵¹⁸

595. DCC asks that the issue be amended for consistency with other requested changes in its submission but makes no specific recommendations.⁵¹⁹

596. Federated Farmers is concerned with the focus and insistence that inefficient irrigation practice causes environmental concerns, as this lacks nuance. It asks that the word

⁵¹⁶ 00014.017 John Highton; 00226.063 Kāi Tahu ki Otago

⁵¹⁷ 00213.005 Waitaki Irrigators

⁵¹⁸ 00116.005 Manuherekia Catchment Group

⁵¹⁹ 00139.020 DCC

“inefficient” be replaced with “poor”, as in irrigation practice that is not suited to the locality or farming system in question.⁵²⁰

597. Federated Farmers also requests a modification to indicate that poor afforestation is the ‘wrong tree in the wrong place for the wrong reason’. It considers landholders are generally the best people to know which areas of their properties are suitable for different types of forestry, and which areas are not.⁵²¹
598. Oceana Gold requests that reference to water quality being adversely impacted by mining activities be deleted, as this is covered by the point about land uses (both are sub-points of “Water quality concerns”).⁵²²
599. David van der Zwet wants the reference to suction dredging removed because the effects are negligible.⁵²³
600. Kai Tahu ki Otago provides amendments to correct the expression of tikaka concepts (under “Water allocation concerns”) as follows:

“[...]

The effects of long duration of water take consents which lock in a pattern of resource use for a long time, limiting the ability for of Kāi Tahu to exercise ~~kaitiakitaka responsibilities~~ their role as kaitiaki as an expression of mana and rakatirataka.

[...]”⁵²⁴

601. John Highton requests an amendment to include the need to greatly improve the coordination between other agencies such as DOC, the Access Commission, LINZ and others.⁵²⁵

3.9.9.2. Analysis

602. In my opinion all but two of the submissions asking for amendments miss the point that this issue is an expression of Kāi Tahu’s concerns with resource management. The submissions amount to requests to unilaterally revise Kāi Tahu’s opinion on these matters. In response to some specific points raised:
- The issue does not, of itself, exclude cross mixing of water from different catchments; it states Kāi tahu’s position on this issue.
 - In the absence of specific changes being presented, it is difficult to see how Kāi Tahu’s expression of an issue should be altered by submissions made on other provisions.

⁵²⁰ 00239.030 Federated Farmers

⁵²¹ 00239.030 Federated Farmers

⁵²² 00115.009 Oceana Gold

⁵²³ 00011.005 David van der Zwet

⁵²⁴ 00226.064 Kāi Tahu ki Otago

⁵²⁵ 00014.018 John Highton

- The word “poor” is more imprecise and subjective than “inefficient”, and I do not think that is fitting given Kāi Tahu’s expression of this issue.
- I do not consider that “wrong tree in the wrong place for the wrong reason” provides better clarity. To expand on the concept: what is a “right” tree, and could it be in a “wrong” place for the “right” reason? Could it be in a “right” place for a “wrong” reason? It is not clear when the permutations of this concept result in a good outcome. The existing wording is sufficient to express Kāi Tahu’s concern.
- As Kāi Tahu has chosen to specifically voice its concern about mining discharges, I consider this aspect should stay. It does not relate solely to Oceana Gold’s operations.
- No evidence is presented to support the claim that the effects of suction dredging are negligible.

603. The remaining two submissions are from John Highton and Kāi Tahu Ki Otago.

604. I agree with John Highton that better coordination is required between agencies. I think this improvement is better suited to a method than an issue, and it is addressed in the Integrated Management section in IM – M2 – Relationships. It does not need to be repeated in this particular issue and accordingly I recommend declining this submission.

605. Kāi Tahu ki Otago’s submission provides informed corrections to the existing text. I accordingly recommend Kāi Tahu’s submission be accepted.

606. On the above basis, I recommend declining all submissions seeking amendments except Kāi Tahu ki Otago’s.

607. I recommend accepting in part Waitaki Irrigators’ supporting submission, in respect of those parts that remain as notified.

3.9.9.3. Recommendation

608. I recommend amending the explanatory text as follows:

- a. In the 4th bullet point under “Water allocation concerns”:
 - i. Insert “of” before “Kāi Tahu”.
 - ii. Replace “exercise ~~kaitiakitaka responsibilities~~” with “their role as kaitiaki as an expression of mana and rakatirataka”.
 - iii. As a consequential change, delete the word “for” prior to the inserted “of”

3.9.10. RMIA-MKB-Mahika Kai and Biodiversity

3.9.10.1. Introduction

609. This set of six issues describes Kāi Tahu concerns relating to mahika kai and biodiversity. The introductory section sets context for the issues that follow.

3.9.10.2. Submissions

610. Kāi Tahu ki Otago supports the introduction as notified.⁵²⁶
611. Te Waihanganoes that there are other ways of safeguarding mahika kai and biodiversity in Otago, and a ki uta ki tai approach would promote an integrated solution to this problem. It also suggests applying the effects management hierarchy to this issue.⁵²⁷

3.9.10.3. Analysis

612. Te Waihanga's submission provides no clear amendments. I do not understand how an effects management hierarchy should be applied to an issue. I recommend declining this submission.
613. I recommend accepting Kāi Tahu ki Otago's submission in support.

3.9.10.4. Recommendation

614. I do not recommend any amendments.

3.9.11. RMIA-MKB-I1 – The diversity and abundance of terrestrial and aquatic indigenous species has been reduced due to adverse effects of resource use and development

3.9.11.1. Submissions

615. DOC suggests amending the 6th bullet point as follows, or words to like effect: "Loss of indigenous ~~fish~~ freshwater species, many of which are taoka and mahika kai, through displacement and predation."⁵²⁸
616. Kāi Tahu ki Otago requests the following addition:
- "Specific concerns include: [...]"
- A persistent lack of recognition of Kāi Tahu perspectives, values and mātauraka in indigenous species and habitat management, planning, and decision – making, and
 - The loss of cultural knowledge, mātauraka, and tikaka that has accompanied the loss of mahika kai, and indigenous biodiversity."⁵²⁹
617. Waitaki DC suggests amending the last bullet point as follows:

⁵²⁶ 00226.065 Kāi Tahu ki Otago

⁵²⁷ 00321.021 Te Waihanga

⁵²⁸ 00137.037 DOC

⁵²⁹ 00226.066 Kāi Tahu ki Otago

“The impact of inappropriate forestry developments including carbon forestry, conversion of tussock lands and other intensification of farming on indigenous flora and fauna values, including ecological disturbance and displacement of species.”⁵³⁰

618. John Highton suggests amending the issue to include that, together with other agencies, the commercial exploitation of native species is regulated and the breeding environment for smelt species are improved through investigation and monitoring.

3.9.11.2. Analysis

619. DOC’s suggested amendment is an appropriate change that does not impact the tenor of the issue and is consistent with Kāi Tahu’s concerns as I have understood them during pORPS development. I recommend accepting this submission.
620. The issue explanation as drafted is broad enough to encompass carbon forestry. Kāi Tahu ki Otago’s submissions and further submissions⁵³¹, and Te Rūnanga o Ngāi Tahu’s further submissions⁵³², reveal that they have considered the effects of carbon farming, have chosen to support some of Waitaki DC’s related submission points, yet have not chosen to support its direct expression in this issue. For this reason, I recommend declining Waitaki DC’s submission.
621. I recommend accepting Kāi Tahu ki Otago’s submission as it is a direct expression of iwi concerns, noting that the “and” at the end of the first new bullet point is not required in accordance with ORC’s approach to formatting the pORPS.
622. I do not think the pORPS is the appropriate tool for setting up regulation of commercial freshwater fisheries, and I consider the breeding environments for smelt species are adequately addressed through provisions relating to freshwater, coast, and biodiversity. I recommend declining John Highton’s submission on this point.

3.9.11.3. Recommendation

623. I recommend amending the explanatory text as follows:
- a. In the sixth bullet point, replace “fish” with “freshwater”.
 - b. At the end of the bullet point list of specific concerns:
 - i. Insert new bullet point “A persistent lack of recognition of Kāi Tahu perspectives, values and mātauraka in indigenous species and habitat management, planning, and decision-making”
 - ii. Insert new bullet point “The loss of cultural knowledge, mātauraka, and tikaka that has accompanied the loss of mahika kai, and indigenous biodiversity”.

⁵³⁰ 00140.015 Waitaki DC

⁵³¹ FS00226 Kāi Tahu ki Otago

⁵³² FS00234 Te Rūnanga o Ngāi Tahu

3.9.12. RMIA-MKB-I2 – Regulatory and physical barriers have impeded the ability Kāi Tahu to access mahika kai and to undertake customary harvest

3.9.12.1. Submissions

624. Beef + Lamb and DINZ request an amendment to provide for farm plans to be used as a tool to determine a protocol for accessing mahika kai sites between iwi and landowners.⁵³³

625. Kāi Tahu ki Otago requests the following amendment:

“[...] Obstacles include lack of physical access, habitat and species loss, and the sites no longer being safe to access due to the site becoming polluted, or a change in flow velocity and/or depth.”⁵³⁴

3.9.12.2. Analysis

626. Beef + Lamb and DINZ’s submission as written is not an issue statement – it provides a solution to an issue. Further, it seems to me to be an operational detail that an RPS is not best placed to deal with. It would be better considered through regional plans or through non-regulatory methods. I consider it is not clear that farm plans are the appropriate mechanism for managing access to mahika kai sites; they may be, but this will require further communication between Kāi Tahu and landowners to decide. In any case, the RPS does not prevent farm plans being used for this purpose. I recommend declining this submission.

627. I recommend declining Kāi Tahu ki Otago’s submission. Although it is a direct expression of iwi concerns, the issue concerns regulatory and physical barriers. Habitat and species loss do not fit these categories and, further, are addressed under RMIA-MKB-I1.

3.9.12.3. Recommendation

628. I do not recommend any amendments.

3.9.13. RMIA-MKB-I3 – Impacts of climate change on both species / habitat viability and increasing pest (flora / fauna) encroachments

3.9.13.1. Submissions

629. Kāi Tahu ki Otago requests the following amendment:

⁵³³ 00237.017 Beef + Lamb and DINZ

⁵³⁴ 00226.067 Kāi Tahu ki Otago

“[...] Where possible, these effects should be planned for in environmental management, including regard the impacts on Kāi Tahu and mana whenua values.”⁵³⁵

3.9.13.2. Analysis

630. Kāi Tahu ki Otago’s submission is a direct expression of iwi concerns, though it does not make grammatical sense as written. I recommend accepting the submission in part, with grammatical adjustments to ensure the sentence as a whole makes sense.

3.9.13.3. Recommendation

631. I recommend amending the last sentence of the issue as follows:

“Where possible, ~~these effects should be planned for in environmental management~~ should include planning for these effects and have regard for their impacts on Kāi Tahu and mana whenua values.”

3.9.14. RMIA-MKB-I4 – Shortage of protected and secure areas for biodiversity

3.9.14.1. Submissions

632. Kāi Tahu ki Otago supports the issue as notified.⁵³⁶

633. Federated Farmers wants the issue deleted because it is addressed through the Biodiversity topics and provisions and is unnecessary and confusing duplication.⁵³⁷

634. Lauder Creek Farming wants the issue amended to identify methods which can increase biodiversity in both rural and urban landscapes and communities.⁵³⁸

3.9.14.2. Analysis

635. I recommend declining both submissions seeking amendments. The issue statement expresses Kāi Tahu concerns. The RMIA section of the RPS is dedicated to this purpose and should remain regardless of repetition elsewhere. The section acts as a package of issues, setting out the range and interconnectedness of iwi concerns.

636. Because this is an issue statement, it does not include methods. Methods addressing biodiversity concerns are found elsewhere in the RPS, mainly in the ECO – Ecosystems and Indigenous Biodiversity chapter. Further, the submitter does not specify the methods that should be included. Specific methods for improving biodiversity may be more appropriately housed in regional plans.

⁵³⁵ 00226.068 Kāi Tahu ki Otago

⁵³⁶ 00226.069 Kāi Tahu ki Otago

⁵³⁷ 00239.031 Federated Farmers

⁵³⁸ 00406.003 Lauder Creek Farming

637. I recommend accepting Kāi Tahu ki Otago's submission in support.

3.9.14.3. Recommendation

638. I do not recommend any amendments.

3.9.15. RMIA-MKB-I5 – Inconsistent approaches to biodiversity protection amongst regulatory authorities

3.9.15.1. Submissions

639. Kāi Tahu ki Otago supports the issue as notified.⁵³⁹

640. Wayfare suggests noting that the Department of Conservation also has obligations under the Wildlife Act and the NZCPS, not just the Conservation Act.⁵⁴⁰

3.9.15.2. Analysis

641. Wayfare's submission does not change the essence of the issue but does add context. I note that the issue is discussing legislation rather than regulation, which I think is sufficient to communicate the issue in question. I recommend accepting the submission in part and including the Wildlife Act.

642. I recommend accepting in part Kāi Tahu ki Otago's submission in support, in respect of those parts that remain as notified.

3.9.15.3. Recommendation

643. Amend the explanatory text as follows:

- a. Add "and the Wildlife Act" after "Conservation Act" in the third to last sentence.
- b. Add legislation dates for the Resource Management Act, Conservation Act, and Wildlife Act (1991, 1987, and 1953 respectively).

3.9.16. RMIA-MKB-I6 – Lack of information on species health and viability

3.9.16.1. Submissions

644. Kāi Tahu ki Otago supports the issue as notified.⁵⁴¹

3.9.16.2. Analysis

645. I recommend accepting Kāi Tahu ki Otago's submission in support.

⁵³⁹ 00226.070 Kāi Tahu ki Otago

⁵⁴⁰ 00411.132 Wayfare

⁵⁴¹ 00226.071 Kāi Tahu ki Otago

3.9.16.3. Recommendation

646. I do not recommend any amendments.

3.9.17. RMIA-WTU-Wāhi tūpuna

3.9.17.1. Introduction

647. This set includes only one issue, which describes Kāi Tahu concerns relating to wāhi tūpuna. The introductory section sets context for the issue that follows.

3.9.17.2. Submissions

648. Kāi Tahu ki Otago requests the following amendment:

“Areas of significance that form part of wāhi tūpuna include, but are not limited to:

[...]

Mauka (mountains), awa (rivers), roto (lakes), tai (coasts), and moana (seas)”⁵⁴²

3.9.17.3. Analysis

649. Kāi Tahu ki Otago’s submission elaborates on what is included in wāhi tūpuna, which I consider useful context. I recommend accepting this submission.

3.9.17.4. Recommendation

650. I recommend the following amendment:

a. Amend the context section for RMIA–WTU – Wāhi tūpuna as follows:

i. In the sixth bullet point, add “, awa (rivers), roto (lakes), tai (coasts), and moana (seas)” after “Mauka (mountains)”.⁵⁴³

3.9.18. RMIA-WTU-I1 – The values of wāhi tūpuna are poorly recognised in resource management in Otago

3.9.18.1. Submissions

651. Federated Farmers seeks deletion of this issue because it is addressed through other topics and is unnecessary and confusing duplication.⁵⁴³

652. Ngāi Tahu ki Murihiku requests an amendment to the issue to recognise that management of wāhi tūpuna extends beyond land use matters, suggesting the following specific amendment:

⁵⁴² 00226.072 Kāi Tahu ki Otago

⁵⁴³ 00239.032 Federated Farmers

“Land, freshwater and coastal management regimes have failed to ...”⁵⁴⁴

3.9.18.2. Analysis

653. I recommend declining Federated Farmers submission. The issue statement expresses Kāi Tahu concerns. This section of the RPS is dedicated to this purpose and should remain regardless of repetition elsewhere.

654. Ngāi Tahu ki Murihiku’s amendments are a direct expression of iwi concerns and elaborate on what is included in wāhi tūpuna, which I consider useful context. However, I am not certain from the submission whether the specific amendment provided is seen as sufficient, or if something further is required. In my opinion, the additional text provided is sufficient and I recommend accepting this submission, with the caveat that Ngāi Tahu ki Murihiku’s concerns may extend beyond this.

3.9.18.3. Recommendation

655. I recommend amending the explanatory text by:

- a. adding “freshwater, and coastal” after “Land” in the first sentence.

656. I am aware that Ngāi Tahu ki Murihiku may wish to expand on its submission through the hearing process, and I am open to considering further changes on this basis.

3.9.19. RMIA-WTA-Wāhi tapu and wāhi taoka

3.9.19.1. Introduction

657. This set of two issues describes Kāi Tahu concerns relating to Wāhi tapu and wāhi taoka. The introductory section sets context for the issue that follows.

3.9.19.2. Submissions

658. Kāi Tahu ki Otago seeks the following amendment:

“[...] This is reflected in ~~Te Reo~~ te reo Māori, as the word... For Kāi Tahu, the terms wāhi tapu and wāhi taoka refers to places with elevated mana and tapu due to their close association with atua and tūpuna. For example: that hold the respect of the people in accordance with tikaka or history including:”⁵⁴⁵

3.9.19.3. Analysis

659. Kāi Tahu ki Otago’s submission corrects spelling and refines the description of tikaka concepts. I recommend accepting this submission.

⁵⁴⁴ 00223.050 Ngāi Tahu ki Murihiku

⁵⁴⁵ 00226.073 Kāi Tahu ki Otago

3.9.19.4. Recommendation

660. I recommend making the following amendments to the context section for RMIA–WTA – Wāhi tapu and wāhi taoka:

- a. In the third sentence, replace “~~Te Reo~~” with “te reo”.
- b. In the fifth sentence
 - i. add “the terms” after “For Kāi Tahu,”.
 - ii. omit “~~that hold the respect of the people in accordance with tikaka or history including:~~” and insert “with elevated mana and tapu due to their close association with atua and tūpuna. For example:”.

3.9.20. RMIA-WTA-I1 – land use activities have resulted in disturbance and degradation of wāhi tapu and wāhi taoka sites and the cultural and spiritual values associated with these areas

3.9.20.1. Submissions

661. Oceana Gold seeks to delete the generalised statement about mining activities being ‘culturally inappropriate’.⁵⁴⁶ Note that this submission was logged in the SODR against RMIA-WAI-I1.

662. Kāi Tahu ki Otago requests the following amendment, as part of making climate change more prominent throughout the RPS:

“[...]

- The resurfacing of kōiwi takata (human remains) through natural and human – induced process, such as climate change, and ensuring [...]”⁵⁴⁷

3.9.20.2. Analysis

663. I recommend declining Oceana Gold’s submission. The comment about mining is also not completely generalised; it is made in the context of the cultural value and integrity of wāhi tapu or wāhi taoka. It is Kāi Tahu’s prerogative to determine what is or is not culturally appropriate.

664. Kāi Tahu ki Otago’s submission is a direct expression of iwi concerns. I recommend accepting this submission, noting that the word “process” in the submission is a mistaken transcription of “processes” in the RPS.

3.9.20.3. Recommendation

665. I recommend amending the explanatory text by:

⁵⁴⁶ 00115.008 Oceana Gold

⁵⁴⁷ 00226.074 Kāi Tahu ki Otago

- a. adding the text “, such as climate change,” after “processes” in the third bullet point.

3.9.21. RMIA-WTA-I2 – Access to wāhi tapu and wāhi taoka and the ability to undertake customary activities on these sites has been impeded

3.9.21.1. Submissions

666. Kāi Tahu ki Otago supports the issue as notified.⁵⁴⁸

667. Ngāi Tahu ki Murihiku requests an amendment to recognise that wāhi tapu and wāhi taoka include nohoaka sites and that, therefore, freshwater management, land use matters and matters of access are significant issues. Specific wording is not provided.⁵⁴⁹

3.9.21.2. Analysis

668. Ngāi Tahu ki Murihiku’s submission is a direct expression of iwi concerns. However, nohoaka sites are already mentioned in the description for this issue, as are land use and access issues. In the absence of specific requests, freshwater management seems to be the only missing element. I recommend accepting this submission in part and adding a reference to freshwater management, though I am open to considering further changes if required and elucidated during the hearing process.

669. I recommend accepting in part Kāi Tahu ki Otago’s submission in support, in respect of those parts that remain as notified.

3.9.21.3. Recommendation

670. I recommend amending the explanatory text by:

- a. in the second paragraph, adding “, freshwater management practices,” after “due to land use change₂”.

3.9.22. RMIA-AA – Air and atmosphere

3.9.22.1. Introduction

671. This set includes only one issue, which describes Kāi Tahu concerns relating to air and atmosphere. The introductory section sets context for the issue that follows.

3.9.22.2. Submissions

672. Kāi Tahu ki Otago seeks the following amendment:

⁵⁴⁸ 00226.075 Kāi Tahu ki Otago

⁵⁴⁹ 00223.051 Ngāi Tahu ki Murihiku

“[...] Pollution of the atmosphere adversely affects the mauri of this air as a taoka, and other taoka such as plants and animals that rely on the life-supporting properties of air.⁵⁵⁰

3.9.22.3. Analysis

673. Kāi Tahu ki Otago’s submission provides further specificity about the connection between air quality and plant and animal health. However, I do not think this change makes a material difference to understanding the issue either in clarity or content. I recommend declining this submission.

3.9.22.4. Recommendation

674. I do not recommend any amendments.

3.9.23. RMIA-AA – I1 – The cultural impacts of discharges to air are poorly recognised in resource management

3.9.23.1. Submissions

675. DCC asks that the issue be amended for consistency with other requested changes in its submission but makes no specific recommendations.⁵⁵¹

676. Federated Farmers requests the following amendment:

“The cultural impacts of air pollution and discharges to air are poorly understood and seldom recognised. Achieving these outcomes requires careful collaboration with surrounding landowners [...]”⁵⁵²

677. Kāi Tahu ki Otago seeks the following amendment:

“[...] Specific concerns include:

- Potential impacts of climate change which could ~~potentially~~ negatively affect taoka such as wai Māori māori and wai tai, mahika kai and biodiversity, wāhi tūpuna, wāhi tapu, and wāhi taoka, coastal environment and the well-being of all people, and the environment as an integrated system.

[...]”⁵⁵³

⁵⁵⁰ 00226.076 Kāi Tahu ki Otago

⁵⁵¹ 00139.021 DCC

⁵⁵² 00239.033 Federated Farmers

⁵⁵³ 00226.077 Kāi Tahu ki Otago

3.9.23.2. Analysis

678. In response to DCC's submission, in the absence of specific changes being presented it is difficult to see how Kāi Tahu ki Otago's expression of an issue should be altered by submissions made on other provisions. I recommend declining this submission.
679. Federated Farmers submission amounts to a solution rather than an issue statement. This is not entirely fatal in and of itself but the added text does not seem to me to make sense in relation to the preceding sentence; it is not clear who the surrounding landowners are in relation to a general statement about the cultural impacts of air pollution, or what outcomes are being referred to. Also, collaboration has a specific meaning in terms of decision making and I am not sure what the intent is here – joint decision making between landowners and Kāi Tahu, with Council, with other landowners, or some combination of the above. I recommend declining this submission.
680. Kāi Tahu ki Otago's submission corrects spelling and refines the description of tikaka concepts. I recommend accepting this submission.

3.9.23.3. Recommendation

681. I recommend amending this issue as follows:
- a. In the first bullet point under "Specific concerns include":
 - i. Delete "potentially".
 - ii. Add "taoka such as" after "negatively affect"
 - iii. Replace "~~Māori~~" with "māori and wai tai".
 - iv. Add "and wāhi taoka," after "wāhi tapu".
 - v. Remove "coastal environment".
 - vi. At the end of the bullet point, add ", and the environment as an integrated system".
 - b. Additionally, I recommend deleting the word "and" before "the well-being of all people". I consider this a consequential change.

3.9.24. RMIA-CE – Coastal environment (Taku tai moana me te wai Māori)

3.9.24.1. Introduction

682. This set of five issues describes Kāi Tahu concerns relating to the coastal environment. The introductory section sets context for the issues that follow.

3.9.24.2. Submissions

683. Kāi Tahu ki Otago seeks a change to the title as follows:

3.9.24.3. Analysis

684. Kāi Tahu ki Otago’s submission corrects te reo usage. I recommend accepting this submission. Note that Kai Tahu Ki Otago’s original submission included but did not mark the change from “Māori” to “tai”, which is included below.

3.9.24.4. Recommendation

685. I recommend amending the issue title as follows:

- a. Replace “~~Taku tai~~” with “te takutai”.
- b. Replace “~~Māori~~” with “tai”.

3.9.25. RMIA-CE – I1 – Mahika kai and coastal systems are adversely affected by lack of integrated management across the land-water interface

3.9.25.1. Submissions

686. Kāi Tahu ki Otago support the issue as notified.⁵⁵⁵

687. Wayfare requests adding “overfishing” and “pollution” as specific issues.⁵⁵⁶

3.9.25.2. Analysis

688. While I agree that “overfishing” and “pollution” are issues for the marine environment, I recommend declining this submission. Pollution is dealt with in the issue as it stands, through mentioning the effects of land use activities, and is more fully dealt with in RMIA-CE – I2. Overfishing does not seem to me to fit within the issue on integrated management across the land – water interface.

689. I recommend accepting Kāi Tahu ki Otago’s submission in support.

3.9.25.3. Recommendation

690. I do not recommend any amendments in response to submissions.

691. I recommend making a minor change under clause 16(2) schedule 1, RMA to correct the spelling of “harbors” to “harbours” in the fifth bullet point.

⁵⁵⁴ 00226.078 Kāi Tahu ki Otago

⁵⁵⁵ 00226.079 Kāi Tahu ki Otago

⁵⁵⁶ 00411.133 Wayfare

3.9.26. RMIA-CE – I2 – Discharges into coastal waters and marine dumping of waste degrade mahika kai and the mauri of the waters

3.9.26.1. Submissions

692. Harbour Fish and Southern Inshore Fisheries propose changing “both land development and marine vessels” to “activities that occur on land and in the marine environment”.⁵⁵⁷

693. Kāi Tahu ki Otago suggests adding
“Discharge of liquid human waste from mortuaries and funeral homes into stormwater systems and coastal waters.”⁵⁵⁸

694. Wayfare⁵⁵⁹ requests the addition of “in lakes and rivers” to the text in the 6th bullet point but does not note exactly where.

3.9.26.2. Analysis

695. I recommend accepting the submissions of Harbour Fish and Southern Inshore Fisheries. They add meaningfully to the issue and are consistent with Kāi Tahu concerns – waste can come from a wider variety of activities than those currently mentioned.

696. Kāi Tahu ki Otago’s submission is a direct expression of iwi concerns. However, I am not aware of instances where funeral homes are discharging directly to the coast or to stormwater systems. I make no recommendation at this point and invite the submitter to elaborate on these concerns through the hearings process.

697. Wayfare’s submission helps emphasise the link between freshwater and coastal management. I recommend accepting this submission. Wayfare was not specific about where its suggested additional text should go, so I have recommended an approach below.

3.9.26.3. Recommendation

698. I recommend amending the explanatory text as follows:

- a. In the opening paragraph replace “~~both land development and marine vessels~~” with “activities that occur on land and in the marine environment”.
- b. In the sixth bullet point, add “and in lakes and rivers” after “coastal environment”, noting the addition of “and” is a consequential change to ensure the submitted wording makes sense in the context of the sentence.

⁵⁵⁷ 00126.002 Harbour Fish; 00124.002 Southern Inshore Fisheries

⁵⁵⁸ 00226.080 Kāi Tahu ki Otago

⁵⁵⁹ 00411.134 Wayfare

- 3.9.27. RMIA-CE – I3 – The ability for Kai Tahu ki Otago to access and harvest kaimoana has been impeded by the effects of activities in the coastal and marine environment
- 3.9.27.1. Submissions
699. Kāi Tahu ki Otago supports the issue as notified.⁵⁶⁰
- 3.9.27.2. Analysis
700. I recommend accepting Kāi Tahu ki Otago’s submission in support.
- 3.9.27.3. Recommendation
701. I do not recommend any amendments.
- 3.9.28. RMIA-CE – I4 – Habitat disturbance and modification has contributed to decline in populations of indigenous marine species, including marine mammals
- 3.9.28.1. Submissions
702. Kāi Tahu ki Otago supports the issue as notified.⁵⁶¹
- 3.9.28.2. Analysis
703. I recommend accepting Kāi Tahu ki Otago’s submission in support.
- 3.9.28.3. Recommendation
704. I do not recommend any amendments.
- 3.9.29. RMIA-CE – I5 – Wāhi tapu and wāhi tūpuna values in the coastal environmental are poorly recognised and protected
- 3.9.29.1. Submissions
705. Kāi Tahu ki Otago seeks the following amendments:
- In the first sentence, “[...] the coastal waters of Te ~~Tai o Ara Te Uru Tai – o – Araiteuru~~ [...]”
- Amend the first and last bullet points:

⁵⁶⁰ 00226.081 Kāi Tahu ki Otago

⁵⁶¹ 00226.082 Kāi Tahu ki Otago

- Damage to and disturbance of wāhi tapu resulting from coastal erosion and the impacts of climate change, earthworks
- Failure to recognise and provide for the effects of climate change, and of changing sea levels on coastal landscapes.”⁵⁶²

3.9.29.2. Analysis

706. Kāi Tahu ki Otago’s request corrects te reo usage and is a direct expression of iwi concerns, part of a general drive to make climate change more prominent in the RPS. I recommend accepting this submission.

3.9.29.3. Recommendation

707. I recommend amending the issue as follows:

- In the first sentence, replace “~~Tai-o-Ara-Te-Uru~~” with “Tai – o – Araiteuru”.
- In the first bullet point add “and the impacts of climate change” after “coastal erosion”.
- In the last bullet point add “of climate change and” after “for the effects”, noting that the original submission includes an additional comma, which I have removed as a minor change.

3.9.30. RMIA-PO – Pounamu, including RMIA-PO – I1 – Pounamu resources need protection from the effects of land use activities

3.9.30.1. Introduction

708. This set contains only one issue and describes Kāi Tahu concerns relating to pounamu. The introductory section sets context for the issues that follow.

3.9.30.2. Submissions

709. Kāi Tahu ki Otago support the issue as notified.⁵⁶³

710. Ngāi Tahu Ki Murihiku⁵⁶⁴ seeks an amendment to recognise that protecting pounamu is about integrated management of lands and waters rather than just a concern associated with land use, and to recognise the work that has been done within the tribe to improve pounamu management. I am uncertain whether this submission applies to the context section under RMIA-PO-Pounamu, or the issue RMIA-PO-I1 and its explanatory text, or both. I have addressed it under this introductory section.

⁵⁶² 00226.083 Kāi Tahu ki Otago

⁵⁶³ 00226.084 Kāi Tahu ki Otago

⁵⁶⁴ 00223.052 Ngāi Tahu ki Murihiku

3.9.30.3. Analysis

711. Ngāi Tahu Ki Murihiku's submission is a direct expression of iwi concerns. However, in the absence of suggested wording I am unsure how the issue should be amended to encapsulate these concerns. It appears to request amendment of the issue itself to refocus on integrated management. I do not have sufficient knowledge of the work done within the tribe to improve pounamu management such that I can recommend appropriate amendments. I make no recommendation at this time and invite the submitter to elaborate on the changes for consideration through the hearings process.
712. I recommend accepting Kāi Tahu ki Otago's submission in support, pending further elaboration from Ngāi Tahu Ki Murihiku.

3.9.30.4. Recommendation

713. I do not recommend any amendments, pending further elaboration from Ngāi Tahu Ki Murihiku through the hearings process.

3.9.31. New Resource management issues of significance to iwi authorities

3.9.31.1. Introduction

714. One submitter seeks the addition of a new RMIA section.

3.9.31.2. Submissions

715. John Highton⁵⁶⁵ seeks inclusion of a separate section recognising the importance of being able to gather food from a healthy environment for the general community. In particular, the gathering of whitebait, trout, salmon and hunting.

3.9.31.3. Analysis

716. This section focuses on iwi concerns, so it is not the right place for the general community's concerns to be expressed. This issue is alluded to in SRMR-I6. Although SRMR-I6 does not provide the level of species detail sought by the submitter, I consider it is sufficient for the purposes of the pORPS, and I recommend declining this submission.

3.9.31.4. Recommendation

717. I do not recommend any amendments.

⁵⁶⁵ 00014.016 John Highton
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